

Una manera de hacer Europa

BUENAS PRÁCTICAS

Actuaciones Cofinanciadas

Investment in wind energy production facilities located in the Canary Islands (EOLCAN)

IDAE

**Programa Operativo
Plurirregional de España**

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Fondo Europeo de Desarrollo Regional

Best practice of the IDAE's grant programme for investment in wind energy production facilities located in the Canary Islands (EOLCAN), with reference to the La Caleta and Las Casillas-1 wind farms of the companies Cardo de la Plata, S.L. and Alamillo de Doramas, S.L. of the ECOENER Group.



*La Caleta wind farm 1
Photo courtesy of ECOENER*

Within the framework of the first call for applications under the IDAE's grant programme for investment in electricity production facilities using wind power technology located in the Canary Islands (EOLCAN 1), the LA CALETA (Cardo de la Plata S.L.) and LAS CASILLAS I (Alamillo de Doramas, S.L.) wind farms, both located in the municipality of San Bartolomé de Tirajana on the island of Gran Canaria, have been commissioned. This action has been co-financed by the European Regional Development Fund (ERDF), included in Axis 4 of the Low Carbon Economy of the Spanish

Multi-regional Operational Programme (POPE), within the Sustainable Growth Operational Programme (POCS) for the period 2014-2020.

The objective of the **EOLCAN 1 programme, with a budget of 80 million Euros**, is to promote the development of the Spanish insular system's renewable electricity generation, providing investors with the public support and financial capacity necessary for the development of wind technology projects in the Canary Islands. This programme will allow the introduction of at least 180 MW of renewable electricity generation projects using wind technology.

Under the EOLCAN 1 Programme, 25 projects have been awarded grants with an allocated support of approximately 56 million Euros from the European Regional Development Fund (ERDF), representing a total investment of around 222 million Euros.

The La Caleta wind farm consists of 7 wind turbines of 800 kW nominal power each, with Enercon E48 technology, adding up to a total power capacity of 5.6 MW.

At the existing electrical substation of the Llanos de la Aldea wind farm, the voltage is raised from 20 kV to 66 kV, which is shared with other wind farms and photovoltaic installations. It is then connected via a 66 kV feed-in line to the 66 kV Aldea Blanca substation, owned by Red Eléctrica de España.

The Las Casillas-1 wind farm is made up of 5 wind turbines of 800 kW of nominal power each, with Enercon E48 technology, adding up to a total power capacity of 4.0 MW.

At the Las Salinas del Matorral substation, the voltage is raised from 20 kV to 66 kV, which is shared with other wind farms and photovoltaic installations. Then it is connected to the grid on the 66 kV side of the substation, owned by Red Eléctrica de España (REE).

The total investment in both facilities amounts to 11,520,000 Euros, with ERDF support - under the EOLCAN programme - of 1,597,464 Euros.

- 1. The role of the ERDF in the action has been adequately disseminated among potential beneficiaries and the general public.**

In addition to the mandatory advertising actions that the beneficiaries had to carry out, extensive dissemination has been done, both of the projects and of the European Regional Development Fund (ERDF), in various media.

a) Fulfilment of reporting obligations by beneficiaries

The actions have complied with their communication and publicity obligations, disseminating the ERDF aid by placing plaques, in accordance with the conditions of the aid received.



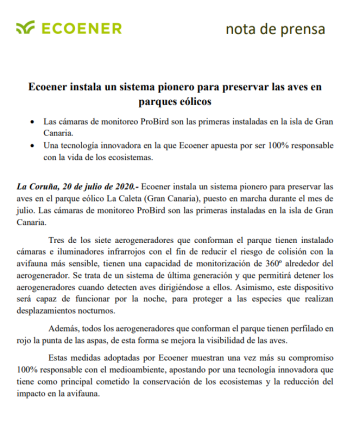
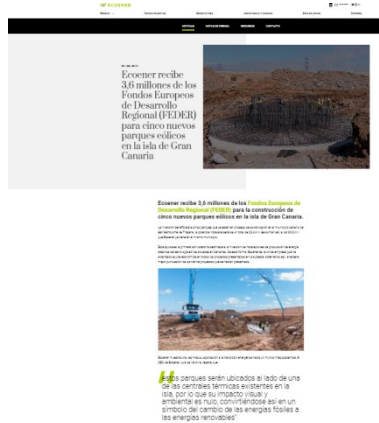
La Caleta Wind Farm - Temporary Billboard



Las Casillas-1 Wind Farm - Temporary Billboard

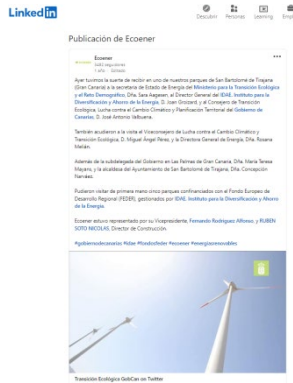
Beneficiary’s website

The beneficiary has largely complied with the obligation to include information about its actions on its website, providing a description of each project, specifying its objectives, results and highlighting the financial support of the European Union, via ERDF funds.



In addition, the beneficiary has carried out various promotional activities that have increased the visibility of the project in the media and among the public.

Inauguration of the ECOENER wind farm complex by the Secretary of State for Energy, Ms. Sara Aagesen, from the Ministry for Ecological Transition and the Demographic Challenge, the Director General of the IDAE, Mr. Joan Groizard, and the Regional Minister for Ecological Transition, Combating Climate Change and Territorial Planning of the Canary Islands Government, Mr. José Antonio Valbuena.



Inauguration of wind energy complex Secretary of State for Energy - LinkedIn



Inauguration of the wind farm complex Secretary of State for Energy - Twitter



Inauguration of the wind farm complex Secretary of State for Energy - Twitter

2. The action incorporates innovative elements

The wind farms use state-of-the-art generation technology. Some of the wind farms, due to their location, have been equipped with modern environmental conservation systems to guarantee the protection of ecosystems and birdlife.



La Caleta Wind Farm - Probird System Photo Courtesy of ECOENER

The wind farm of La Caleta (Gran Canaria) has implemented **ProBird monitoring cameras**, which are the first ones installed on the island of Gran Canaria.

Three of the seven wind turbines have cameras and infrared illuminators installed that reduce the risk of collision with the most sensitive birdlife, with a 360° monitoring capacity around the wind turbine. It is a state-of-the-art system that allows the wind turbines to stop when they detect birds heading towards them. The bird protection device also works at night to protect nocturnal species.



In addition, all the wind turbines of the wind farm have been painted with red outlines on the tips of the blades to increase their visibility and prevent birds from colliding with them.

Landscape integration has also been enhanced by painting some of the wind turbines with a gradient earth colour characteristic of the Canary Islands landscape.

El Rodeo wind farm. Photo courtesy of ECOENER

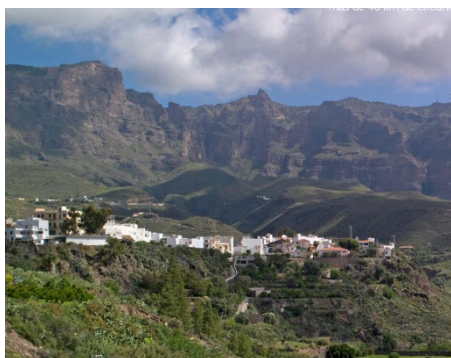
3. Adequacy of the results obtained to the established objectives.

The planned objectives have been fully achieved, since, thanks to the actions carried out at the La Caleta and Las Casillas-1 wind farms, a reduction in emissions of 16,972 tCO₂ eq/year has been accomplished, in addition to their renewable energy contribution, the implementation of sustainable economic activity and the generation of employment on the island.

Within the framework of the EOLCAN 1 Programme, the ECOENER Group has built a total of five new wind farms, which, together with the company's preexisting wind energy portfolio, make up the largest wind farm complex in the Canary Islands. This wind farm complex is made up of the "P.E. La Caleta", "P.E. Arcos del Coronadero", "P.E. Lomo del Moral", "P.E. Las Casillas 1" and "P.E. El Rodeo" wind farms, which use Enercon E-48 wind turbines, with a total installed capacity of 22 MW, generating enough electricity to cover the demand of 19,200 families.

4. Contribution to the resolution of a problem or weakness detected in the territorial area of implementation.

The singularities of the electricity systems of the non-mainland territories with respect to the mainland system, derived fundamentally from their isolated nature and small size, mean greater difficulties for the integration of electricity production from renewable energy sources due to their characteristics.



Local landscape. Photo Courtesy of San Bartolomé de Tirajana Town Hall.

The municipality of San Bartolomé de Tirajana is the largest on the island of Gran Canaria and has a population of approximately 54,000 inhabitants. Maspalomas, the world's leading tourist destination, is located in this municipality. The municipality also stands out because it has different protected areas such as the Roque Nublo Rural Park, the Pilacones Natural Park and the Protected Landscape of Fataga, as well as the Special Natural Reserve of Las Dunas de Maspalomas.

The main pillar of the municipality's economy is tourism, being one of the main tourist destinations in the archipelago, attracting more than a million tourists every year, which means that economic activity is totally linked to this sector.

This means that the municipality must cover its growing energy demand with renewable energy sources such as wind energy, incorporating technological advances that allow greater use to be made of the area's endogenous wind and solar resources, while at the same time integrating eco-sustainable elements of socio-environmental respect and coexistence with biodiversity.

5. High degree of coverage of the target population

The wind resource in the Canary Islands is especially high during the summer season, between June and September, when there is a high tourist influx. This is due to the influence of the trade winds over the Canary Islands. Consequently, the generation of electricity from the 5 wind farms that make up the ECOENER wind farm complex covers the electricity needs of both the inhabitants of San Bartolomé de Tirajana and tourist visitors. In addition, these wind farms generate local economic activity linked to the decarbonisation of the island economy and the regional development of the Canary Islands in an environmentally sustainable manner, supplying 19,200 families and reducing the emission of 40,000 tonnes of CO₂ per year.

6. Consideration of the horizontal criteria of equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability

Environmental sustainability, as well as the management of the impacts generated by its activity, have been a priority for the ECOENER Group, which has a firm commitment to the preservation of the environment and to social development, through its support for the San Bartolomé de Tirajana Town Council and its citizens, which translates into an improvement in the living conditions of many families in the area.

Other actions include the most recent ones:

- March 2022: **Cooperation with the Department of Tourism, Town Planning and Environmental Policies** to carry out work to remove accumulated rubbish in the Los Rodeos Alto neighbourhood. 75,000 kilos of rubbish and debris, which had been illegally deposited in recent years, were removed. The residents themselves participated during the removal work. <https://ecoener.es/noticias/ecoener-coopera-con-la-concejalia-de-urbanismo-de-san-bartolome-de-tirajana-para-la-retirada-de-residuos-del-barrio-de-los-rodeos-alto/>



- November 2022: Support for the Castillo del Romeral Football Club in the granting of scholarships whose main purpose will be to pay the annual club fees for children with a difficult family economic situation. In addition, thanks to the support received, the club has been able to set up the "**Balón y boli**" (**Ball and pen**) project, where the children who are part of the club, after their sporting training, receive academic training. A space has been set up with teaching support where the children can do their homework and receive support in the school subjects they need.



<https://ecoener.es/noticias/ecoener-apoya-el-proyecto-balon-y-boli-dentro-de-su-acuerdo-de-cooperacion-social-en-el-castillo-club-de-futbol-en-gran-canaria/>

- In November 2022, ECOENER collaborated with the Santa Lucia Secondary School by lending its wind energy facilities for the Erasmus + "ELECOTEAM" integrated international meeting, within the framework of the **European Social Fund**, in order to train trainers. The teachers who attended the visit came from different schools in Iceland, Turkey, Hungary, the Netherlands and Slovenia. The aim of ELECOTEAM is to experience an exchange between different countries. The main focus of the project is to bring an ecological approach to the field of electricity and electronics, which is associated with energy consumption.



<https://ecoener.es/noticias/el-ies-santa-lucia-de-gran-canaria-y-otros-centros-europeos-visitatan-las-instalaciones-de-ecoener/>

- July 2021, Ecoener and the women's football team *Ginelux Juan Grande*, of the Liga Reto Iberdrola (Iberdrola Challenge League), sign a sponsorship agreement for the new 2021/22 season. <https://ecoener.es/noticias/ecoener-patrocinador-del-club-de-futbol-femenino-ginelux-juan-grande/>



7. Synergies with other policies or instruments of public intervention

This action is in line with **Directive (EU) 2018/2001** of the European Parliament and of the Council of 11 December 2018 **on the promotion of the use of energy from renewable sources**, in which the implementation of wind power installations that contribute to the diversification of primary energy sources, to the reduction of energy dependence and to the reduction of CO2 emissions is considered appropriate, especially in geographical areas such as island territories. Currently, the new Renewables Directive, Directive (EU) 2023/2413, approved by the European Parliament and the Council on 18 October 2023, establishes a share of energy from renewable sources of at least 42.5% of the Union's gross final energy consumption in 2030.

Furthermore, in May 2017, Spain signed, together with the European Commission and 13 other Member States, the policy statement on **Clean Energy for EU Islands**, recognising the potential of these islands to be the architects of their own energy transition, as well as the opportunity to take advantage of these territories as a testing ground for energy transition technologies or policies that can then be exported to the continent.

Within the framework of the **National Energy and Climate Plan (NECP) (2021-2030)**, targets are defined for the reduction of greenhouse gas emissions, the penetration of renewable energies and energy efficiency in Spain. In particular, it includes the following measures for the islands, with synergies with the action aid programme: "Measure 1.12. Singular projects and strategy for sustainable energy in the islands", "Measure 3.2. These lines are linked to two other cross-cutting measures which are also aligned with the programme: "Measure 1.1. Development of new electricity generation facilities with renewables", "Measure 1.2. Development of self-consumption with renewables and distributed generation".

This action also enhances synergies with the Canary Islands Climate Action Strategy (ECAC, as per its Spanish acronym), which establishes the regional objective for 2040 of reducing GHG emissions by 90% compared to 1990 emissions, with at least 10% of the remaining emissions to be absorbed by sinks, thus achieving the climate neutrality scenario.

To achieve this goal, five strategic objectives are defined, one of which is the gradual implementation of renewable energies until 92% of final energy consumption is reached, based on the European Directive on the promotion of energy from renewable sources.



Las Casillas 1 Wind Farm. Photos courtesy of ECOENER

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