

Best Practice presented by the Directorate General of Housing, Architecture, Territorial Planning and Urban Planning at the Regional Ministry of the Environment, Housing and Territorial Planning, consisting of the comprehensive renovation, based on energy efficiency criteria, of a building containing 63 public housing units in Calle Puente Colgante in Valladolid to incorporate it into the Public Rental Housing Stock of Castilla y León.

The Regional Ministry of the Environment, Housing and Territorial Planning, through the Directorate General of Housing, Architecture, Territorial Planning and Urban Planning, aims to increase the number of homes in the Castilla y León Public Rental Housing Stock. For this purpose, it is carrying out actions including the renovation of buildings that are assets belonging to the Administration of the Community of Castilla y León, using energy efficiency criteria and quality construction systems. This Best Practice is included in this framework.

The building, built in the 1940s and rented by Civil Guard Police families, was unoccupied from 2015 and did not meet the requirements of the Building Regulations Act 38/1999 of 5 November in terms of the functionality of the spaces and accessibility, structural safety, use, fire safety, as well as aspects related to habitability: hygiene, health, environmental protection, noise protection and energy saving. Therefore, it is a building approximately 8,200 m² in size with great general deterioration that requires comprehensive renovation to be used. Improving the building's energy efficiency, as well as the use of renewable energy and reducing pollutant emissions and greenhouse gases, are basic objectives.

In this scenario, the main goals of the intervention are as follows:

1. Use of quality construction systems, with easy, minimal maintenance.
2. Optimising the resources available in the building and on the plot to design and build with the best possible quality and safety and in all stages of development (design, construction and use).
3. Applying energy efficiency criteria to design eco-efficient homes in terms of total primary and non-renewable energy consumption, CO₂ emissions, contribution of renewables and building energy demand that will result in a nearly zero-energy-consumption building.
4. Employing environmental sustainability criteria in the materials and products used.

In particular, in line with goal 3, the homes will be energy performance "A" and highly insulated. They will have shared biomass thermal equipment with individual meters for heating and domestic hot water with adequate ventilation control. They will have LED lighting in shared areas, bathrooms and kitchens and will be equipped with high-efficiency kitchen furniture and appliances, as well as water-saving taps and cisterns. Since all of the homes have two opposite-facing façades, summer ventilation can be passive.

All of the above contributes to reinforcing and strengthening the aims of energy efficiency and environmental sustainability that are proposed as the ultimate and priority purpose of the ERDF Operation being performed, since such a reduction in energy consumption is planned that the building will have almost zero consumption and low CO₂ emissions.

The building, once renovated, will be used for the specially protected groups regulated in the Community of Castilla y León Right to Housing Act 9/2010 of 30 August, in particular young people, under an affordable rent system.

The total cost of the action, which amounts to €8,015,156.63, is entirely financed by ERDF funds, specifically through REACT-EU.

This work, which is currently at an advanced stage of performance, will cut primary energy consumption by 817,489.79 kWh/year. This is equivalent to a theoretical reduction of final greenhouse gas emissions, calculated based on estimated primary energy savings, of 173.16 tonnes of CO₂/year.

The pictures below show the construction process that has been carried out to produce a building with almost zero energy consumption:

Condition of the building before the start of construction work 4/08/2021



Condition of the building during construction work 22/11/2022



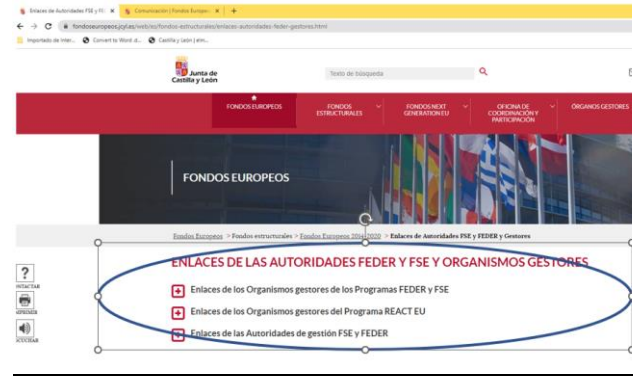
Current situation of the building during construction work



This is considered a Good Practice because it meets the following criteria:

- 1. The action has been appropriately disseminated to beneficiaries, potential beneficiaries and the general public.**

In addition to complying with the regulatory requirements, throughout the entire contracting process, this operation has been publicised on the website of the Directorate General of Housing, Architecture, Territorial Planning and Urban Planning at the Regional Ministry of the Environment, Housing and Territorial Planning. It has also been publicised on the European Funds website of the Government of Castilla y León.



<https://fondoseuropeos.jcyl.es/web/es/1285146790456/comunicacion.html>

<https://fondoseuropeos.jcyl.es/web/es/fondos-estructurales/enlaces-autoridades-feder-gestores.html>

Three signs have been put up on site to make the general public aware of the European Union’s role in funding the intervention through the ERDF, specifically through REACT-EU: “Funded as part of the European Union's response to the COVID-19 pandemic”. Once the work has been completed, the relevant plaques will be fitted.



On 8 October 2021, the site was visited by the Regional Minister of the Environment, Housing and Territorial Planning, the Mayor of Valladolid and the Director General of Housing, Architecture, Territorial Planning and Urban Planning, who were accompanied by staff from the aforementioned Regional Ministry, the Territorial Delegation of the Government of Castilla y León in Valladolid and Valladolid City Council. During the visit, the planned action was explained, starting with the existing building’s condition and deficiencies, with a description of the planned works. It was documented with a display of pictures of the project’s contents and the homes with their facilities. This visit attracted press coverage.

The sites was also visited on 11 March and 10 May 2022 and 3 February 2023 by first- and second-year students from the Building and Civil Works Department of La Merced Higher Education Institute and on 17 January 2023 by students from the Master's Degree in Architecture at the University of Valladolid.

Examples of these are provided below:

Visit by authorities (8 October 2021)

La Junta prevé seleccionar en enero de 2023 a los arrendatarios de las viviendas del edificio de Puente Colgante

Las obras, con un presupuesto de 6,3 millones de euros se encuentran en la fase inicial y tienen un plazo de 20 meses



El consejero de Fomento (segundo por la izquierda), junto a la directora general de Vivienda, el alcalde de Valladolid y, a la derecha, el delegado territorial de la Junta en Valladolid, en la visita al edificio de Puente Colgante. - EUROPA PRESS

El consejero ha recordado que las actuaciones de rehabilitación que pone en marcha la Junta este año, como el proyecto de Puente Colgante, se puede beneficiar de los fondos Next Generation llegados de la Unión Europea para los planes de recuperación y resiliencia del estado español.

Suárez-Quñones ha mencionado una cantidad de 27,2 millones de euros para poder construir viviendas en alquiler social. De los fondos React-EU además hay 18,6 millones para rehabilitar antiguas viviendas en distintas partes de la Comunidad, muchas en zonas rurales, que permitirá actuar en unas 100.

Student visit (11 March 2022)



VISITA A LA OBRA DE REHABILITACIÓN DE UN EDIFICIO DE 63 VIVIENDAS DE PROTECCIÓN, "PUENTE COLGANTE" EN VALLADOLID,

DEL INSTITUTO DE ENSEÑANZAS SUPERIORES "LA MERCED"
Departamento de Edificación y Obra Civil

ACTUACIÓN COFINANCIADA AL AMPARO DEL
P.O. FEDER REACT-UE 2014-2020

VALLADOLID 11-3-2022



The operation was reported in various digital media https://comunicacion.jcyl.es/web/jcyl/Comunicacion/es/PlantillaSimpleDetalle/1281372051501/_/1285099490389/Comunicacion?vista=impresion, <https://www.valladolid.es/es/ciudad/urbanismo-vivienda/utilidad/noticias/alcalde-consejero-fomento-visitante-edificio-puente-colgante>, <https://www.20minutos.es/noticia/4849078/0/1a-junta-preve-seleccionar-en-enero-de-2023-a-los-arrendatarios-de-la-viviendas-del-edificio-de-puente-colgante/>

and the printed press: El Mundo-Diario de Valladolid (1 August 2022). The relevant specifications, tender, award and contract formalisation announcements were published on the Public Sector Procurement Platform.

2. The action incorporates innovative elements

This action aimed at comprehensive renovation, with energy efficiency criteria, of the building containing 63 public housing units in Calle Puente Colgante in Valladolid envisages the updating and modernisation of the air conditioning and lighting equipment in accordance with cutting-edge equipment technologies and performance according to market supply. Pellet boilers and underfloor heating, controlled mechanical ventilation, and LED lighting fittings in the shared areas and homes will be installed. In addition to the foregoing, the building has been designed with superior insulation than that required by the regulations, so the expected primary energy consumption of the building is 5.49 Kwh/m²/year. This is much lower than the overall level required to obtain an A-rated energy performance certificate.

The construction systems being implemented and the planned facilities, including high-efficiency domestic appliances, are aimed at reducing energy demand and achieving optimal environmental comfort with high-efficiency mechanical controlled-ventilation equipment.

3. Adaptation of the results obtained to the established goals

The intervention aims to improve the building's energy efficiency, as well as use renewable energy and reduce pollutant emissions and greenhouse gases. Although the work is still in progress, so the final parameters cannot yet be established, the interventions defined in the project, as well as the construction improvements that are being implemented in it, mainly in terms of glazing and roof insulation, point to the objectives set in terms of energy efficiency and environmental sustainability being achieved. Excellent energy savings in terms of primary energy will be achieved.

4. Contribution to solving a problem or weakness detected in the territorial scope of implementation

One of the biggest problems for the public rental stock in Castilla y León is the high energy demand that homes require for their users to have adequate thermal comfort, mainly due to the homes' age.

The success of the intervention, which is presented as a Good Practice, will be reflected in the results recorded in the finished building's EPC (Energy Performance Certificate).

This action will achieve not only a decrease in the demand for energy consumption, reducing environmental effects and saving financial expenditure, but also a supply and operation of the facilities and the building that can be classified as more sustainable and environmentally friendly. A reduction of 95.76% in primary energy consumption and a reduction of 95.77% in CO₂ greenhouse gas pollutant emissions will be achieved for the building as a whole.

5. High coverage of the target population

The new building will benefit not only the people who live in it but also the urban environment of the city of Valladolid by reducing total CO₂ atmospheric emissions.

The results of the improvements set out above will have a direct impact on a building containing 63 homes, each with a floor area of between 59 and 100 m². It will foreseeably be occupied continuously by around 250 people on a rental basis. This will contribute to holding down rental prices and to fostering the development of life projects among the specially protected groups by whom they will be used, especially young people. It will therefore contribute to social cohesion and the improvement of their quality of life.

6. Consideration of the cross-cutting equal opportunities and non-discrimination criteria, in addition to social responsibility and environmental sustainability

It can be said of the operation presented as Good Practice that in the design, development and use stages, the harmlessness and absence of any negative effect in relation to this cross-cutting principle of equal opportunities has been guaranteed. The obligation to observe this as an essential principle in its implementation is maintained.

Accordingly, both men and women benefit equally. Moreover, measures and actions aimed at preventing discrimination have been envisaged. For example, renting to people in a situation or at risk of social exclusion is envisaged, and in relation to accessibility by people with disabilities, it envisaged that 4 of the 63 homes to be renovated will be adapted and used for families with members with disabilities, 3 for the integration of people with mental disabilities, and another for the social integration of people with Down's syndrome. It is also intended to provide direct assistance to young families registered as applicants for subsidised rental housing in the municipality of Valladolid.

The very nature of the actions—energy efficient public housing for social renting to specially-protected groups—corroborates that they are aimed at improving citizens' quality of life under conditions of equality, without discriminating between men and women. In any case, when selecting potential tenants

of the renovated homes, the principles of equality, competition, objectivity, publicity and transparency will be guaranteed, promoting equal usage by all of them, thus ensuring the maximum benefits the operation offers are achieved.

The environmental sustainability of the operation is evident, since the improvement in the energy efficiency of the homes to be renovated will significantly reduce the energy demand compared with conventional buildings. Also, since renewable energies will be used, this will contribute to reducing polluting emissions and greenhouse gases, in addition to other planned environmental efficiency actions, including those related to water consumption and the management of the waste that may be produced during the performance of the actions. The action will thus have a positive impact on improving the quality of the environment and, in particular, on climate change mitigation and adaptation.

7. Synergies with other policies or public intervention instruments.

This operation reinforces compliance with the measures set out in the Energy Efficiency Strategy of Castilla y León 2020 (EEE-CyL 2020), approved by Resolution 2/2018 of 18 January, as a clear commitment of the regional administration in the field of energy efficiency with the aim of ensuring a more efficient use of energy and combating climate change in order to promote sustainable economic growth.

This EEE-CyL 2020 Strategy targets the goals set out in the 2030 Agenda and the Europe 2020 Strategy. Its goals go beyond those set by the European Union with ongoing assessment of the achievements and adjustment of its actions based on the results.

The operation also supports the goals of the National Energy Efficiency Action Plan 2017-2020, which is set up as a central tool of energy policy of the Government of Spain, whose implementation is making it possible to achieve the energy saving and efficiency goals resulting from the compliance with and observance of European Directives. Likewise, the operation comes within the framework of the Energy Efficiency Strategy of Castilla y León and the National Integrated Energy and Climate Plan (PNIEC) in force.

The fulfilment of its purposes will imply: an increase in energy efficiency in their field of action, whether public administrations or citizens, energy savings in primary energy with results in financial savings and final energy, and reducing CO₂ atmospheric greenhouse gas emissions.