

Una manera de hacer Europa



BUENAS PRÁCTICAS

Actuaciones Cofinanciadas

Energy improvement of 100 public promotion dwellings in the "Antonio Muro" neighborhood in Puerto Real (Cádiz)

Andalusian Housing and Rehabilitation Agency

Programa Operativo de Andalucía

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Fondo Europeo de Desarrollo Regional

ENERGY IMPROVEMENT OF 100 PUBLIC PROMOTION DWELLINGS IN THE “ANTONIO MURO” NEIGHBORHOOD IN PUERTO REAL (CÁDIZ)

The Antonio Muro neighborhood of the Cadiz municipality of Puerto Real has its origin in the actions carried out by the different public administrations starting in the 1980s to resolve the accommodation of families from nearby towns and to eradicate substandard housing and shanty towns. The residential stock in the area is mostly made up of privately owned multi-family buildings with a medium degree of conservation. However, there is also a significant number of public housing under a social rental regime, as is the case with this building, inhabited by families with low income levels in need of rehabilitation and conservation. The neighborhood is considered a vulnerable statistical area as it exceeds the unemployment rate, 30.50%, the national reference value.

Given the state in which the building was found, global interventions have been made on the facade and roof enclosures and punctually on the repair of the structure, and on the replacement of the original steel and simple glass carpentry with aluminum carpentry with thermal bridge break and double glass, to improve its performance in terms of energy and noise insulation. There is no intervention inside the houses.

The neighborhood of Antonio Muro was declared an Area of Urban Regeneration and Renewal, which allows the works to be financed by the Ministry of Public Works at an approximate percentage of 35% of the budget, thus being able to complement the resources necessary to cover the total costs of the planned interventions. The total eligible cost of the project was 459,889 euros, 80% financed by the ERDF.

This action is intended to improve energy efficiency and reduce CO2 emissions in buildings and in infrastructure and public services, to reach a final energy consumption of the residential sector of 1,572.00 ktep in 2023 compared to the value of 1,821, 50 reached in 2019.



It is considered a Project's Good Practice since it meets the following criteria:

1. The ERDF's role has been suitably disseminated among the beneficiaries, potential beneficiaries, and the general public:

The Andalusian Housing and Rehabilitation Agency, as the managing body, has conveniently publicized the role of the ERDF in this action by placing, during the execution of the works, a large fence on the façade of the building, which was replaced by a plaque permanent information at the conclusion of the same.



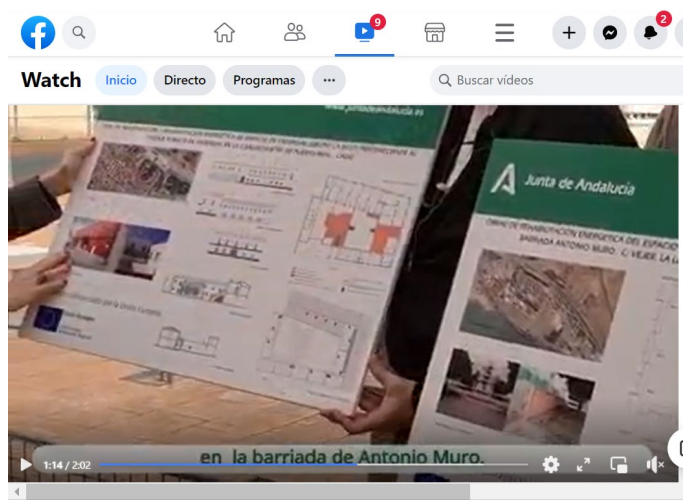
On the other hand, the local and regional press echoed the project and its numerous publications expressly mentioned the role of the ERDF in it. We provide some examples:

<https://www.diariobahiadecadiz.com/noticias/puerto-real/la-rehabilitacion-de-las-viviendas-de-la-junta-en-la-barriada-de-antonio-muro-en-su-recta-final/>

<https://www.europapress.es/esandalucia/cadiz/noticia-junta-ultima-obras-rehabilitacion-100-viviendas-barriada-antonio-muro-puerto-real-cadiz-20170602185831.html>

In addition, in March 2021, the Government delegate, Ana Mestre, visited the works that were being carried out in the interior space of the Antonio Muro neighborhood and that were about to be completed. The delegate was accompanied by the mayor of Puerto Real, Elena Amaya; the territorial delegate for Development, Infrastructure and Territorial Planning, Culture and Heritage, Mercedes Colombo, and the provincial director of AVRA in Cádiz, Ignacio Romani. On behalf of the City Council of Puerto Real, the Councilor for Urban Planning, Carlos Salguero, also attended.

This visit generated a great impact in the press and on television, without forgetting the social networks that were also an important channel for disseminating this action through the Facebook profile of the Government Delegation of the Junta de Andalucía in Cádiz (<https://www.facebook.com/CadizJunta>):



[La Junta invierte casi un millón de euros en la mejora de viviendas sociales de Puerto Real \(diariodecadiz.es\)](https://www.diariodecadiz.es)

<https://www.facebook.com/watch/?v=476205037069991>

Finally, the website of the General Directorate of European Funds maintains a section dedicated to co-financed projects in which, after a brief description of the project, some images of the project are shown and the EU brand image is widely disseminated:

<https://www.juntadeandalucia.es/economiaconocimientoempresasuniversidad/fondoseuropeosenandalucia/proyecto/286>

The screenshot shows a webpage from the Junta de Andalucía. At the top, there are logos for 'JUNTA DE ANDALUCÍA', the European Union, and 'free Andalucía 2014-2020'. Below the logos, there is a navigation bar with 'PROGRAMACIÓN', 'SEGUIMIENTO Y EVALUACIÓN', 'ACTUACIONES', and 'COMUNICACIÓN'. The main content area is titled 'Proyectos' and features a large banner for 'Obras de Rehabilitación de Edificios' in 'ARRU Barriada Antonio Muro Puerto Real (Cádiz)'. The banner includes the text 'Mejora energética de 100 viviendas de promoción pública de la barriada Antonio Muro' and funding information: 'Inversión obras: 953.929,01 €' and 'Aportación Ministerio de Fomento: 376.123,67 €'. Below the banner, there is a 'FEDER' logo and a 'Puerto Real/Cádiz' location tag. A small text block describes the project as a general renovation of the building and its services, including the replacement of original windows and doors with energy-efficient ones. At the bottom of the banner area, there are four small images showing different views of the building and construction site. A 'volver' link is visible at the bottom left of the banner area.

2. The action incorporates innovative elements:

The entire design of the process in its administrative, social and technical aspects, which entail both the drafting of the project and the direction of the works and dialogue with the residents, has been an innovative element as it has been carried out by the company's own staff of the Housing and Rehabilitation Agency of Andalusia (AVRA in Spanish), which has generated very useful internal learning for the improvement of the organization, in addition to significant savings in production costs for it. This learning has made it possible to identify references, procedures and operations that resulted in making the relocation of resident families unnecessary and therefore optimizing the available resources, notably improving their efficiency, which will serve for their application in other actions.

From the very beginning, AVRA's social workers analyzed the peculiarities of the neighborhood and of the group of residents in the building, collecting comments, suggestions and requests from them over several visits and meetings so that everything was as best possible, given that the works not only had to guarantee the functionalities that motivated them, but also be carried out making them compatible with their regular use by the residents.

In addition, the technologies, materials and other aspects that made it possible to achieve the planned objectives in the most efficient way, leading to lower maintenance costs, were identified.

The coordination of the construction company and the families, always under the direction of AVRA's social workers and technicians, has been essential to reconcile operations that had to meet mandatory deadlines, costs and technical requirements, with the habitability of the houses, which could not be compromised at any time, and very especially in the common elements such as stairs, portals, etc.

3. Adaptation of the obtained results to the established objectives:

With this action, the structural elements affected by corrosion due to humidity and the surrounding saline environment have been repaired, the existing roof has been replaced by a new roof that will not only solve the problems of humidity and thermal and acoustic insulation, rather, it will do so definitively and by improving the mandatory parameters, which will translate into significant energy and cost savings for its inhabitants, increasing the comfort of the homes.

The walls of the facades have been completely renovated, with problems of leaks, condensation and thermal and acoustic insulation, for which a meticulous procedure has been carried out that ensures perfect functionality, durability and aesthetics to the whole. The carpentry has been sealed in general and the windows in poor condition, mainly steel ones, have been replaced by windows with thermal bridge breakage and thermo-acoustic glass. And work has been done on stairs, portals, entrance doors and the sanitation network, carrying out the pertinent repairs or replacements according to the specific state of each of the elements in each of the blocks.

With all this, it has been possible to improve the energy efficiency of 8,913 homes and reduce annual energy consumption by 48.3 million Kwh/year, influencing the change in behavior of citizens to achieve better use of energy and facilitate the knowledge about the use of renewable energies and fight against energy poverty of social housing users at risk of poverty or social exclusion, efficiently ensuring people's health and comfort. And it has been possible to reduce at least one letter in the building's Energy Rating Scale, from the letter E to the letter D, achieving a reduction in the average energy consumption of homes by almost 30%.





4. Resolution contribution of a regional problem or weakness:

The specific problem or weakness that exists in a general way in the public and private residential park, one of the sectors with the highest energy consumption according to the Andalusian Energy Strategy 2020, built largely before the entry into force of the current regulations in terms of building, it is its lack of adaptation to many requirements that are required by law today, among others those related to energy efficiency. This is also the case in the case of a good number of buildings in the Andalusian Public Housing Stock managed by AVRA, made up of just over 84,000 homes located in half a thousand municipalities in which some 350,000 people reside, many of them in vulnerable situations of vulnerability. In particular, this is the case of the 100 homes that have been refurbished with this action. Consequently, the action in this set of 100 dwellings contributes significantly to solving the aforementioned problem and also has an exemplary effect, since the neighbors themselves will be the best spokespersons for the results achieved.

5. High target population coverage:

The action carried out has had a very positive impact on the quality of life of all the residents in the building, which at an average rate of approximately 4 people per dwelling, means that it has improved the living conditions of 400 people of all ages including children, the elderly, the sick and the disabled, who are the most vulnerable and sensitive in terms of climate comfort. In addition, work has been done on stairs and portals, improving their accessibility and safety. Also, and as a consequence of the improvement in energy efficiency, the energy billing of homes has decreased, with the consequent economic savings for families.

Although with a more subtle effect, the landscape improvement that this intervention has meant for the neighborhood should not be underestimated, as the external appearance of a large building has been significantly improved and therefore highly visible from different perspectives.

6. The horizontal criteria for equal opportunities and non-discrimination, environmental sustainability and/or social responsibility have been taken into account:

All AVRA interventions, how could it be otherwise, have as a reference in their design, in their legal-administrative implementation and in their material execution, the high values that the European Union makes explicit, as well as our national and regional legislation, in terms of equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability.

As far as social responsibility is concerned, AVRA, due to its public nature and in accordance with its Statutes, is obliged to act with public service criteria, which guarantees compliance with current legislation in all matters. In addition, AVRA qualifies its management by intervening in the Public Housing Stock with the greatest consideration for the people who live in the properties it owns, who are in many cases people with great difficulties of all kinds, and other aspects such as the landscape or the heritage. To do this, the Agency

has qualified and experienced personnel such as social workers and technicians who strive to obtain the best results from the resources they manage in all aspects: spatial, economic and human.



7. Synergies with other public intervention policies or instruments:

In the rehabilitation of the dwellings included in this action, multiple sectoral policies, both European and state, regional and municipal, of an environmental, social, urban nature, and also those of the beneficiary entity itself, such as the Territory Planning Plan of Andalusia, the Multiannual Plan of Action of AVRA 2016 - 2020, Energy Strategy of Andalusia 2020 and Andalusian Regional Strategy for Cohesion and Social Inclusion (ERACIS).

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