

Una manera de hacer Europa



INTEGRAL MANAGEMENT MODEL OF EXTERNAL LIGHTING AND
IMPROVEMENT OF THEIR ENERGY EFFICIENCY
Palma City Council

**Programa Operativo
de Illes Balears**

Año 2019

Fondo Europeo de Desarrollo Regional

INTEGRAL MANAGEMENT MODEL OF EXTERNAL LIGHTING AND IMPROVEMENT OF THEIR ENERGY EFFICIENCY

Palma City Council has carried out the project “Integrated management of external lighting and improvement of their energy efficiency”.

The project has consisted of replacing obsolete luminaries with new LED technology luminaries, adapting lighting levels, removing existing interferences between holders (streetlights) and urban elements (trees), adapting networks to the Low Voltage Technical Regulation and eliminating accessibility interference in different neighbourhoods in the city, giving priority to improvement in the suburbs of the city because they are the most deprived. Specifically, it has been carried out in the following neighbourhoods of Palma: Pablo Iglesias, Santa Catalina, Camp d'en Serralta, Los Almendros, Es Fortí, Son Serra-La Vileta, Son Cotoner, Son Rapinya, el centro histórico, Plaza de Toros, Foners, Pere Garau, Virgen de Lluc, Son Rul•lan, Son Oliva, Son Cladera, Can Capes, el Vivero, Can Pastilla, Rafal Vell, Son Gotleu, la Soledad , Nou Llevant, Establiments, Coll d'en Rabassa, Molinar, Camp Redó y Sa Indioteria .



The total investment is EUR 21,7 million, with a **total eligible cost of EUR 15.999.048 and ERDF support of EUR 7.999.521.**

This action has taken action on about **25.000 points of light in the city with a reduction of 0,58 ktep/year** (thousands of tonnes of oil equivalent per year), equivalent to 187.000 trees in CO₂ emissions, and **annual savings of more than EUR 1 million on the electricity consumption** thanks to the replacement of existing public lighting luminaries by less consumers.

The arguments that make this project a good practice, in accordance with the criteria defined for this purpose, are presented below.

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

The project has a high diffusion of the contribution of European funds to economic and social development, especially among the general public and has been widely disseminated through the various information and publicity measures.

Among the **compulsory measures** implemented in accordance with EU law, the following should be noted:

During the execution of the energy efficiency actions in Public Lighting, informative posters have been installed informing the general population of the co-financed. In the areas where trenching ditches are carried out, there are dedicated A4-sized posters displayed on the site fences, ensuring that the information collected can reach any citizen in a simple and visible way. Stickers have been installed in all control tables that comply with the requirements laid down by the regulations



To publicize all the actions that have been carried out, as well as their development, evolution and savings achieved, a specific website (www.federpalma.es) has been created, adapted to offer maximum accessibility, in especially for people with disabilities. The information is updated on a regular basis, including the actions carried out and the projects to be implemented. It also sets out the details of the measures to be put in place to improve energy efficiency and bring it into line with the legislation in force, drawing attention to the changes envisaged in the light points, command centres and pipelines.



Further actions and measures have been carried out with regard to communication and information, including:

In various media of the Balearic Islands, both in its paper editions and in its online versions, news about the progress of the works has been published, which also referred to the financial contribution of the EU through the FEDER

Las inversiones en alumbrado equivalen a la siembra de 120.000 árboles

J. CAPÓ PALMA

Las inversiones que Cort está realizando con la implantación del nuevo modelo de gestión integral del alumbrado, cofinanciadas en un 50% por la Unión Europea con cargo al programa operativo Feder, permitirá en los próximos un ahorro del 40% en la factura y la reducción de las emisiones de dióxido de carbono a la atmósfera equivalentes a la siembra de 187.000 árboles.

El concejal de Infraestructuras

Cort invierte en alumbrado el primer millón de euros de subvenciones europeas

Los 21 millones de los fondos FEDER se van a invertir en 25.000 puntos de luz en toda la ciudad.

LA PAZ

El regidor de Infraestructuras y Accesibilidad, Rodrigo A. Romero, anunció ayer que el Ayuntamiento de Palma ya ha ingresado el primer millón de euros procedente de los fondos del Programa Operativo FEDER 2014-2020 de Baleares para mejorar la eficiencia energética de las infraestructuras públicas, así como la gestión integral del alumbrado exterior.

Según informó Cort en un co-

municado, este proyecto su pondrá una inversión total de 21,7 millones de euros, cofinanciados en un 50 por ciento por los fondos FEDER.

"La implantación del nuevo sistema de gestión y de la mejora de la eficiencia de alumbrado público de Palma supondrá un ahorro sobre unos 25.000 puntos de luz de la ciudad y una reducción de 0,58 ktep por año, lo que es equivalente a un ahorro anual superior al millón de euros en el consumo eléctrico", afirmó Romero.

Asimismo, señaló que con el ahorro del consumo energético conseguido, sumado al cofinanciamiento de Europa, la ciudad ha conseguido 2,7 millones de

Dos millones para el nuevo alumbrado de barrios de Levante

L. RIBELLES PALMA

La Junta de Gobierno de Cort rubricó la ejecución de tres nuevos proyectos relacionados con el contrato de renovación del alumbrado público en Palma, financiados en un 50% por los fondos europeos FEDER. Los proyectos aprobados son la adecuación y mejora del alumbrado público en diferentes viales principales de las barriadas de Levante de la capital balear. Una iniciativa adjudicada por un importe de

1.028.122,47 euros, IVA incluido, y que tiene un plazo de ejecución de 6 meses. Además se sustituirán las luminarias tipo PEP de diferentes emplazamientos, como el paseo del Molinar, por un importe de 307.296,19 euros y con un plazo de ejecución de medio año también, así como el remplazo de soportes y luminarias de las barriadas de Hostalets, Sant Jordi y la Soledad sur, por un importe de 648.823,80 euros, IVA incluido al igual que el anterior.

Cort ahorrará un 40 % en la iluminación del Camp d'en Serralta con el nuevo alumbrado

A.M. I PALMA

El Ajuntament de Palma ahorrará un 40 % en la iluminación del Camp d'en Serralta con el nuevo alumbrado, en el que se ha realizado una inversión de 454.615 euros, cofinanciados en un 50 % por los fondos FEDER 2014-2020. El regidor d'Infraestructuras i Accessibilitat, Rodrigo A. Romero, precisó que la factura de la electricidad se reducirá

Various articles on the project have also been published in FuturEnergy, an online energy magazine with the latest energy news and all the latest news on energy efficiency and energy generation, where the ERDF cofinancing is mentioned



Gracias a los principios rectores establecidos y al compromiso con los objetivos marcados, está prevista la firma del Convenio instrumental entre el Govern de les Illes Balears y el Ayuntamiento de Palma para la cofinanciación, a través del programa operativo FEDER

2014-2020 de las Illes Balears, del proyecto de nuevo modelo de gestión del alumbrado exterior y mejorar de la eficiencia energética de las infraestructura pública del Ayuntamiento de Palma. Estos principios rectores son los siguientes:

- Contribuir a las prioridades y a los objetivos de la estrategia de plan de acción de energía sostenible del municipio de Palma (PAES) y del PO FEDER Baleares 2014-2020.
- Contribuir a la eficiencia energética.
- Permitir la telegestión de las instalaciones y servir de soporte para agregar tecnologías inteligentes.
- Contribuir a los principios horizontales del Reglamento (UE) num. 1303/2013 desarrollo sos-



On March 3, 2016, the act of presentation of the project, which was attended by public authorities and the media, took place at the city hall of Palma. In the parliaments mention was made of the contribution of the European Union in the construction of infrastructure. On the occasion of this event, a portable roll-up was published that identifies the co-financed by ERDF.

Similarly, in the framework of the meeting held in Madrid on 26 September 2019 of the Low Carbon Economy Network (Rebeca), the General Director of European Funds of the Government of the Balearic Islands, Félix Pablo Pindado presented this action as a successful initiative managed by European funds to combat climate change



This action has also been disseminated through the mapping system of co-financed projects of DG Funds, located on its Website (http://www.caib.es/sites/fonseuropeus/ca/portada_2016/?campa=yes). This *on line application*, which is accessible to anyone, makes it possible to visualise, not only the geographic location of the investment, but also provides systematic data for the investment made.

The **Newsletter of European Funds in the Balearic Islands** in December 2017 also includes information about the project and the ERDF contribution to its implementation.

Finally, two accounts have been created on the social media platforms on Facebook and Twitter (FederPalma y @FederPalma) where is presented the information about the project.



Criterion 2. Incorporating innovative elements.



This action incorporates new elements, as it harmonises environmental and economic objectives, aimed at providing a vital public service for citizen.

Another innovative element relates to the **technology used**, since the system in place incorporates tools for the remote management of all installations that promote sustainability on the farm and serves as a base for the addition of new *smart technologies*.

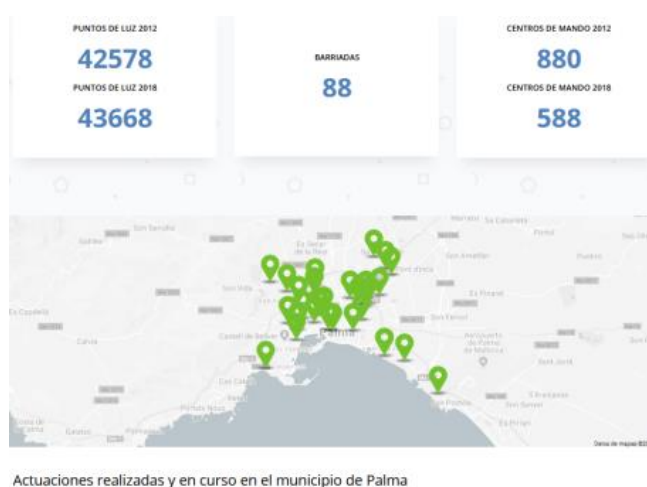
In addition, an increase in the economic efficiency resulting from the removal of control centres leading to the use of less electricity policies

It should also be noted that this new management model is replicable and applicable to other municipalities and, in addition, strengthens the image of Palma Municipal Council for citizens and society, as it is continuously kept informed of the progress of the action through the dissemination of monitoring indicators.

Criterion 3. Adequacy of the results achieved with regard to the objectives set

The action on 25,000 points of light has allowed to achieve the objectives set with a saving in energy costs of approximately 1 million euros per year in the electricity bill of the City Council, an amount that will be reversed to achieve more energy efficiency in public buildings

In addition, it has managed to reduce 0.58 ktep/ year (thousands of tons of oil equivalent per year), or what is the same, almost 187,000 trees in CO2 emissions, as well as light pollution



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

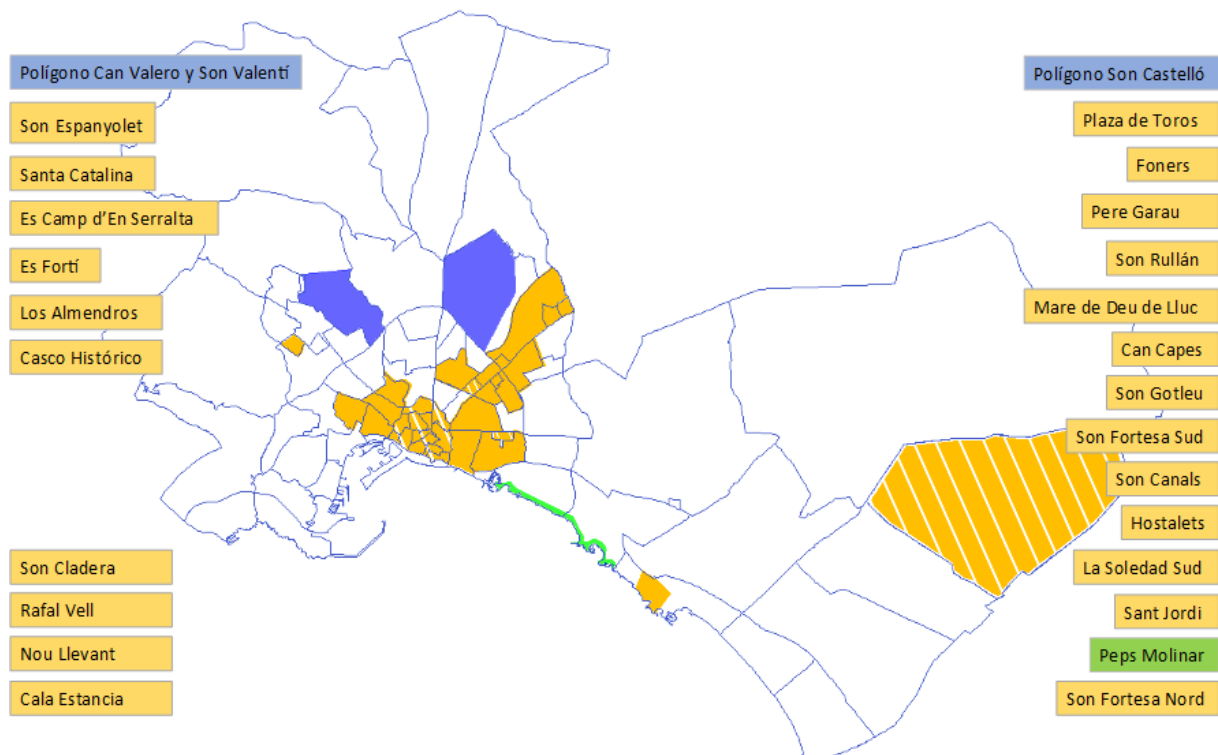
According to the Energy Audit carried out, the street lighting for Palma de Palma lighting a total of 88 districts in the municipality and the installation is composed of approximately 42.000 light points and more than 880 control centres. This reveals the significance of lighting installations for the consumption of electric energy.

Given that this is a necessary consumption, and therefore it cannot be removed, the best option has been to find ways to reduce it by using the most efficient technology possible. This led, on the one hand, to the elimination of control centres with less power policies and, consequently, less fixed term quotas; and, on the other hand, the replacement of LED lamps whose useful life is well above those of the discharge lamps.

In this way, the largest part of the public lighting system in Palma has been renovated, which was in a state of technical, economic and energy efficiency obsolescence, yielding significant economic savings on the municipal electricity bill.

Criterion 5. High coverage of the target population.

The population directly benefited by the action is 279,684 people. These are the people who live in the neighbourhoods where the new light installations have been made, that is, 63.48% of the total population of the city of Palma.



However, the rest of the inhabitants of the city who travel through the affected neighborhoods, as well as the large number of tourists who visit the city of Palma all year round, also benefit.

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

From the point of view of **equal opportunities** for women and men, there is no direct impact in this area because of the characteristics of the project, this action is aimed at the entire civic distinction of sex, race or religion, therefore it is considered to be an inclusive and non-discriminatory action.

As regards **environmental sustainability**, action to meet the technical requirements and characteristics of the installations in accordance with the recommendations and regulations in force promotes the rational use of energy without prejudice to the safety of users, the natural conditions of night hours are kept to the greatest possible extent and CO₂ emissions are substantially reduced, contributing to the national and European targets for greenhouse gas reductions.



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

This project is part of the **Energy Sectorial Steering Plan of the Balearic Islands**, which action plans to aimed at supplying the future energy demand to each of the Balearic Islands, either using conventional energy sources as renewable and at the same time boosting the saving and rationalisation of energy use in each of the economic sectors, in order to minimise the increase in energy demand.

The investment made has also made a contribution towards meeting the objectives of the **Action Plan on Climate Change Mitigation and the Balearic Island Climate Change Strategy 2013-2020**, which aims to contribute to a 20 % reduction in GHG emissions in 2020 compared to 2005. Indeed, one of the aspects of this strategy is the involvement of the public sector in the development of planning and projects related to climate change.



The objectives of this action are also well aligned with those set out in **the European Climate Change Adaptation Strategy**.

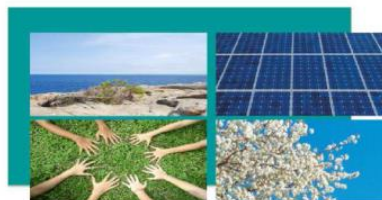
Moreover, this action is also included in the **Sustainable Energy Action Plan of the municipality of Palma (PESA)**, adopted on 7 February 2015, which aims at meeting the objectives of the Covenant of Mayors in the fight against climate change.



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

federpalma.es

INICIO OBJETIVOS DE MEJORA PROCEDIMIENTOS PROYECTO

PAES

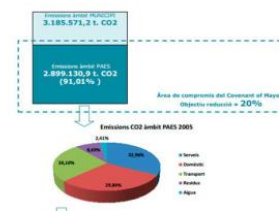
Inicio / Objetivo

Plan de acción de energía sostenible del término municipal de Palma, PAES.

Objetivo

El objetivo del PAES es que el municipio de Palma cumpla con los objetivos del Pacto de los Alcaldes en la lucha contra el cambio climático, reduciendo las emisiones de gases de efecto invernadero. Dicho objetivo de reducción, se debe conseguir en el horizonte del año 2020.

El siguiente gráfico muestra un cuadro resumen de los objetivos del PAES.



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BUENAS PRÁCTICAS
Actuaciones Cofinanciadas

Fondo Europeo de Desarrollo Regional