ISO 50001 Energy Management Systems Implementation Case Study
London South Bank University
London South Bank University (LSBU) is one of London’s largest and oldest universities. It’s a cosmopolitan establishment, welcoming over 23,000 students from over 120 countries providing relevant, accredited and professionally recognized education.

LSBU places sustainability at the heart of its research and curriculum, informing all elements of university life. With ISO 14001 and EN 16001 already in place, the university’s environmental management plan underpins all corporate activity. And this is why LSBU wanted to align its existing system with ISO 50001 and the latest in environmental management best practice – highlighting the importance of sustainability now and in the future for all stakeholders.

Over the past five years, LSBU has fulfilled its role as a higher education institute in promoting sustainability to both staff and students – driven by legal and regulatory requirements as well as opportunities to trial new energy saving technologies.

### Aims
- Make the transition from EN 16001 to ISO 50001
- Audit existing energy management policies and systems
- Raise awareness and accountability for energy management

### Background
The university had been using the plan-do-check-act model to implement EN 16001 across all processes and operations. However, developments in environmental management meant that this approach could be even more effective following the transition to ISO 50001. LSBU had been able to identify where the most energy was being used, but the EN 16001 system did not provide the level of accuracy needed to understand why their consumption was so high. This proved to be one of the most challenging parts of the audit and transition, but was nonetheless a success. Anuj Saush, Energy and Environmental Manager, explained: “Collating the various resources which influenced and justified the system proved to be timely, however the management approach is now more robust due to this work.”

### Benefits
- Successful implementation of ISO 50001
- Increased accountability across staff for energy use
- 10% reduction in energy use
**Approach**

LSBU took into account all the key environmental impacts of university life and nominated its Estates and Facilities Directorate to take the lead on sustainability initiatives. One of the main objectives was to manage and reduce carbon emissions to conform with the EU Energy Performance of Building Directive Carbon Reduction Commitment scheme, as well as changes to government funding and rising energy bills. LSBU set a voluntary target of a 35% reduction by 2020 using 2005/6 results as a benchmark. They were then able to analyse energy use across all university buildings and to compile an energy saving action plan using the results.

**Challenges**

Anuj explained that action and implementation should take precedence over the ISO 50001 documentation: “I can envisage that organisations, due to the wording of the standard, might create large manuals which become more of a paper exercise than a vehicle to deliver energy savings.” He also stressed that links to other management systems needed highlighting to “aid organisations without energy expertise to further understand the process”. What’s more, the concept of an audit proved daunting for staff, but everyone was kept informed throughout the process and all relevant ISO 50001 documents were also made available on the intranet to increase awareness and accountability.

**Benefits**

It became clear throughout the process that already having a certified environmental management system in place was an advantage. Anuj added: “Understanding the general system processes definitely helped. Implementing ISO 50001 also gave us the opportunity to review all the processes for both systems and make significant improvements”. Making the transition also highlighted the importance of monitoring central energy consumption, and the auditing process helped to raise awareness of links between overall use and everyday actions. As a result, the university has already seen a 10% reduction in energy use.

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**Conclusion**

“Taking a positive proactive approach, incorporating related standards together, will make future energy and environmental management a continuing and progressive part of the university’s sustainability. Basic energy management is good housekeeping and can be implemented without an energy manager or expert. Fundamentally it is the process of ensuring clear auditable records and the consideration of energy consumption in business processes. Once a system is in place maintaining the system is simple with changes only being required if consumption or business changes.”
About ISO 50001 Energy management systems, Requirements with guidance for use

What is your organization doing to manage energy efficiency and control energy costs?

ISO 50001 stipulates the requirements for an energy management system. Designed to make the most of energy technology, this standard helps management to reduce their energy consumption, while boosting their overall energy conservation. This includes reduced energy costs and carbon emissions, and a more secure supply of energy. ISO 50001 helps organizations to take on a systematic approach to continually improve their energy performance and establish a credible, certified reputation.

This unique standard also helps improve management techniques by providing a comprehensive scope of requirements to run an efficient energy management system. These include energy policies, planning, legal requirements, as well as energy reviews, baseline and performance indicators. ISO 50001 also explains how to demonstrate competence, operational control and best practice procurement of energy services, products and equipment.

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