

Luxembourg, 12.07.2023

Environmental and Social Data Sheet

Overview

Project Name:	<i>ENDESA WIND AND SOLAR SECOND ALLOCATION</i>
Project Number:	<i>2022-0711</i>
Country:	<i>Spain</i>
Project Description:	<i>Solar and wind renewable energy generation projects. Allocation under the Framework Loan (FL) 2020-0916 approved by the BoD on 22.07.2021 (CA/545/21/451)</i>
EIA required:	yes
Project included in Carbon Footprint Exercise ¹ :	yes

Environmental and Social Assessment

Environmental Assessment

The project is an allocation under the framework loan (FL) 2020-0916 ENDESA WIND AND SOLAR GREEN FRAMEWORK LOAN. The project consists of the construction and operation of three solar PV plants and one onshore wind plant, grouped into three clusters, with a total capacity of ca. 675 MWp. The scope will also include ancillary infrastructure such as access roads, substations and interconnections. The three PV plants are “Emin” with ca. 150 MWdc, “Centurion” with ca. 140 MWdc and “La Revuelta” with ca. 126 MWdc. The wind farm cluster (“Campillo I, II and III”) has a capacity of ca. 259 MWdc. The windfarm cluster Campillo I-III and La Revuelta are located in the Spanish regions of Castilla-La Mancha and the PV plants Emin and Centurion in Extremadura.

	Plant	Technology	Capacity (MWdc)	Province	Region
Campillo	I, II & III	Onshore wind	259	Cuenca	Castilla-la Mancha
Emin	-	Solar PV	150	Badajoz	Extremadura
Centurion	-	Solar PV	140	Badajoz	Extremadura
La Revuelta	-	Solar PV	126	Ciudad Real	Castilla-la Mancha
TOTAL			675		

Due to their technical characteristics, the plants fall under Annex II of Directive 2014/52/EU amending EIA Directive 2011/92/EU, leaving it to the national competent authority to determine, according to Annex III of the said Directive, whether an environmental impact assessment is required. In this case, the competent authority screened in all projects and grid interconnection infrastructure and has required an EIA process, including public consultation. Some grid interconnection infrastructure falls under Annex I of Directive 2014/52/EU amending EIA Directive 2011/92/EU, requiring an EIA. The Bank services will publish the EIA reports and other E&S relevant documents related to the projects.

The competent authorities considered all the comments presented during the EIA process, in line with the legal framework. General quality of the EIA reports, in terms of the impact assessment methodology, studies and fieldwork conducted is considered acceptable. The EIA report of each plant and ancillary facilities such as the transmission lines included a cumulative impacts assessment taking into account the neighbouring (existing and planned) infrastructures, including the plants within the relevant cluster. The plants and associated infrastructure obtained their environmental permits (Declaracion de Impacto Ambiental – DIA) between 2018-2022. The wind

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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cluster is in the last stage of construction, with projects already energised in December 2022, and PV schemes are currently under construction with the last plants expected to be operational by end of 2023.

The closest Natura 2000 sites to the project are listed in the table below:

Cluster	Plant Name	Size (ha)	Closest Natura 2000 site to the plants and associated infrastructure - distance (km) and direction
CAMPILLO	Campillo I, II and III	3400	<p>The closest Natura 2000 site is "Hoces del Cabriel" located approximately 2.2 km from the evacuation line and 13km from the nearest wind turbine.</p> <p>Within the scope of the study there is no area included in the Natura 2000 Network.</p>
EMIN	Emin	393	<p>The photovoltaic plant contemplated do not affect areas of Natura 2000. Three evacuation lines cross over with the ZEC «Río Ardila Alto», and the LAAT SE «Apicio»-SE «Brovales» runs along a route close to the ZEPA «Embalse de Valuengo», having to take preventive and corrective measures, to minimise the impact on the fauna.</p> <p>The project is not likely to appreciably affect the Natura 2000 Network sites, provided that the mitigation measures are taken into consideration.</p>
CENTURION	Centurion	327	<p>There are no protected natural spaces in the study area, but there are two Natura 2000 Network spaces:</p> <ul style="list-style-type: none"> - Special Zone of Conservation ZEC ES4310019 "Río Ardila Alto", being about 800 m from the PFV and crossed by the evacuation line. - Special Protection Area for Birds (ZEPA) ES0000403 "Colonies of Lesser Kestrels of Fuente de Cantos" about 9 km from the project. <p>The project is located at IBA No. 268 called "Fuente de Cantos - Montemolín", important for steppe birds such as Montagu's Harrier, Lesser Kestrel, Great Bustard, Little Bustard, Sandgrouse, Iberian Sandgrouse and Stone Curlew.</p> <p>In addition, approximately 13 km south of the study area is the "Dehesas de Sierra Morena" Biosphere Reserve.</p> <p>The competent authority established that the global impact is compatible with protected natural spaces and the Natura 2000 Network, as long as mitigation measures are complied with.</p>
LA REVUELTA	La revuelta	302	<p>The closest Natura 2000 site is "microreserva Abardinales de Membrilla-La Solana" located approximately 12km from the project.</p> <p>The project does not affect any protected natural space, or protected areas of the Natura 2000 Network.</p>



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The Spanish EIA process incorporates the Habitats assessment, whereby competent authorities can only issue the environmental permit once the project has been either screened in or screened out for both EIA and an appropriate assessment (AA). There was no need for an AA in this case.

The three PV plants and the Wind cluster are expected to generate limited impacts during both construction and operation phases. The project, taking also into account cumulative impacts, entails limited negative impacts in particular on the runoff characteristics of the drainage basin, fauna, landscape and soil.

During the construction phase, main impacts are associated with the presence of machinery, vehicles, construction workers, and the erection of the PV and wind plants infrastructure. The impacts relate to increase of dust and noise due to construction-related activities, increased wildfire risk, as well as increased traffic in the surrounding areas, soil erosion due to the loss of vegetal cover, visual impacts due to the construction operations and loss or fragmentation of habitats. During the operation phase, the main impacts are related to loss and fragmentation of habitats, barrier effect, visual impacts and collision risk (for the transmission lines and for the wind projects).

Specific mitigation measures required for implementation during construction and operation phases vary per cluster, but overall can be summarised as follows:

- 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 for the transmission lines, the mitigation measures are based on the Royal Decree 1432/2008²;
- In relation to the risk of collision with the wind turbines, the mitigation measures and specific rules to be applied are included in the environmental permits, including under which circumstances a wind turbine shall be shut off (“protocolo de parada”).
- Use of specific fences to guarantee fauna permeability, mitigating barrier effects.
- Habitat conditioning (e.g. nesting aids) of certain bird and bat species.
- Implementation of fauna monitoring programmes.
- Reuse of soil layers for restoration activities.
- Implementation of restoration and revegetation plans; and
- Landscape integration plans.

The environmental impact studies 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 Waste electrical and electronic equipment Directive ((Directive 2018/849 amending Directive 2012/19/EU) is transposed by national law RD 110/2015 (further amended by RD 27/2021). PV panels contain a complex mixture of materials, some of which are hazardous, that need to undergo waste management operations. National legislation describes the treatment of this type of waste needs at the end of life, including preparation prior to recovery (such as recycling) or disposal. Despite the lack of legislation regarding the recycling of wind turbine blades, the European wind industry is increasingly developing strategies and tangible commitments to face end-of-life issues of the sector³. The promoter will have to present a decommissioning plan to the competent authority in advance of the planned end of activities.

The main physical climate change risks of the PV clusters relate to floods and solar irradiation change, and to a lesser extent to temperature increase, precipitation increase and wind speed increase. The related mitigation measures foresee enhanced drainage systems, the use of equipment suitable for high temperatures and the consideration of local wind conditions as per industry practice. The respective risks of the wind farm relate to floods and wind speed increase,

² These include i.a. ensuring that the design of pylons and insulating elements minimise the electrocution risk, and that the lines include elements to enhance the visibility of conductors to reduce collision risk.

³ [Wind industry calls for Europe-wide ban on landfilling turbine blades | WindEurope](#)



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and to a lesser extent temperature increase, precipitation increase and solar radiation change. The related mitigation measures include enhanced drainage systems, design of WTG suitable for site locations, location of WTG at least 1.5 times its height from transmission lines and buildings, and the use turbines certified for high temperatures.

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 the specific issues regarding each cluster is included below:

CAMPILLO Cluster (Campillo I, II and III)

The project consists of three wind farms with a total of 54 wind turbines with a rated capacity of 4.8 MW and a production capacity of 259 MW. All wind turbines are located in the municipality of Campillo de Altobuey and Enguidanos (Cuenca, Spain).

Within the scope of the study there is no area included in the Natura 2000 Network. The project site is located within several sites designated as Special Areas of Conservation (SAC) and Special Protection Areas (SPA) for the conservation of bird species. The project could potentially cause direct and indirect impacts on the breeding, feeding, and migration of some bird species. However, the competent authority resolution determines that these impacts can be avoided or reduced by implementing mitigation measures, such as the installation of radar equipment to detect birds and the implementation of measures to prevent bird collisions with the turbines.

The environmental impact statement also considers the cumulative effects of the project in conjunction with other wind farms in the area.

The projects received the necessary environmental permits and authorisations between 2018 - 2021. The main impacts of the projects on the environment include the potential displacement and mortality of bird populations, the fragmentation and alteration of habitats, and noise pollution. The resolution outlines several mitigation measures aimed at reducing these impacts, including the installation of bird flight diverters, restrictions on the use of the turbines during migration periods, and the restoration of affected habitats.

In conclusion, the competent authority approved the environmental impact declaration of the wind farm projects while requiring the implementation of several mitigation measures to minimise its potential impacts on the environment.

EMIN

The project consists of the construction of a 150 MWp photovoltaic plant in two locations, Fuente de Cantos and Segura de León, in the province of Badajoz. The plant will consist of photovoltaic panels mounted on metal structures and will occupy a total area of 292.2 hectares. The project also includes the construction of a 220 kV electrical substation and a transmission line to connect the generated energy to the electrical grid.

The environmental impact assessment report for the project has considered the potential cumulative effects of the project in conjunction with other existing and planned activities in the area. The report concludes that the potential cumulative effects are not significant, as the project does not overlap with any Natura 2000 sites or other protected areas, and it is not expected to have significant impacts on the landscape or natural resources of the region. The project is expected to have a minimal environmental impact, and all possible impacts have been identified and adequately evaluated. Mitigation measures include the recovery of the soil after construction and the restoration of the fauna habitat. In addition, measures have been established to minimise noise impact, waste generation, water consumption, and soil erosion.



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The project has been approved, and the environmental impact statement was issued on 7 September 2022. A series of conditions and corrective measures have been established for the construction and operation of the plant, and periodic reports must be submitted to ensure that the established requirements are met. The project is expected to have a positive impact on the local economy by creating employment opportunities during construction and operation.

CENTURION

The project consists of the construction of a 140MW photovoltaic plant located in the municipalities of Segura de León, Fuente de Cantos, Valencia del Ventoso and Fregenal de la Sierra, in the province of Badajoz, Spain. The plant will consist of photovoltaic panels mounted on metal structures and will occupy a total area of 327.13 hectares. The project also includes a subterranean medium voltage line to the substation Segura de Leon, and from there a high voltage aerial line of 18.4km to the substation Apicio.

The competent authority establishes that the global impact is compatible with protected natural spaces and the Natura 2000 Network, as long as mitigation measures are complied with.

The assessment considers the cumulative effects of the project in conjunction with other nearby projects in a radius of 5km around the project. The competent authority considers that the cumulative impacts are compatible if the proposed mitigation measures are effectively implemented.

The environmental permit for the Centurion Project was granted on 16 September 2022, and is valid for four years. The main impacts of the project identified in the report include land use changes, loss of vegetation, potential impacts on water resources, noise, and dust. To mitigate these impacts, the report suggests several measures such as the reforestation of the project site after decommissioning, the use of dust suppression measures during construction, and the implementation of a monitoring programme to ensure compliance with environmental regulations.

In conclusion, the competent authority approves the environmental impact declaration of the Centurion project, while requiring the implementation of several mitigation measures to minimise its potential impacts on the environment.

LA REVUELTA

The project consists of a photovoltaic solar energy plant with a total installed capacity of 126 MW, located in the municipality of Manzanares in the province of Ciudad Real, Spain. The project involves the installation of photovoltaic panels and electrical equipment, and the construction of a substation and an evacuation line. The plant will consist of photovoltaic panels mounted on metal structures and will occupy a total area of 302 hectares.

The project does not affect any protected natural space, or protected areas of the Natura 2000 Network.

The report includes an assessment of the cumulative effects of the project on the environment, including the impact on other nearby photovoltaic solar energy plants, approximately 17 projects in the surroundings. The cumulative effects assessment takes into account factors such as land use, water resources, air quality, ecological connectivity, loss of habitats and fragmentation. The report concludes that the cumulative effects are expected to be moderate and include mitigation measures such as improvement of the ecological connectivity in a radius of 3km and green infrastructure for the region.

The environmental permit for the La Revuelta project was issued on 15 February 2022. The main impacts of the project include the transformation of agricultural land, the possible loss of biodiversity, the alteration of the landscape, and the use of water resources. The report identifies several mitigation measures to reduce these impacts, including the use of low-impact construction



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techniques, the use of recycled materials, the implementation of a water management plan, and the reintegration of the site into the landscape through the use of vegetation.

In conclusion, the competent authority approves the environmental impact declaration of La Revuelta project while requiring the implementation of several mitigation measures to minimise its potential impacts on the environment.

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. 474 kt CO₂e/yr.

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

Enel S.p.A. (Enel), as the head of group for the different Enel subsidiaries, is in scope and screened in to the EIB Paris alignment for counterparties framework (PATH). Enel already meets the requirements of the PATH framework with its existing alignment plans; it is considered aligned according to the SBTi (Science Based Targets initiative) and its decarbonisation plan is publicly available.

Social Assessment, where applicable

The promoter has engaged with the landowners in order to secure voluntary agreements for the lands required by all project infrastructures, in the form of leases with annual payments. Some plots of land have been secured through bilateral agreements. If voluntary agreements cannot be reached, the promoter intends to require expropriation, 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 public utility, and are subject to urgent forced expropriation to be carried out by the authority in the interest of the promoters.

The land use before the construction of the Wind Farms was mainly for agriculture (vineyards, almond trees, cereals, etc.) Campillo II is in a Public Utility Mount. After the wind farms construction, the land use continues to be the same.

Public Consultation and Stakeholder Engagement

The public consultation process was carried out as part of the EIA process for all project components, as required by EU law and as transposed by national and regional law. The promoter has channels of contact on sustainability and environmental matters (sostenibilidad@endesa.es, medioambienteiberia@endesa.es). The promoter has a programme of "Creating Shared Value - CSV", aimed at engaging with local stakeholders of its projects to define and put in place sustainability initiatives and plans that will have a positive impact on the communities⁴. Specifically, the promoter has developed capacity-building programmes on PV installation skills targeted for local unemployed population. In addition, CSV also foresees energy efficiency partnerships with public and private stakeholders and is currently considering the deployment of agri-PV.

⁴ [Social projects for the development of communities - Endesa](#)



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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. The promoter is ISO certified, related to Energy Management System (ISO 50001), Environmental Management System (ISO 14001), Quality Management System (ISO 9001) and to Occupational Health and Safety (ISO 45001). The promoter has developed an environmental management plan and has established an action plan to follow up its implementation.

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 Code of Ethics in place, rejecting the use of any form of forced or compulsory labour, which are also applicable to their PV module suppliers. The promoter confirmed that each PV module supply contract contains a specific undertaking for the relevant supplier to comply with the principles of this Code of Ethics. The promoter reserves the right to carry out verifications and monitoring activities aimed at checking compliance with this obligation by the supplier and, to the extent feasible, on any of its subcontractors. The promoter has performed a supply chain mapping exercise with its suppliers, concluding that it did not find evidence that any of the factories involved in this project are using forced labour. The promoter is committed to continue its engagement with the PV module manufacturers and their sub-suppliers, and review their practices to avoid the use of forced labour in the supply chain. The project will have to comply with the EIB E&S Standards, which foresee a zero tolerance for the use of forced labour, and requires the promoter to make reasonable efforts to assess and address the labour risk associated with the solar PV panels used in the project.

Conclusions and Recommendations

The Bank reviewed the environmental and social capacity of the promoter including its organisation, process and procedures and deemed them to be good.

As project undertakings:

- The promoter will have 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 continuously inform the Bank about the land acquisition or/and easement related to the projects until the process end.

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