

Luxembourg, 17.07.2024

## Environmental and Social Data Sheet

### Overview

Project Name: *SALTO DE CHIRA PUMPED-STORAGE HYDRO PROJECT*  
 Project Number: *2022-0163*  
 Country: *Spain*  
 Project Description: *Construction of a 200MW pumped-storage hydroelectric power station and associated desalination plant in the Gran Canaria, Spain*

EIA required: yes

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

### Environmental and Social Assessment

#### Environmental Assessment

The Project consists of the construction of a 200MW pumped hydro storage scheme in the isolated island of Gran Canaria. The scheme that will use the two existing reservoirs of Soria and Chira, is complemented by a transmission line and the construction of a water supply system fed by a 7,800 m<sup>3</sup>/day desalination plant (EDAM<sup>2</sup>, Spanish acronym).

The related studies were initiated in 2007 and updated in 2020, the Project aims at providing flexibility, improving power quality, reliability and security of supply, and ultimately increasing electricity generation from renewable sources in Gran Canaria isolated grid.

The Project is in line with Energy Strategy of Canarias 2015-2025, dated 2017 and the national targets of the Integrated Plan for Energy and Climate. It will also provide water for irrigation and contribute to the firefighting system of the island. During the peak hours, the Project can provide 200MW to the grid for 16 hours i.e. 3.2GWh per cycle, contributing to i) mitigate the risk of electricity shortage, ii) reduce fossil fuel import, and iii) smoothen electricity peak prices.

The Project falls under Annex I of the EIA-Directive (2011/92/EU, as amended by 2014/52/EU). The EIA process included was initiated in 2016. In 2020, due to technical modifications, (hydraulic circuit, underground works, surface works, EDAM water outlet), the Project has undergone an EIA, including Appropriate Assessment. The process was completed in July 2021 with the issuance of the environmental permit (*Declaración de Impacto Ambiental / DIA*) by Autonomous Environmental Assessment Commission (CAEA<sup>3</sup>) under General Directorate for Fight against Climate Change and for Environment<sup>4</sup> (DGLCCMA) of the regional government of the Canary Islands.

<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.

<sup>2</sup> EDAM, Spanish acronym for *Estación Desalinizadora de Agua de Mar* (Seawater Desalination Plant)

<sup>3</sup> CAEA, Spanish acronym for *Comisión Autónoma de Evaluación Ambiental*

<sup>4</sup> DGLCCMA, Spanish acronym for *Dirección General de Lucha contra el Cambio Climático y Medio Ambiente*



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The Project has been granted with declarations of public interest and of general interest and the building authorisation from relevant local and national authorities.

Further modifications have been brought to the Project (EDAM inlet water pre-treatment and brine diffusion system) and notified to the DGLCCMA which confirmed that the modifications do not necessitate the update of the EIA as previously permitted. The Promoter also confirmed that the conclusions of the cumulative impact assessment from the EIA completed in 2021 and based on updated information on planned Projects remain valid.

The construction works started with the EDAM, are currently ongoing and expected to be completed in 2027. To note that the consent for the installation of pipelines for abstraction and release of water into the Marine Special Area of Conservation ("SAC") has not been obtained yet (request submitted in 2022).

The Project is covering 20ha of which more than 4ha of the Biosphere Reserve of Gran Canarias. The Project is likely to affect the following Natura 2000 areas: directly ZEC<sup>5</sup> Franja Marina de Mogán, ZEC Macizo de Tauro II and ZEC El Nublo II, and indirectly ZEPA Ayagaures y Pilaciones and ZEPA<sup>6</sup> Macizo de Tauro, with several other sites in the area of the Project, as well as natural parks and natural monuments. The Appropriate Assessment carried out concluded that:

- ZEC Franja Marina de Mogán with main conservation feature represented by habitat 1110 (*sandbanks which are slightly covered by sea water all the time*) – the Project will not significantly affect the habitat, nor the benthic communities. Other conservation features, according to the management plan of the site, are represented by *Caretta caretta* and *Tursiops truncatus*. As a condition from the DIA, a mapping, bathymetric and bionomic study for the implementation of the EDAM's intake and discharge systems has been prepared in January 2023. Together with this study, additional reporting was submitted on proposed monitoring for the 1170 (*reefs*) habitat, for the turtles and for the cetaceans (noise sensitive species).
- ZEC Macizo de Tauro II where the Project (the power line component) will entail loss of habitats 550m<sup>2</sup> of 5330 (*Thermo-Mediterranean and pre-desert scrub*) and 1470m<sup>2</sup> of 92D0 (*Southern riparian galleries and thickets*), mitigation measures are foreseen to reduce the impact to minimum. The site is also hosting *Teline rosmarinifolia*. The surveys were performed during the permitting process did not identify any specimen; following the condition imposed via DIA, additional surveys have been performed leading to the same result;
- ZEC El Nublo II, where species of concern are represented by habitat 9370\* (*palm groves of Phoenix*), Canarian pine forests (endemic to the islands) with an important role in erosion control and aquifers recharge will not be affected by the Project.
- ZEPA Ayagaures y Pilaciones and ZEPA Macizo de Tauro, where no conservation features are likely to be affected by the Project.

To note that signalling with bird-saving devices has been updated to cover the entire power line. Triple reflective blade anti-collision devices are currently proposed, as they are more effective against birds that have nocturnal habits.

The Appropriate Assessment, considering the measures, concludes that the Project is not likely to have significant impact, neither alone nor in combination with other projects, on the conservation features for which the NATURA 2000 sites were designated, nor is it likely to reduce the ecological connectivity or affect the coherence of the network.

The DIA foresees the restoration project of the plant communities of the ravine of Arguineguín, by the construction of the reservoirs and improve the water bodies in this area. These works are expected to start in Q4 2024.

The DIA also includes a specific condition for an Environmental Monitoring Program was requested to monitor impacts, determining the adequacy and the efficiency of the mitigation

<sup>5</sup> ZEC, Spanish acronym for *Zonas Especiales de Conservación*

<sup>6</sup> ZEPA, Spanish acronym for *Zonas de Especial Protección para las Aves*



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measures, as well to detect unforeseen impacts, and articulate prevention and correction measures, as necessary. Monthly reports are being prepared and submitted bi-annually to the DGLCCMA<sup>7</sup> and General Energy Direction (DGE<sup>8</sup>) and verified by a Technical Monitoring Commission which is made up of different public administrations. The most important features to be reported in the monitoring results are: benthic communities in the vicinity of the water outflow, *Chelonia mydas* species, conservation status of habitat 1170 reefs, in order to avoid inconvenience or damage to *Chelonia mydas*, collision of all bird and chiropter species.

Within the framework of the EIA report, a series of measures are proposed that have been assumed by the Promoter for the protection of underground water bodies. The Promoter has hired a specialized company that carried out groundwater level measurements in existing boreholes over the last 2 years, an inventory of surface and underground water points, wells and springs to facilitate knowledge of the possible affected points and have additional piezometric data of the groundwater. Initial measurements were done before starting the underground works, defining a hydrogeological control network within the scope of the Project.

A number of conditions have resulted from the EIA report and have been requested within the DIA. Some of these conditions requested additional surveys and assessments; these activities have been carried out in the past 2 years. In terms of biodiversity, additional surveys have been performed and reported to the DGLCCMA and DGE:

- survey of the entire area of potential habitat of *Pymelia granulicoides* - a species included in the Canary Catalogue of Protected Species in the category "in danger of extinction" – was carried out in the middle and low sections of Arguineguín ravine to confirm or discard, and, where appropriate, characterise the presence of *Pimelia granulicollis*, delimiting its area of current and potential presence from the results of this survey and the report has been submitted to the competent authority. A number of specimens were identified, but there was no need to relocate them.
- helicopter support has been carried out to avoid accessing areas where protected vegetation was found (e.g. specimens of *Limonium preauxii* access to tower 8).
- in the surveys carried out in 2022, it has been possible to verify the presence of three couples of *Falco peregrinus* in the cliff areas of El Montañón, Puntón de Gavilanes y El Sao. Consequently, apart from monitoring activities, the measure proposed was that all types of works that produce noise or involve the installation of heavy machinery should be avoided during the period between January 15 and May 15, considered as breeding season.

Caracol Chato (*Monilearia arguineguensis*) is a species that is not included in protected species lists, neither on European level, nor at the national level; however, it is an endemic species classified as critically endangered by International Union for Conservation of Nature ("IUCN"). Following complaints received from NGOs, the Promoter has provided a separate study. The study presents the distribution area of the species, as well as of similar taxa, the location of necessary environmental favourable conditions, the fact that the Project is not likely to have an impact on this particular species. The report concludes the need for an assessment of the conservation status and development of a management plan for the conservation or restoration, as the case may be. However, these do not fall within the responsibility of the Promoter. In August 2023, authorisation was issued by the Environment, Climate, Energy and Knowledge Department of the Cabildo de Gran Canaria for the relocation of the specimens, should this be the case during the implementation of the Project, stating the conditions in which this activity is to be carried out.

**Climate Change adaptation:** a Climate Change Risk and Vulnerability Assessment was requested via the DIA and was prepared and submitted during the appraisal process. At the Bank's request, the study was prepared following the IHA guideline. Through the measures proposed, the Project deemed to be resilient in case of climate change related events.

<sup>7</sup> DGLCCMA, Spanish acronym for *Dirección General de Lucha contra el Cambio Climático y Medio Ambiente*

<sup>8</sup> DGE, Spanish acronym for *Dirección General de Energía*



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## EIB Carbon Footprint Exercise

Project estimated emissions savings are 19 kilo tonnes of CO<sub>2</sub> equivalent per year. Project emissions are assumed to come from energy consumptions (i.e. GWh pumping + GWh supply from desalination plant - GWh generating) based on data received from the Promoter. For the calculation of the absolute emissions (A) the long-term grid emission factor (287 ktCO<sub>2</sub>/GWh) has been calculated based on the projections provided by the Promoter and aligned with the PNIEC (*Plan Nacional Integrado de Energía y Clima*) and considering the future interconnection of Gran Canaria with the smaller grid Fuerteventura-Lanzarote. Emission factors for different technologies are as per EIB Carbon Footprint Methodology.

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 (Redeia, the Promoter's Head of Group) is in scope and screened out of the PATH framework because less than 20% of annual consolidated revenues come from high-emitting sectors and physical risk score is lower than 3.

## Social Assessment, where applicable

The Promoter engages with landowners in order to secure voluntary agreements for the land plots required for all the programme-related infrastructure. The agreements usually entail land leases. If such an agreement cannot be reached, an expropriation process is followed, in line with the relevant legislation in Spain. The Promoter has provided information on the affected assets and rights and on the fact that the expropriation (status provided) is carried out according to the legislation requirements.

## Public Consultation and Stakeholder Engagement

Consultation have been carried out under the EIA process, as required by the legal provisions. To note that a good number of reactions against the Project have been raised, even appeals. The Promoter holds grievance records. Currently, there is no further knowledge of any ongoing judicial and legal proceedings; this will also be monitored throughout the implementation of the Project.

In terms of judicial reviews, five judicial proceedings have been initiated for the precautionary stop of the works. All of them have been dismissed because the requests lacked foundation and due to the prevailing general interest of the infrastructure was evident. Also, several appeals have been initiated against the Promoter, all of them dismissed.

## Other Environmental and Social Aspects

The Promoter has in place an integrated health, safety, environmental and quality (HSEQ) management system including requirements for the quality management system (ISO 9001), environmental management systems (EMS) ISO 14001, Eco-Management and Audit Scheme (EMAS) Health & Safety (ISO 45001 and OHSAS 18001), as well as the voluntary standard for designing, implementing and maintaining an energy management system (ISO 50001).

## Conclusions and Recommendations

Based on the information available, and with appropriate conditionalities (see below) and monitoring, the Project is expected to be acceptable in environmental and social terms for Bank financing.

*Disbursements conditions:*



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- *Disbursement related to the installation of pipelines for abstraction and release of water into the Marine Special Area of Conservation will be subject to obtaining the consent and providing it to the Bank.*
- *Update of implementation of the restoration measures adopted before each disbursement and confirmation of completion before the last disbursement.*

*Undertakings for the finance contract:*

- *In case during the works there is need of relocation of Caracol Chato (*Monilearia arguineguensis*), confirmation of proper implementation of the recommendations resulting from authorisation issued for this purpose.*