

Altair SmartCore™ Delivers Data Driven Ecosystem to Make Pozuelo Del Alarcón a Smart City



Today, cities like Pozuelo de Alarcón face many challenges including the financing and management of modern and efficient infrastructures. There is a neeed to improve their urban environment and the overall quality of life of their citizens, while keeping in mind environmental impact and sustainability.

Inspired by the demand of its citizens, the city council of Pozuelo de Alarcón decided to set specific goals to become a cleaner and more efficient city, a Smart City. These goals included protecting the environment, decreasing energy usage, reducing CO2 emissions, detecting and eliminating any excesses in water and electricity consumption, and controlling expenses. The overarching objective is the enhancement of the quality and performance of urban services to citizens' lives through sustainability, community and growth.

Pozuelo de Alarcón's first step was to launch four projects integrated on Altair SmartCore' Internet of Things platform:

- Smart irrigation in 11 public parks and gardens with a network of humidity sensors making irrigation more efficient and saving on water consumption.
- Smart parking in 970 parking spaces with information about free spaces through a mobile app for citizens saving time for parking and therefore improving traffic fluidity.
- Smart street lighting, by integrating multiple data sources from sensors
 within Altair SmartCore, the intensity of light can be adjusted depending on
 weather conditions and/or citizen traffic to save money and energy.
- Energy efficiency in the City Council with more than 150 locations collecting data and providing recommendation to facility manage



Industry

Smart City • Region, Europe

Challenge

The citizens of Pozuelo de Alarcón in Spain wanted a cleaner and more efficient city
The goals were to protect the environment, decrease energy consumption, reduce CO2 emissions, and control expenses.

Solution

The city council used Altair SmartCore platform to realize its digital transformation by:

- Monitoring city infrastructures
- Smart irrigation in 11 parks with humidity sensors
- Smart parking in 970 spaces with mobile app
- Smart street lights adjusting for weather & traffic

The Team

Altair SmartCore IoT platform run with local telecommunications partner: Orange España. For the Smart Street Lightings project, we used Schréder-Socelec's sensors and Afeisa y de Arelsa helped us manage remote control modules for the electric cabinets.

The Technology

Altair SmartCore enables the development of vertical applications to manage city services in an integrated way. It allows the monitoring of the different infrastructures through dashboards and management applications.

This cloud platform enables the collection, integration, storage and analysis of data through sensors and information reported by citizens to better manage municipal services. In the case of Pozuelo de Alarcón, the Smart City platform developed by Altair SmartCore is intergated with the services of Orange España, our connectivity partner.

Pozuelo de Alarcón is now a sustainable city with an innovative, agile and efficient administration. This project makes Pozuelo de Alarcón a point of reference in its country, showcasing intelligent urban development, and fostering initiatives that will improve its citizens' quality of life.

The Smart City platform from Altair SmartCore has enabled this municipality to gather real time information on what is really happening within the city. Today, the municipal lighting system turns on if visibility is impaired because of fog, the automatic irrigation system skips cycles on rainy days, and the overall energy consumption is optimized leading to significant savings. The platform is also improving traffic fluidity by providing drivers with directions to available parking spaces.

Pozuelo de Alarcón plans on further developing this project by extending the use of sensors throughout the city and adding new functionalities and services to its Smart City platform.

All data is managed via an application dashboard allowing municipal services to make their decisions in real time.

Results

Pozuelo de Alarcón is now a sustainable city with an innovative, and efficient administration. This project showcases intelligent urban development, and fosters initiatives that will improve its citizens' quality of life.



