

Una manera de hacer Europa



BUENAS PRÁCTICAS Actuaciones Cofinanciadas

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**Programa Operativo
Plurirregional de España**

Año 2021

Fondo Europeo de Desarrollo Regional

CHANGES IN PUBLIC LIGHTING, THROUGH THE USE OF LED TECHNOLOGIES AND THE ELIMINATION OF OVERHEAD WIRING IN MAGDALENA STREET AND THE AREA AROUND THE PLAZA DE ARMAS.



The project consisted of replacing the old luminaires based on obsolete sodium vapour technology with new LED technology luminaires in the section of Magdalena street, between San Diego street and Rubalcava street, and the area around the Plaza de Armas, in order to improve efficiency and urban environmental quality. Depending on the section, the luminaires were installed in catenary in forge grey, suspended with an anchorage formed by a rocker arm and a suspension shaft machined in stainless steel, or by means of arms fixed to the wall with a similar aesthetic in terms of the colour and the material used. In addition, the overhead crossings of the streets through which the installation passes were eliminated and underground crossings were designed, and the low-voltage distribution cable was replaced. The control centres were also reunified and relocated to a single public lighting switchboard and the existing lighting points were redistributed.

The eligible cost of this operation is 269,270.66 euros, with an aid FEDER of 215,416.53 euros, which meant an annual saving of 61% in both the electricity bill and annual energy consumption, obtaining a public lighting installation with the most efficient energy rating.

This is considered good practice because:

The role of the FEDER in the action has been adequately disseminated to beneficiaries, potential beneficiaries and the general public.

All regulatory obligations in terms of communication, publicity and visibility of support from the FEDER, both in the preparation of all administrative documentation for the action and in the placement of the **construction site sign** and **permanent plaque**.

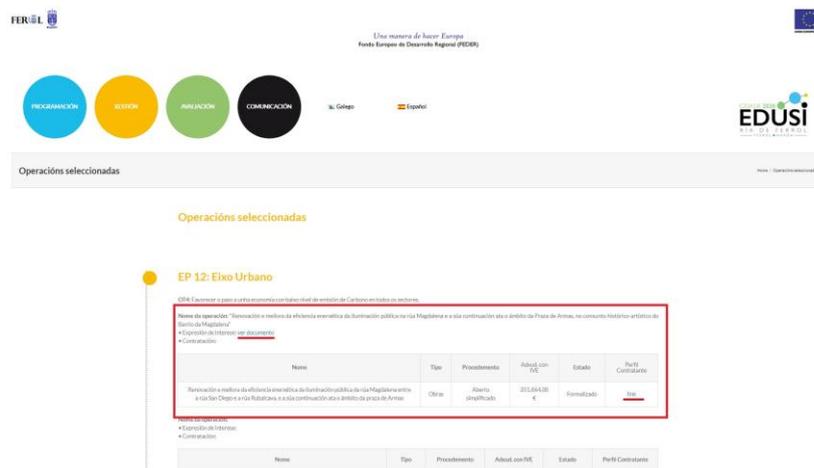


Construction site sign



Permanent plaque

Likewise, the EDUSI "Ría de Ferrol, Cidade 2020" has its **own website**, where, in addition to disseminating the role played by the FEDER and its cohesion policy, information is provided on the actions carried out within the framework of this strategy.



www.ferrol.gal/edusi/operacions-seleccionadas/

The action has been disseminated among the public through various media, both through the regular publication of **news items** and the broadcasting of **radio spots** and the insertion of **banners in the digital press**.

- The radio spots were broadcast on national (Cadena Ser and Cope) and regional (Radio Galega and Radio Voz) broadcasters, with a total of 214 insertions over two weeks:

<https://www.ferrol.gal/edusi/wp-content/uploads/2021/12/Cu%C3%B1a-iluminaci%C3%B3n-A-Magdalena.mp3>

- The advertisements were placed in three digital media (La Voz de Galicia, Diario de Ferrol and Ferrol360) for one week:

CIDADE SOSTIBLE
Eficiencia enerxética

Mellora da eficiencia enerxética da iluminación da rúa Magdalena e o contorno da praza de Armas

Animated banner link:
<https://www.ferrol.gal/educi/wp-content/uploads/2021/12/Banner-Illuminaci%C3%B3n-A-Magdalena.gif>

CONCURSO DE PINCHOS
DO 11 AO 28 DE NOVEMBRO

120 coxas achicadas e 9 persoas hospitalizadas en el área de Ferrol

www.ferrol360.es

Diario de Ferrol
Lunes 15 de Novembro de 2021

INSECURATIVA A DOMICILIO DEL A LA ZONA MEDIA-ALTA

Mellora da eficiencia enerxética da iluminación da rúa Magdalena e o contorno da praza de Armas

EDUSÍ FERROL

www.uarioaeferrol.com

- News in various media:

Comienza la renovación del alumbrado público de A Magdalena

Las nuevas farolas en catenaria o de brazo y eliminarán el cableado aéreo existente

PROYECTO ENMARCADO EN LA ESTRATEGIA LOCAL

El Concello de Ferrol saca a licitación la renovación y mejora de la eficiencia energética de la iluminación de la calle Magdalena y la Plaza de Armas

Diario de Ferrol

Galicia Artabra

El Concello saca a licitación la renovación y mejora de la eficiencia energética de la iluminación de la calle Magdalena y la Plaza de Armas

El Concello de Ferrol saca a licitación la renovación y mejora de la eficiencia energética de la iluminación de la calle Magdalena y la Plaza de Armas

www.galiciaartbradigital.com

During the execution of the works, a number of **billboards** located in different parts of the city were used to publicise the FEDER aid, as well as to identify the action being carried out and its scope of intervention.



In addition to these communication actions, a video was made, emphasising that this action was possible thanks to the support provided by the European Union, through the European Regional Development Fund. It was distributed through social networks.



www.facebook.com/EdusiRia/videos/1157043564704502



twitter.com/EdusiRiaFerrol/status/1464187183728934934

The action incorporates innovative elements

The main innovative element is the incorporation of LED technology, hitherto non-existent in the public lighting of Magdalena street and the area around the Plaza de Armas. LED optics with high luminous and energy efficiency have been introduced, allowing a 75% reduction in electricity consumption per luminaire. In addition, the luminaires are multi-configurable and self-programmable. They are programmed to reduce electricity consumption by 30% and 50% in the central time slots of the night, and this programming can be modified according to municipal interests.

The control centres were reunified in a single public lighting control panel equipped with a state-of-the-art terminal that allows communication with the Central Management Unit for municipal public lighting, facilitating the centralised remote management of the installation.

Adequacy of the results obtained to the established objectives



The aim of this action is to improve the efficiency and energy saving of the public lighting in Magdalena Street and the area around the Plaza de Armas. The irrational use of energy and light pollution have a negative impact on the environment that must be mitigated. For this reason, a complete renovation of the public lighting installation has been carried out, adapting it to current regulations, replacing the old luminaires based on obsolete and polluting sodium vapour technology, incorporating regulation and control systems, etc.

Therefore, the results obtained are in line with the objectives set. A public lighting installation with energy rating A (more efficient) is achieved, which also complies with the maximum levels of luminance and uniformity permitted in residential urban areas. It represents an energy and electricity bill saving of approximately 61%, while reducing CO₂ emissions and improving street lighting with the installation of a greater number of light points.

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

The neighbourhood of A Magdalena, in the centre of which are located Magdalena Street and the area around the Plaza de Armas, declared a Historic-Artistic Site, is an urban area of great heritage value in the heart of the city. The old overhead crossings of the roadways, made up an image that tarnished the aesthetics of the urban environment and prevented the enjoyment of its emblematic buildings, as well as posing a greater risk to public safety. In addition, there was an electrical installation with a high energy consumption and economic cost, as well as polluting.

The renovation of the public lighting and the design of underground crossings will contribute to the improvement of the neighbourhood's landscape, as well as to the safety and security of its inhabitants. In addition, it provides a solution to the need to implement strategies to reduce the carbon footprint based on energy efficiency and savings. In the same way, the renovation reduces light pollution from the old luminaires installed. Luminance and uniformity levels are brought into line with the maximum permitted levels, limiting night-time glare and reducing intrusive or disturbing light.

Degree of coverage of the targeted population



The privileged location of Magdalena Street and the Plaza de Armas makes the residents of the neighbourhood (5,281 inhabitants) direct beneficiaries, who gain in safety, comfort with the adaptation of the lighting levels and aesthetic beauty of the neighbourhood. Likewise, so are all the residents of the municipality of Ferrol and its area of influence constituted by the councils of the region of Ferrolterra who travel to the neighbourhood to shop, walk or do their business at the town hall.

This action provides citizens with efficient public lighting that guarantees better urban environmental quality and improves the well-being of both residents and visitors to the neighbourhood.

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

The action is aimed at all citizens without distinction of sex, race or religion, and is therefore considered an inclusive and non-discriminatory project. The increase in the number of lights installed in the street helps to reduce the feeling of fear among pedestrians, particularly women, as well as improving accessibility by guaranteeing better mobility.

However, environmental sustainability is the main objective of this intervention. With the renovation of public lighting and the installation of LED luminaires, we are contributing to the protection of the environment, with a significant reduction in CO2 emissions and, consequently, to the national and european targets for the reduction of greenhouse gases in the fight against climate change.

Synergies with other policies or instruments of public intervention



The action has been carried out in accordance with the provisions of the Project for the Standardisation of street furniture in the A Magdalena neighbourhood, which contains the proposal for public lighting, as well as with the Regulation on energy efficiency in outdoor lighting installations, with the aim of improving the energy efficiency of municipal lighting, reducing electricity consumption and CO2 emissions into the atmosphere.

Likewise, this action is related to other interventions that are being carried out in the A Magdalena neighbourhood, such as the remodelling of the Plaza de Armas, the renovation of the public lighting in the Cantón de Molins and Plaza Constitución and the redevelopment of Igrexa street, which involve the installation of new public lighting in accordance with criteria for improving energy efficiency.

The action is also closely linked to the various interventions that the council is carrying out in the neighbourhoods of Ferrol Vello (San Francisco street, Espartero street and Carmen Curuxeiras street) and Canido (Alegre street) to improve energy efficiency in outdoor public lighting.

Finally, actions are being carried out to improve the energy efficiency of the municipal housing blocks in the Recimil neighbourhood, with the incorporation of insulation systems in façades and roofs. In this regard, through the programme for the energy rehabilitation of existing buildings PAREER II, co-financed by the FEDER and managed by the IDAE, work was carried out on 10 de Marzal Street (1-4) and Narón Street (1-6).

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