



Federation schemes and expert surveys can assist the facilities manager in ensuring their organisations meet energy consumption targets under Climate Change Levy guidelines

The CCL challenge

Most firms and organisations are familiar with the Climate Change Levy (CCL), a tax introduced in April 2001 on energy use in industry, commerce, agriculture and the public sector, with the aim of cutting emissions from business. The theory was that by adding about 10 per cent on to energy bills for all non-domestic users, large energy users would reduce their consumption.

Two parts of the CCL scheme have worked well. Most heavy energy users have been able to join industry association schemes, for example The Food & Drinks Federation scheme covers most food producers. If an organisation is a member of the federation and agrees to reduce its energy consumption over a five-year period, it is granted an exemption of up to 80 per cent in the CCL.

Over the years the industry association schemes have helped businesses to reduce their energy consumption significantly. This has saved millions of tons of carbon and other greenhouse gas emissions. The second part of the scheme, which has worked equally well, is the free Action Energy surveys. These are paid for by the Carbon Trust, which was given substantial amounts of money by the government through the CCL.

If an organisation spends over £50,000 per annum on its energy, it is entitled to apply for a free Action Energy survey.

Energy expenditure

This means that a trained energy conservation consultant carries out a survey of the organisation's sites. The more the company spends on energy, the more of the consultant's time it is allocated. His report prioritises the actions which will enable the company to reduce its energy consumption.

Those which require the least cost and produce the biggest reduction

come first. Those which require a high investment and have a long payback period come at the bottom of the list. Energy savings of 10 per cent to 20 per cent are not unusual.

Many organisations in industry exemption schemes found it quite easy to comply with the CCL targets in the first few years, because the targets and benchmarks were not too challenging. However in recent times, more challenging targets have been set. An example of the set target might be x kWh of energy consumed per ton of food produced or y kWh of energy consumed per sq ft of shop floor area for a retailer.

Technology

These new, more demanding targets, together with the large rises in energy costs, have created a growing need for close monitoring and targeting of energy consumption, which is something that many organisations do not have the time, the technology, or the resources to do. One solution is to commission an independent utilities

Smart way to stay on target

The smart metering software can also be used to compare the organisation's energy consumption figures with their own targets, or those set for them under the CCL exemption schemes. This prevents firms from falling behind on their commitments to save energy. To do so could result in ejection from industry schemes and the loss of their 80 per cent exemptions. With the current high energy price levels, this loss would be much more painful than in 2001, when energy prices were relatively low. The software can also be used to compare the energy performances of similar buildings in a chain.

consultant to track and manage your energy consumption.

These utilities management companies offer "smart metering", monitoring consumption and analysing data to see when high and low use occurs. The technology helps organisations to reduce their energy and water consumption and their carbon emissions. This particular hardware and software combines easy to use, 'plug in and go' technology with an evaluation service to monitor and reduce utility consumption. It makes use of simple-to-install monitoring and transmission equipment to pick up consumption data from electricity, gas and water meters and send the data to a server. There the software can be tailored to suit the needs of each organisation and to provide virtually real-time remote analysis of gas, water, and electricity usage. Operating non-invasively across all three utilities, it can also accurately measure the consumption of fluids such as LPG diesel and gas oil.

As part of the service, the experts can use the software to identify inefficiencies in the use of gas, electricity and water, thereby achieving significant cost reductions. The system can give users early warning of potential problems such as gas or water leaks by flagging up "abnormal" consumption and also offer the facility to check usage in different zones of a building even when the utility is coming from a single source. It also allows businesses to accurately forecast future energy consumption.

These smart metering devices are the future for accurately controlling and reducing utility costs, and meeting CCL exemption schemes targets. **END**

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FM QUICK FACTS

● Energy types subject to CCL include: electricity; natural gas; LPG and petroleum; and solid carboniferous fuels such as coal, lignite, coke etc



● Types of energy exempt from CCL include: those not used as fuel (eg, LPG when used as propellant, electricity used in electrolysis); electricity from renewable sources; and electricity from CHP schemes

● Supplies excluded from CCL include those for domestic use; de minimis supplies to small businesses; and non-business use by charities

Source: The Carbon Trust