

*Una manera de hacer Europa*



PHOTOVOLTAIC SOLAR ENERGY CHARGING STATION FOR  
ELECTRIC VEHICLES ON A SELF-CONSUMPTION REGIME IN  
HUERCAL DE ALMERÍA

Andalusian Energy Agency

**Programa Operativo  
de Andalucía**

Año 2020

**Fondo Europeo de Desarrollo Regional**



# PHOTOVOLTAIC SOLAR ENERGY CHARGING STATION FOR ELECTRIC VEHICLES ON A SELF-CONSUMPTION REGIME IN HUERCAL DE ALMERÍA

This project is based on helping promote more sustainable transport, as it is a rapid charging facility for electric vehicles linked to a photovoltaic system that supplies both the charging of electric vehicles, managing to replace fossil fuels with sun generated electricity, and the rest of consumptions derived from the service station, that houses the supermarket and the office, and its outdoor lighting.

In addition, the installation includes an energy management system that monitors the energy generated through the photovoltaic system as well as the charging of electric vehicles.

The ERDF contribution has been of EUR 55,090, representing 80% of the total incentive granted, that is EUR 68,863, of a total investment of EUR 140,814. This action aims to reduce CO2 emissions associated with fossil fuel consumption in the transport sector to reach the value of 8,653 thousand tonnes of CO2 in 2023, as compared to the 14,540 tonnes from 2017.



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:

Firstly, the website of the Andalusian Energy Agency disseminates the project in its section dedicated to the actions co-funded by the ERDF, whose link is located on the unique web portal of the Managing Authority:

<https://www.agenciaandaluzadelaenergia.es/es/financiacion/incentivos-2017-2020/fondo-feder-2014-2020>



In addition, the corresponding information plaque has been installed in the charging facility, reflecting the type of energy improvement carried out and where the funding comes from.



The action has been widely disseminated among the public accessing the service station, as well as on the website of the Andalusian Energy Agency, which promotes communication actions, and in the Promotion Day held within the framework of the Federation of Associations of Service Station Companies of Andalusia (FEDAES, for its acronym in Spanish), where the facilities subject to the action were presented as an example.



A press release was also prepared, that has been published on the Regional Government of Andalusia news portal and on the Andalusian Energy Agency website.

<https://www.juntadeandalucia.es/presidencia/portavoz/economiaempleo/150806/gasolinera/huercal/almeria/instala/primer/punto/recarga/coches/electricos/energia/solar>



<https://www.agenciaandaluzadelaenergia.es/es/actualidad/una-estacion-de-servicio-de-huercal-de-almeria-instala-el-primer-punto-de-recarga-para-vehiculos-electricos-con-energia-solar>



This press release has had a wide impact on provincial and regional press, as well as on specialised energy media, having appeared to date (21 March, 2020) in 24 media, and always mentioning the co-funding through the ERDF. Here are some links and some graphic examples:

<https://andaluciainformacion.es/almeria/883925/huercal-cuenta-con-primer-punto-de-recarga-para-vehiculos-electricos/>

<https://movilidadelectrica.com/recarga-raida-fotovoltaica-almeria/>

<https://www.lavanguardia.com/vida/20200310/474080525189/instalan-en-almeria-primer-punto-recarga-energia-solar-para-coches-electricos.html>

<https://www.solarnews.es/2020/03/10/una-estacion-de-servicio-de-huercal-de-almeria-instala-el-primer-punto-de-recarga-para-vehiculos-electricos-con-energia-solar/>

<https://www.europapress.es/esandalucia/almeria/noticia-huercal-almeria-instala-primer-electrogasolinera-andalucia-abastece-energia-solar-20200310132701.html>

## Andalucía ya cuenta con el primer punto de recarga para vehículos eléctricos con energía solar

Una estación de servicio de Huércal de Almería instala el este proyecto pionero en Andalucía, incentivado con 68.800 euros por la Agencia Andaluza de la Energía y cofinanciado con **Fondos FEDER**.

MARZO 11, 2020 PILAR SÁNCHEZ MOLINA

COMUNIDAD EV TV COMERCIAL & INDUSTRIAL ANDALUCÍA ESPAÑA



## Andalucía inaugura su primer punto de recarga solar para vehículos eléctricos

Martes, 16 de marzo de 2020



ER  
La Agencia Andaluza de la Energía, entidad adscrita a la Consejería de Hacienda, Industria y Energía, ha incentivado, en el marco del Programa para el Desarrollo Energético Sostenible de Andalucía (que está cofinanciado por el Programa Operativo Feder), la primera infraestructura de recarga rápida para vehículos eléctricos cuya electricidad se genera in situ mediante energía solar fotovoltaica en régimen de autoconsumo situada en una estación de servicio. **[Foto]**.



La instalación, pionera en Andalucía, ha sido puesta en marcha por la empresa Costa de Andarax en Huércal de Almería y permite a esta estación de servicio -informa la Agencia- tanto (1) la recarga rápida simultánea de dos vehículos, como (2) abastecer el 74% del consumo de la estación, la tienda, la oficina y el alumbrado exterior gracias a los 109 paneles con los que cuenta, 25 de ellos con seguimiento solar en torre. La Agencia Andaluza de la Energía calcula que los 211 metros cuadrados de superficie solar fotovoltaica instalados en la estación de servicio (38,6 kilovatios de potencia pico) producirán aproximadamente 65.670 kilovatios hora al año de electricidad. El proyecto, que ha supuesto una inversión de 140.814 euros, ha recibido un incentivo de la Agencia, a través del Fondo Europeo de Desarrollo Regional, de 68.863 euros y prevé evitar la emisión de 34 toneladas de CO2 anuales.

Antonio Jesús Felices, promotor del proyecto: "el objetivo es convertirnos en estaciones de servicio multienergía. La energía que

## Andalucía inaugura su primer punto de recarga solar para vehículos eléctricos

marzo 17, 2020



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Artículo de <https://www.energias-renovables.com> [Pinche aquí para leer el artículo completo]

A report has also been broadcast on InterAlmeria local television, appointing the help of the European Union through the ERDF: <https://www.youtube.com/watch?v=hQrm-1HOLX4>

Finally, the action has also been widely disseminated on social networks, both on the Twitter and Facebook profiles of the Agency, as well as on the networks of the Ministry of Finance, Industry, and Energy, of its Counsellor, of the regional Government of Andalusia, and of the Government Delegation of Almeria, as well as in the profiles where these posts have been shared. Here are some graphic examples:



The hashtag #ProyectedeÉxitoAndaluciaFEDER has also been created, under which it is intended to group the dissemination of all the projects co-funded by the ERDF Funds carried out through the Andalusian Energy Agency.



## 2. The action incorporates innovative elements:

It is a pioneering project in Andalusia that incorporates innovative elements in the process of charging electric vehicles, as the energy that is used is produced by renewable sources thanks to the implemented self-consumption installation which guarantees the use of clean energy from the very start. This innovation is very important since the two sources that produce most of the greenhouse gas emissions are electricity generation and road transport. Thus, without decarbonising electricity generation, only the pollution from cities is transferred to electricity generation places, without solving the problem.

In this case, in addition, the energy supplied to the vehicles comes directly from the sun and, when there is no vehicle charging, the energy goes to the service station facilities. The installation is also monitored through an energy management system that tracks both the energy generated through the photovoltaic system and the charging of electric vehicles, this allows for a more efficient use and energy performance of the facility, since it provides greater information about energy consumption and its optimisation.



Furthermore, as another innovative element that also affects the awareness and dissemination of the action, a screen has been installed showing the customers of the station the energy generated and the one that is being used in real time, as well as how many kilometres could be covered with an electric vehicle or how many homes (of four people) could be supplied.

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

The objective of this action was to facilitate the use of electric vehicles by expanding the charging infrastructure of the Autonomous Community, which should also be powered by solar energy, thus contributing to the decarbonisation of the generation of energy necessary for charging.

The action put in place has therefore contributed to the resolution of an environmental and energy problem arising from the use of fossil fuels, both in the transport and the production of electricity, for its high charging power (capable of powering two vehicles simultaneously with a maximum power of 50 kW each) and its high degree of self-consumption, above 74%.

In addition, the contribution of this project to the fulfilment of regional objectives of decarbonisation of transport and production of energy from renewable sources is fundamental for its exemplary effect and replicability potential in other service stations.

### **4. Resolution contribution of a regional problem or weakness:**

The action contributes to climate change mitigation by encouraging the use of renewable energy against fossil fuels in the transport sector, which is where the highest energy consumption occurs. Specifically, in Andalusia, transport is responsible for 39.7% of energy consumption in the final sectors and 64% of CO<sub>2</sub> emissions in these sectors.

In addition, it also contributes to increasing the number of charging points for electric vehicles in Andalusia, one of the elements that hinders a wide development of mobility with alternative vehicles in the region.

### **5. High target population coverage:**

The action has a high degree of population coverage, both for the high number of customers of the service station where the charging facility is located, with 100,000 per year, as well as for its location in the municipality of Huercal de Almeria, very close to the metropolitan area of Almeria, with a population of around 250,000 inhabitants and which can be accessed by many electric vehicle users in this area.

Also, the promoter of the project is, in turn, the president of the Federation of Associations of Service Station Companies of Andalusia (FEDAES) and the Provincial Association of Service Stations of Almeria (APESAL, for its acronym in Spanish), so the project also has an impact on other entrepreneurs of other service stations who may find interesting to replicate this project co-funded by the ERDF.



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

The service station where the performance has taken place employs eight workers, seven of whom are women. It contributes, in turn, to environmental sustainability and social responsibility due to the very nature of the project, as the service station will be supplied with the renewable energy produced when it is not being used to charge vehicles, with the consequent energy saving and decreased impact on the environment.

**7. Synergies with other public intervention policies or instruments:**

The action enhances synergies with various instruments of public intervention. It does so with the policy of developing charging facilities for alternative vehicles, and also with the Energy Strategy of Andalusia, which is the energy planning document of the Autonomous Community, specifically, with two of its objectives: decarbonising energy consumption by 30% from the 2007 value, and self-consuming 5% of electricity generated from renewable sources. It is also included as an action within its line of action on Mobility and Efficient Transport.



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# BUENAS PRÁCTICAS

## Actuaciones Cofinanciadas

**Fondo Europeo de Desarrollo Regional**