Strategic Safety Systems

So, you want ISO 50001 – Energy Management

By Phil Chambers BSc, CMIOSH

There are normally 2 reasons for gaining certification to any standard: As a tool for driving improvements and as a "badge" that improves your marketing position. At present, a "ISO 50001 badge" may not have much marketing weight but by following ISO 50001 systems you can yield substantial cost-saving benefits, even if you don't actually go as far as gaining certification.

Benefits

By following ISO 50001 systems, a company will:

- Have systems in place to manage their energy use
- Be able to make cost-effect improvements to yield savings through reduced energy use
- Be able to demonstrate its commitment to energy reduction

As a result being certified to ISO 50001, a company will:

- "Have the oxygen that enables the energy management system to live and breathe"; external audits are a great driver for implementation
- Be in a strong position to gain business where demonstrated energy performance is a key part of the business

So what is ISO 50001 and how do we go about getting certification?

ISO 50001 is an energy management standard. Note that it is management standard, not a performance standard. So it is not a just matter of doing the right thing; it is also how you approach that in an auditable, sustainable and improving way. It is similar to ISO 14001, but is more prescriptive in certain areas.

Essentially there are two steps to gaining certification:

- Setting up and implementing management systems to cover the clauses in the ISO 50001 standard.
- Being audited by a UKAS-accredited certification body. This requires initial certification visits and then repeat visits to maintain certification.

Note that, at present UKAS have not formally accredited any certification bodies to ISO 50001 (this is scheduled for July 2013) but there are several who are beta testing this standard. You should choose one of these companies.

So how do I go about setting up and implementing management systems?

Before we go any further, I'd just like to recommend that your documentation should be implementation-based. What I mean by this is that it should be written from the perspective of the users of the different systems and not look like semi-legal documents. I recommend the following:

- Use flowcharts wherever possible. A system comprising a couple of pages of flowcharts is far more understandable that multiple pages of, "The Production Manager, on receipt of ……". Flowcharts are just as acceptable to the certification body.
- Where text is necessary, write it in the form of an instruction to whoever is carrying out the action and possibly in tabular form. So, in one column you may have "Environmental Co-ordinator" and in the next "File waste transfer notes"
- Avoid text like "The Energy Co-ordinator shall ….". Sometimes it's unavoidable, but minimise it.
- Be concise. You are not being judged on your weight of documentation, just that it covers the relevant ISO 50001 clauses and how well it is implemented.

All of the requirements you have in 9001, 14001, etc., of document control, auditing, communication, control of records, non-conformities, corrective and preventive action need to be covered in the environmental management system (EnMS). ISO 50001 requires the following:

Management commitment

Without a doubt, the key requirement of any management system must be management commitment. This includes establishing an energy policy, appointing a energy management representative and team, establishing objectives, targets and budgets. A key requirement of 50001 is the management representative needs to report to the management team on the performance of the EnMS.

Energy policy

This must be far more than stating that the company will reduce energy. It must be appropriate to the nature and size of the company and commit to continual performance. It must also commit to the availability of information and compliance with legal requirements, and support the purchase of energy efficient products and services.

Energy review, planning and review

The company needs appropriate energy performance indicators (EnPIs) which normalise energy use, ie Energy Used per unit of Production, so that energy measures cope with how busy a company is.

Energy use needs to be analysed, based on current use, with also an estimate of past use. Based on this analysis, you need to identify the areas of significant energy use; you need to concentrate on the higher energy users rather than those which are easy to tackle.

Objectives, targets and energy management plans

These need to states the means and time frame by which individual targets are met, a statement of the methods by which and improvement shall be verified and a statement of the method of verifying the results.

Operational control

The company needs to identify operations and maintenance activities related to the significant energy users, in order that they are carried out to establish appropriate control criteria and how they are to be controlled.

Design

The company needs to consider how energy use can be reduced at the design stage, say by choosing to site server rooms at the northern side, rather than the southern side of the building.

Procurement

The company needs to consider energy performance on all equipment, products and energy services it purchases.

About the author

Phil Chambers BSc CMIOSH

Phil completed an apprenticeship with an engineering company, gained a Production Engineering degree and subsequently became a Chartered Engineer. After a career mainly with Moog Controls and Cosworth, Phil joined CRA in Melbourne where he immediately started work on the safety of molten aluminium in addition to his main management role. After a period concentrating on health & safety and environmental management, including molten aluminium operations in Australia, New Zealand and the USA, he returned to the UK in 1996 and formed Strategic Safety Systems Ltd. (SSS)

Phil is a Chartered Health and Safety Practitioner and has carried out certification support for many companies, with certification gained to ISO 9001, ISO 14001, OHSAS 18001, FSC, FEPC and other standards.

In addition to certification support, SSS also provides health & safety and environmental services and computerised systems to manage these and other areas

Strategic Safety Systems Ltd., 8 The Highgrove, Bishops Cleeve, Cheltenham, GL52 8JA, UK
Phone: 01242 679713 Mobile 077680 11667
E-Mail: info@StrategicSafety.co.uk Web site: www.StrategicSafety.co.uk