

Luxembourg, 7<sup>th</sup> July 2022

## Environmental and Social Data Sheet

### Overview

Project Name:	ALCAZAR PV I II III
Project Number:	2021-0601
Country:	Spain
Project Description:	<i>The project concerns the financing of three solar PV farms in the Spanish region of Castilla-La Mancha, for a total capacity of 150 MWp. Allocation under Framework Loan (FL) 2020-0452.</i>
EIA required:	yes
Invest EU sustainability proofing required <sup>1</sup>	yes
Project included in Carbon Footprint Exercise <sup>2</sup> :	yes

(details for projects included are provided in section: “EIB Carbon Footprint Exercise”)

### Environmental and Social Assessment

The project is an allocation under the operation TITAN SOLAR PV GREEN FRAMEWORK LOAN (2020-0452), promoted by GALP.

The project consists of the construction and operation of three solar photovoltaic (PV) plants, Alcazar I, Alcazar II and Alcazar III (50 MWp each), for a total capacity of 150 MWp. The three plants, while operationally independent, are located next to each other, forming an integrated cluster, occupying ca. 265 ha of land. The three plants connect to the common substation Alcazar SE 30/220kV located at the centre of the cluster. A new 220 kV transmission line of c. 21 km will connect the common substation to the existing substation SE Arenas de San Juan 220 kV (property of the transmission system operator – TSO). The project includes the necessary ancillary facilities, such as the new substation and transmission line. The project is located in the Spanish the region of Castilla-La Mancha.

#### Environmental Assessment

The solar PV plants fall under Annex II of the Environmental Impact Assessment (EIA) Directive 2014/52/EU amending the EIA Directive 2011/92/EC, and the 220 kV transmission line falls under Annex I. Following national and regional environmental regulations, the three PV plants have been screened in for EIA process by the competent authority. Therefore, all the project components were subject to an EIA process, including public consultation.

<sup>1</sup> The information contained in the document reflects the requirement related to the environmental, social and climate information to be provided to Investment Committee as required by the Invest EU Regulation and it represents the equivalent of the information required in the template of the InvestEU sustainability proofing summary

<sup>2</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.



Luxembourg, 7<sup>th</sup> July 2022

The environmental impact assessment reports (EIA reports) are available for each plant. The EIA report of Alcazar I also covers the common 30/220 kV substation and the common 220 kV line. General quality of the EIA reports, in terms of the impact assessment methodology, desk studies and field work conducted, is considered to be acceptable. The cumulative impact of the three plants was assessed in the respective EIA reports, in particular in regards to impacts on the avifauna.

As per the EIA reports, the project is expected to generate acceptable impacts during both construction and operation phases. The project entails limited negative impacts mainly on landscape, soil and fauna. The EIA reports records the presence of threatened species such as the Great Bustard<sup>3</sup>, the Imperial Eagle<sup>4</sup>, the Lesser Kestrel<sup>5</sup> and the Little Bustard<sup>6</sup>. During the construction phase, main impacts are associated with the presence of machinery, vehicles, construction workers, and the erection of the PV plant infrastructures. The impacts relate to increase of dust and noise due to construction activities, as well as increased traffic in the surrounding areas, loss of vegetal cover, and loss of habitats. During the operation phase, the main impacts are related to loss and fragmentation of habitats, barrier effect, visual impacts and risk of bird collisions with the transmission line. Overall, the impacts during construction and operation phases are considered to be acceptable. The EIA reports also foresee mitigation measures that were further complemented by the competent authority as conditions of the environmental permit (Declaracion de Impacto Ambiental - DIA), and further detailed below.

The closest Natura 2000 site from the PV plants is the SCI/SPA Humedales de La Mancha (ES4250010), which is composed of several wetlands and lagoons, the closest one being at c. 2 km South of plants. The site also covers the Ramsar site Lagunas de Alcázar de San Juan (250 ha), which is located at c. 6 km North of the Site. The last section of the transmission line is also located at c. 6 km from the SCI/SPA Montes de Toledo (ES4250005). The project is also located within the limits of the Biosphere Reserve Mancha Húmeda, which core and buffer areas (in the vicinity of the project) corresponds broadly to the site SCI/SPA Humedales de la Mancha. The plants are located in the transition area of the Mancha Húmeda. The PV plants (but not the transmission line) are also located within the southern boundary of the Important Birds Area (IBA) Alcázar de San Juan-Quero endorreic lagoons (ES195), a 58 500 ha area of arable cultivation with several natural and artificial lagoons, important for steppe species and wildfowl. The IBA overlaps with the SPAs Humedales de La Mancha and Área esteparia de La Mancha norte (for c. 26% of the IBA).

The plants and associated infrastructure obtained their DIAs in November 2019 and are currently under construction since end 2020, with the start of the operations planned in the course of 2022. As part of the EIA process, the competent authority confirmed in the DIAs that the project components do not affect Natura 2000 sites (nor other nationally protected areas). The competent authority also noted that the land is currently dedicated to herbaceous agriculture in a rain-fed and irrigated regime, so the construction of this project will not affect natural vegetation cover or native tree species. It however concluded that the project in its initial design could affect a neighboring natural habitat of common interest (Annex I of the habitats directive) "Mediterranean salt steppes (Limonietalia) – 1510" (Albardinales Salinos y Formaciones Salinas de Limonium sp.). It also concluded the PV plants area constitutes an adequate habitat for steppe birds categorized as threatened under local legislation (such as the Little Bustard and the Great Bustard), which would require further mitigation due to the loss of habitat.

<sup>3</sup> Otis tarda – Vulnerable as per the IUCN Redlist

<sup>4</sup> Aquila adalberti – Vulnerable

<sup>5</sup> Falco Namanni – Vulnerable

<sup>6</sup> Tetrax Tetrax - Near Threatened



Luxembourg, 7<sup>th</sup> July 2022

To avoid direct affection on natural habitat 1510, the competent authority requested a modification of the project to exclude an area of around 25 ha, to create a natural corridor between the habitat and the nearby river Gigüela river. The project was reconfigured to exclude such area, and the total footprint further decreased from c. 347 ha to c. 265 ha. To mitigate the loss of adequate habitat for steppe birds, the competent authority required the promoter to undertake agro-environmental measures to conserve and consolidate a similar habitat on an area equivalent to 50% of the footprint of the PV plants, close to the project.

Other mitigation measures foreseen in the environmental documentation for construction and operation phases can be summarised as follows:

- Implementation of general prevention and mitigation measures during construction, in particular for dust and noise emissions, protection of soil and groundwater, and conservation of protected trees and vegetation;
- In relation to the risk of collision and electrocution with the transmission line, the mitigation measures are based on the Royal Decree 1432/2008<sup>7</sup>
- Use of specific fences to guarantee fauna permeability, mitigating barrier effects;
- Habitat conditioning (e.g. nesting aids, platforms, etc) for certain type of birds, such as the Lesser Kestrel;
- Implementation of avifauna monitoring programmes;
- Reuse of soil layers for restoration activities;
- Implementation of restoration and revegetation plans;
- Landscape integration;

The environmental permit also specifies the requirements for the decommissioning activities, with restoration activities to reinstate the sites in their original states after the operational phase. The promoter will have to present a decommissioning plan to the competent authority in advance of the planned end of the activities. Waste produced during decommissioning is classified following the European List of Waste. The Directive for electrical and electronic equipment waste (Directive 2012/19/EU, further amended by Directive 2018/849) is transposed by national law RD 110/2015. PV panels contains a complex mixture of materials, some of which are hazardous, that need to undergo waste management operations. RD 110/2015 describes the treatment this type of waste needs at the end of the life, including preparation prior to recovery (such as recycling) or disposal.

### **Climate Assessment**

The EIA reports include a climate vulnerability assessment, which highlight a moderate risk of flooding following a hydrological study, with a medium probability that the western part of the project area could be subject to such events. The mitigation measure consists of designing an adequate drainage system, which should be designed in a way that it does not worsen the flooding risk in adjacent areas, nor modify substantially the natural drainage of the zone.

The project is fully aligned to the goals and principles of the Paris Agreement as set out in the Bank's Climate Bank Roadmap and the Energy Lending Policy

### **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 in CO<sub>2</sub> equivalent emissions by ca. 94 kt CO<sub>2</sub>e/yr.

<sup>7</sup> These include i.a. ensuring that the design of pylons and insulating elements minimize the electrocution risk, and that the lines include elements to enhance the visibility of conductors to reduce collision risk.



Luxembourg, 7<sup>th</sup> July 2022

For the annual accounting purposes, if the project is included in 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.

## Social Assessment

The promoter has engaged with the land owners in order to secure voluntary agreements for the lands required by all project infrastructures, in the form of leases or rights of ways. All the land for PV plants has been secured through bilateral agreements. A minor portion of the rights of way for the transmission line were eventually obtained through an expropriation process, in line with Spanish legislation. In Spain, all projects required for the implementation of the different activities within the electricity sector, including generation, promoted by public or private companies, are considered of public utility, and are subject to urgent forced expropriation to be carried out by the authority in the interest of the promoters.

Recent reports are pointing out the possibility of use of forced labour in the supply chain of solar PV panels. The promoter has a Code of Ethics and Conduct and a Human Rights Policy in place, committing to prevent all forms of forced or compulsory labour. The promoter has contracted a contractor to build the project under a lump-sum Engineering Procurement and Construction contract. The EPC Contractor has itself a Human Rights Policy and a Code of Conduct for Business Partners referring to the compliance with international standards for human and labour rights. Finally, the supplier of the PV modules has a Code of Business Conduct and Ethics, which explicitly prohibits any form of forced labour in its supply chain, and states that it will not conduct business with any factory or suppliers that uses forced labour. The supplier has also issued a declaration stating its commitment to try to ensure that modern slavery does not exist within the company and in its supply chain. It also states that it is reviewing this matter with its own suppliers periodically, and that it has identified that there is no sign or proof of its involvement in forced labour whether directly or indirectly.

## Public Consultation and Stakeholder Engagement

Public consultations are carried out under the EIA process, as required by the EIA Directive, and as transposed into national and regional law. The Promoter has a direct channel of contact on sustainability matters ([sustentabilidade@galp.com](mailto:sustentabilidade@galp.com)), through which communications, questions, complaints or claims can be made. The promoter has reported no complaint so far for the project.

## Other Environmental and Social Aspects

The promoter is known to the Bank from previous operations and has sufficient E&S capacity to implement the project, having experience in the management of complex infrastructure projects. The Promoter has a solid organisational structure.

The promoter is aiming at "*progressive decarbonisation towards Net Zero by 2050*". It plans to reduce the carbon intensity of its activities by at least 20% by 2030 (versus 2017)<sup>8</sup>, even considering a planned increase of its O&G production. GALP reports under the Carbon Disclosure Project. The Transition Pathway Initiative (TPI), a leading assessment organisation, does consider the Promoter's current long-term target to be aligned to a Below 2 Degrees benchmark.

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<sup>8</sup> Targets as per June 2021 (Capital Market Day announcement)



Luxembourg, 7<sup>th</sup> July 2022

## Conclusions and Recommendations

Based on the reporting by the promoter, the project is considered environmentally acceptable and compliant with the relevant EU and national environmental legislative framework by the competent authorities.

As a project undertaking, the promoter will have to demonstrate that the measures foreseen in the EIA reports and the DIAs, including measures to avoid, reduce and mitigate the impact, were put in place during the construction and operational phases.

Under these conditions, the project is acceptable for EIB financing in Environmental, Climate and Social terms.