

Challenge

Implement a structured approach to energy management to help reduce energy costs and ensure continual improvement, in order to maintain competitiveness in tough economic times.

Solution

Hanley Energy designs and installs a bespoke energy monitoring solution as a crucial part of energy management, allowing for continual improvement against targets.

Results

Energy management helps Largo to reduce energy costs by 7%.

LARGO represents iconic snack-food brands such as Tayto, Hunky Dory, King and Perri. It supplies branded and own-label products to Ireland, the UK, Continental Europe, Australia, Asia and Middle East. It has production facilities in Ashbourne, Co. Meath, Gweedore, Co. Donegal and Barnsley, UK. Largo Foods is the first crisp and snack manufacturer to be certified to ISO 50001:2011.

In 2007, Paul Fisher, Health, Safety and Training Manager and Energy Champion at Largo Foods, attended Energy MAP⁽¹⁾ training, and was impressed by the benefits a structured approach to energy management can bring. It can initially reduce energy consumption by up to 15%, and through continual improvement can realise continued annual savings of between 4% and 7%.

"I needed to understand where energy was being used in the Irish production plants," says Paul. "I approached multiple vendors and asked them to design a metering solution suitable for our needs."

He found the technical solution presented by Hanley Energy to be "practical, modular and cost-effective". He thus chose Hanley Energy to design and install an energy monitoring solution for Largo Foods. Paul adds: "I haven't regretted this decision; their solution is perfect and cost effective!"

Energy monitoring installed in stages

A key part of any energy management programme, including ISO 50001, is to understand where energy is being used. Energy monitoring allows users to identify and analyse where and how energy is being used within a building and operation.

Hanley Energy installed the energy monitoring system for Largo Foods in stages (see figure below). This modular approach works extremely well in a busy manufacturing environment. It allowed Largo to prioritise energy optimisation of the biggest energy users.

"We are operating in tough economic times, and as a business we must identify opportunities to remain competitive. For me energy management was a no-brainer. By implementing a structured approach to energy management I could drive continual improvements, allowing significant energy savings."

Paul Fisher, Largo Foods Health, Safety & Training Manager



Phased introduction of energy monitoring system at Largo Foods – Ashbourne and Gweedore sites

"An energy management system can lead to 15% energy savings. A good monitoring system can enable these savings through continual evaluation of performance against targets. Hanley Energy is delighted to work with partners, such as Largo Foods, to design and implement an energy monitoring system, especially one that has helped reduce energy costs by 7%."

Dennis Nordon
Managing Director
Hanley Energy

"A key aspect of energy management is to continually improve performance. Expanding our monitoring system gives me greater visibility of energy use across the Ashbourne and Gweedore sites. I continue to work with Hanley Energy on our upcoming projects, since they are our established energy partners, who service our needs in a cost-effective, professional manner."

Paul Fisher
Safety & Training Manager
Largo Foods

An energy monitoring system allows an organisation that wants to adopt a structured approach to energy management (including ISO 50001 certification):

- Establish an energy baseline
- Develop an energy performance indicator (EnPi)
- Track performance against targets ... all of which are requirements of ISO 50001

Energy saving opportunities identified

The energy monitoring system allowed Largo Foods to identify opportunities for energy savings, and make informed decisions on investment in energy optimisation. Projects completed include:

- Installation of new MV transformers and new capacitors
- Heat recovery on the cooker stack
- Energy optimisation of both the cooker and kettle process
- Procurement of electricity on the open market

How Largo Foods has benefited

Since 2007, the implementation of an energy management system – supported by the monitoring system – at Largo Foods has brought numerous operational and financial benefits. The metering solution has helped Largo to identify up to 30% savings (kWh) in their kettle cooking process and to achieve a 7% reduction in annual energy costs over a three-year period.

Companies such as Largo Foods with an energy management system are poised to gain further advantage when there is an uplift in the economy.

What's next?

Largo Foods is committed to continual improvement in energy reduction. Sustainable energy projects are planned in the coming years, such as the installation of a combined heat and power plant (CHP), installation of variable-speed drives and a lighting upgrade. It is planned to expand monitoring to incorporate previously unmonitored parts of the site, and include intelligent controls. These projects will be supported by the current Building Energy Management System (BEMS) – installed by Hanley Energy.



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