



Using ISO 50001 certification to improve energy efficiency, reduce costs and boost sustainability

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Andrew Whitehorn,
Head of Sustainable Business, Viridor

Customer objectives

- Reduced energy consumption, and costs
- Fulfil regulatory requirements
- Meet customer expectations
- Demonstrate social responsibility

Customer benefits

- Improved energy efficiency and cost savings
- Compliance with carbon reduction regulations
- Reduced expenditure on carbon allowances
- Stronger credentials in bids and tenders
- Enhanced sustainability and reputation

Customer background

Viridor is one of the UK's leading recycling, renewable energy and waste management companies. Part of the publicly listed Pennon Group, it employs over 3,200 people at some 300 sites around the country, handling over eight million tonnes of recyclables and waste materials for customers from all sectors.

Today, Viridor aims to do much more than merely 'manage' waste. It puts waste into action, turning it into high quality raw materials and energy. Each year, the company transforms over two million tonnes of waste into high quality recycle (material from recycled products), and yet more into over 760 gigawatt hours of renewable energy.

Viridor strives to be an environmentally, socially and economically sustainable business and is listed among the most responsible businesses in the UK in the Business in the Community Corporate Responsibility Index 2013.

Why certification?

All Viridor's sites and services are operated under a business management system that incorporates the highest environmental, quality and health and safety standards. These include certification by BSI to management standards in quality (ISO 9001), environmental performance (ISO 14001) and health and safety (OHSAS 18001). Now, the company has also become the first in its industry to be certified to the international ISO 50001 standard, which represents the latest international best practice in energy management.

Andrew Whitehorn, Viridor's Head of Sustainable Business, explains that the company's move into recycling has driven up its energy consumption, so it has sought to make energy cost savings. "Energy prices are not going back down, so we have every incentive to manage energy efficiently," he says.

Since 2010, the UK Government's Carbon Reduction Commitment – a mandatory carbon emissions reduction scheme now known as the CRC Energy Efficiency Scheme (CRC) – has sharpened Viridor's focus. "The CRC has been a key driver for going for ISO 50001. It has meant large users of energy like us having to identify and measure their energy use, then build evidence to prove it and buy carbon allowances to offset it," says Whitehorn.

Viridor also wanted to be seen to be conscientious in its energy use. "The world increasingly recognizes the need for both governments and industry to reduce carbon emissions and modify processes to consume energy responsibly and efficiently," says Whitehorn. "We wanted to 'walk the walk', not just 'talk the talk'."

Additionally, Viridor's customers, who include major businesses and large public sector organizations, are starting to ask their suppliers to demonstrate strong energy management credentials.

Benefits

ISO 50001, which was only launched in June 2011, is narrower in scope than its long-established environmental management cousin, ISO 14001. It focuses squarely on the management systems required to continually improve energy performance. Viridor benefits hugely from such deep analysis because a large proportion of its expenditure is on energy – it has an annual electricity bill alone of £6.5m across the organization, plus expenditure of several hundred thousand on carbon allowances.

The company has set a target for the 2015/16 financial year of becoming 20% more energy efficient per pound of revenue than it was in 2010/2011 – a 20% gain in energy productivity over five years.

ISO 50001 provides a framework to help Viridor achieve this target, enabling it to:

- Establish current energy use and predict future use
- Monitor consumption and spot anomalies
- Identify opportunities to reduce energy use and costs
- Put operating controls in place
- Ensure staff, from top management to the shopfloor are aware of their role
- Reduce greenhouse gas emissions
- Comply with the CRC and other regulations
- Embed energy management into all aspects of its operations
- Enhance its reputation as a responsible and sustainable business

Implementation

Certification to ISO 50001 took around 18 months to achieve. Strategically, Viridor found the process straightforward, having

already established most of the management systems required. Senior management buy-in was gained early on and, with active support from the CEO, targets were set and agreed. Even so, Whitehorn says the process reinforced some important issues and enabled minor anomalies in its systems to be ironed out.

On the ground, implementation was more challenging, involving both new technology and behavioural change. The company invested in a computer-based monitoring system, and 99.9% of its energy use now goes through smart meters, providing accurate real-time data on consumption.

"We really drill down to find out exactly what we're spending on energy in terms of cost of sales," says Whitehorn. Viridor has established that 80% of its energy use takes places on 20% of its sites, so these have been the priority for action.

The company has a centralised energy team, led by Manish Chahwala, an Energy Efficiency Manager with wide industry experience. In terms of behavioural change, the team works closely with site managers to identify waste and instil a culture of constant improvement. Practical measures include an ongoing series of staff workshops, energy champions at key sites, internal communications and online support.

BSI's role

In seeking certification to ISO 50001, Whitehorn says, "It made sense to go to BSI, as we already had a long history of working effectively with them to achieve our other certifications."

Now, he says, the standard "provides the discipline for us to keep going through the cycle, getting round the whole business and maintaining momentum. We received the Carbon Reduction Gold Standard last year and we continue to lead the way in our industry."

He concludes, "Achieving ISO 50001 not only helps shape our own desire to be a socially responsible business, but demonstrates to our customers and other stakeholders that Viridor is committed to transforming itself into a company with reduced costs and lower reliance on fossil fuels, ready for the future."



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