Alcoutim Solar Parks: Our Commitment to Biodiversity Protection and Restoration in Portugal

Pilot project in Portugal to achieve NPI with the goal of conserving, restoring, and enhancing biodiversity at photovoltaic power plants

Galp recognizes that the energy transition is pivotal for global decarbonization, with renewable energy generation being a primary avenue to achieve this goal. However, we acknowledge that focusing only on clean energy generation is insufficient, thus it must also be made sustainable.

In September 2023, the Alcoutim solar parks were inaugurated in Portugal, representing a significant photovoltaic energy project with a capacity of 144 MWp and an investment exceeding €70 million. Comprising four photovoltaic plants - S. Marcos, Viçosa, Pereiro, and Albercas - the project spans an area of 250 hectares. The estimated annual production capacity in Alcoutim is 250,000 megawatt-hours of electricity, enough to provide renewable energy to over 80,000 families.

To secure the sustainability of this project, Galp, with the support of ecology and biodiversity experts, developed a methodology to integrate solar plants into the ecosystem, making them part of the region's habitat. For this purpose, a Biodiversity Action Plan (BAP) and its respective Monitoring Plan were developed defining relevant metrics and indicators with a focus on achieving Net Positive Impact (NPI).

The BAP outlines measures that were considered most appropriate for implementation in our solar power plants. Additionally, its initiatives aim to promote a diversified use of land, soil regeneration, safeguard and increase local biodiversity, enhance ecosystem services, and increase resilience to climate change, among other benefits.

Throughout the year 2023, the BAP was developed and some of its actions started to be implemented in the Alcoutim parks. For example:

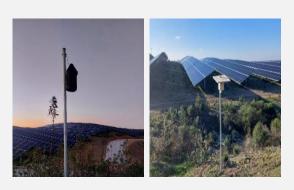
Sheep grazing

Sheep grazing provides a sustainable approach since it promotes ecological land maintenance. In addition, the presence of this species in а photovoltaic park results in а significant improvement in soil quality and contributes to the reduction of wildfire risks while controlling vegetation growth.



Shelters for birds and bats

The installation of shelters for birds and bats creates a conducive environment for their reproductive activities. Additionally, by providing safe nesting and resting places, this initiative directly contributes to the protection, preservation, and enhancement of local biodiversity, attracting various species to the area. Thus, the combination of renewable energy and the promotion of natural habitats reinforces our commitment to the harmonious coexistence between the environment and technology.



Installation of insect hotels

The installation of this kind of structure provides essential refuge for the pollinator insect community, promoting a conducive environment for their development. By offering shelter and beneficial conditions for various insects, the hotels contribute to the preservation and increase of biodiversity in photovoltaic plants, favouring the presence of species that are crucial for the balance of the local ecosystem.



In addition to the mentioned initiatives, opening gaps were created in the fences of the photovoltaic plants to allow access for medium-sized fauna to the site, promoting habitat connectivity with the surrounding environment.

Furthermore, the monitoring process was initiated through the installation of acoustic sensors and camera traps. With the Monitoring Plan, we will be able to track the progress of our measures, allowing adjustments if necessary **to ensure the achievement of the Net Positive Impact.**

The Alcoutim solar parks contribute to the following Sustainable Development Goals (SDGs):

