GOBIERNO DE ESPAÑA
MINISTERIO DE HACIENDA
SECRETARÍA DE ESTADO DE PRESUPUESTOS Y GASTOS
DIRECCIÓN GENERAL DE FONDOS EUROPEOS

Junta de Castilla y León

UNIÓN EUROPEA

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BUENAS PRÁCTICAS
Actuaciones Cofinanciadas

"Heating network to supply eight buildings of the administrative complex of the presidency of the Governing Council of Castilla y Le· n in Valladolid"

EREN - Regional Energy Entity

Programa Operativo de Castilla y León

Año 2020

Fondo Europeo de Desarrollo Regional

Good Practice presented by EREN - Regional Energy Entity of Castilla y León, consisting in the construction of a "Heating network to supply eight buildings of the administrative complex of the presidency of the Governing Council of Castilla y León in Valladolid"

EREN, as part of the Regional Ministry of Economy and Finance, has been investing in renewable energies for more than twenty years, both to prove their technological or economic viability, and to acquire "from within" the business and technical knowledge of the sector.

These projects range from large wind farms or biomass-fired power plants to medium-sized hydroelectric power plants, solar installations in hospitals or heating networks, small photovoltaic installations in schools or boilers in town halls.

These projects include the heating network for eight buildings of the administrative complex of the presidency of the Governing Council of Castilla y León in Valladolid where more than 500 people work.

This installation was finally set up with two distinct parts.

On one side and adjacent to one of the buildings, a 1.5 MW thermal power plant with three identical 500 kW boilers that consume about 190 t/year of wood pellets, two 10,000 litre water tanks each, a 50 t silo for a minimum autonomy of 15 days, control systems and a series of pumps, valves and pipes.

On the other hand, the network of pre-insulated hot water pipes with two branches of 110 and 225 m each way. To this are added the heat exchangers required to transfer the heat to the buildings, the existing boilers having been left in operation for safety reasons.

The work was delivered in June 2019 with an eligible investment (including VAT) of 720,000 euros, financed 50% by the ERDF, i.e. 380,000 euros, within the Operational Programme 2014 - 2020.

Regarding the impact of this operation, the facility is expected to save an equivalent amount of 456 t/year of CO_2.

This action is considered a good practice as it meets the following criteria:

1. The operation has been appropriately disseminated to beneficiaries, potential beneficiaries and the general public.

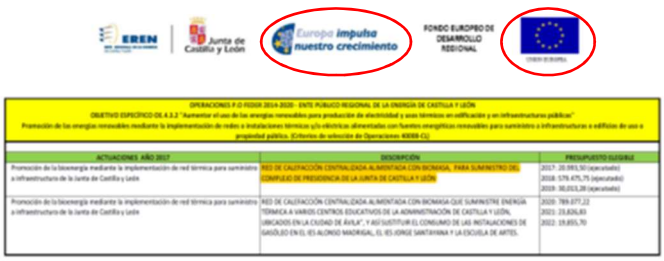
To publicise the start of construction, a sign was placed outside the power station.

It was later replaced by this other one that has been permanently placed in the complex of the Ministry of the Presidency.

Both have been seen daily by hundreds of employees of the complex, them being the direct beneficiaries of the project.

This project has also been included in the EREN website.

https://energia.jcyl.es/web/es/iniciativas-subvenciones-fondos-feder/subvenciones-eficiencia-energetica.html



In addition to the above, other dissemination actions have been carried out, such as presenting the project at the "Third National Meeting of Agencies and Public Bodies in the field of energy", held in León on 20th April 2018.

This good practice has also been disseminated by including it in the regional press in the period from October to December 2020.

The project, which is presented as a good practice, has also been disseminated through the EREN's Twitter account.

2. The actions incorporate innovative elements.

For various reasons in Spain, considering its size and climate, heating networks and particularly biomass heating networks have not been developed as in other similar countries.

Basically, and despite being a less efficient alternative, the country is heated with individual systems, to the point that the trend in recent decades has been to replace traditional central heating systems with wall-mounted natural gas boilers in each home.

In this context, the mere fact of planning (and finally building) a biomass-fired heating network is, in itself, a novelty.

If we also add the fact of being the headquarters of a Government, in this case that of an Autonomous Community, this assessment is increased, especially if we think that in this more biomass configuration

of network this would be the second project in Spain, after the one installed three years earlier by the Xunta de Galicia (Regional Government of Galicia).

3. Adapting the results obtained to the established goals.

This project falls under the goal established by the European Union of "Increasing the use of renewable energies for electricity production and thermal uses in buildings and public infrastructures".

The construction of this heating network results in replacing the use of fossil fuels (diesel and natural gas) with renewables, thus increasing their use.

In addition, the location of the project, the building of the presidency of the Governing Council of Castilla y León, fulfils the desired goal, which is to promote renewable energy in public infrastructures.

On the other hand, this installation has not been built as an end in itself, but to act as an incentive for others.

This explicitly sought replicability will result in the use of more biomass and less fossil fuels and thus meet the European, national and regional goals of decarbonisation, rural development, the fight against depopulation, energy diversification, improvement of the balance of payments, employment, economic development, etc.

4. Contribution to solving a regional problem or weakness.

In renewables there is a big difference between generating electricity from wind turbines or photovoltaic plants or producing heat and/or cold (what is called "thermal uses") with a pellet boiler or a solar installation for domestic hot water.

The main difference is the rules of the game. Thus, the electricity sector has a complete and complex regulation whereby the State can increase the number of wind farms or photovoltaic plants almost at will.

However, the decision to replace an oil boiler with a pellet boiler or to install solar panels on the roof depends solely on the user’s free will. If in addition this is a community of property owners, exercising this will is even more complex.

Therefore, the main problem or weakness is the potential user's reluctance to systems that are perceived as problematic because of things such as a hypothetical and false possibility of a lack of pellet supply or that their usual heater does not know how to maintain or repair it.

This risk aversion is increased in the public sector, the primary target of this project, where technical managers are encouraged to act conservatively, thus favouring low-risk decisions, even if they are not

actual, such as the use of "traditional" fossil fuels, as opposed to the alternative of more innovative renewables.

This project addresses this barrier, offering a tangible example of good performance both for these public managers, and for those who decide in companies, communities of property owners or simply in single-family homes.

5. High coverage of the target population.

As has been mentioned, this project is aimed firstly at all the people who work in or visit the office complex of the Autonomous Government headquarters and secondly at public managers, companies, community of property owners' associations, etc.

The fact that the most emblematic place of all the public buildings of the Autonomous Community has been chosen, such as its headquarters, and the mentioned communication actions, allows us to rate the coverage of the target population as high.

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

The replacement of the energy source of a heating system in an administrative building does not produce any discriminatory effect as it will benefit men and women equally.

On the other hand, these aspects have been considered in contracting the company that has carried out the works, as it is specifically committed by contract to be subject to the regulations on equal opportunities, non-discrimination and accessibility and removal of barriers.

Given its very nature, the project contributes to environmental sustainability by replacing fossil fuels with biomass. Thus, the use of biomass offers additional benefits since it creates a new economic activity in the forests, providing resources to work in them, which discourages their abandonment, a previous and immediate step to fires and plagues.

7. Synergies with other policies or public intervention instruments.

As a result of the increase in demand for biomass, which is a product originating in our rural environment and given the geographical area where it is located, this project is consistent with other programmes that promote the development of rural areas, such as the Rural Development Programme of Castilla y León 2014-2020, and the Agenda for the population of Castilla y León 2010-2020, which aim to fix, integrate, and increase population.

Likewise, this project is in line with the current National Integrated Energy and Climate Plan (PNIEC) of the National Government, in addition to the requirements of the 2015 Paris Agreement or the "winter package" ("Clean Energy for all Europeans").

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