



How certification to ISO50001 energy management systems standard can help drive business efficiencies and cost savings in industrial organisations.

Case Study

**HORIZON**



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## Section 1

### Introduction

**This case study outlines how certification to ISO50001 energy management system standard can help drive business efficiencies and cost savings in industrial organisations.**

It also outlines the objectives, benefits, background, why an organisation should consider certification and the benefits of it; how to go about implementation and how Horizon can help you to upgrade your system.

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## Section 2

### Client objectives

- Create a framework for improving business efficiency
- Maintain best standards of practice through audit processes
- Reduced energy consumption and costs through analysis and targeting of energy consumption
- Fulfil regulatory requirements, comply with the [Energy Savings Opportunity Scheme \(ESOS\)](#)
- Meet customer expectations
- Demonstrate corporate social responsibility

### Client benefits

- Improved energy efficiency and ongoing focus on cost savings and business best practice
- Compliance with carbon reduction regulations
- Stronger credentials in bids and tenders
- Enhanced sustainability and reputation
- Using knowledge gained to demand excellence from suppliers

### Typical Client background

Manufacturing organisations which work in partnership with their customers to develop and produce world leading products, who spend a large proportion of their expenditure on energy and are often disadvantaged when tendering for new business especially on the international market.

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## Why Certification?

[ISO50001](#) focuses exclusively on energy and requires an ongoing, sustained improvement in energy efficiency and reduction in greenhouse gas emissions. This sustained improvement in energy efficiency falls in line with the ethos of “continuous business improvement”. “Where ISO14001 is a generic standard for the environment, ISO50001 focuses on the cost benefits of using utilities more efficiently.”

## Benefits of Certification

ISO 50001, which was 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.

In our experience, when coupled with a clear and targeted Energy Reduction Policy, the application of the analysis tools contained within ISO 50001 has brought major benefits to organisations in terms of improved energy efficiency and significant reductions in annual energy costs.

ISO 50001 provides a framework to help organisations to achieve their energy targets, thus enabling them to:

- Establish current energy use and predict future use
- Monitor consumption and spot anomalies for targeting of reduction
- Identify opportunities to reduce energy use and costs through energy efficient process changes and investment in energy efficient plant & equipment
- Put operating controls in place
- Ensure staff, from top management to the shop floor are aware of their role(s)
- Reduce greenhouse gas emissions
- Comply with the [ESOS](#), [CRC](#) and other regulations

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- Embed energy management into all aspects of its operations
- Enhance its reputation as a responsible and sustainable business

## Implementation

The timeframe for Certification to ISO 50001 is generally dependent on the following being in place:

- Existing management processes
- Buy-in from Senior management
- Setting and agreement of the targets which are to be achieved. On the ground, implementation can be more challenging, involving both new technology and behavioural change
- Investment in computer-based monitoring systems and the channelling of all energy consumption data through smart meters
- Allocation of sufficient competent resources to find out exactly where energy is being used and what the cost of that energy is throughout the various business units which make up the organization
- The establishment of a collaborative culture within the organisation across all sectors to constantly challenge waste and instil a culture of Continuous Improvement
- Communications processes which reaches all levels of the organisation and actively encourages feedback and suggestions

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## Section 3

# How can Horizon help in upgrading to ISO50001?

Outlined below is the role and steps which Horizon can take in helping an organisation to upgrade to ISO50001 energy management system:

- **Prepare an understanding of ISO50001** by undertaking an awareness session aimed at different levels within the organisation's management structure with awareness training on:
  - What is ISO 50001?
  - What is an EnMS?
  - What are the requirements of ISO 50001 – a clause by clause appreciation of the requirements?
  - What is the Process Approach?
  - What ISO 50001 training is available?
  
- **Gap Analysis**
  - Carry out a gap analysis using a “gap analysis checklist” to compare the current Energy Management System that is in place with the requirements of the ISO 50001 Standard
  - Source and employ an external accredited body to conduct an initial Stage 1 audit and Stage 2 audit
  
- **Develop an Implementation plan**
  - Gap analysis audit
  - Action plan and implementation strategy
  - Stage 1 pre-audit
  - Stage 2 audit
  - Certification

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- **Training**
  - Put together an ISO50001 training plan for Manager's, Engineers, Team Leaders, Production staff
  - Train internal auditors
  - Train energy teams
  - Train employees in awareness of ISO 50001 and how it impacts their jobs
  
- **Documentation**
  - Identifying the processes
  - Formulating the documentation required for control with ISO50001
    - Energy Manual
    - Policies
    - Procedures
    - Work Instructions
    - Record Sheets
  
- **Internal Audits**
  - Formulation of the internal Audit Team
  - Formulation of an internal audit schedule
  - Formulation of audit checklists

If you feel that the content of this Case Study may be of benefit to your organisation, please get in contact with us and we would be glad to discuss it further with you.

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