

Wyeth Medica finds the cure

WYETH Medica Ireland (WMI) is dedicated to operating its facilities in a manner that promotes energy conservation, and reduces energy demand, costs and carbon emissions (greenhouse gases). The Wyeth facility in Newbridge, Co Kildare occupies over 1 million ft² and employs over 1,400 personnel. WMI manufactures and packages finished solid dosage pharmaceutical products. The main energy service requirements are HVAC, compressed air, water treatment, process equipment, lighting and office equipment.



The company has been focused on reducing energy usage over the past number of years. From the outset, it felt that energy wastage and uncontrolled peak energy demands at the facility were directly responsible for a significant portion of the energy budget. A steering energy team was set up to address this issue. The team believed that a structured approach to energy management would facilitate systematic responses to energy usage data. Accordingly, the Wyeth facility at Newbridge signed up to the Energy Agreements Programme in May 2006, with a view to certifying its energy management system in January 2008.

Generating synergy

A number of energy teams were established with the aim of involving and working in conjunction with area managers; the teams felt it is only by involving the end users that you can effectively influence energy use. Energy champions were also appointed in all function areas. Viewed as the 'eyes on the ground', they are responsible for ensuring that all energy-related activities are in line with best practice. Training programmes were run for these energy champions to increase awareness and motivation.

Using the data

An energy monitoring system was installed in June 2006 to help the team to monitor energy consumption. This aided identification of energy conservation projects, and set the structure for systemised energy management. Sub meters were installed at various points throughout the energy distribution networks (gas and electricity), based on where information would yield the most useful analysis. The impact of a number of energy-saving projects is continuously being assessed along with key energy usage profiles for functional areas. Tony Martin, of the site's energy management team, says that, despite the power of the energy monitoring system, "It won't do anything for us unless we use the information. It is vital to relate the trends in energy to activities within the factory." The knowledge gained during these steps allows the energy team to move forward with energy-saving opportunities.

Awareness programmes

An energy awareness campaign is an important element of IS393. From the outset, the Wyeth team set about communicating energy-saving activities, while it planned projects for the future through quarterly



newsletters. In addition, monthly electricity, gas and water metrics were distributed to the main departments. The departmental share of energy usage is thus available to all personnel across the facility. A number of all-engaging awareness programmes were held. For example, a competition was run to name the energy awareness mascot at the facility. To complement this competition, a poster painting competition based on the site mascot was run to promote energy awareness in the home. Such campaigns have been received enthusiastically and will be repeated.

New building, new opportunity

A new building for a product coming online in the coming months has been completed recently. Lighting is one of the most energy-intensive services at the Newbridge facility. It is also the most visible and requires the most adjustment to suit the needs and preferences of individuals. An energy-efficient lighting control scheme was incorporated into the new building. It enables the operator to efficiently control, adapt and monitor lighting to achieve cost and efficiency savings.

Additional fringe benefits in the new facility include a reduction in the air-conditioning load and a better environment for people working in the building. Substantial energy avoidance is anticipated for this project. The energy team aim to use this project as a showcase of successful energy management.

Energy-saving projects

A number of initiatives and projects to save energy at the facility have been identified. For example:

- In the utilities plant, a boiler optimisation programme has been completed to efficiently sequence the five medium pressure hot water (MPHW) gas-fired boilers.
- The decommissioning of obsolete equipment is structured and phased to ensure that the facility uses energy only as required.

Another example of energy initiatives is an 'efficient office equipment' campaign. In the past, personnel had individual printers/copiers, which led to excessive use of standby energy. A new programme was run as part of the energy management system to operate office areas in line with best practice. Communal printers were procured and the staged decommissioning of individual printers has begun. At this point in the campaign, 229 printers have been replaced with 35 network multi-function devices (a printer, copier and pdf scanner combined). It is estimated that this initiative will save the facility just over €44,000 a year. The team have identified 47 additional printers to be replaced, yielding an extra saving of €10,000 a year.

Further savings

WMI strives to be a more energy-efficient company by promoting an energy culture and ethos onsite, and taking steps to improve plant energy efficiency. The energy team at Newbridge anticipate that an energy management system certified to ISO 50001 will help the company to accelerate energy initiatives by providing the company with a platform to:

- gather, analyse and control energy usage, leading to optimised efficiency
- identify, eliminate and avoid energy wastage

Wyeth Medica Ireland, Newbridge is looking forward to continuous improvement, energy cost-effectiveness and plant efficiency. The benefits of the energy management system are already clear, and a number of successful energy projects have been carried out. In the future, further savings are expected. A strong energy-saving culture will ensure that, as new operational practices come online, the facility's efficiency is in line with best practice.

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