CASE STUDY

Residential complex energy management

Lofos Edison is a modern residential complex comprising of 202 luxurious residences (maisonettes and apartments) with a total surface of 34,000 m² on a 70,000 m² piece of land. Apart from the residential buildings, the Estate includes auxiliary spaces such as a health club and underground levels for 287 parking spaces. The total surface of shaped gardens within the site as a landscape is 22,500 m²; this includes communal and private garden areas with 700 people are living within the complex boundaries.
Electricity consumption for the Estate’s communal areas is mainly used for communal lighting, the health club, irrigation of green spaces as well as consumption for the operation of a wastewater biological treatment plant and the pumping of water from an underground well. The site has a central medium voltage intake from where it is distributed to support the communal loads mentioned above.

The estate’s administration committee had to face several issues related to energy consumption. Awareness of factors resulting to excessive consumption was limited.

During the previous operational years, high energy consumption was noted (25,000 - 40,000 kWh/month) with peak consumption during the summer months due to random gardening irrigation schedules.

Through MEAZON’s cloud energy management solution, information on the energy consumed in kWh, active and reactive power & energy information is accessible from everywhere. MEAZON’s web analytics provided an insight of the consumed energy not only in terms of quantity but also in terms of power quality. The Estate’s Committee got on the right path to effectively manage electrical loads according to their energy management policies. Easily installed equipment without the nuisance to integrate between different meters, data loggers and reporting systems. Within the next twelve months, the information gathered and the practical associated analytics gave an invaluable decision making tool for the interventions needed to save wasted energy.
“Lofos Edison is considered a unique residential complex in Greece and one of the top in Europe. It’s consisted of 37 three-floor building and maisonettes, 20.000 m² of parks and gardens and advanced technical infrastructure including among other a water purification system, an irrigation system and a medium voltage substations. Our cooperation with Meazon helped us gain an invaluable insight on our electricity consumption profile achieving financial and environmental benefits. Our immediate plans include further enhancement of our energy profile understanding that will lead us to the next cycle of energy efficiency achievements.”

_Timos Geropoulos, Head of Administrative Committee, Lofos Edison, Greece_