



Una manera de hacer Europa



City Hall, Municipal Museum and Cutlery Museum ornamental outdoor lighting renovations to improve efficiency and energy savings. EDUSI ALBACETE

Programa Operativo Plurirregional de España

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Fondo Europeo de Desarrollo Regional

EDUSI ALBACETE GOOD PRACTICE, ALBACETE CITY COUNCIL

<u>CITY HALL, MUNICIPAL MUSEUM AND CUTLERY MUSEUM ORNAMENTAL OUTDOOR</u> LIGHTING RENOVATIONS TO IMPROVE EFFICIENCY AND ENERGY SAVINGS







Works carried out on the installation of outdoor ornamental lighting in the municipal buildings of the City Hall, Municipal Museum and Cutlery Museum in the city of Albacete.

The City Hall building, built in 1986 in a modern classicist style with a stone façade and located in the heart of the city centre, has housed the offices of the City Hall since that year, which were previously located in the building of the current Municipal Museum, an 18th century eclectic style palace with a brick façade and large windows, located in the main square of the city, the *Plaza del Altozano*, and which was remodelled in 1995 to house the museum's facilities. The *Casa del Hortelano*, a small palace dating from the early 20th century and characterised by its eclectic Gothic façade with green tiles, located opposite the City Hall and the Cathedral of San Juan Bautista, was remodelled in 2004 to house the current Cutlery Museum of Albacete.

The proximity of the three buildings and their location in the city's main squares means that this action, in addition to improving the energy efficiency of the facilities, will boost Albacete's tourist appeal.

These buildings had outdoor ornamental lighting installations that needed to be updated, along with wiring, luminaires, and outside projectors that needed to be replaced because they were old and used a lot of energy. The new intelligent LED luminaires installed have reduced energy consumption and light glare, resulting in a reduction of light pollution in the facility. With this action, it has been possible to reduce the installed electrical power, bringing the energy rating of the installations from letter G to A, reducing the emission of pollutants by almost 90%.

A dynamic LED lighting system has been used, which allows the modification of the colour tone, the control of each of the light points and the programming of different scenes, both in movement and static, achieving an artistic lighting that highlights the singular elements of the façades, enhancing the tourist, historical and cultural interest of the buildings.

The installation has a web-based remote management system that is independent for each building and allows users to create and program scenes and turn on and off lights, which helps cut down on maintenance tasks.

The eligible cost of the action amounts to $\[\epsilon 299,964,$ with **co-financing from the European Regional Development Fund (ERDF) of \[\epsilon 239,971.** Although the intervention has been carried out in the three buildings, the scope is the central area of the city of Albacete, and the action will have an impact on the entire municipal area, with a population of 174,336 inhabitants.

This action is considered Good Practice based on the following criteria:

1. The role of the ERDF in this action has been adequately communicated to beneficiaries, potential beneficiaries and the general public.

In addition to the obligatory plaques and posters, the public has been made aware of the ERDF's participation using the following media:







Placement of adverts on city buses in Albacete and in the press. Advertising banners in local and regional digital media, local television spots and informational panels for exhibitions.













Leaflets describing the action have been distributed in the information points of the various municipal offices, merchandising and in its digital version through the social networks of EDUSI Albacete.



Production of a video explaining the action, subtitled in Spanish and English for broadcasting on the Albacete City Council YouTube channel, EDUSI Albacete social networks, screens of Municipal Urban Planning and Housing Management, merchandising material and future exhibitions.

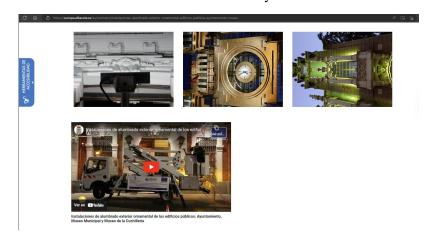


Information about the action by means of information panels on the façades of the three buildings and advertisement of the dissemination campaign on billboards in the city of Albacete.





All the information and publicity material, as well as the information and description of the action has been disseminated in the EDUSI Albacete section of the Albacete City Council website.

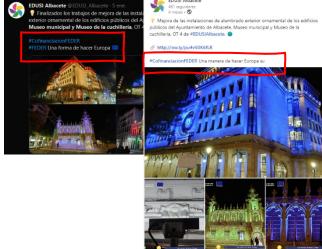


The European funding for the project has been reported at the safety fencing of the construction site.



News in local and regional media. Regular publications on EDUSI Albacete's Facebook, Twitter, Instagram, LinkedIn and YouTube social networks.





2. The action incorporates innovative elements.

The project is based on the use of LED technology due to its technical advantages over conventional light sources, together with its long useful life. The installation is equipped with a web-based remote management system for each of the buildings, allowing the installation to be managed remotely from a computer or smartphone by the municipal electricity service.

Other elements that can also be considered innovative are the tourist boost and night-time attraction of the city achieved with ornamental lighting, the energy-saving image transmitted to citizens and the possibility of adapting the ornamental lighting of various municipal buildings to the demands of citizens or groups (different colour of the façades on the occasion of special days, festivities, acts or events to be promoted, etc.).

3. The results obtained have been in line with the objectives set.

The main objective of the action is to reduce the energy consumption and CO2 emissions of the ornamental lighting installations of the main municipal buildings, promoting and encouraging sustainability by increasing energy efficiency. Another objective is to promote the historical and cultural value of these buildings through night-time lighting.

Through the actions carried out, the ornamental lighting of buildings has been renewed, achieving a 22% reduction in the number of light points, reducing the installed power and energy consumption by 88%, contributing, in the urban area, to the objective of the "National Energy Efficiency Action Plan (PNAEE) 2014-2020" of reducing emissions and saving primary energy in municipal outdoor lighting.

Through the ornamental lighting installed, it has been possible to highlight the unique elements of their façades, enhancing the tourist, historical and cultural interest of the buildings and the surroundings where they are located.

4. The action contributes to the resolution of a problem or weakness.

The aim is to solve the problem of the high cost to Albacete City Council of the consumption of outdoor lighting installations, which accounts for around 40% of municipal electricity expenditure.

With the energy efficiency improvement of the ornamental lighting in the three buildings through the change of luminaires and projectors to other lighting devices based on LED technology, we have achieved a reduction in the consumption of electrical energy demanded by the municipal outdoor lighting, going from a G to an A energy rating.

5. The action has a high degree of coverage of the target population.

The action is aimed at the population living in the central area and in the rest of the city and municipality, as they are emblematic buildings in the administrative and cultural sphere and are located in the centre of the city, polarising numerous administrative, commercial, cultural and leisure activities. The degree of coverage is

therefore 100% of the population of the municipality of Albacete (172,722 inhabitants, according to INE census 01/01/21).

6. The horizontal criteria of equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability have been taken into consideration.

The actions carried out guarantee equal treatment and opportunities for people regardless of their nationality, sex, race or ethnic origin, religion or beliefs, disability, age or sexual orientation, as the actions carried out are aimed at all citizens and visitors to the city of Albacete, providing groups and associations with the lighting of façades to promote and give visibility to the celebration of special days, festivities, acts, events, etc.

With regard to environmental sustainability, the action takes into account the horizontal principle of sustainable development, as the reduction of electricity consumption and light glare achieved protects the environment, contributing to the reduction of CO2 emissions, primary energy savings and a reduction in light pollution.

This action has reduced pollutant emissions by 90 % (6,062 KgCO2/year), thus reducing greenhouse gases.

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

The action contributes to reinforcing and enhancing the effects of the following public funds, policies and instruments:

- National Energy Efficiency Action Plan (PNAEE) 2014-2020, aid programme for the renovation of municipal outdoor lighting installations, through renovation work on them.
- Local Agenda 21, in terms of decision-making in the municipality based on respect for the environment, aimed at more sustainable municipal management.

Albacete City Council (and thanks to financing through the FIDAE Fund, for a total amount of around 7 million euros) has undertaken various energy saving measures in public lighting installations, both in the city of Albacete and its districts, exclusively affecting road lighting, both functional and environmental, excluding other outdoor lighting (specific, ornamental, security, festive and Christmas, etc.).

In the same operation of the Strategy for Sustainable and Integrated Urban Development of Albacete (EDUSI Albacete) in which this action is located, Albacete City Council has carried out a new action that complements this one and which has consisted of improving the energy efficiency of the outdoor lighting installations of the Fair Grounds, Caseta de los Jardinillos, Bullring, Cemetery and Municipal Market, highlighting the new ornamental lighting of the Puerta de Hierros of the Fair Grounds and the main gate of the Bullring which adds two more buildings with historical and cultural character and of tourist interest in the city that are put in value through ornamental lighting.





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