

Local Energy Community "Energía Bonita y Renovable"

CEL-EBRE



" The vast majority of the renewable power plants to be developed will use existing roofs and infrastructures, to preserve natural areas and agricultural soil"



This project is supported by the EU Islands Facility NESOI. NESOI has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°864266



The European Islands Facility NESOI aims to unlock the potential of EU islands to become the locomotives of European Energy Transition. To do so, NESOI aims to mobilize more than €100 Million of investment in sustainable energy projects to give EU islands the opportunity to implement energy technologies and innovative approaches, in a costcompetitive way. NESOI has selected 56 such projects across the European Union and provide them with financial resources and technical support.

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- Assessment of existing procurement options (e.g. tender, PPP, etc.)
- Financial modelling and identification of target scenario
- Identification of financing/funding options
- Action plan and identification of project monitoring procedures
- Grid audit and detailed design
- Request grid access and permits to build the pilot power plants
- 10 Legal advices on public-private collaboration and support for the creation of the LEC









Local Energy Community "Energía Bonita y Renovable"-Interview

INTERVIEW WITH

Nuria Albet (la Palma Renovable) and Jorge Díaz Pérez (Cabildo de la Palma)

Q: How was the project initially designed? Why choosing this specific sector?

A: This project was initiated based on the interest of the citizens of La Palma in creating an energy community on this island. The Cabildo has always supported the organization of the Energy Community. The aim was to obtain electricity at a lower price and to minimize the CO₂ emissions, to the benefit of citizens, SMEs and the Cabildo. Solar PV technology was chosen, which is very scalable and allows developing projects of various sizes. Additionally, an attempt is being made to take advantage of a hydroelectric plant that is not used, Salto del Mulato. This plant was operated by Endesa, which had the administrative concession for 99 years. The plant stopped working in 2004, and the concession expired. Currently, the plant is not working, and the Cabildo de La Palma is interested in commissioning it again. This plant was chosen because the concession had ended, and the plant had already been built, minimizing the investment to be made and the environmental impact.

La Palma

Renovable

DE LA PALMA

Q: What were the challenges? How did NESOI help overcome them?

A: There were many challenges. NESOI's greatest contribution has been to propose specific projects for the community to make ideas become a reality. There were many specific doubts about how to constitute the energy community and develop the projects. Among them, legal aspects to consider, as well as the economic business model to use. NESOI proposed a new, more appropriate business model. In addition, the NESOI team conducted a technical and economic feasibility analysis, to make sure that it is economically viable to develop the photovoltaic solar plants and recover the El Salto del Mulato hydroelectric plant.

Q: What will be done next to pursue this project?

A: There is a lot of work to done next. New renewable energy power facilities need to be installed in La Palma island and the barriers set by the distribution company need to be solved. For the financing of the solar PV project, we received a very important subsidy from IDAE (Instituto para la Diversificación y Ahorro de la Energía), but we will still need to look for more funds. The Salto de El Mulato project should be defined in much greater detail, especially at the legal level. Likewise, the repowering of this hydroelectric plant must be technically analysed to start it up. A high investment will be needed, and there are again questions about how these funds will be obtained.





1 Local Economy

Installation of more RE production will create new jobs and help to make energy more available and cheaper. One of the key objectives of the LEC is to dedicate part of the generated energy to cover the electricity demand for people affected by energy poverty.

2 Social Acceptance

In an anonymous survey conducted with the citizens of La Palma, a considerable willingness to participate in a LEC and to invest in RES was seen. Therefore, a great acceptance from locals is anticipated.



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Local Energy Community "Energía Bonita y Renovable" – Technical Data

FOCUS ON BRINGING SOLIDARITY THROUGH ENERGY COMMUNITIES

At the beginning of year 2020 an anonymous survey was carried out in La Palma island to check the previous knowledge about energy communities and the interest to invest in renewable energies. It was answered by almost two hundred people, showing their willingness to know more and to participate in the project.

The project consist of photovoltaic power plants for shared selfconsumption within a 500-meter radius, reserving part of the generated energy to support people in energy poverty situations.

Renewable power plants, especially photovoltaics, are going to be installed on degraded areas, existing roofs or other infrastructures such as water surfaces, thus avoiding soil usage conflicts.

The installation of collective renewable power plants is going to increase the installed renewable power by at least 2 MW, an increase of 16% compared to the renewable power installed nowadays on the island.

The objective is to develop up to 20 similar projects and at least one project on the territory of each municipality of the island, thus generating a significant impact on the whole island.



One location for PV installation estimated during CEL-EBRe, roof for 100 kW photovoltaic in El Paso



Schematic representation of creating solidarity using local energy community systems

(Icons by FREEPIK, design by NESOI)



Picture on cover - Author: Tamara k, source:

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