

Smart lighting - Energy



NEED

Local governments pay increasing attention to energy efficiency policies, which are essential for fighting pollution, ensuring access to energy and to renewable resources. However, many Organisations still do not have a system capable of measuring/predicting consumption and of applying energy saving logics combined with use of the IoT. A necessary qualitative leap which can no longer be delayed.

SOLUTION

Municipia develops energy efficiency technological projects with the aim of “creating infrastructures” within the city in order to reduce energy consumption and pollution and to free up economic resources. At the same time, it provides innovative services to improve control of the territory and to give citizens concrete answers in terms of safety, mobility, quality of life and innovation.

SERVICES

Efficiency increase in public lighting (smart lighting):

- ▶ implementation of innovation projects of existing plants with high efficiency systems, remotely managed and integrated in the logic of a smart city ecosystem (electric mobility charging, energy community management)

Home automation and building security (smart building):

- ▶ activation of remote management systems and detection sensors as well as their placement in rooms and on windows for the active and automated regulation of lights, air conditioning, consumption monitoring and air quality
- ▶ activation of control over areas at risk, evidence of unsafe conditions and potential illicit behaviour
- ▶ numerical and timely verification of presences in single areas and in the building complex for verifying unauthorised accesses/exits, presence and safety control for emergency management, quality control of harmful gases

Energy efficiency means guaranteeing the same levels and quality of services, such as comfort and safety, to everyone, consuming fewer resources and thus obtaining savings not only in energy.

ADVANTAGES

- ▶ Decrease in energy consumption and transition to renewable energy
- ▶ Support for the development of light (bicycles, scooters) and heavy (cars) electric mobility by creating public recharging network infrastructures
- ▶ Lower environmental impact
- ▶ Greater economic savings for citizens, businesses and the Public Administration itself
- ▶ Activation of management and monitoring systems with reduction of maintenance and related costs
- ▶ Greater service reliability thanks to the use of new technologies and the development of IoT solutions (for example, sound detectors, rain calibrators, air pollution sensors, alarms and video security, just to name a few)

- ▶ Quality, safety and reliability in the provision of public services
- ▶ Monitoring of energy consumption and verification of faults and frauds
- ▶ Comparative analysis of consumption
- ▶ Computerised management of system calendar/timetables
- ▶ Correlation between consumption and corresponding costs
- ▶ Identification of anomalies, waste and inefficiencies
- ▶ Identification and planning of energy saving/efficiency raising measures
- ▶ Optimisation of supply on the energy market

Municipia,

a company of the Engineering Group, is the partner for the digital transformation of cities of all sizes. It provides the best technologies and creates services through private investments, absorbing the operational risk.

MUNICIPIA - AUGMENTED CITY

- ▶ We manage services for Authorities and their citizens, achieving greater levels of efficiency, effectiveness, transparency and sustainability through digital technology. We also intervene with **public-private partnerships and project financing** formulas with investments and risks borne by us and participation in the benefits deriving from the increase in revenues and the decrease in costs.
- ▶ We add value to existing investments and technologies, making available our experience and the technological solutions of the Engineering Group. We intervene both with vertical initiatives and with cross-cutting projects in order to improve the quality of life in the city and to simplify the relationship between Public Administrations and citizens.