

Luxembourg, 13<sup>th</sup> December 2023

## Environmental and Social Data Sheet

### Overview

Project Name:	CADIZ REPOWEREU SOLAR ENERGY
Project Number:	2022-0648
Country:	Spain
Project Description:	Financing of the construction and operation of two solar PV plants for a total capacity of c. 227 MW in the Spanish region of Andalucía.

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 consists of the construction and operation of Herradura and Sancho solar photovoltaic (PV) plants for a total capacity of ca. 227 MWp in the province of Cádiz, region of Andalucía. The project scope includes the associated infrastructure, such as substations and grid interconnections.

The power produced by Herradura will be evacuated via a 30kV underground network to the 30/220kV Herradura substation, located at the project site. This project substation will be connected via a 220kV underground transmission line of ca. 8.3km to the 220/400kV Guadarranque substation, shared with other promoters. An overhead line in 400kV will evacuate the power from Guadarranque substation to the adjacent 400kV Castellar substation, owned by the Transmission System Operator (TSO), Red Eléctrica de España (REE). Similarly, Sancho PV plant includes a 30kV underground network connected to the 30/220kV Sancho substation, where the power will be elevated to 220kV and transported through a ca. 13.4km transmission line (partly underground) to the Guadarranque substation mentioned above.

Both PV plants and the respective ancillary infrastructure fall within Annex II of the EIA directive (Directive 2014/52/EU amending the EIA Directive 2011/92/EU). According to national and regional legislation, the plants and ancillary infrastructure have been screened in by the competent authority, requiring full Environmental Impact Assessment (EIA), including public consultation.

The three EIA reports cover the plants and the related auxiliary facilities: (i) Herradura PV plant; (ii) the interconnection infrastructure from Herradura PV plant to the Castellar substation (TSO); including Herradura substation, Guadarranque substation, the transmission line connecting both substations and the transmission line connecting Guadarranque substation to Castellar

<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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substation; and (iii) Sancho PV plant; Sancho substation and its transmission line to Guadarranque substation.

General quality of the EIA reports in terms of the impact assessment methodology, desk studies and field work conducted is considered acceptable. Where relevant, the EIA reports included a cumulative impact assessment considering neighbouring (existing and planned) infrastructure, including other solar PV plants and transmission lines.

The schemes are expected to generate acceptable impacts during both construction and operation phases. The schemes entail limited negative impacts mainly on fauna, flora and landscape, and also on watercourses, soil, air quality, cultural heritage, protected areas and the population. In some of the sites, the EIA report indicates the presence of threatened species such as the Spanish Imperial Eagle (*Aquila Adalberti*, vulnerable (VU) acc. IUCN<sup>2</sup> Red List), Montagu's Harrier (*Circus Pygargus*, VU), Red Kite (*Milvus Milvus*, Nearly Threatened (NT)), Egyptian Vulture (*Neophron Percnopterus*, Endangered (EN)) and Osprey (*Pandion haliaetus*, EN). During the construction phase the main impacts are associated to earth works and removal of the vegetation cover, such as destruction of habitats, fatalities of species, soil erosion, GHG emissions, dust and noise, deterioration of ground and surface water quality or visual impact. Main impacts expected during the operation of the PV plants are the fragmentation of habitats, reduction of feeding and hunting grounds, collision and electrocution of birds or bats with the transmission lines and visual impact.

Specific mitigation measures foreseen in the EIA reports during construction and operation phases, vary per scheme, but overall 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, use of existing roads and infrastructure wherever possible
- Minimising the removal of vegetation and topsoil (where required, the removed topsoil shall be kept and used for restoring the area after construction)
- Collection and treatment of wastewater and other liquids
- Construction calendar respecting the reproductive season
- In relation to the risk of collision and electrocution of birds with the transmission line, mitigation measures based on the Royal Decree 1432/2008<sup>3</sup>
- Use of specific fences to guarantee fauna permeability, mitigating barrier effects
- Habitat conditioning (e.g. nesting aids, ponds, etc) for certain species (birds, bats, amphibians, reptiles, etc.)
- Implementation of fauna monitoring programmes
- Landscape integration plans

The mitigation measures foreseen in the EIA reports were further complemented by the competent authority as conditions of the environmental permit (Declaración de Impacto Ambiental - DIA), and further detailed below.

The 100 MWp Herradura Solar PV plant and its interconnection infrastructure are located in the municipalities of Jimena de la Frontera and Castellar de la Frontera. The DIA was obtained in December 2022 and includes the plant and the interconnection infrastructure, as described in the two EIA reports mentioned above ((i) and (ii)). The EIA reports take into account the cumulative impact assessment of Sancho Solar PV plant and over 15 other solar PV plants (existing and planned) and their respective transmission lines within a radius of 10km. The closest Natura 2000 site to Herradura solar PV plant is Los Alcornocales (SCI and SPA ES0000049) part of Intercontinental Biosphere Reserve of the Mediterranean, adjacent to the west, Ríos Guadiaro y Hozgarganta (SCI ES6120031) at ca. 5 km to the southeast. The

<sup>2</sup> International Union for Conservation of Nature

<sup>3</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.



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transmission line crosses the SCI and SPA Los Alcornocales, however, following the recommendations of the competent authority this is a fully underground transmission line. SCI and SPA Los Alcornocales is an important site for the Spanish Imperial Eagle, the Egyptian Vulture and the Osprey. The EIA reports include an assessment of the project's impact on the integrity of the Natura 2000 sites, concluding that the impacts are not significant. The competent authority confirmed in the environmental permit that the Natura 2000 sites will not be damaged. The addenda to the EIA reports include improved preventive and corrective measures regarding flora, fauna and the fragmentation of habitats.

The 127 MWp Sancho Solar PV plant and its interconnection infrastructure are located in the municipality of San Roque. The DIA was obtained in December 2022 and includes the plant and the interconnection infrastructure, as described in the EIA report mentioned above (iii). The EIA report takes into account the cumulative impact assessment of Sancho PV plant and over 26 other solar PV plants (existing and planned) and their respective transmission lines within a radius of 20km. SCI and SPA Los Alcornocales is adjacent to Sancho solar PV plant and part of the transmission line that is actually inside this site. Following the public consultation process, the competent authority required the transmission line to go underground when crossing the Natura 2000 site. The EIA report includes an assessment of the project's impact on the integrity of the Natura 2000 site, concluding that the impacts are not significant. The competent authority confirmed in the environmental permits that the Natura 2000 sites will not be damaged. The permit required the southern section of the plant to be eliminated from the project due to the impact on vegetation and protected habitats<sup>4</sup> and further adaptation in the layout of the plant and the transmission line to reduce impact on such habitats. The project will have to undertake a preconstruction survey on flora and fauna that will continue during operation. Furthermore, a new landscape study for San Roque municipality will need to be submitted to the competent authority.

The EIA reports cover the entire lifecycle of the facilities, including the decommissioning, foreseeing restoration activities to reinstate the sites in their original states after the operational phase. 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 further amended by RD 27/2021). National legislation describes the treatment this type of waste needs at the end of the life, including preparation prior to recovery (such as recycling) or disposal. The promoter will have to present a decommissioning plan to the competent authority in advance of the planned end of the activities.

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.

### **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. 140 kt CO<sub>2</sub>-eq/yr.

For the annual accounting purposes, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost

<sup>4</sup> 5330\*Thermo-Mediterranean and pre-desert scrub, 6220\* Pseudo-steppe with grasses and annuals of the Thero-Brachypodietaea, 91E0\* Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) amongst others

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

The counterparty CEPSA is in scope and screened in to the EIB PATH framework as it is active in a high-emitting sector and operates in a context of high vulnerability.

The counterparty is active in activities that are considered incompatible with the Paris Agreement in the PATH framework. The project meets the conditions set out in paragraph 4.28 of version 1.1. of the PATH framework, introduced in support of the REPowerEU plan, and is therefore deemed to meet the PATH framework requirements.

The counterparty already meets the requirements of the EIB PATH framework with its existing alignment plan(s).

### **Social Assessment**

Most of the privately owned land for the PV plants has been bilaterally agreed, but the plots of land needed for the power line have not yet been secured. The promoter is expecting to negotiate with the related landowners to secure this land. In parallel, the promoter applied for the public utility declaration where applicable and will only resort to launching expropriation procedures in the case where a voluntary agreement cannot be reached. In Spain, all projects considered of public utility, can be subject to expropriation, to be carried out by the relevant authorities 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 Human and Labour Rights Policy, a Code of Ethics and Conduct and a Supplier Code of Ethics and Conduct rejecting the use of any form of forced or compulsory labour. The promoter has reinforced its assessment process on supply chain sustainability, including on key aspects like forced labour and ethical practices. The project shall also comply with the EIB Environmental and Social Standards, which foresee a zero tolerance for the use of forced labour.

### **Public Consultation and Stakeholder Engagement**

Public consultations are carried out under the EIA processes, as required by the EIA Directive, and as transposed into national and regional law. The promoter has not developed further stakeholder engagement activities. The promoter has a direct channel of contact<sup>5</sup> to report on possible breaches of the Code of Ethics and Conduct, Policies or other applicable internal and external regulations. The promoter has reported no complaint so far for the project.

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

The promoter has in place an integrated health, safety, environmental and quality (HSEQ) management system including requirements for the management of the Environment (ISO 50001), and Health & Safety (ISO 45001 and OHSAS 18001). The promoter carbon footprint is certified on a yearly basis (ISO 14064).

## **Conclusions and Recommendations**

The operation is acceptable in Environmental, Climate and Social terms under the following conditions.

- The promoter undertakes to demonstrate that the measures foreseen in the EIA reports and the permits, including measures to avoid, reduce and mitigate the impact, as well as monitoring indicators, were put in place during the construction and operational phases. The promoter will have to send the Bank a copy of the environmental

<sup>5</sup> <https://secure.ethicspoint.eu/domain/media/en/gui/106348/index.html>



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monitoring reports (“Informes del Programa de Vigilancia Ambiental”) as sent to the Competent Authority.

- The promoter undertakes to only resort to launching expropriation procedures in the case where a voluntary agreement cannot be reached with landowners.
- Prior to disbursement, the promoter shall provide information regarding plant-specific supply chains of the solar PV modules including supply chain mapping to the satisfaction of the Bank.