

ENERGY USE REDUCED BY 23%

Enistic's Intelligent Building Energy Management System achieved:

- Advanced sub-metering to identify and eliminate energy waste
- Overall reduction in energy use by 23%
- A 75% reduction in energy used by fresh air units
- A payback period of less than 14 months

“ Despite our staff occupancy doubling in the same period we managed to reduce the total energy consumption at our Taxback.com headquarters in Kilkenny by 23% over a year, exceeding our expectations.

Inefficiencies with our heating systems and controls were quickly identified and improved using the system. The team provide a very good service. ”

Terry Clune
CEO, Taxback.com



The Taxback.com headquarters in Kilkenny, Ireland

Background

Taxback.com is a multi-national corporation providing specialist tax return services to private and corporate clients across 100 countries. Taxback.com set-up their headquarters in Kilkenny in 2003. The building consists of approximately 1000m² of open plan office space and meeting rooms over two floors. With the addition of Transfermate, a global international payments service with over 65,000 clients worldwide, and the new Connect Ireland headquarters, the building occupancy had doubled in just six months.

The IBEMS system was installed to help reduce energy consumption, identify and eliminate wasted energy use, and maintain control of all prime energy consumers through the use of Advanced Smart Metering and a

“ At the outset, this looked like an efficient building. Newly built with up to date building technologies, we wondered where we might make an impact. Following the installation of our system, we quickly established that controls were an issue and moved to recommission where possible. IBEMS building sensors and meters were monitored and programmed with real-time alerts, ensuring that control of consumption at the site was maintained. ”

Sean Doyle
Enistic Ireland

What We Did

The 30 Day Baseline Review

A period of 30 days after commissioning was given to establish the breakdown and normal profile of the main energy consumers on the site. A review of consumption trends, overnight loads and daily and weekly costs was then presented with recommendations for Energy Conservation Measures (ECM's).

Analysis

The prime energy consumer and main target was HVAC. The building is heated in winter and cooled in summer with an electrically powered air conditioning system. A separate fresh air system maintains ventilation levels.

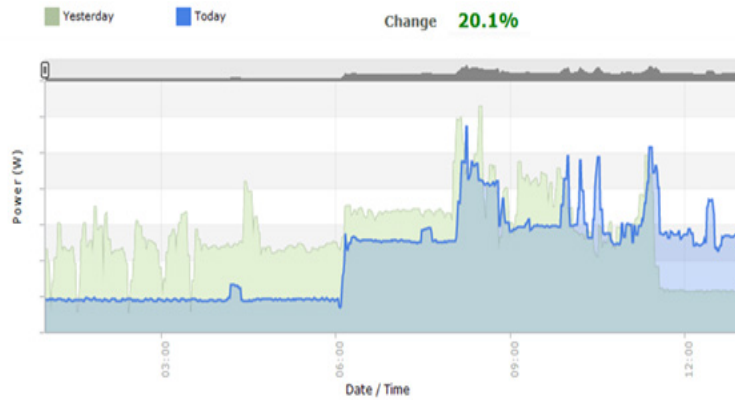
Fresh Air Units:

The fresh air units had been running 24/7 until new controls strategies were implemented, minimising out of hours operations.

Heating, Cooling and Air Conditioning

Poorly commissioned controls led to un-managed heating schedules and temperature settings.

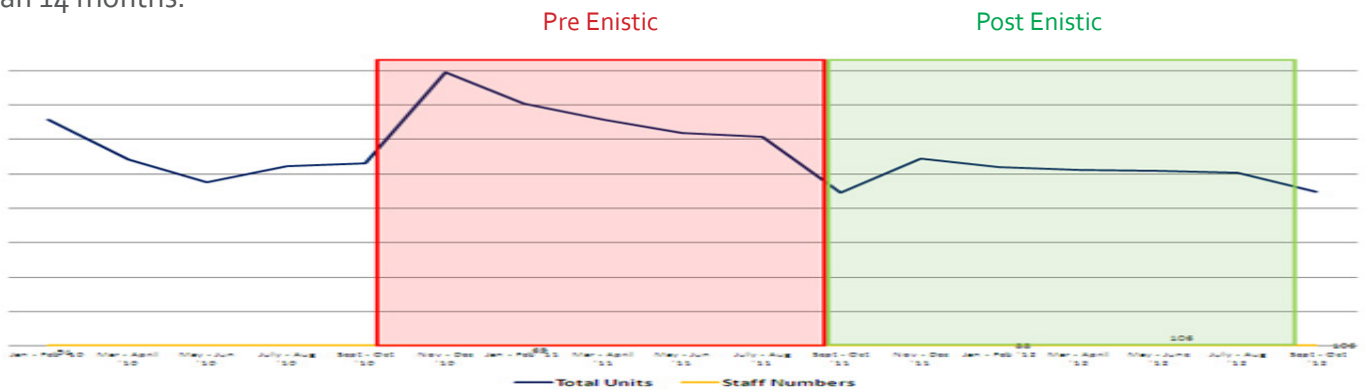
The daily analysis graph compares a day where systems were unscheduled during out of office hours against the following day where controls were programmed (see right).



Graph comparing unscheduled heating consumption with programmed control during out of office hours

Achievements

Energy Consumption was reduced by 23% over a year, despite staff occupancy doubling in the same period. Energy use by the fresh air units was reduced by a massive 75%. The cost initial investment was returned in less than 14 months.



Consumption reduced by 22.5% despite doubling occupancy

New ESOS Regulations

By 5th December 2015 all large UK undertakings* must conduct and report energy efficiency audits to the Environment Agency in order to comply with the new ESOS (Energy Savings Opportunity Scheme) Regulations. Effective and accurate monitoring of your energy consumption and targeting potential energy savings is an essential part of the process.

We can help

Our Easy ESOS service includes a completely free, no obligation ESOS scoping meeting in which we can determine an approach, time frame and fixed cost for compliance. For more information see our website www.enistic.com or call us on 0844 875 1600 or email info@enistic.com to book your free scoping meeting.

*All organisations with over 250 staff

Or turnover of over 50 million Euros (approx £38,937,777) and an annual balance sheet total in excess of 43 million Euros (approx £33,486, 489).

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Realtime & robust energy monitoring supporting you in managing your facilities more expertly & efficiently