

Introduction

The ISO 50001:2011 standard is used to help organisations to integrate an Energy Management System (EnMS) within their business processes and operations. The standard applies to organisations of all sizes and sectors as it is bespoke to each individual organisation. An EnMS provides a structured approach to managing energy performance and planning to reduce your organisations energy usage.

What are the business benefits?

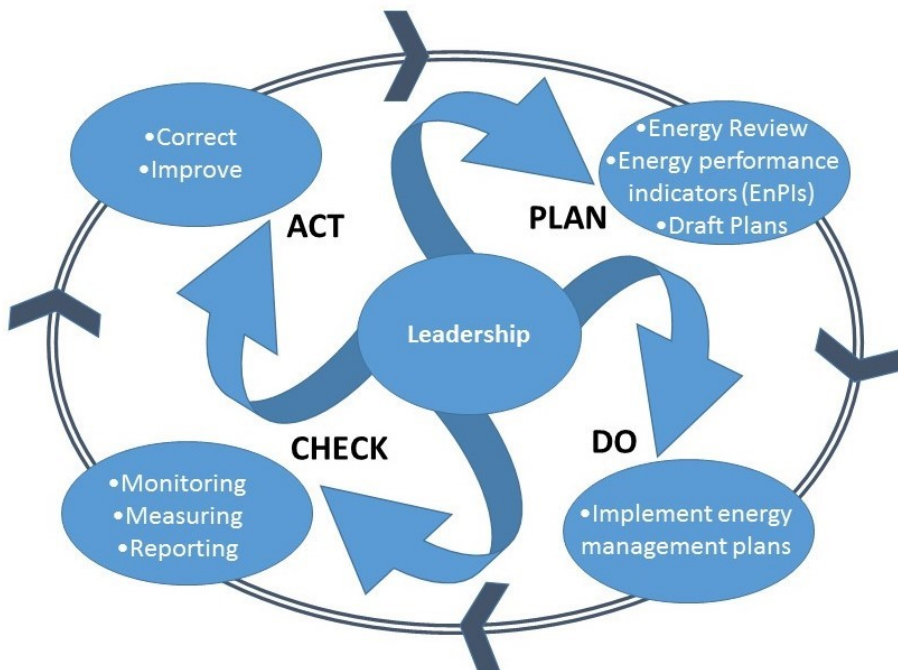
Establishing an EnMS to the ISO 50001:2011 standard includes a full review of energy processes within the organisation producing objectives and targets for improved energy performance. The standard adopts the need for continual improvement whilst allowing for good business practices and full integration into existing business practices. Implementation of an EnMS can lead your organisation to compliance with the requirements of the Energy Saving Opportunities Scheme (ESOS).

Benefits of implementing an EnMS in your organisation include:

- Improved competitive and financial advantage
- Leadership involvement engaging and motivating employees
- Improved organisation reputation giving confidence to stakeholders and customers
- Ensured compliance with energy statutory and other requirements
- Identified objectives and targets for energy improvements within your organisation
- Public energy policy demonstrating your organisation's commitment to better energy performance

Basic Structure

The EnMS is designed to sit within the organisations business processes with input from all levels of management. The identified energy objectives and targets for the business need to be integrated into normal business operations.



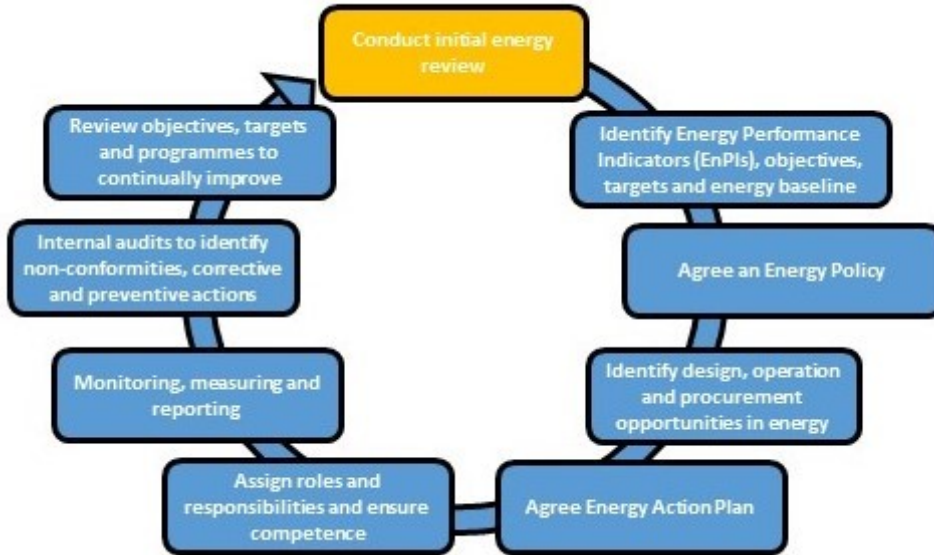
An EnMS has identified outputs such as:

- Energy Policy
- Objectives and Targets
- Risks and Opportunities report
- Energy Action Plan
- Energy Performance Indicators (EnPIs)
- Design and Procurement practices
- Monitoring and Measuring reports
- Internal Audit reports
- Operational Controls
- Management Reviews

An EnMS is a process based approach looking at inputs, processes and outputs for the organisation. It will look at what your business needs to operate, what the business activities/operations are and what your final products and/or services are. The aim of the EnMS is to ultimately reduce greenhouse gas emissions, related environmental impacts and the energy costs to your organisation.

How to get started

The processes for implementing an EnMS are:



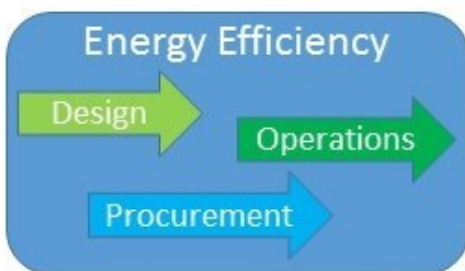
The first step to establishing an EMS is to assess your organisation using an **energy review** that will look at all aspects of energy use in the business. Once the **energy baseline** has been established then the EnMS can be constructed to suit business activities. A key document is the **energy policy** that states the organisations intentions regarding energy performance. It presents a description of key issues relevant to your business and is a key method to communicate to your interested parties.

Energy Performance Indicators (EnPIs)

Once the energy baseline has been established for your organisation then the Energy Performance Indicators can be identified. These will be used to measure the energy performance of the organisation year-on-year providing comparable metrics. Examples of EnPIs that could be used include:

- Total baseline primary energy consumed per year
- Total energy consumed per product item produced
- Energy usage from renewable energy sources out of total usage
- Individual site usage compared to number of employees

Design, Operations and Procurement Opportunities



Opportunities can be considered in all aspects of business operations but specifically at the design stage of a product. Consideration can be given to energy performance improvements in the design of new, modified or renewed facilities, equipment, systems and processes. The operations of the business can also be investigated for energy efficiency improvements whether it is new and improved equipment on the production line or changes to resources used.

Procurement is crucial in the implementation of energy efficiency measures as it is often outdated and inefficient equipment that can cause irregular and excessive energy usage.

Certification

Certification to ISO 50001:2011 can be achieved through a certification body accredited by UKAS (www.ukas.com). Once certified your organisation can display the certificate and logo on marketing materials to demonstrate your commitment to energy management to customers and other interested parties.

If you would like more information contact GEP Environmental and speak to one of our consultants.