

SECRETARÍA DE ESTADO DE PRESUPUESTOS Y GASTOS DIRECCIÓN GENERAL DE FONDOS EUROPEOS GOVERN ILLES BALEARS

**BUENAS PRÁCTICAS** 

**Actuaciones** Cofinanciadas



# Una manera de hacer Europa

PHOTOVOLTAIC PLATE INSTALLATION ON THE ROOF OF THE GERIATED RESIDENCE IN MAO Directorate-General for Energy and Climate Change of the Regional Ministry of Land, Energy and Mobility

Programa Operativo de Illes Balears

Año 2019

Fondo Europeo de Desarrollo Regional

### AIDS FOR THE INSTALLATION OF PHOTOVOLTAIC PLATES TO LOCAL AUTHORITIES IN MINORCA

#### PHOTOVOLTAIC PLATE INSTALLATION ON THE ROOF OF THE GERIATED RESIDENCE IN MAÓ

#### **Basic Project description.**

The Directorate-General for Energy and Climate Change of the Regional Ministry of Land, Energy and Mobility of the Govern de les Illes Balears, promotes the installation of solar PV targeted at local authorities in the Balearic Islands (town councils, island councils and subsidiaries), in order to give impetus to the incorporation of this source of renewable energy into its premises and thus reduce the consumption of electricity from the grid and CO2 emissions to air.

This is good practice that, as part of the 2016 call for proposals, it is located in the island of Menorca. This call has enabled 5 actions to be subsidised on the island of Menorca, which has enabled installations connected to the network to reach 80 % of the value of the eligible investment, which is EUR 1,5 per Watt peak (kWp unit which measures the power of the photovoltaic panels) .In this respect, projects carried out on the island of Menorca have been particularly marked by their commitment to self-consumption.

The advantages of this generation model are manifold: using local energy sources, reducing energy dependency, reducing losses due to proximity between the place of generation and the place of consumption and creation of local employment.

The investment in these 5 projects in the island of Menorca amounted to EUR 609.571, with a total eligible cost of EUR 423.540 and ERDF assistance of EUR 211.770.

The impact of the investment has been 284,60 kW of additional installed power renewable PV power in public buildings, and a reduction in air emissions of 313,64 tons of CO  $_2$  per year.

Among the most outstanding actions is the one that carried out in the municipal buildings in Maò, in particular the installation of the new PV power plants on the cover of the Geriatric Residence in Maò



Please find below the arguments making for a good practice, in accordance with the criteria set for this purpose.

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

This action has been widely disseminated through the various information and publicity measures developed. In particular, **all regulatory reporting obligations**, such as:

The existence of a specific space on ERDF projects on the website of the Directorate-General for Energy and Climate Change, which provides information on the different co-financed actions, including that for photovoltaic solar energy installations. Also, information concerning the co-financing of the project by the ERDF has also been published on the website of the municipality of Maò.

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Ordenació Energética			
Atmosfera	Programa Operatiu FEDER 2014-2020		
Canvi climàtic	Gestió i tramitació dels programes d'ajuda cofinançats amb fons del Programa Operatiu FEDER 2014-2020, en matèria d'eficie energètica, energies renovables i mobilitat sostenible.		
FEDER	1. Actuacions a cofinançar		
Informació pública de projectes	D'ouce d'anté el Bayrou Openation 117876 de Baleres 2014 2020, aporte el 12 de tetenhor de 2015, la forrecia general d'array de Concel Chanie el protorte malitarza - en la formazement of Aposta (no FOTRE), aposta de releptorte expectivo - los según actuacion dim de l'Objectiu sequeixil e Manoré la transició i militara de Telicialeccia energistica de las empresas, en particular les P19 a. Actuacione: a. Actuacione:		
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Millora de l'efficiencia energètica en les empreses.     Plans pluto par a la reducció del comun energètic en les empreses.     Organizzació de la multitozicata connecciais i trabados empresariais en materia d'eficiencia energètica i energies renovables.			
b. Indicadors de productivitat:			
<ul> <li>Reducció del consum d'energia final en empreses (Ktop/any).</li> <li>Reducció estimada de gasos d'efecte hivernacle (Tn CO2/any).</li> </ul>			

DG Energy and Climate Change website

 
 AUNTAMENT DE MAÓ - MAHÓN
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Municipality of Maò website

Once the action has been completed, a permanent **information plate** has been placed at the entrance to the geriatric centre and in a visible place to the public, including the corresponding texts and logos.



In addition, **additional information and publicity measures** have been carried out which have increased the dissemination of the project as well as the visibility of the ERDF contribution to the project. In this regard, the following actions should be highlighted:

Various **information notices** have been produced in the news section of the Govern website of the Balearic Islands and **news from various media** in the Balearic Islands on the public call for aid and the launch of the action, its progress and results.

### Placas solares en la cubierta del geriátrico de Maó



Dia i hora d'emissió: 09/06/2017, 12:30 Tipus de comunicat: Consell de Govern Emissor: Conselleria de Territori, Energia i Mobilitat



Ayer comenzaron los trabajos de instalación de una planta fotovilacia en la cubierta de la residencia geriátrica de Maó, que contará con 194 placas y dos convertidores. La obra implica una inversión de 91.000 euros, de los que dos terceras partes son cofinanciadas por el Govern y el programa europeo Fe

der. El rendimiento de esta nueva infraestructura estima una generación anual de 69/936 kilovatios, lo que equivale al 18 por ciento de consumo del geriátrico calculado sobre la factura del centro correspondiente al año pasado, que fue de 74.555 euros por un consu-

mo total de 389.415 kilovatios. Una vez amortizada la nueva infraestructura, que se calcula en tres años, permitirá un ahorro anual de unos 14.000 euros. La obra forma parte de

de unos 14.000 euros. La obra forma parte de un plan de mejoras en el geriátrico que han contemplado el arreglo previo de las cubiertas del edíficio, la modernización de los dos ascensores o el cambio del montacargas, según explicó en su día el concejal Biel Pons.

Pons. Esta planta, junto con otra de parecidas características cuya instalación se ha previsto en el polideportivo, es la primera instalación de energía solar que lleva a cabo en el ayuntamiento en edificios municipales.

#### ENERGÍA

#### La Residencia Geriátrica de Maó ya cuenta con planta fotovoltaica

🖝 Esta semana, han finalizado los trabajos de instalación de la nueva planta fotovoltaica en la cubierta de la Residencia Geriátrica Asistida de Maó. Se trata de la segunda instalación de energías renovables en edificios municipales, junto con la que se ha puesto en marcha recientemente en el Polideportivo Municipal. La inversión en esta instalación ha sido de 90.976 euros, y ha contado con una subvención del Govern por valor de 60.528 e ros cofinanciada al 50% con cargo al Programa Feder.

Consell de Govern: EL GOVERN DESTINA 1,2 MILIONS D'EUROS A AJUDES INSTAL·LACIONS FOTOVOLTAIQUES EN ADMINISTRACIONS LOCALS

Pretén afavorir que els ajuntaments incorporin aquest font de ener

El Consell de Govern ha autoritzat a la Conselleria de Territori, Energia i Mobilitat la despasa aconòmica necessiria per a la convectòria d'ajude per instal·lar plaque fotovoltaiques en administracions locals i entitats públiques que en depenguin per a 2017 i 2018, amb un import d'1.250.000 euros, cofinançat amb fons europeus FEDER.

La convocatòria de les ajudes es formalitzarà en un mes i preveurà la presentació de les sol·licituds d'ajuda dins l'any 2017 i la possibilitat d'execució el 2017 i el 2018. Les ajudes sòn de fins al 80 % del cost de la instal·lació.

In addition, an **information day on energy efficiency and renewable energy for the local authorities in the Balearic Islands** took place on 28 July 2016 in Palma, which was organised with the aim of raising awareness of the various forms of assistance in this area and co-financed by the ERDF, attended by numerous municipal councils



The **fifth number of the European Funds Information Bulletin of the Balearic Islands** also includes information on the call of proposals and its results as well as the ERDF contribution in its implementation, paying particular attention to the results achieved through this investment. Finally, another dissemination channel is the **mapping system for co-financed projects** of DG Funds, located on its website (<u>http://www.caib.es/sites/fonseuropeus/ca/portada\_2016/?campa=yes</u>). This application *on line*, which is accessible to anyone, makes it possible to visualise, not only

the geographic location of the investment, but also systemised data on the name, field of intervention, co-financier, EU aid, total eligible cost and even pictures of the investment made.





Además, la Conselleria de Territorio, Energía y Movilidad llevó a cabo una **campaña publicitaria** en medios de comunicación tales como prensa escrita, programas radiofónicos y en medios digitales anunciando la puesta en marcha de las líneas para el fomento de las energías renovables, donde se hace mención a la cofinanciación por parte del FEDER de las ayudas y se incluyen los emblemas y logos de la UE.



#### Criterio 2. Incorporación de elementos innovadores.

One of the advantages of self-consumption solar installations is that they are an appropriate choice, both economically and environmentally, as electric peak consumption takes place in spring and summer seasons, during the daytime period.

The equipment of such network-connected self-consumption installations is the result of the continuous evolution of all the components making up the system. In particular, they consist of state-of-the-art solar modules, endowed with excellent reliability and operational safety, generating low-cost electricity and being suitable for a wide range of applications, with optimum performances, regardless of climate, brightness and temperature.



Moreover, it is important to note as an innovative element that the public call for aid obliges to beneficiary administrations to have a monitor in a place visible to the public, indicating the production of solar energy that are being generated by the panels, so that any person who accesses the functioning of this type of facility is able to see the functioning of this type of facility.

#### Criterion 3.Adequacy of the results achieved to meet the objectives set.

The development of solar photovoltaic solar power generating facilities connected to the electricity distribution network has resulted in the expected achievement of the investment.

The energy consumption generated by the Geriatric Center facility before entering into this installation was 389.415 KWH per year, at an annual cost of EUR 74.555. The new plant produces 69.936 kWh/year, accounting for 18 % of annual consumption. Once amortised, the facility will save an estimated annual saving of EUR 14.000.In addition, it will reduce emissions to the atmosphere by **55,59** tonnes of CO<sub>2</sub> per year.



#### Criterion 4.Contribution to solving a regional problem or weakness.

In general, island territories do not provide a sufficient energy supply and have to import fossil fuels or electricity through submarine cables. This is due to the lack of indigenous energy resources, the lack of interconnection with other energy systems and the seasonal nature of demand, associated with consumption from tourism activity. These problems with the supply, consumption and cost of energy have a decisive influence on the economic development and competitiveness of other regions. Thus, variations in fuel costs affect much more negatively the competitiveness of island regions and the quality of life of their resident population.

The Balearic Islands have a very high **energy dependence**. Approximately 96 % of the energy consumed is imported from outside the islands, making the energy bill almost 4 % of regional GDP. A way of solving this problem is through a renewable energy based in the future.

In its turn, on urban land, taking advantage of gaps in the large part of buildings, it is estimated that 57 % of the electricity needs of the Balearic Islands could be generated. Then, the location of Geriatric Residence in Maò in a built-up area has motivated the use of a model of rooftop PV installations. This model is appropriate to progress towards the energy transition by boosting renewable self-consumption in the public sector.

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

The public call for aids has been intended for all the local authorities in the Balearic Islands which are responsible for the facilities and/or actions set out in the invitation to tender within the territorial scope of the Autonomous Community of the Balearic Islands, since all the entities have electricity from the electricity distribution company, and it is intended to reduce the purchase of electricity from the distribution network.

It is therefore considered that the degree of coverage of the population has been very high.

## Criterion 6. Taking into account the horizontal criteria of equal opportunities and environmental sustainability.



The use of renewable energy plays a key role in reducing greenhouse gases and mitigating climate change, a key factor in environmental sustainability. This is particularly relevant in a region like the Balearic Islands, given the high dependence on energy resources that have already been commented on.

Solar photovoltaic panels, when generating electricity from the sun, do not produce any CO  $_2$  or emit greenhouse gases, contributing to the improvement of air quality.

To this must be added the fact that producing electricity in the same place where it is consumed is much more efficient than it is done centrally and distributed. To this must be added, also, the value of the investment in terms of increased awareness and awareness of the staff working on these facilities, as well as the improvement of the public perception by the high level of sustainability commitment of the public administration.

In terms of **equal opportunities** for women and men, there is no direct impact in this area because of the characteristics of the project. However, the possibility to be able to generate their own electricity for self-consumption through photovoltaic solar panels and to inject it to the grid favours the creation and maintenance of installation plants that generate local employment.

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

This project is part of the **Energy Sectoral Steering Plan of the Balearic Islands**, which plans to plan actions aimed at supplying the future energy demand to each of the Balearic Islands, whether using conventional energy sources as renewable energy sources and, at the same time, promoting the saving and rationalisation of energy use in each of the economic sectors, so as to minimise, as far as possible, the increase in energy demand.

The investment made has also made a contribution towards meeting **the objectives of the 2013-2020 Estrategia Balear de Lucha contra el Cambio Climático** for reducing GHG emissions. Indeed, one of the aspects that this strategy promotes is the involvement of the public sector in planning and project development related to climate change.

For its part, the **Plan of Action on Climate Change Mitigation in the Balearic Islands 2013-2020** aims to reduce greenhouse gas emissions by 20 % in 2020 compared to 2005. It includes, among other measures, the granting of subsidies for installing photovoltaic plates to save 2.173,5 tonnes of  $CO_2$  per year.



These objectives have recently been reinforced by the new **Energy Transition Plan of the Balearic Islands**, which envisages making progress towards the use of 100 % of energy from renewable funds in 2050, in line with the Paris climate change agreements.

This action also ties in with the Menorca **Route Strategy 2030 of the island of Menorca**, which is designed to ensure that 85 % of the energy consumed on the island of Menorca in 2030 comes from renewable sources.

At national level, the main issues are the Spanish Climate Change and Clean Energy Strategy 2007-2012-2020 and the Spanish National Renewable Energy Action Plan 2011-2020, approved under the European Renewable Energy Directive. Its objectives are well aligned with those set for the EU as a whole by 2020 to reduce greenhouse gas emissions by 20% compared to 1990 and to reach 20% of total energy consumption coming from renewable energies. Therefore, synergies with the **European Climate Change Adaptation Strategy** are also very clear.



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