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BUENAS PRÁCTICAS

Operaciones Cofinanciadas

**INSTALLATIONS OF SOLAR
PHOTOVOLTAIC ENERGY IN COMPANIES:
1. DE SALABERT E HIJOS, S.A.
2. FINCA ES FANGAR, S.A.**

**Directorate General of Energy and Climate
Change**

Programa Operativo de Illes Balears

Fondo Europeo de Desarrollo Regional

Año 2017

INSTALLATIONS OF SOLAR PHOTOVOLTAIC ENERGY IN COMPANIES:

1. DE SALABERT E HIJOS, S.A.
2. FINCA ES FANGAR, S.A.

Basic description of the projects.

Within the framework public announcement of subsidies of 2015 for the promotion of photovoltaic solar energy and wind energy for self-consumption aimed at companies, business associations and individuals, promoted by the Directorate General of Energy and Climate Change, have been subsidized a total of **21 plants**.

The total investment made was € 962,325.94 and the total eligible cost of these projects amounts to **€ 761,507.13** with an associated ERDF grant of **€ 266,527.49**, which falls within the specific **objective 4.2.2** concerning "promotion of the use of renewable energies by companies, in particular SMEs".

This objective is part of the **investment priority 4B** for the promotion of energy efficiency and the use of renewable energies by the companies of **Axis 4** of the OP, with which it is intended to favor the transition to a low carbon economy in all sectors..

The operations selected within the framework of this call have allowed the installation of a total of **0.553 MW of renewable photovoltaic energy**, which is used to self-consume in industrial establishments and thus reduce their electricity bill. As a whole, all these projects allow **to reduce emissions to the atmosphere by 609 tons of CO2 per year**.

The main characteristics of the aid directed to companies and business associations have been defined by the following aspects:

- A subsidy of 45% on the value of the investment.
- A maximum investment value for photovoltaic generation facilities of € 1.50/Wp.
- A maximum amount of subsidy per beneficiary not exceeding € 30,000.

In this sense, two projects have stood out especially for their commitment to industrial self-consumption, not only for the benefits derived from the savings generated, but also for their commitment to the environment within the activity they develop.

One of them is the company **De Salabert e Hijos, S.A.**, located in Palma, which is dedicated to the sale, rental and installation of computer equipment and computer consumables software, digital whiteboards and all its variants, audio and video equipment and, in general, the sale of office, desk and school supplies.

The total investment made by this company was € 76,679.56, with a total eligible cost of € 48,750 and **an ERDF of € 26,250**. Thanks to this co-financed action, it has installed **200 photovoltaic panels of 50 kw** for its electricity supply.



Company facilities De Salabert e Hijos, S.A. in Palma

The other company is the **Finca Es Fangar, S.A.**, the largest ecological farm in Mallorca, in the municipality of Manacor, with more than 1,000 hectares dedicated to the production of organic agriculture, vineyards, olive trees, among other products based on fertility of its land and its favourable microclimate.

Within this ecosystem of exceptional natural value, renewable energy also has its space, where **384 modules** of 260 Wp and 4 converters of 15 kW have been installed with the support of the ERDF. Specifically, the investment made by Finca Es Fangar was € 150,000, with a total eligible cost of € 85,714.29 and an **ERDF of € 30,000**.



Company facilities Es Fangar, S.A. in Manacor

Below, the arguments that make both projects are considered as Good Practices are presented, according to the criteria defined for these purposes.

Criterion 1. High dissemination among the beneficiaries and the general public.

This action has been widely disseminated through the different information and advertising measures developed. In the first place, in the call for aid, published in the Official Gazette of the Balearic Islands on January 17, 2015, the reference to the ERDF co-financing is included, even though the Operational Program was not yet approved. In fact, in its expository part, it indicated that "the amount of the subsidy obtained by the projects submitted is co-financed 50% with ERDF funds".

In addition, the Department of Territory, Energy and Mobility carried out an **advertising campaign** in media such as written press, radio programs and digital media announcing the implementation of energy efficiency help lines, where mention is made of the co-financing by the ERDF of the aid and include the emblems and logos of the EU.



Publication in the OGBI of the call for aid



Informative campaign on energy aid

In various **media of the Balearic Islands**, both in their paper editions and online versions, information has been collected on the implementation of the call for aid with the support of the ERDF. Likewise, several informative notes have been prepared on this same matter that has been published in the news section of the website of the Balearic Government.



El conseller Pons anuncia una nova convocatòria d'ajudes per a empreses, particulars i entitats, amb 400.000 euros

↑ Informative note published in the Website of the Government of the Balearic Islands

News published in the Diario Última Hora →

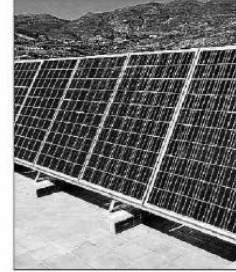
El Govern destina 1,2 millones en ayudas para instalar energía solar

EFE

La Conselleria de Territori, Energia y Movilidad ha convocado las ayudas para instalaciones de energía solar fotovoltaica dirigidas a administraciones locales y entidades dependientes por 1,2 millones de euros, con carácter bianual y cofinanciada con Fondos Europeos de Desarrollo Regional (FEDER).

La convocatoria para 2017 subvencionará las instalaciones iniciadas a partir del 1 de enero y realizadas hasta el 11 de noviembre. En el caso de 2018, las ayudas serán para actuaciones desarrolladas hasta el 31 de octubre del próximo año. Las solicitudes pueden presentarse hasta el 1 de noviembre.

Las subvenciones pueden ser de dos tipos. Para las instalaciones conectadas en la red se puede llegar al 80 % del valor de la inversión admisible. en el de



Placas fotovoltaicas.

1,5 euros por watt pico, y para las aisladas se mantiene el mismo porcentaje con un límite de 30.000 euros.

La convocatoria obliga a las administraciones a disponer de un monitor en un lugar visible que indique la producción de energía solar que generan los paneles.

This visibility has been reinforced by the information contained on the website of the DG Energy and Climate Change on the different projects it promotes within the framework of the 2014-2020 Balearic Islands ERDF OP, among which is the aforementioned call for facilities for photovoltaic solar energy and wind energy, for self-consumption, by companies and individuals.

DIRECCIÓ GENERAL D'ENERGIA I CANVI CLIMÀTIC
DIRECTORI

Inici > Conselleria de Territori, Energia i Mobilitat > Direcció General d'Energia i Canvi Climàtic > Direcció General d'Energia i Canvi Climàtic > DG d'Energia i Canvi Climàtic > FEDER

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- Gestió Energètica de la CAIB
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Fondo Europeo de Desarrollo Regional

Unió Europea

Programa Operatiu FEDER 2014-2020

Gestió i tramitació dels programes d'ajuda cofinançats amb fons del Programa Operatiu FEDER 2014-2020, en matèria d'eficiència energètica, energies renovables i mobilitat sostenible.

1. Actuacions a cofinançar

D'acord amb el **Programa Operatiu FEDER de Balears 2014-2020, aprovat el 22 de setembre de 2015**, la Direcció general d'Energia i Canvi Climàtic té previst realitzar - amb el cofinançament d'aquests Fons FEDER, i agrupades per objectius específics - les següents actuacions dins de l'Objectiu temàtic 4: Afavorir la transició cap a una economia baixa en carboni en tots els sectors.

 1. Objectiu específic 4.2.1: Avançar en l'avaluació i millora de l'eficiència energètica de les empreses, en particular les PYME.
 - a. Actuacions:
 - Millora de l'eficiència energètica en les empreses.
 - Plans pilot per a la reducció del consum energètic en les empreses.
 - Organització de fires, manifestacions comercials i trobades empresarials en matèria d'eficiència energètica i energies renovables.

Unió Europea

Website of DG Energy dedicated to reporting on projects co-financed by the ERDF (<http://www.caib.es/sites/energiaicanviclimatic/ca/feder-86605/>).

More specifically, **the final beneficiaries of the aid have made a brief reference on their website** of their respective operations, indicating the objectives and results obtained, as well as the financial support received from the EU.

<http://www.desalabert.com/gm2/index.php> /// <http://es-fangar.com/es/>

In addition, identification stickers have been placed on the equipment of the facilities co-financed with the European Union emblem and mention of the co-financing of the project by the ERDF.



Identification stickers on the equipment of the co-financed installation

The information on the two projects selected and their co-financing by the ERDF has also been disseminated through other information channels. Thus, explanatory **leaflets** have been designed with the most relevant data of the investment and the community contribution, which have been distributed by the different points foreseen in the Communication Strategy of the ERDF and ESF OP of the Balearic Islands 2014-2020.

In turn, the Directorate General of Energy has published informative posters on the conditions and characteristics of the actions that have been disseminated among the potential beneficiaries of the action.



Informative triptych about the ERDF contribution in the projects of solar energy installations of Salabert e Hijos, S.A. and Finca Es Fangar, S.A.

Informative posters about the general characteristics of the line of aids for photovoltaic panels

Another means of dissemination is the **mapping system** for co-financed projects of DG European Funds, located on its website (http://www.caib.es/sites/fonseuropeus/ca/portada_2016/?campa=yes). This online application, which is accessible to anyone, allows us to visualize, not only the geographical location of the investment, but also offers systematized data on the name, scope of intervention, co-financing fund, EU aid, total eligible cost and even images of the investment made.

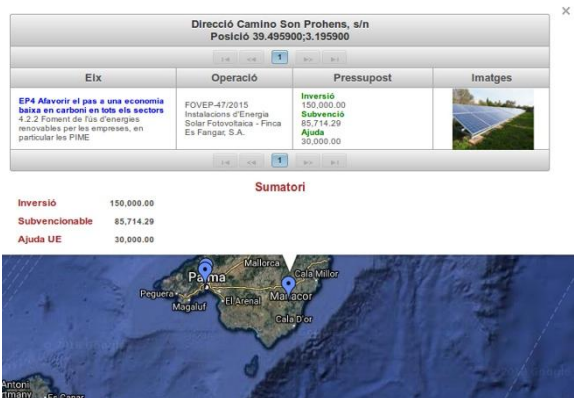


Image of the location system for co-financed projects of the Balearic Islands. Es Fangar S.A.

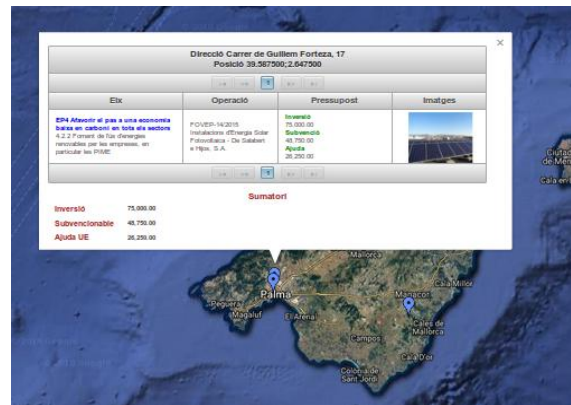


Image of the location system for co-financed projects of the Balearic Islands. From Salabert e Hijos S.A.

Finally, the second issue of the **Bulletin of European Funds in the Balearic Islands** has also included a reference of the project and the ERDF contribution in its execution, paying special attention to the results achieved thanks to this investment.

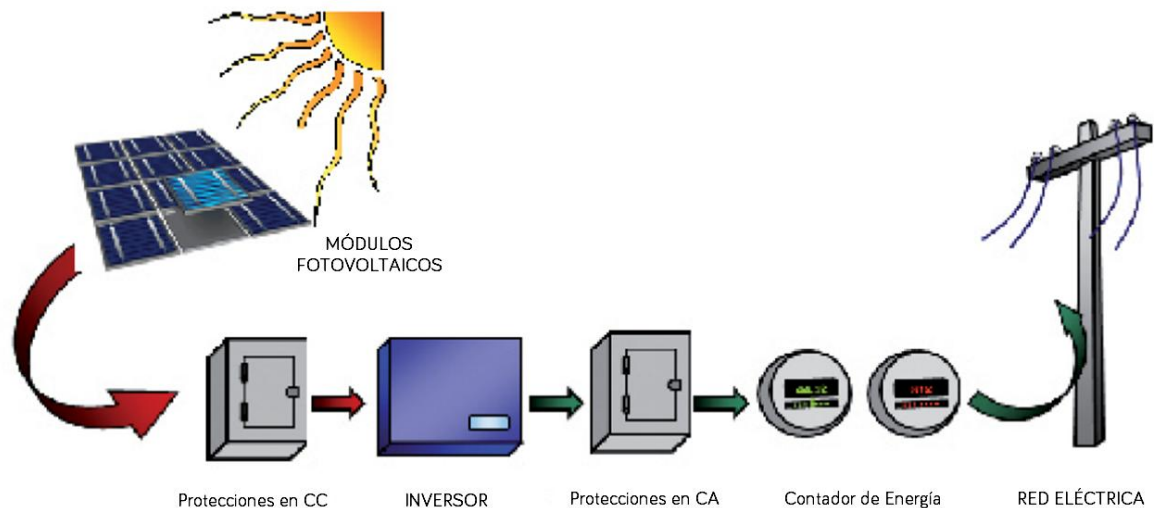
*Bulletin of European Funds
in the Balearic Islands (No. 2,
March 2018)* →



All these actions have allowed all the target groups of the investment (the population of the municipality, the island and the whole of the Balearic Islands, as well as other interested entities, such as energy services companies, environmental organizations) to have first-hand information about the development and results of the projects.

Criterion 2. Incorporation of innovative elements.

One of the advantages of solar self-consumption facilities is that they are an ideal option, both from the economic and ecological point of view, since the tips of electricity consumption are given in the spring and summer seasons, during the daytime period.



Components of a photovoltaic installation.

The equipment of these self-consumption facilities connected to the network are the result of the continuous evolution of all the teams that comprise it. In particular, they are composed of state-of-the-art polycrystalline solar modules, equipped with excellent

reliability and operational safety, which generate electricity at low cost and are suitable for a wide range of applications, with optimum performance regardless of climate, luminosity and temperature.

Co-financed investments are ideal for large plants in the commercial and industrial sector, as in the case of the beneficiary companies De Salabert e Hijos and Finca Es Fangar. Thanks to its high performance, not only guarantee exceptionally high profits, but through its concept of multistring, combined with a wide range of input voltage, also offers high design flexibility and compatibility with many available photovoltaic modules.

The integration of new network management functions allows to regulate the reactive power at the point of connection to the network only through the investor, being a firm commitment to the future. This makes it possible to dispense with higher order control units and reduce system costs.



Solar panels in De Salabert e Hijos, S.A.



Solar panels in De Salabert e Hijos, S.A.

Criterion 3. Adaptation of the results obtained to the established objectives.

The implantation in these companies of the small-scale photovoltaic solar energy generation facilities connected to the electricity distribution network described has resulted in the expected results with the investment made, which can be summarized in four fundamental aspects:

- **Savings in the energy costs of the activity.** The installation of the solar panels has directly affected a significant drop in the electricity bill of the two companies:
 - In the case of De Salabert e Hijos, the increase in the capacity to produce solar energy has been 0.05 MW.
 - For its part, the increase recorded in Finca Es Fangar was 0.09 MW.

- **Reduction of greenhouse gas (GHG) emissions.** The generation of own green energy for self-consumption has contributed to reduce the CO₂ emissions of these companies, contributing to curb climate change:
 - The investment made by De Salabert e Hijos supposes an estimated annual reduction of more than 55 tons of CO₂.
 - For Finca Es Fangar, the GHG emissions derived from its activity have been reduced by 110 tons after the start-up of the project.
 - **Increase in competitiveness.** The reduction of costs has favoured the possibility of offering more competitive prices, as well as its application in other assets that have strengthened the positioning of these companies in their markets.
- Therefore, the investment made, with the support of the ERDF, has led to an improvement in its efficiency levels.
- **Business differentiation.** In addition, those responsible for the two companies do not hesitate to say that their commitment to renewable energy consolidates their corporate social responsibility and improves the brand image considerably.

Criterion 4. Contribution to the resolution of a regional problem or weakness.

In general, insular territories do not have sufficient energy supply and have to import fossil fuels or electricity through submarine cables. This is due to the absence of autochthonous energy resources, the lack of interconnection with other energy systems and the seasonality of demand, associated with consumption derived from tourism activity.

These problems linked to the supply, consumption and cost of energy have a determining weight in the possibilities of economic development and competitiveness with respect to other regions. Thus, variations in fuel costs have a much more negative impact on the competitiveness of island regions and on the quality of life of their resident population. Significant fluctuations in fuel costs can make transport between insular regions and continental Europe considerably more expensive.

The Balearic Islands have **very high energy dependence**. Approximately 96% of the energy consumed is imported from outside the islands, which means that the energy bill is almost 4% of regional GDP. One way to solve this problem is through a future based on renewable energies.

However, the contribution of renewable to the electrical system of the archipelago represents only 2% of the total power, which places the Balearic Islands very far from the state average, which stands at 43.5%.

However, it is estimated that the non-urbanized land of the Islands has a potential capacity to produce almost 20 times the energy currently consumed in the Balearic Islands. Proof of this opportunity is the project of installation of photovoltaic plates in

the company Finca Es Fangar, which allocates an approximately 1 hectare of the surface that counts for the production of solar energy.



Image of the solar panels installed in the company Finca Es Fangar, S.A

At the same time, in urban land, taking advantage of the empty spaces in the upper part of the buildings, it is estimated that 57% of the Balearic electricity needs could be generated. Thus, the location of De Salabert e Hijos in an urban environment has led to the use of a model of roof or rooftop photovoltaic installations. In this case, it is an energy generating system that has its plates installed on the roof of the company building.



Image of the solar panels installed in the company Salabert e Hijos, S.A.

Both models are appropriate to move towards the energy transition through the impulse of the self-consumption of renewable energy in the productive sector.

Criterion 5. High degree of coverage of the target population.

The call is addressed to all companies in the Balearic Islands that carry out, within the territorial scope of the Autonomous Community of the Balearic Islands, the facilities or an action established in the call, since all companies have electricity from the electricity distribution system operator, and is intended to reduce the purchase of electricity from the network.

The only population sector that cannot benefit from these aids would be of 2 types: the first one, those applicants that are large companies. It is a legal condition of the ERDF Funds, which does not allow this type of companies to avail themselves of this aid.

The second type of companies that could not benefit from this type of facility is based on a technical condition, which requires those companies to have roof orientation with adequate conditions for sufficient sun exposure. However, there is no available data for companies in the Balearic Islands that do not have appropriate roof orientation to benefit from an installation of this type.

Therefore, it is considered that the degree of coverage of the population is very high.

Criterion 6. Consideration of the horizontal criteria of equal opportunities and environmental sustainability.

The use of renewable energy undoubtedly plays an essential role in the reduction of greenhouse gases and the mitigation of climate change, being an essential factor of environmental sustainability. This is especially relevant in a region such as the Balearic Islands, given the high dependence on energy resources already mentioned.

Photovoltaic solar panels, when generating electricity from the sun, do not produce any type of CO₂ in their operation or emit greenhouse gases, contributing to the improvement of air quality.

Must be added the fact that producing electricity in the same place where it is consumed is much more efficient than doing it in a centralized way and distributing it. It is estimated that about 10% of electricity is lost in the transportation and distribution of electricity, which represents a large amount of wasted energy.

From a closer perspective to the ordinary activity of the beneficiary companies, it must be considered that the project has allowed, in each case, to integrate photovoltaic solar energy in a sustainable and ecological way in the day to day of both companies.

To this must be added, also, the value of the investment in terms of awareness and sensitization of the staff working in them, as well as the improvement of the perception of the customers by high commitment to them by the sustainability.

Therefore, both De Salabert and Hijos, and Finca Es Fangar, are two clear examples of sustainable business management from the triple economic, social and environmental point of view, making compatible the economic viability of their business and the creation of long-term value term with the protection and conservation of the environment.

From the point of view of **equal opportunities** between women and men, due to the characteristics of the project there are no direct repercussions in this area. However, the possibility that companies can generate their own electricity for self-consumption through photovoltaic solar panels and inject it into the grid, favours the creation and maintenance of installation companies that generate local employment.

It is estimated that approximately 400 jobs from different establishments and businesses in the Balearic Islands are benefited by renewable energy, as companies can reduce their electric costs.

Criterion 7. Synergies with other policies or instruments of public intervention.

These outstanding projects are part of the **Energy Sectorial Master Plan of the Balearic Islands**, which establishes the planning of the actions aimed at supplying the future energy demand to each one of the Balearic Islands, either with conventional or renewable energy sources and, at the same time, promote savings and rationalization of the use of energy in each of the economic sectors, in order to minimize, as far as possible, the increase in energy demand.

The investments of De Salabert e Hijos, S.A. and of Finca Es Fangar, S.A. have also contributed to the fulfilment of the objectives of the **Balearic Strategy to Combat Climate Change 2013-2020** in terms of reducing GHG emissions. In fact, one of the aspects that, in this sense, the Strategy promotes is the involvement of the private sector in the development of planning and projects related to climate change.

For its part, the **Action Plan for Mitigation of Climate Change in the Balearic Islands 2013-2020** aims to reduce 20% of GHG emissions in 2020 compared to 2005. Among other measures, it contemplates the granting of subsidies to install photovoltaic plates that allow a saving of 2,173.5 tons of CO₂/year approximately.



ESTRATÈGIA BALEAR DE
CANVI CLIMÀTIC 2013-2020

Una visió global del canvi climàtic



Govern de les Illes Balears


Govern de les Illes Balears
Conselleria d'Agricultura, Medi Ambient i Territori
Direcció General de Medi Natural,
Educció Ambiental i Canvi Climàtic

Pla d'Acció de Mitigació del Canvi Climàtic a les Illes
Balears 2013-2020

Reducció d'emissions de gasos amb efecte d'hivernacle

Aprobat per la Comissió Interdepartamental sobre Canvi Climàtic dia 9/4/2014



El Pla d'Acció de Mitigació recull el compromís voluntari del Govern de les Illes Balears d'assumir un comportament responsable i donar suport en el compliment dels compromisos internacionals

These objectives have recently been reinforced with the new **Energy Transition Plan of the Balearic Islands**, which includes moving towards the use of 100% of energy from renewable funds in 2050, in line with the Paris agreement against climate change.

At the national level, for its part, the main references are the **Spanish Strategy for Climate Change and Clean Energy 2007-2012-2020** and the **National Action Plan for Renewable Energies of Spain 2011-2020**, approved within the framework of the **European Directive on renewable energy**.

Its objectives are perfectly aligned with those established for the EU in the H2020 about reducing greenhouse gas emissions by 20% compared to 1990 and achieving that 20% of total energy consumption comes from renewable energies. Therefore, synergies with the **European Strategy for Adaptation to Climate Change** are also very clear.