

Una manera de hacer Europa

BUENAS PRÁCTICAS

Actuaciones Cofinanciadas

Installation of sensors for air quality measurement

Molina de Segura Town Council

**Programa Operativo
Plurirregional de España**

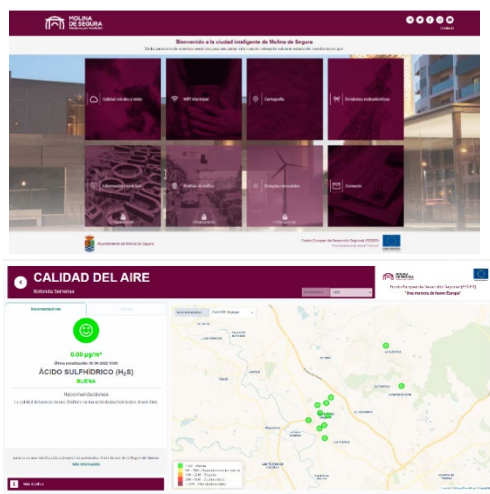
Año 2022

Fondo Europeo de Desarrollo Regional

GOOD PRACTICE REPORT EDUSI MOLINA 2020 MOVES WITH YOU MOLINA DE SEGURA CITY COUNCIL

INSTALLATION OF SENSORS FOR AIR QUALITY MEASUREMENT

The Molina de Segura Town Council presents as a good practice the installation of sensors for the measurement of air quality, distributed in 10 remote monitoring points throughout the city. To disseminate the information collected by the sensors, the City Council has created a website which purpose is to made the data available. It is located on the municipal website.



Picture of air quality website (left) and of the sensors installed (right).

The action is part of the operation "Improvement of urban public services through electronic administration and Smart City facilities" within the EDUSI "Molina 2020 Moves with you". It has an eligible cost of 54.028,92 euros, of which 43.223,14 euros, 80% of total, is co-financed by the European Union through the European Regional Development Fund (ERDF).

The criteria for this action to be considered good practice are as follows:

- 1. The role of the ERDF in the action has been adequately disseminated to potential beneficiaries and the general public.**

The obligations of dissemination have been fulfilled through a communication campaign created to maximize the promotion of the effects of ERDF support in the city, as set out in the communication study.

In relation to the **regulatory communication**, it was published that the contract was 80% co-financed by the ERDF on the State Contracting Platform, both in the announcement and in the technical and administrative specifications (<https://acortar.link/R5JU6O>). It was also posted in the list of co-funded contracts, that is periodically updated in the website of the EDUSI "Molina moves with you" (<https://federmolina.es/licitaciones/>)

At the end of the installation of the equipment, a permanent plaque was placed with the name of the action, the operation in which it is part of, the budget of the work, as well as the municipal and ERDF co-financing.



In relation to **complementary communication**, in addition to the permanent plaque placed on the City Hall building, stickers have been pasted on each of the equipment units.



On 14 December 2021, a **public event** was organised with the aim of disseminating the co-financed action, as well as to raise awareness of the problem of environmental pollution in cities and its impact on the health of citizens. In this awareness event, several experts were invited, and together with the technicians from the City Council explained how the sensors work and how citizens can access to the information through the website set up for this purpose. They also explained the consequences that pollution has on human health.

In order to make it easier for citizens to attend and to publicise the event, various media were used:

- It was publicised on the City Council's website with an online access link and a registration form open to anyone wishing to attend.

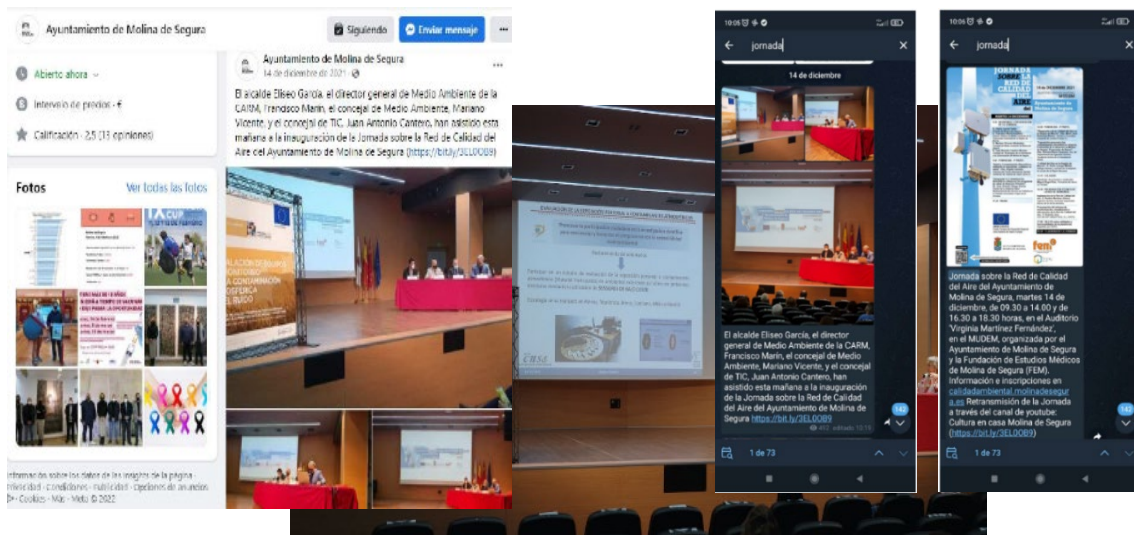


<http://jornadacalidaddelairemolinadesegura.nomelopierdo.es/>

- Posters of the event were placed on the **city's billboards** in order to promote the dissemination to all citizens of the municipality, facilitating access to them for people who cannot consult the web.



- A **social media** advertising campaign was carried out on Facebook and Telegram.



In addition, the event was broadcast live on the YouTube channel so that people who were unable to attend could follow it online. The recording of the event can be consulted at the following link:
https://youtu.be/EcXmvZPS_nU

- A **short video** was made and can be seen at the following links:

<https://vimeo.com/694800070/eadbbb540b>

https://www.youtube.com/watch?v=I2DwH2ffjEg&ab_channel=AyuntamientodeMolinadeSegura

Several **local and regional media** reported the event and the action, and proof of this is shown in the links below:

La Verdad: <https://acortar.link/iFFZcH>

La Opinión: <https://acortar.link/STW1I0>

Murcia.com: <https://acortar.link/jxFQse>

It was also broadcast on the **radio**, through the Onda Regional radio station, which can be tuned in this link: <https://acortar.link/DIVpcY>

Finally, it should be noted that the Council has produced a five-minute documentary video, which was not included in the Communication Plan. It intends to use it as a tool to encourage debate and reflection. To this end, it has distributed it to the different high schools in the municipality, which have a population of 5,806 pupils¹ in secondary and intermediate and higher vocational education. It has also sent it to the Inter-neighbourhood Federation of Molina de Segura, which brings together about forty-two associations in the municipality

2. The action includes innovative elements.

The action is innovative in itself, as a complete air quality measurement network has been created in an area where there was no existing means of monitoring those data.

Another innovative aspect is the number of sensors installed in the municipality. In other municipalities that have similar equipment, several of them have been installed in different parts of the territory, but this is the first time that such a large number have been installed in the same area, which provides more real and accurate data on the situation in the municipality.

Moreover, not only is it a network with several sampling points throughout the city, but the sensors include noise and temperature measurements which, together with the air quality measurement, make even more comprehensive and useful the data captured.

As a final innovative aspect, we can highlight the universal accessibility of all the data, which can be consulted through an enabled portal, located on the municipal website, by all those who wish to access them. <https://ciudadinteligente.molinadesegura.es/>

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

Molina de Segura City Council is committed to achieving its objectives by investing in innovation. In this sense, it is its will to increase the presence of information and communication technologies in order to have more digital data and be able to make better decisions.

In addition, investment continues to be made in digitalisation to improve and facilitate citizens' access to local government, specially by electronical administration tools.

In short, the promotion of new digital Smart City solutions, such as the one presented here, contributes to the achievement of a more efficient city model. Through the implementation of different mechanisms, a higher quality of life for its citizens will be achieved by the improvement of the urban environment and of people's health.

4. Contribution to the resolution of a problem or weakness detected in the territorial area of implementation

Before the installation of the measurement sensors there was no system in Molina de Segura to monitor air quality and to be able to act on the consequences on its environmental impact.

To solve the problem, a study was carried out to place strategic points with different air qualities. These allocations depend on different polluting factors, such as vehicle traffic.

¹ Number of high school population, academic year 2022/2023. Source: Department of Education, Molina de Segura City Council.

With the installation of sensors, it is possible to improve the perception of the environmental reality in the city. The system allows a quantitative analysis of the environment and the traceability of impact indicators, which also make it possible to measure the evolution of levels of habitability over time.

Likewise, the number of e-government tools made available to citizens has increased, enlarging the accessibility of environmental data to citizens.

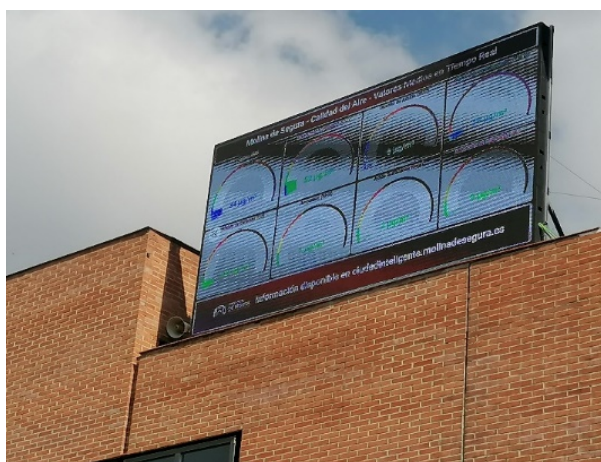
5. Coverage of target population

The information from the sensors is displayed through the Smart City web portal of the Molina de Segura City Council and enables the analysis of the data provided to make decisions when developing public policies focused on environmental improvement.

This portal is completely open, reliable and accessible. It allows the state of the city to be known in real time. Therefore, the degree of coverage of this action is very high, as it covers all the citizens of the municipality.

The direct beneficiaries of the air quality monitoring are the citizens themselves, as actions will be taken on the basis of the sensor results to improve the health of all, especially vulnerable groups.

Portal data from December 2021 to December 2022 are as follows: total number of visits 251,138; number of users 56,213; new users 660.



6. Consideration of the horizontal criteria of equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability.

Throughout the whole process of dissemination, management and installation of the sensors of this action, the principles of equal opportunities and non-discrimination, and social responsibility have been taken into account. The action avoids inequality with vulnerable groups, especially those with respiratory diseases, as it involves all citizens regardless of gender, race, ability, social class or age, in taking care of their health. In addition, access to information is public and accessible to everyone.

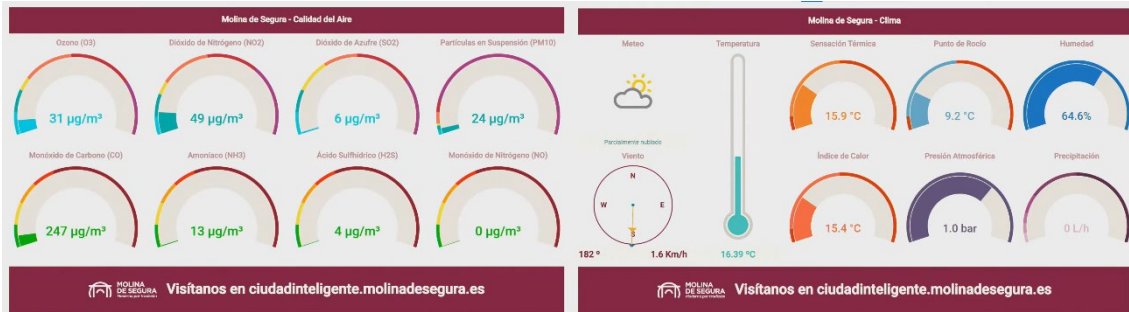
Relating to the parameters of municipal environmental sustainability, the City Council wants to use air quality sensors with the aim of acting on the main emitters of noise and environmental pollutants (reduction of traffic, livestock, industrial emissions, infrastructure...). Therefore, this action will contribute to reduce the impact of pollution on environment, as well as in urban and citizen health.

This action also represents a commitment to social responsibility, as it fights inequality arising from the digital divide and improves and facilitates citizens' access to information electronically.

Briefly, the action favours the traceability of environmental pollutants, will eliminate emitters and help to improve environmental quality and thus the health of citizens.

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

The synergies of this action with other public intervention actions are clear. The data collected by the sensors will be published on a digital signage located on a public building. This is another action included in the same operation as the sensors.



Digital signage of sensor data

Within the framework of the EDUSI, the City Council is also improving the environment through other actions such as the complete remodelling of the Huerto Fayrén Park and the construction of the new Paraíso Park, which will have native vegetation, typical of the Mediterranean basin. Paraíso Park will be crossed by pedestrian paths and bicycle lanes, which will include a new walkway over the Avenida de la Industria Road (former N-340), to connect the urban centre of Molina de Segura with the Segura River, the Northwest Greenway and the farmlands; specifically the neighbourhoods of La Ermita and San Roque,.

In addition, the City Council is also improving the quality of the air in the municipality through other actions such as the pedestrianisation of Calle Serreta between Ronda Levante and Avenida de las Eras del Llano. It is also committed to promote sustainable, ecological and non-polluting travel with the creation of pedestrian paths and bicycle lanes.

Una manera de hacer Europa



BUENAS PRÁCTICAS

Actuaciones Cofinanciadas

Fondo Europeo de Desarrollo Regional