

FOR SHOPPING CENTERS TOO, THE FUTURE IS ENERGY MANAGEMENT

Atalian Global Services and Ergelis have recently launched their joint solution for energy management which is currently implemented in 24 shopping centers in Central and Eastern Europe.

BY MICHEL ZOZAYA, IMAGES ATALIAN GLOBAL SERVICES



It is not only environmental issues that are at stake. Reducing CO₂ emissions and the use of primary energy also reduces energy bills. The economic performance of a shopping center in the future will also be judged by its energy performance.

ENERGY PERFORMANCE

The energy performance of a building is the amount of energy consumed annually due to the quality of its structure, its energy-consuming equipment, and its operating system. Linked to energy performance, the concept of energy efficiency targets thermal comfort with optimized energy use. It relies on the behavior of occupants and their use of the facilities, the quality of the building, weather conditions, and energy prices. We can measure energy performance by the annual energy bill. As generally 20 to 25% of operating costs are energy costs, the issues are both environmental and economic. Therefore it becomes essential – not to say compulsory – to master energy performance in order to control the intrinsic and financial performance of a building.



The Kyoto Protocol is aimed at reducing CO₂ emissions and was ratified by all EU countries. They are committed to decreasing their emissions of greenhouse gases to a quarter of current levels by 2050. By the same date, buildings will have to consume only 50 kWh of energy per sq m per year. With an average consumption of 555 kWh per sq m per year, shopping centers are struggling to comply with the new regulations. Even if the emerging competition from new buildings with high energy performance is included, shopping centers are far from these objectives.



MICHEL ZOZAYA
International Technical
Director at Atalian Global
Services



Euro Center in
Budapest (Hungary).

NEW TECHNICAL SOLUTIONS

In order to comply with the new energy performance requirements, one solution is to renovate and upgrade all non-compliant buildings. Of course, this “solution” is unrealistic and not cost-effective. As an alternative, new technical solutions are available. These systems are easy to implement and able to adapt to weather and energy price fluctuations in order to optimally manage the technical facilities of buildings while reducing energy consumption and bills. The most important energy-using equipment in the building is connected to a calculator that is linked to a remote server. These systems are then controlled remotely by energy management professionals (we call them energy managers) who use optimizing algorithms to determine the best energy management for a building and its facilities. By working on various parameters such as energy prices or the thermal inertia of a building, the system allows customers to save tremendous amounts of money on their energy bills. In most cases these savings are up to 20%. Buildings suitable for this system are mainly commercial buildings with a minimum surface area of 10,000 sq m. This concerns office buildings, logistics warehouses, shopping centers, and retailers. These systems are particularly suitable for shopping centers, as they are able to adapt easily to existing building management systems. Savings provided by reduced energy consumption, in turn provided by energy managers dedicated to optimizing energy use, are very interesting.

THE ENERGY MANAGER: A NEW PROFESSION IN COMMERCIAL REAL ESTATE

As energy management becomes a key issue in commercial real estate, one must think about the increasing role of energy managers in shopping centers. In addition to the energy management system, which automatically calculates and sends instructions to the various types of equipment, the energy manager monitors the operations and deals with anomalies with local on-site maintenance teams. As a result of the synergy between technology and human skills, Atalian Energy Solutions - Ergelis Inside uses a strategic approach to understand a client’s energy consumption. With the analysis energy data we define the main items consuming energy and how to counteract this in order to deliver savings in primary energy consumption and CO₂ emissions. The energy manager deals with the energy challenges of a building. This concerns technical maintenance but is also part of the financial and corporate social approach of companies. As a result, the energy manager will be increasingly incorporated into the commercial real estate organization.



ABOUT ATALIAN ENERGY SOLUTIONS – ERGELIS INSIDE

In addition to its technical maintenance and facilities management services, Atalian Global Services provides energy efficiency solutions of Ergelis to its international clients. Atalian Energy Solutions, together with Ergelis Inside, provides solutions for energy efficiency that facilitate energy savings through optimized management of energy-consuming equipment. This energy-consuming equipment management solution, which is provided in addition to an existing BMS, combines the following three parameters:

- Day to day occupancy
- Day by day energy prices
- Weather conditions and forecast

A guarantee of savings over the operating period is provided to the customer with a commitment to pay back the difference if the savings are not attained.

ALREADY IMPLEMENTED IN 24 SHOPPING CENTERS IN CENTRAL AND EASTERN EUROPE

Atalian Global Services is already providing energy management solutions to 24 shopping centers in Poland, Czech Republic, Slovakia, Hungary, and Romania through its Atalian Energy Solutions division. In addition to cleaning, technical maintenance, security and landscaping services, the group already provides all its customers in this part of Europe with teams dedicated to Atalian Energy Solutions, implementing energy performance solutions aimed at reducing annual energy bills of shopping centers by 20%. This energy performance solution mainly consists of implementations of the system for energy-consuming equipment management coupled with operational services. This includes the automated management of the building’s facilities, monitoring of the operations and energy consumption, regular savings calculations, and monitoring that guarantees savings over the operating period.