Citroën car dealership
Case study
Case studies

Citroën car dealership

PROJECT
Improve energy efficiency and cost savings

SECTOR
Automotive

CLIENT
Garaje Eloy Citroën Car Dealers

Objectives
The ownership’s top priority was to improve energy efficiency and the resulting cost savings. To achieve this, it looked at three fundamental areas: air conditioning, controlling electrical consumption by programming temperatures and calendars, and compensation of inefficient energy (reactive energy).

Solution
Energy measurement and control units were installed (EDS and EDS 3G, CIRCUTOR CVM analyzers), for lighting and air conditioning, and inefficient energy (reactive energy) was compensated with an OPTIM 1 capacitor bank. The entire system is controlled via the WEB, both for managing parameters and viewing alarms. As a result of these measures, savings of €13200 were achieved in the first year.

Results
From the first month following installation, the electrical energy consumption savings amounted to 24%. Other savings were also noticed both in terms of use and maintenance, thus facilitating rational energy use in the installations, including

The client
The Garaje Eloy Citroën Dealers grew gradually and reached 6220 m² for its activities, consuming 260,000 kWh per year at an annual cost of €55000.

Most significant results
Dealership surface area
6220 m²
Annual energy consumption
260000 kWh
Annual consumption in Euros
€55000 a year
Savings
Between 11% and 24% the first year
Annual return on the investment
61%
Savings Measurements and Results
On installing the electrical network analysis units, the variability and need to compensate inefficient energy (reactive energy) was clear, since this was not only a waste of energy but also a non-productive excess cost.

Improvements in air conditioning management
20% was also saved on air conditioning consumption, which was optimised thanks to the CIRCUTOR measurement and control systems.

Implementation of new management protocols
By programming energy use and managing incidents and excess consumption via alarms, energy consumption was rationalised right from the start of the project, achieving savings of 24%, and later actions were also possible thanks to the system data.

“The energy saving was already 24% in the first year, and reached 28% at some points, as a result of the comprehensive control of energy use”

25% of the saving was achieved through better control and working habits

15% was saved on the electricity bill as a result of power factor correction

(remotely via the WEB platform. To achieve these results, a technical study was first of all performed so that the improvements could then be introduced and the entire supervision system installed. In August, following the installation, 28% was saved on the electricity bill, and even greater improvements were achieved thanks to the use of consumption and programming calendars.

Partners
CIRCUTOR supplies units and software for energy management and saving in the public administration, tertiary, corporate, industrial and residential sectors. Through its network of Experts and its distribution channel, installers, integrators and partners, it provides services in more than 100 countries and has received several energy efficiency awards for projects, units and R&D+i. CIRCUTOR’S management solutions are compatible with other units on the market, so that installations can be updated with minimum investment CIRCUTOR Electric Energy Management. In this case, the chosen Partner was 3SL Aplicaciones Integrales Eléctricas.

Savings
25% of the saving was achieved through better control and working habits

15% electricity bill as a result of power factor correction