

LEGOLAND® Windsor eSight® to monitor consumption across site

chooses
energy



LEGOLAND® Windsor is part of the Merlin Entertainments Group. Opened in 1996, the park extends over 150 acres and is one of four LEGOLAND parks in the world. LEGOLAND Windsor contains over 50 interactive rides, shows and attractions, 11 restaurants and cafes and 7 shops

■ The Requirement

The requirement was for the supply of both hardware and software for the LEGOLAND theme park in Windsor. LEGOLAND Windsor needed a facility whereby they would be able to monitor the energy used by each isolated ride. As a result, there was a requirement for the installation of data loggers across the park and a system to analyse the collected data.

LEGOLAND Windsor required a system whereby they would be able to:

- Monitor electrical energy data automatically, via an AMR (Automatic Meter Reading) system, which would be capable of expansion
- Analyse energy consumption and observe peak demand
- Create exception reports whereby they would be automatically notified should anomalies arise in the energy data, in turn allowing them to act accordingly



"eSight has saved LEGOLAND Windsor time and money and I highly recommend it to anyone looking for a flexible, intuitive and complete M&T solution"

Keith Johnson

Facilities Director, LEGOLAND Windsor

■ The Solution

Hawkesbury and Enercom worked together to provide the complete solution for LEGOLAND Windsor. A site survey was undertaken to determine the specific requirements across site and a qualified professional assessment was presented to LEGOLAND Windsor along with a fixed price for the programme of works.

Following this Enercom loggers were installed across the site, to supply LEGOLAND Windsor with a thorough breakdown of their energy data.

This half hourly data was then imported back into Hawkesbury's energy suite eSight, allowing LEGOLAND Windsor to:

- Examine peak consumption rates and times
- Optimise performance by making energy saving changes and in turn schedule alarms when energy data breached these levels
- Construct and issue energy reports automatically across site

■ The Technology

The LEGOLAND Windsor site is spread across several acres and includes an HV ring serving 6 substations. Hawkesbury performed a thorough site survey across the site to determine the locations and points of equipment to be monitored. This included all of the theme park rides.

Data is collected by utilising the existing infrastructure across the LEGOLAND Windsor site. The communications method to collect data from the data logging equipment includes a combination of Powerline Communications and dialup, taking data back to Enercom Multilog data loggers.



Data is collected on a daily basis back to a central server location within LEGOLAND Windsor where eSight has been installed. This data is then made available across the network for users to log on and access.

Powerline Communications

Powerline communication provides a digitised method of transmitting data across an existing mains network. The system communicates between locations by superimposing a signal on the live and neutral mains low voltage network and then detecting the signal elsewhere in the installation.

The communication does not pass from the low voltage to the high voltage section of an installation and the range of communications is up to 400 meters. This is particularly suitable for transmitting data across a large site with extensive submetering – such as LEGOLAND Windsor.

“The level of service given by Hawkesbury has been flawless. I have greatly enjoyed working with them and will continue to do so, into the future”

Keith Johnson

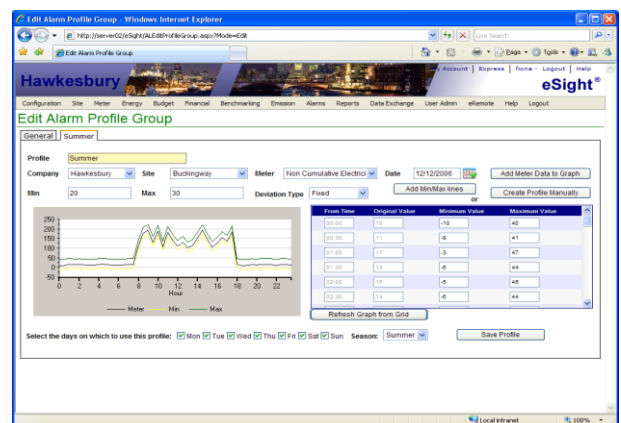
Facilities Director, LEGOLAND Windsor

Exception Reporting

LEGOLAND Windsor wanted to monitor energy across their entire site, including all rides and the main office block.

By using eSight to observe energy profiles across these areas, LEGOLAND Windsor was able to optimise energy performance by making energy saving changes.

When these changes were breached, eSight sent alarms via e-mail and text message, notifying the relevant parties thus enabling them to take action.



About Hawkesbury

Hawkesbury specialises in the supply of **aM&T** solutions. Built upon the very latest Microsoft technology, eSight is our fully browser based energy monitoring and targeting suite.

eSight may be used in conjunction with other products from Hawkesbury for the collection and transfer of data between sites.

Please contact Hawkesbury if you would like to receive further information about eSight, data collection, data logging, meters, manual meter reading solutions, or pricing and licensing options for your organisation.

eSight is a registered trade mark of Hawkesbury Consulting Limited.