



Una manera de hacer Europa



Thermall Shell Serrano Lima swimming pool.

Marbella City Council

Programa Operativo Plurirregional de España

Año 2022

Fondo Europeo de Desarrollo Regional

THERMAL ENVOVENTE AND INSTAENVOVENTE THERMAL ENVOVENTE AND INSTALLATION OF PHOTOVOLTAIC SOLAR ENERGY SYSTEMS AT THE MUNICIPAL SWIMMING POOL OF THE ANTONIO SERRANO LIMA SPORTS COMPLEX INSTALLATION OF PHOTOVOLTAIC SOLAR ENERGY SYSTEMS AT THE MUNICIPAL SWIMMING POOL OF THE ANTONIO SERRANO LIMA SPORTS COMPLEX

The project consists of the energy refurbishment of the Salduba swimming pool at the Antonio Serrano Lima sports complex, transforming it into a more energy-efficient facility. To this end, a new roof was installed, with a glazed system that allows the interior temperature to be maintained, thus avoiding leaks and the entry of hot and cold air, and air-conditioning measures were installed to use energy and water more efficiently. After this comprehensive reform intervention, the facility will not require any external energy to supply or



heat the water in the locker rooms or the pool itself, since aerothermal energy and photovoltaic solar panels are used, thus meeting the energy demand of this sports facility.

This action reduces the high energy consumption of the previous tent, which did not meet the appropriate conditions for the thermal insulation of the pool, forcing excessive use of air conditioning. Thanks to this project, new air-conditioned changing rooms were also built for the users, installing two dehumidifying units with thermal recovery, and betting on water saving, with a renewal system through an exchanger, together with the implementation of a cistern for the storage of this renewed water, which will be used, later, for irrigation and street cleaning.

The ERDF contribution has been 1.666.560 euros, representing 80% of the total cost of the action, which amounts to 2.083.200 euros. With this action, it has been possible to avoid leaks and hot and cold air inlets, thus reducing energy consumption by more than 40 percent, reducing greenhouse gases (GHG), and achieving a reduction of at least one letter in its energy rating, in order to achieve an A energy rating.

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

1. The role of the ERDF has been adequately disseminated among beneficiaries, potential beneficiaries and the general public:

Firstly, the building in which the Salduba swimming pool is located, that is, the Antonio Serrano Lima sports complex, will has a **permanent informative plaque**, which shows where the co-financing of the project comes from and the purpose for which it is intended.



The website of the ERDF Funds of the Marbella City Council disseminates the project in its section dedicated to the actions co-financed with ERDF, whose link can be found on the web portal of the Funds EDUSI Operaciones EDUSI Marbella



The performance has been widely disseminated among the target public, through the communication actions promoted by the City Council, such as an informative Roll up exhibited for the citizens, distribution of merchandising, mupis or the dissemination of a microvideo in the municipal social networks, which can be seen at this following link.



Commercial spots have been aired on national broadcasters and banners in digital media:

- ONDA CERO
- COPE







A press release has also been prepared, which has been published in the news section of the municipal website of the Marbella Town Hall and on the website of the Consistory ERDF Funds. This press release has had a wide repercussion in regional, provincial and local media, having appeared to date (15 October 2023) in about twenty media, always mentioning the co-financing of this project through the ERDF.

- MÁLAGA HOY
- ➤ ÁREA COSTA DEL SOL
- **EL PERIÓDICO DE MARBELLA**



The action has been widely disseminated on Twitter, Instagram and Facebook of the City Council and the hashtag #ProyectosFEDERMarbella has been created under which all the dissemination of projects co-financed with ERDF Funds is grouped.



2. The project incorporates innovative elements:

This is a project that promotes the renovation of the energy efficiency of public infrastructures, betting on a low-carbon economy and the use of renewable energies, while the improvement of the sports infrastructure itself, towards a more modern image, has also had an impact on the neighborhood where it is located, as it is one of the few sports facilities located in the center of the city.

Thanks to this action, the new glazing system roof allows the maintenance of the interior temperature, avoiding leaks and the entry of cold and hot air, an essential measure, since the tent that has been replaced did not meet the appropriate conditions for thermal insulation, forcing an excessive use of the air conditioning system and energy consumption.

One of the most innovative aspects of this project is the photovoltaic system that has been installed on the pool roof, which serves the thermal production equipment, meeting the entire energy demand of this electrical installation.

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

The objective of this action has been to reduce polluting carbon emissions due to energy inefficiency, in addition to modernizing this municipal sports facility, and to increase energy production from renewable sources, something that has been achieved thanks to the photovoltaic system installed on the roof and the replacement of the volume of the pool shell with a new one that does meet energy efficiency criteria.

In addition, this action also achieves savings in water consumption, thanks to the exchanger that renews it, and to the construction of the cistern that stores this renewed water that is used for irrigation and street washing.

4. Contribution to the resolution of a problem or weakness detected in the area of execution:

This action has contributed to the resolution of a problem that was a real demand among the users of the pool, whose condition and inefficiency even forced the closure of the facility, such as leaks and the entry of hot and cold air into the pool, due to the fact that the cover did not meet the appropriate conditions for the thermal insulation of such equipment. Therefore, thanks to the new glazing system cover, which allows the maintenance of the temperature, the photovoltaic system installed and the replacement of the volume of the pool, the Salduba pool can be considered an energy efficient building, achieving significant energy and water savings, since, in the case of the former, consumption has been considerably reduced, and in the case of the latter, the renewal of water through the exchanger has allowed a responsible use of it, in addition to reusing it for other actions such as flushing.

Likewise, the sports facility now has optimal conditions for the use and enjoyment of citizens and sports clubs.

5. High degree of coverage of the target population:

The action has a high degree of coverage over the entire population of the municipality, since the energy savings in municipal facilities and the improvement of air quality and the environment is a global benefit.

Likewise, it not only benefits the 300 users of the swimming pool, together with the sports clubs that train there and the local police and firefighters, but also the personnel who carry out their professional work there, such as monitors, lifeguards, administrative and cleaning staff.

In addition, the location of the pool is very close to the center of the city, in the East zone of the District, which is a densely populated area, conglomerating almost 30 percent of the total population, so the design of the project has taken into account the image of the building, which is now much more aesthetically modern to meet the current needs of users.

6. <u>Consideration of horizontal criteria of equal opportunity and non-discrimination, as well</u> as social responsibility and environmental sustainability:

The action has taken into account the horizontal criteria of equality and non-discrimination, and social responsibility, since it has managed to respond to a demand of the population of the neighborhood that, as users of the facilities, sometimes have not been able to receive the service because of the problems presented by the installation, and that now have been solved for anyone who wants to use it, adults, children, adults and for the people of the back school.

In terms of equal opportunity criteria, this action has also given the building a more modern image and better services, which has resulted in a greater offer for the neighbors living in the area and also for the rest of the citizens.

In terms of environmental sustainability, it is especially noteworthy the energy savings that have been achieved with this project, which has resulted in a much reduced use of the air conditioning system, and also now complies with the A rating for energy efficiency, also at the same time has worked for savings in the pool water with the construction of a cistern and an exchanger.

7. Synergies with other public intervention policies or instruments:

The action enhances the synergies with various instruments of public intervention. Specifically, it does so with the Maintenance Plan for Sports Facilities in Marbella and San Pedro, an initiative whose objective is to provide a quick and efficient response to solve the incidents that may arise in the sports facilities of the municipality. For this purpose it is intended, from 2020, about four million euros, for a period of action that will run until 2025.





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