ENERGY SERVICES COMPANY URBAN PUBLIC LIGHTING

Urban Public Lighting is a major source of energy consumption as it is a system which operates for continuous periods of time. In energy terms, urban public lighting comprises between 40-60% of municipal energy consumption.

As a result, any improvement either to the components or system management will lead to major energy savings, which will subsequently lead both to financial savings and also a reduction in non-renewable energy consumption, as well as greenhouse gas emissions.

For these purposes, all projects completed by SICE are designed to achieve:

- Improved energy efficiency in facilities.
- Energy and financial savings in terms of electricity use.
- Reduction in light pollution.

To achieve this, the following steps are required:

- Full control over the characteristics of different equipment that can be found on the market and the most appropriate operations.
- Complete understanding of facilities and the real prospects of obtaining optimal performance and reliability.
- Efficient methodology which is able to minimize breakdown repair times as well as potential recurrences.

Thanks to its continuous analysis of the maintained facilities and different applied working methodologies, SICE uses procedures which, in accordance with the age, condition and characteristics of the facilities, are the most appropriate to achieve a long service life for street lighting facilities, whilst optimizing the system's energy use.

ENERGY SERVICES

The history of the company has always borne a close relationship to public lighting, giving SICE the knowledge and experience it needs to provide all services related to engineering, consultancy, audit, installation and supply, monitoring, maintenance, and Smart City integration, providing a tailored monitoring and verification service to offer its clients the best technological option.

In addition to this, SICE has the financial and lending capacity to make technological changes which can generate financial savings for its clients from the outset.

Lighting and Energy Efficiency

SICE has more than 15 years of experience in the provision of energy services, having completed a wide range of projects such as providing support on the procurement of energy supplies (electricity, gas,...), always achieving the lowest possible cost and the best option, or monitoring and control of facilities' consumption, including reporting.

SICE has its own remote management system which has controlled the largest number of luminaires in a Spanish city for the past 7 years.

SICE also provides detailed energy auditing services, analysing lighting systems, street types, current technology and facilities, as well as Energy Saving checks and methods, based on the IPMVP Protocol.

Furthermore, SICE currently provides **Comprehensive Government Energy Services**, long-term contracts with works and repairs completely financed through the obtained energy savings, based on the 5P model.

- P1: Energy Management and/or Supply.
- P2: Comprehensive facilities maintenance.
- P3: Full guarantee.
- P4: Works and repairs.
- P5: Investments in Energy Savings.

SICE Remote Management System

SICE's system is able to collect the required information to control the facility, particularly everything related to energy consumption and detection, and it allows:

- **Real time** control and monitoring of the Control Centres.
- Improvement in **energy control** through electricity consumption, comparing with the marketing company invoice.
- Remote reading of specific electrical parameters at facilities for **analysis purposes**.
- Reduction in breakdown **response times**.
- Daily, weekly and monthly reports.
- Control of start-ups and shutdowns.
- Management of maintenance and incident monitoring.
- **Integration** of various manufacturers.

The system has a **web-based application** and various different profiles for Administration, Management and handling information, along with rankings for breakdowns and alarms.

This system has been tested and installed in various municipalities, including the city of Madrid, where more than **2.400 control centres** are controlled remotely.

Remote Management System Architecture