

Luxembourg, 3rd September 2025

Environmental and Social Data Sheet

Overview

Project Name:	IBERDROLA TAMEGA WIND HYBRIDISATION GREEN LOAN
Project Number:	2024-0332
Country:	PORTUGAL
Project Description:	Construction and operation of a wind farm with a total capacity of 274 MW in the north of Portugal (the "Project"). The Project will be integrated with the TAMEGA hydropower plants also financed by the EIB.
EIA required:	yes
Project included in Carbon Footprint Exercise ¹ :	yes

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

Environmental and Social Assessment

The project (herein "the Project") entails the implementation and operation of two new wind farms which will be connected to the existing electric substations that serve the already operating TAMEGA hydro complex, in Portugal. The Project consists of the Tamega Norte 194MW and the Tamega Sul 79MW, placed on north and south of the Tamega River and the main Daivões hydro power plant respectively. The Project will employ 38 Wind Turbines in total, of 7.2MW capacity each.

The Project also entails (i) a 30kV/400kV transformer and a 7.8km 400kV overhead line ("OHL") for the connection of Tamega Norte in the Daivões existing substation and (ii) a second 30kV/400kV transformer and a 3km 400kV OHL for the connection of the Tamega Sul in the Gouvães existing substation.

The wind farms are implemented in an area covering parts of the municipalities of Montalegre, Cabeceiras de Basto, Ribeira de Pena and Vila Pouca de Aguiar, all in the regions of Vila Real and Braga. The Project is expected to commence work in Q1 2025 for both wind farms and reach completion in June 2026.

Environmental Assessment

Wind farms and its grid connection infrastructure -due to its technical characteristics- adhere to the national legislation having transposed Annex II of Directive 2011/92/EU, as amended by Directive 2014/52/EU, thereby leaving it to the competent authority to determine if an Environmental Impact Assessment (EIA) is mandatory. In this case the wind farms have been permitted together (the Tamega Norte and Tamega Sul) with their associated grid connection

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.



infrastructure and have been screened in for an EIA. The EIA has been completed and the Project has been granted with the environmental approval.

The Project at its present design, has incorporated the changes required by the authorities in order to minimize and avoid environmental impacts. In the first application for the environmental permit, the Project was substantially bigger in size and following several rounds of permitting steps (where the authorities rejected the project and the promoter subsequently redesigned it and reapplied), the design was modified and adapted to the requirements of the authorities. These changes entailed the reduction of wind turbines, change of location of some turbines, change of routing of associated infrastructure (access roads and electricity cables). On the basis of the latest design, the aforementioned environmental permit has been granted.

The Tamega Sul wind farm is located on the border and marginally within the Alvão / Marão PTC00003 site and Important Bird Area ("IBA") of the same name and borders. The Tamega Norte is located c.4km to the North of the Alvão/Marão site. An Appropriate Assessment was conducted in the context of the EIA, to assess impacts on the Natura 2000 site(s) affected by the Project. Impacts on Habitats of Community Interest (priority habitats 4030 and 6230, present in the Project area) as well as for impacts on the integrity of the Alvão/Marão site have been assessed.

The environmental permit prohibits turbines in certain locations and required that sensitive habitats and species to be signposted during construction phase to avoid impacts. A recovery plan for the intervened areas is required and it shall be based on the use of typical floristic elements of the region and habitats impacted. The permit concluded that the Project does not pose a threat to the integrity of those priority habitats.

For both sites (North and South), the habitat mapping undertaken by the Promoter and included in the EIA report, quantified the impact of the Project and identified locations which presented Habitats of Community Interest. The impacts were minimizable through the reduction of the number of turbines and deemed not significant.

The EIA report assessed the impacts of the Project on the Iberian Wolf, present in the Project area, a species included in the Annex II of the Habitat's Directive. On the basis of that assessment, the authorities required that certain turbines were removed from the Project scope and that construction activities were ceased for certain periods during the year. On the basis of the final design, for the Tamega Sul (in the border and marginally within the Alvão/Marão site), the environmental permit concluded that the turbines will not have significant negative impacts on the Iberian Wolf. Similarly, for the Tamega Norte, the conclusion was that the locations of the wind turbines are in areas which already entail significant human activity and the use of these sites by wolves is limited. The permit required also certain monitoring (5yr) and compensatory measures to improve the connectivity between the wolf packs (planting of native hardwood species).

For birds, the EIA studied the cumulative impacts with operating wind farms in the greater area. A study on the integrity of the Alvão/Marão site was undertaken and estimated the bird mortality which -based on experience from existing windfarms the affected species concern mostly least concern species but occasionally species with higher threat categories can be impacted. The integrity study also took into account mortality from collision with the high voltage overhead line. The reduction of number of turbines required in the context of the first environmental permit application, contributed in the reduction of the aforementioned impacts. The competent authorities required also monitoring during the construction and operational phases extending up to 3 years after the start of operation.

For bats, the permit concludes that the most affected species do not concern those that were the basis for the designation of the Alvão/Marão site as special area of conservation, again noting that species of higher threat status could also be impacted. The authorities introduced



mitigation measures (such as start-up speed variation or pausing operation for certain locations) and monitoring requirements (3yr).

Based on the EIA, other environmental impacts mainly include noise and traffic disruption during the construction, visual impacts, impacts on cultural heritage and on landscape. Cumulative impacts with other projects and associated facilities have been considered in the EIA report. Shadow flickering and noise emissions are expected during the operation phase as well as electro-magnetic radiation by the high voltage equipment (mainly overhead, high voltage electricity lines) connecting the wind farms to the grid.

The project has been assessed for Paris alignment and is deemed 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

The direct CO2 emissions of an onshore wind farm are deemed negligible.

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 Portugal the total relative effect of the project is a net reduction in CO2 equivalent emissions by 202 kt CO2e/a.

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 Iberdrola S.A. is in scope and screened into the PATH framework, because it operates in a high emitting sector. The counterparty already meets the requirements of the EIB PATH framework with its existing alignment plan.

Social Assessment

The Project is located in the northern region of Portugal, in the districts of Braga and Vila Real, and specifically in the municipalities of Cabeceiras de Basto (Braga district), Montalegre (Vila Real), Ribeira de Pena (Vila Real) and Vila Pouca de Aguiar (Vila Real). The land rights to the Project site are being negotiated via lease agreements with the local municipal entities. A small part of the cable routes is privately owned -for this part, the promoter secures voluntary agreements with the landowners. There will be no expropriation of land. The Project will not lead to involuntary resettlement or entail impacts on vulnerable groups.

Public Consultation and Stakeholder Engagement

As per the EIA requirements, several rounds of public consultation were held. As the Project originally applied for a different design which was subsequently modified (reduced number of turbines, locations), for each modification, there was a public consultation phase. All E&S documents have been made available on the website of the national authority ([Agência Portuguesa do Ambiente](#)). The Promoter has channels of contact on social responsibility, sustainability and environmental matters (<https://www.iberdrola.com/contact/query-mailbox>).

Other Environmental and Social Aspects

The promoter, Iberdrola, is a Spanish multinational energy company with experience in the renewable energy. The Bank has financed other projects with the promoter and its E&S management capacity is deemed satisfactory.



The promoter has strict requirements for all contractors with respect to HSE, for ensuring a high level of health, safety, and environmental performance. The Promoter is certified to ISO 9001 (Quality management), ISO 14001 (Environmental management), and ISO 45001 (Occupational health and safety management systems). By entering into agreements, suppliers pledge to observe the promoter's ethical and environmental principals and to put them into practice in their supply chains.

Conclusions and Recommendations

The project is deemed acceptable for Bank financing under environmental and social aspects, subject to the below loan conditions:

- The promoter will undertake to report to the EIB on the progress and outcomes of the environmental monitoring undertaken in line with the permit requirements.
- With regards to the Appropriate Assessment conducted (for the assessment of impact on the Alvão/Marão Natura 2000 site), the promoter shall inform the EIB in the context of its periodic reporting, about any changes/updates to the conclusions of the Appropriate Assessment, in view of the Site Specific Conservation Objectives of the Natura 2000 site(s) affected by the project, as defined by the competent authority and reflected in their decision.