

## Energy monitoring enables Roadstone Wood monitor & reduce energy consumption

## Challenge

Roadstone Wood began a programme of structured energy management in 2007. This programme is centrally managed, so implementation across multiple sites poses challenges – not least, how to monitor energy consumption at each site. Multi-site integration was needed to allow for internal benchmarking and reporting, enabling continual improvement.

## Solution

Hanley Energy designed and installed a bespoke energy monitoring solution.

## **Results**

The monitoring solution enables understanding of where and when energy is being used. This facilitates creation of an energy performance indicator (EnPi). The EnPi in turn allows Roadstone to track performance improvement and identify new opportunities for energy saving projects.

A total of 19 locations are certified to ISO 50001, with multi-site energy savings of over 40 million kWh.

The overall energy savings translate to approx. 18,000 tonnes of CO<sub>2</sub> avoided.



ROADSTONE WOOD LTD is one of the major suppliers of construction aggregates, ready-mixed concrete, concrete products, road surfacing materials, agricultural lime and architectural products. In operation for over 60 years, its commitment to sustainability and energy management is integral to its business strategy. Roadstone Wood has 19 of its 50 locations certified to the energy management standard ISO 50001:2011.

Energy monitoring system enables continual improvement

Roadstone wanted to approach energy management in a structured way, enabling continual improvement. It thus sought to understand how much energy was being used in 19 locations with heavy energy usage. Relying on energy bill analysis was inadequate. A monitoring solution was needed, integrated into operations.

Energy monitoring allows users to identify and analyse where and how energy is being used within a building and operation. To achieve multi-site integration, it is important to understand how much energy is being consumed at each site.

Working with Roadstone Energy Manager Kevin Donovan, Hanley Energy designed and installed a customised energy monitoring solution, spanning 13 locations, which enabled Roadstone Wood to monitor, manage and reduce energy use.

The bespoke monitoring system is simple to use, and, through use of an online software system, data from all the sites can be viewed centrally. This allows the Energy Manager to implement an energy awareness programme without being physically at each site.

Investigating baseline data and identifying and implementing opportunities for improvement has resulted in a reduction in unit costs.

In terms of energy management Roadstone Wood are a leader, and demonstrate best practice that is being shared internationally.

Dennis Nordon, Managing Director, Hanley Energy

"I've worked with Roadstone Wood to design and implement an energy monitoring solution for many of their locations. In terms of energy management they are a leader, and demonstrate best practice that is being shared internationally.

"Our monitoring solution has enabled the Energy Manager to understand where and when energy is being used, facilitating the creation of an energy performance indicator (EnPi). The EnPi allows Roadstone to track performance improvement year on year, and identify new opportunities for energy saving projects."

Dennis Nordon, Managing Director, Hanley Energy The success of the structured approach to energy management is helping to change behaviour at Roadstone Wood and affect how employees carry out their operations and manage their locations.

The energy monitoring system installed by Hanley Energy has given Roadstone Wood clear visibility of the actual cost per tonne of product, highlighting energy-efficient and inefficient plant. Energy monitoring is essential to ensure continual improvement, which is the essence of energy management.

"At Roadstone Wood we plan to add to our monitoring system, expanding to more locations.

This oversight will give us a greater ability to manage and reduce our energy consumption.

From concept to commissioning Hanley Energy delivered on their promise to provide an energy monitoring system to meet our needs.

Their customer service is excellent! I will certainly consider working with Hanley Energy again, as we expand our energy management and monitoring programme."

Kevin Donovan, Energy Manager at Roadstone Wood





Hanley Energy Ltd is a dynamic, Irish-owned and Irish-managed company specialising in the design, supply, installation and support of customised energy and critical power management solutions for a diverse range of business sectors. Hanley Energy delivers cost-effective solutions for clients located in Ireland, the UK and the USA.