

Luxembourg, 2nd March 2022

Environmental and Social Data Sheet

Overview

Project Name:	<i>IBERDROLA GREEN HYDROGEN</i>
Project Number:	<i>2021-0187</i>
Country:	<i>Spain</i>
Project Description:	<i>Implementation and operation of a medium-scale photovoltaic plant (nominal capacity 100 MWp) incl. a battery storage system (storage capacity 20 MWh, power 5 MW), directly connected to a large-scale electrolyser (20 MW) for hydrogen production, using partially the renewable (PV) energy capacity (35 MW). The hydrogen will be supplied to the fertiliser industry, situated nearby the PV plant, replacing hydrogen from natural gas. The project is located in Spain, Ciudad Real (Castilla-La Mancha, less developed region).</i>
EIA required:	yes
Project included in Carbon Footprint Exercise I:	yes

Environmental and Social Assessment

The project entails the development, implementation and operation of a large-scale photovoltaic (PV) plant with a total nominal capacity of 100 MWp (peak), combined with a battery storage system with a nominal storage capacity of 20 MWh and a nominal power of 5 MW. These will be partially used to supply electricity to the third project component, a large-scale “green” hydrogen electrolyser (20 MW). A new transmission line with a capacity of 35 MW connects the electrolyser directly to the PV plant. Further, the PV plant will be connected via a new underground cable to a new grid-connected MV/HV substation (30 kV/220 kV) located close to the project site.

The PV plant and the battery storage are located in Puertollano, Spain, close to the most accessible natural entrance to the Ojalén river valley on the edge of the Sierra Morena. It is situated between two hills, the San Sebastián (800 m) and Santa Ana (900 m). All the components of the project’s “green” hydrogen production facilities are located in the same area within the premises of the off-taker.

Environmental Assessment

Photovoltaic plants fall under Annex II of Directive 2014/52/EU amending the EIA Directive 2011/92/EU according to which the Member States shall determine whether the project shall be made subject to a mandatory EIA based on defined criteria. According to national legislation, PV installations with a capacity of more than 50 MW are subject to a mandatory EIA. An EIA including public consultation was undertaken accordingly and the competent authority has granted approval for the PV plant at end of 2020.

Production and storage of hydrogen falls under item 6a,c of Annex II of EIA Directive 2011/92/EU (as amended by Directive 2014/52/EU), for which Member States shall determine whether the project shall be made subject to an a mandatory EIA based on defined criteria. Since the “green” hydrogen production plant will be located at the site of the industrial off-taker, the environmental approval for implementing the “green” hydrogen facilities was granted by the off-taker’s request through a non-substantial modification of its Integrated Environmental Authorisation. The hydrogen part of the project needs to further demonstrate compliance with

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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applicable industrial safety regulations related to the handling and storage of chemical products in terms of safety and accident prevention, such as the SEVESO Directive.

The transmission line between the PV plant and the electrolyser is subject to a simplified environmental impact assessment. The promoter has submitted this request to the competent authorities, whose approval process is in progress. Despite this evidence, it is recommended to consider a clause of “Representations by the borrower” in the Finance Contract, which refers to the promoter’s policies.

An EIA was undertaken and the competent authority granted a permit in December 2020. The environmental permit includes the confirmation that no negative impacts are expected on Natura 2000 sites².

The EIA study has adequately identified and assessed individual and cumulative impacts of the project, noise, dust and increased traffic during the construction phase and to visual impacts during operation. Further, the study has evaluated impacts on biodiversity and ecosystems, loss of habitats, and impacts on cultural and archaeological patrimony. The assessment also determines the significance of identified impacts and proposes measures to avoid, reduce, mitigate and compensate these. All EIA reports included the corresponding “Plan de Vigilancia Ambiental” (Environmental Management Plan), which mentions efforts to minimise disturbance during construction. Specific relevant measures are also included as conditions in the permit.

The project is expected to have limited, residual environmental and social impacts, provided that all mitigation measures indicated in the EIA and in the environmental permits are implemented.

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 combined margin for intermittent generation, the total relative effect of the project (based on the expected power and hydrogen generation) is a net reduction in CO₂ equivalent emissions by ca. 45 kt CO₂e/year.

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.

Social Assessment, where applicable

Recent public reports point out the possibility of use of forced labour in this specific sector. There is a risk that forced labour is employed in the supply chain of the solar PV panels that will be used for the project. To address this issue, the promoter requires its contractors, to state expressly in their supply contract that forced labour practices in their supply chain are prohibited and hence rejected in line with the promoter’s Code of Ethics and Human Rights policy. Further, the promoter has a Human Rights Policy in place, rejecting the use of any form of forced or compulsory labour. The promoter provided evidence for these statements related to the purchase agreement of the PV modules of the project. In any case, a representation by the borrower/promoter referring to compliance with their policies will be included in the finance contract.

Public Consultation and Stakeholder Engagement

² Nearest Natura 2000 Site: ZEC “Lagunas Volcánicas del Campo de Calatrava” 6,5 km.



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Based on the environmental permit, provided by the promoter to the Bank, the permit decision considered information presented by the promoter to the competent authorities as part of the permit application, possibly additional requests by the authorities and public consultees to that information and assumingly an analysis of such information by the relevant experts of the competent authorities. The information has to be presented by the promoter/applicant based on national regulations, having transposed the relevant EU Directives into national law.

Other Environmental and Social Aspects

The promoter's business unit for renewable energy operations in Spain is certified according to OHSAS 18001, ISO 9001, ISO 14001 and ISO 45001.

The promoter's climate objective is to reduce the intensity of CO₂ emissions down to 50 gCO₂/KWh by 2030, and to reach carbon neutrality by 2050 globally and by 2030 in Europe. Their Climate Action Policy seeks to integrate climate change into internal strategic planning and decision-making processes, as well as into the analysis, management and reporting of long-term risks. According to assessments conducted by an external, commercial monitoring entity for the objectives of the Paris Agreement, the promoter has emissions intensity and targets aligned to these, and a sound managerial awareness on the Climate Change objectives. The promoter is also disclosing actively its climate strategy and policies.

Conclusions and Recommendations

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. Based on the reporting by the promoter, it is concluded that this project has been found environmentally acceptable and compliant with the relevant EU and national environmental legislative framework by the national competent authorities.