Metering, Communications and Services

Energy innovation at McDonald's

Managing energy use in every McDonald's restaurant, UK-wide

The challenge: to manage energy and reduce costs

"At McDonald's we recognise our responsibility to protect and preserve the environment for future generations to come. Our goal is simple, all of our activities are centred around the key priorities of reduce, reuse, recycle and redesign with the aim to use less energy." (From 'Striving for a sustainable future': www.mcdonalds.co.uk)

Environmental responsibility is one of McDonald's five key sustainability focus areas – and reducing the environmental impact of its restaurant operations was identified as a key measure in championing this.

So a nation-wide programme was introduced to train employees in energy efficiency and to provide them with easy-to-implement housekeeping tips and advice. Getting employees engaged with the central objectives was of course essential – but a big practical challenge still remained: to find out why some UK restaurants had significantly higher usage profiles than similarly-sized and equipped restaurants in other areas.

McDonald's decided that each restaurant should have access to its own energy consumption profile to provide it with the information needed to reduce costs. It also decided that it wanted the data to be collected independently of its energy suppliers around the UK. This was where Siemens Metering, Communications and Services could help.

Siemens' solution: data collection and reporting services

Energy consumption data had to be easy to access, through the McDonald's intranet. It also had to enable all restaurants to do five things:

1) Understand their energy consumption
2) Manage their energy consumption
3) Track consumption trends
4) Reduce their energy costs
5) Have easy web-based access to energy profiles and reports.

Siemens' solution, introduced 10 years ago, meets these requirements. Its data collection service – fully independent of the energy suppliers – compiles and presents information in a way that enables easy billing validation, whilst energy consumption profile reports are provided to all stores on a monthly basis, to compare existing costs with last year's figures.

Moreover, Siemens' energy management application has been installed in all McDonald's restaurants throughout the UK, allowing each manager to monitor and respond to energy usage on a daily basis. (Its implementation helped McDonald's Energy Manager to win the 2010 ESTA 'Energy Manager of the Year Award', too!)

siemens.co.uk/metering

> **Data collection and energy management motivate and underpin energy reduction**

Key features:
- Nationwide data collection
- A full meter installation and maintenance service
- Bespoke consumption profile reports
- Data management application to monitor usage
- Supporting consultancy services.

Benefits: each restaurant can see and compare its energy consumption

The combined service – data collection and energy management – motivates and underpins energy reduction by:
- supporting billing clarification and cost control
- ensuring continuity of data quality, regardless of energy supplier
- enabling compilation of a consumption 'league table'
- providing clear, actionable information easily accessible via the customer's intranet.

The independent data collection service guarantees consistency in data quality, producing consistent reports for each restaurant tailored to their particular needs, while McDonald's maintains its freedom to select the energy supplier and tariff of choice.

In addition, Siemens' energy management application highlights exceptions and provides restaurant managers with valuable information to identify anomalies and reduce consumption. This enables action plans to be put in place to drive down consumption to a level equivalent to that of comparable restaurants.

The end result? Simple. A system that supports McDonald's central goal: to "use less and spend less".

Next steps:
What of the future? McDonald's is always seeking a better understanding of consumption patterns – and where to invest to reduce consumption and save cost.

Siemens is also working with McDonald's to explore using McDonald's own IP network to replace the more traditional communication methods of GSM or PSTN when retrieving data remotely from its meters. If successful, this could achieve a significant saving in each restaurant's operating costs.

Contact us to find out how your organisation could benefit from Siemens smart metering and energy management services. We look forward to speaking with you.

McDonald's, first established in the US in 1955 and now present in more than 100 countries, opened its first restaurant in the UK in Woolwich in 1974 (pictured left).

Today, McDonald's serves 2.5 million people in the UK every day. Siemens has a long-standing local relationship with McDonald's, providing metering and data collection and management services at all its UK restaurants.