

Luxembourg, 15th December 2021

Environmental and Social Data Sheet

Overview

Project Name: SOLARIA TRILLO TORO PV GREEN LOAN
 Project Number: 2021-0632
 Country: Spain
 Project Description: Construction and operation of 5 PV Plants for a peak capacity of 230 MWp in the municipalities of Budia, Durón, Cifuentes and Trillo (Guadalajara) and Toro (Zamora)

EIA required: yes

Project included in Carbon Footprint Exercise¹: yes

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

Environmental and Social Assessment

Environmental Assessment

The Project is a multi-schemes investment project, or programme, and consists of the construction and operation of 5 solar photovoltaic (PV) plants organized in two clusters, for a total capacity of c. 230 MWp, located in the Spanish regions of Castilla-La Mancha and Castilla y León, and the associated infrastructure, such as substations, and grid interconnections. The PV plants included in the Project are identified in the table below:

Cluster	Solar PV Plant	Province	Region	Capacity (MWp)
Trillo Cluster	Tethys Solar	Guadalajara	Castilla-La Mancha	50
	Rhea Solar			50
	Telesto Solar			50
Toro Cluster	Delphinus	Zamora	Castilla y León	50
	Hercules			30

All solar PV plants and grid connection facilities fall under Annex II of the Environmental Impact Assessment (EIA) Directive 2014/52/EU amending the EIA Directive 2011/92/EC, except the 220 kV transmission line for Tethys, Rhea and Telesto, which falls under Annex I (with a length slightly over 15km in total). For Hercules, a scheme that was potentially subject to a simplified EIA process under the regional legislation, the Promoter selected voluntarily to undergo the ordinary EIA process. Therefore, based on national and regional environmental regulations, all

¹ 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 schemes have been screened in by the competent authorities, requiring an EIA process, including public consultation.

The Environmental Impact Studies (EISs) are available for all schemes. The Trillo cluster is part of a larger development named Budia Norte, consisting of 7 solar PV plants for a total of 338 MWp. A single EIS was prepared to cover for the entire Budia Norte development, including Tethys, Rhea and Telesto, together with the whole interconnection infrastructure until the interconnection with the existing substation of the Transmission System Operator (TSO) in Trillo (REE Trillo Nuclear). The EISs of Delphinus and Hercules also cover the interconnection facilities until the shared infrastructure Toro Renovables, which will collect the energy from various plants and interconnect with the adjacent substation of the TSO through a 0.1 km line. This shared infrastructure is subject to a separate authorization process.

General quality of the EISs, in terms of the impact assessment methodology, desk studies and field work conducted, is considered to be acceptable. Where relevant, the EISs of the PV plants included a cumulative impacts assessment taking into account the neighbouring (existing and planned) infrastructures, including other PV plants.

According to the EISs, none of the PV plants and associated grid connection facilities are located within Natura 2000 sites. The Spanish EIA process incorporates the Habitats assessment, whereby competent authorities can only issue the environmental permit (Declaración de Impacto Ambiental) once the appropriate assessment has been satisfactorily performed. The EISs concluded that the impacts of the plants and associated facilities on the neighbouring Natura 2000 sites (described below) are not likely. This was subject to further confirmation by the competent authority, as part of the EIA process in Spain.

The schemes are mostly located on agricultural land, and are expected to generate acceptable impacts during both construction and operation phases. The schemes entail limited negative impacts mainly on landscape, soil and fauna. In some of the sites, the EIS records the presence of threatened species such as the Egyptian Vulture (*Neophron percnopterus* – Endangered as per the IUCN Red List), the Great Bustard (*Otis tarda* – Vulnerable), the Imperial Eagle (*Aquila adalberti* – Vulnerable), the Red Kite (*Milvus Milvus* – Near Threaten), etc. During the construction phase, main impacts are associated with the presence of machinery, vehicles, construction workers, and the erection of the PV plants infrastructures. The impacts relate to increase of dust and noise due to construction related activities, as well as increased traffic in the surrounding areas, soil erosion due to the loss of vegetal cover, and loss of habitats. During the operation phase, given the presence of the PV plants, connection infrastructures and other similar facilities in the surrounding area, the main impacts are related to loss and fragmentation of habitats, barrier effect, visual impacts and birds collision risk with the transmission lines (for the Trillo cluster, as the one for Toro is mostly underground). Overall, the impact during construction and operation phases are considered to be acceptable.

Specific mitigation measures foreseen in the EISs 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, 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 1432/2008²
- Use of specific fences to guarantee fauna permeability, mitigating barrier effects;

² 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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- Habitat conditioning (e.g. nesting aids, ponds, etc) for certain species (birds, bats, amphibians, etc);
- Implementation of fauna monitoring programmes (including the GPS marking and follow-up of a Golden Eagle for Trillo);
- Reuse of soil layers for restoration activities;
- Implementation of restoration and revegetation plans;
- Landscape integration plans;

The EISs 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. 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. The promoter will have to present a decommissioning plan to the competent authority in advance of the planned end of the activities.

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.

A detailed description of each scheme is included below:

The **Tethys, Rhea and Telesto solar PV plants (3 x 50 MWp)** are located in the province of Guadalajara (region of Castilla–La Mancha), in the municipalities of Budia, Durón, Cifuentes and Trillo. The plants are adjacent to each other and part of a larger cluster being developed by the promoter (Budia Norte - 338 MWp in total). The schemes include all the interconnection infrastructure for the entire Budia Norte development until the 400 kV substation Trillo Nuclear, belonging to the TSO. Such grid connection consists of the 30/220 kV substation Las Represas, a 220kV overhead line of ca. 5.4km to the substation El Peral (220/30 kV – to be shared with other plants of the promoter), a ca.10 km 220kV overhead line from El Peral to the collecting substation Uma 220/400kV, where the power will be elevated to 400 kV and transported through a ca. 1.7km overhead line to the REE Trillo Nuclear substation. The three plants will occupy ca. 249 ha together (the whole Budia Norte cluster is planned to occupy 618 ha).

The environmental permit for the whole Budia Norte development, including Tethys, Rhea and Telesto and the interconnection to REE Trillo Nuclear substation, was issued in July 2021. The EIS covers the entire development and therefore automatically takes into account the cumulative impact assessment of all the Budia Norte PV plants. It also includes the cumulative impact assessment of other PV plants within a radius of 10km (including the San Andres PV plant 138 MWp currently being developed by the same promoter, at 3.3km south-west of Budia Norte). The closest Natura 2000 site to the cluster Budia Norte is Quejigares de Barriopedro y Brihuega (SCI ES4240014), at ca. 4km in the North. The 220 kV transmission line route is at ca. 1.2km distance North of the site Alto Tajo (SCI/SPA ES4240016), and ca. 7.4km North from Sierra de Altomira (SCI/SPA ES4240018). The EIS includes an assessment of the impact on the Natura 2000 sites, concluding that impacts are acceptable. The competent authority confirmed that the Natura 2000 sites are not directly impacted, indicating that the main risk for species subject to conservation measures (such as the Golden Eagle and the Peregrine Falcon, both Least Concern) is that of collision with the transmission lines. A few plots of the PV plants are of archaeological interest, requiring a specific management plan. The permit required the re-arrangement of the layout to improve the global connectivity, by reducing the barrier effect through the preservation of corridors without fencing. The project will also have to restore steppe habitat for the equivalent of 15% of the fenced area, through agreements with the



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farmers to set-up an adequate agro-environmental management allowing the use of the area by wild fauna. Furthermore, the project shall increase the sustainability of agricultural crops in the area (e.g. thinning), for the equivalent to 10% of the affected area.

The **Delphinus (50 MWp) and Hercules (30 MWp) solar PV plants** are located in the municipality of Toro (province of Zamora, region of Castilla y León), around one km apart from each other (Delphinus being north of Hercules). Delphinus includes the 30/66kV substation El Pisón, collecting the power from the two plants, as well as the 66kV line of 6.2 km (6km underground and 0.2km overhead) to evacuate the energy and connect to the 30/66/132/400 kV Toro Renovables substation. An overhead line of 0.1 km 400kV will then connect to the existing Valdecarretas substation that belongs to the TSO. The Toro substation and line is a common infrastructure shared among various promoters, which is not located within any protected areas and was screened out based on thresholds applicable under the national and regional legislation. The two plants will occupy a total of c. 203 ha.

The plants obtained their environmental permit in June 2021. The closest Natura 2000 site to Delphinus and Hercules is the site Riberas del Río Duero y afluentes (SCI ES4170083), ca. 3km North of Delphinus. The Important Birds Area Castronuño – Zamora (ES59) is located ca. 3km North of the plant. The environmental permits include the reference to the appropriate assessments that were made by the competent authority, and the confirmation that the plants are not expected to adversely affect the integrity of the sites concerned. Regarding the impact on steppe birds, the promoter will establish an area dedicated to their habitat improvement, for a surface equivalent to 10% of the occupied area.

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 CO₂ equivalent emissions by ca. 137 kt CO₂e/yr.

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, where applicable

The implementation of the project will not lead to involuntary physical or economic displacement or resettlement. The current use of the sites is mostly agricultural, and such activity will continue to be carried out in the area (outside the plant perimeter) with the normal safeguards and will not be affected by the project.

The promoter has engaged with the landowners and, for the vast majority of the plots, has reached voluntary agreements in the form of leases or surface rights or rights of way. For the Toro cluster, all the privately owned land has been bilaterally agreed including for the transmission line. For the Trillo cluster, 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 all secured. The promoter is expecting to negotiate with the related landowners to secure these land. In parallel, the promoter is expecting to obtain the public utility declaration 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.



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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 not developed further stakeholder engagement activities. The Promoter has a direct channel of contact on sustainability matters (greenmatters@solariaenergia.com). The Promoter has also a communication channel (canalcompliance@solariaenergia.com) to which both employees and third parties can address any kind of complaint, claim or inform any breach. This channel can also be used to raise any doubt, questions or make any suggestion on ethics, compliance and Environmental Social and Governance matters (ESG). The promoter has reported no complaint so far for the project.

Other Environmental and Social Aspects

The environmental capacity of the promoter is deemed to be adequate. It has the experience and the capacity to appropriately manage this project. The Promoter is known to the Bank from previous operations and has experience in the construction and operation of solar PV plants in Spain.

The promoter is fully dedicated to the development, construction and operations of solar PV plants and its activities are therefore considered aligned with the goals of the Paris Agreement.

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 Rights Policy and a Suppliers' Code of Conduct in place, rejecting the use of any form of forced or compulsory labour, which are also applicable to the EPC contractor, being an affiliate of the promoter. The promoter confirmed that each PV module supply contract contains a specific obligation for the relevant supplier to comply with this Code of Conduct. The project will have to comply with the EIB E&S Standards, which foresees to avoid the use of forced labour, and envisages additional due diligence further down the supply chain in case of concerns.

Conclusions and Recommendations

As a project undertaking, the promoter will have to demonstrate that the measures foreseen in the EISs 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 undertake to carry out appropriate due diligence throughout its supply chain, with the aim of avoiding the use of forced labour in the supply chains of the solar panels that will be used for this project

Under these conditions, the operation is acceptable in E&S terms.