

BS EN 16001 Energy Management Systems

VICTORIA BARRON, PRODUCT MARKETING MANAGER, BSI

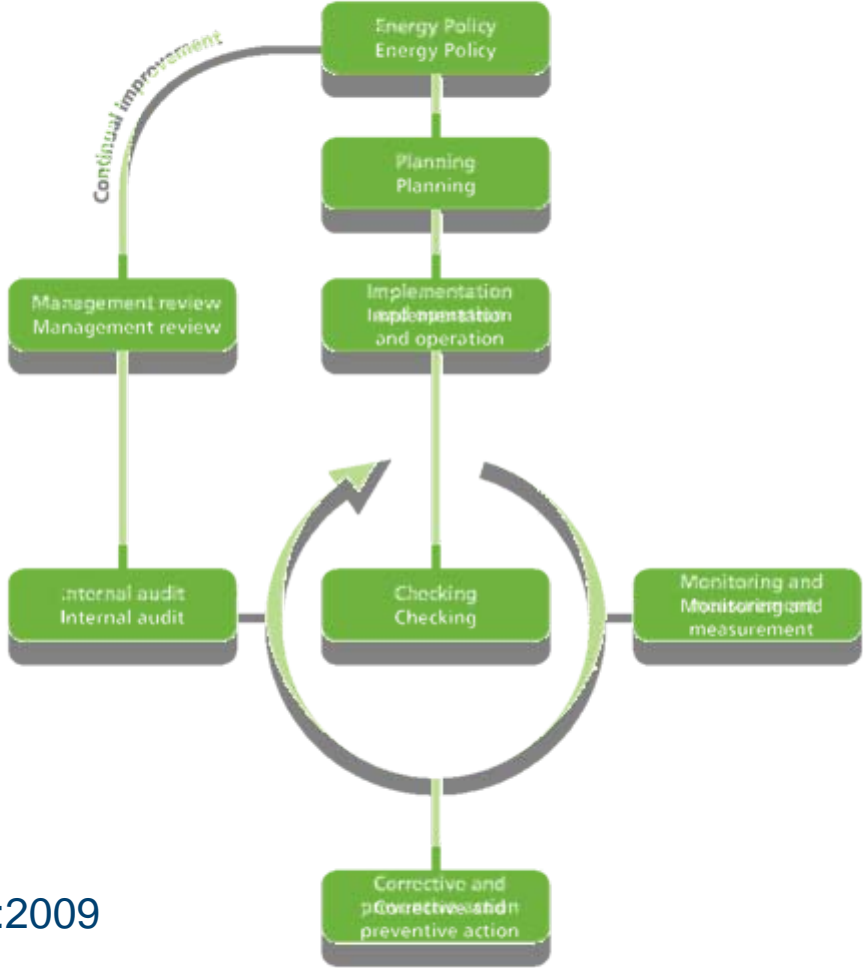


The Standards Solution – EN 16001

- Developed by the European Commission
- Builds upon and harmonises existing national standards and initiatives within Europe
 - SS 62 77 50:2003, Swedish Standards
 - DS 2403:2001, Danish Standards
 - IS 393:2005, National Standards Authority of Ireland
 - EnMS Specifications in Germany and The Netherlands
- Adopted as the UK National standard – BS EN 16001:2009



BS EN 16001 Energy Management System Model



Source: EN 16001:2009

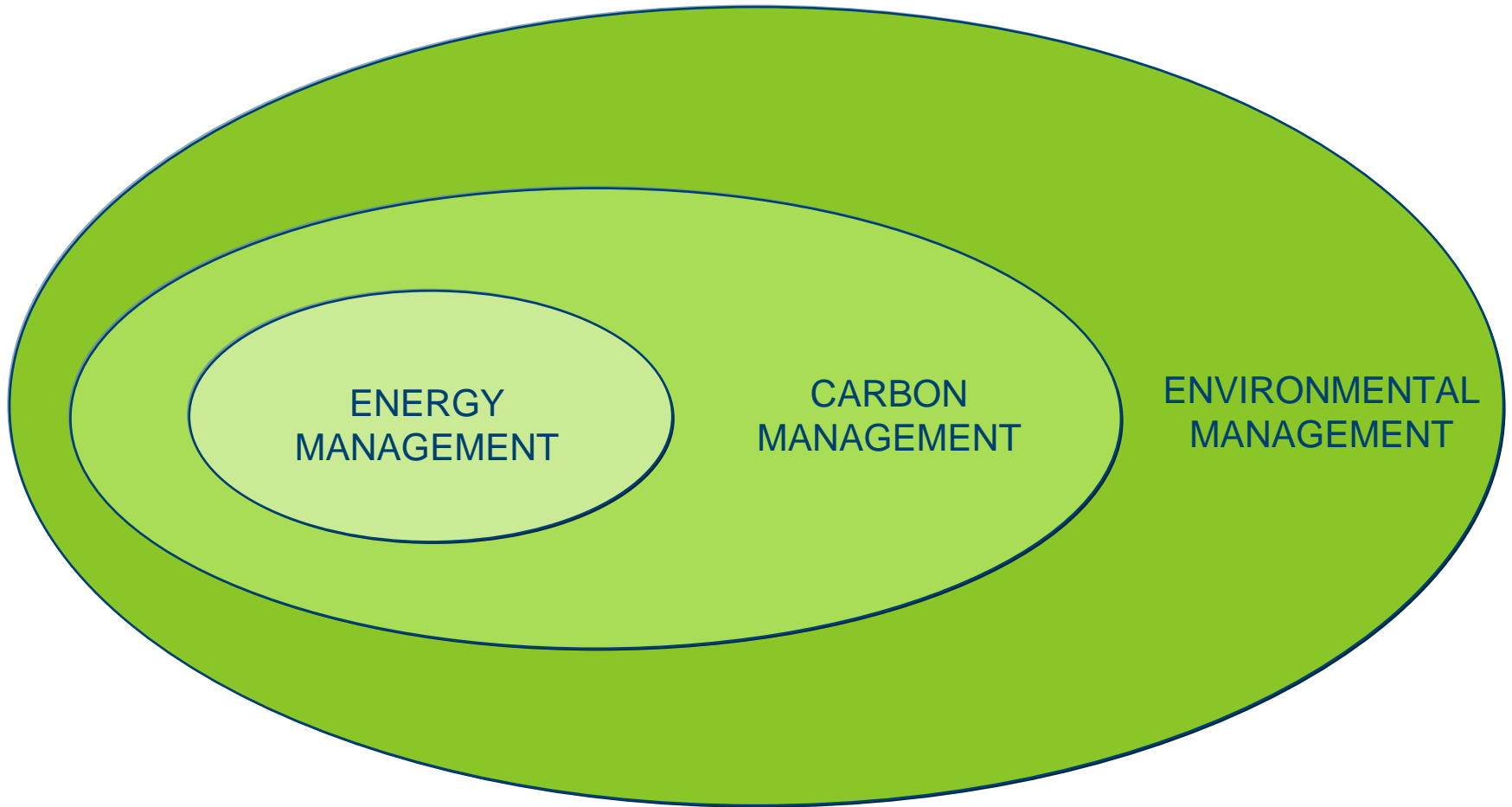
Features & Benefits of BS EN 16001

Feature	Benefit
Defined energy policy, objectives and targets	Top management engagement. Direction and focus. Energy management is embedded into organisation
Systematic identification of energy aspects and impacts	Nothing is left out. Focus on those aspects that have the greatest potential for savings
Defined processes and procedures	Process mapping leading to more efficient processes. Consistency in implementation.
Defined and communicated roles and responsibilities	Staff are trained, competent, and aware of their roles and responsibilities and are therefore more likely to be engaged and comply

Features & Benefits of BS EN 16001

Feature	Benefit
Operational controls are put in place	Risk of situations that could lead to deviations in energy consumption is minimised
Monitoring and measuring of energy consumption. Relationship between energy consumption and factors is established	Energy consumption can be predicted. Hidden waste and deviations from the norm can be spotted and acted upon. Robust information is gathered for decision making.
Regular reviews of performance is conducted by top management	Trends can be spotted. Areas of weakness and opportunities for improvement can be identified and acted upon. Focus of top management on continual improvement is maintained

BS EN 16001 in Context



Differences

EMS



Environment management system focuses on:

- Environment protection
- Prevention of pollution
- Waste management
- Environmental performance

EnMS



Energy management system focuses on:

- Energy efficiency
- Energy conservation
- Energy management
- Energy performance



Building a BS EN 16001 Based EnMS

- Determine needs of the organisation and conduct initial review
- Establish energy policy and energy objectives
- Identify applicable legislation
- Determine necessary processes and responsibilities
- Provide resources to attain energy objectives
- Establish methods for energy monitoring and energy analysis
- Identify the energy factors that affect energy consumption
- Determine energy efficiency and energy performance indicators
- Establish and implement effective operational controls
- Measure and monitor actual v. expected consumption
- Review and monitor for continual improvement in energy efficiency

BS EN 16001 Solutions from BSI



Other useful standards

- BS 8499:2009 - Specification for domestic gas meter boxes and meter bracket
- PAS 402 - Waste resource management. Specification for performance reporting
- BS EN 61400 wind turbines series
 - The BS EN 61400 series of standards for manufacturers, designers, owners, planners and installers of wind power plants. Covers onshore and offshore wind turbines. Also for utility companies in the wind energy market.
- Energy Audit Standard – in development
- Technical report on Terminology – due 2010
- ISO 50001 – Energy Management Systems – due 2011

www.bsigroup.com/energy

Demonstrating Compliance

What is Certification?

- Independent assessment of an organisation's implementation of the energy management system standard (BS EN 16001)
- Objectives of certification:
 - Are the requirements of the Standard effectively implemented?
 - Is the organisation effectively managing its energy performance?
- Assessment carried out in accordance with ISO 17021



The Certification Process

Step 1 - Initial enquiry

Step 2 - Proposal

Step 3 - Application

Step 4 – Pre-Certification
Audit

Step 5 – Certification assessment

Step 6 – Registration

Step 7 – Maintenance Programme



Benefits of Certification



Summary

- Increasing pressure for managing energy performance
- BS EN 16001 enables all types of organisations to review their energy management situation and then establish the systems and processes necessary to improve energy efficiency
- This systematic management of energy approach can help lead to reductions in cost and greenhouse gas emissions
- Certification to BS EN 16001 enables organisations to demonstrate your commitment to energy management best practice
- BSI's BS EN 16001 solutions will help organisations reach this goal



Energy Management Network



- Forum for exchange of best practice
- Involves: energy users, consultants, solution providers, auditors, other practitioners
- Contains: documents to download, Webinars, Forum discussions
- Aims: to help save money, to secure buy in, benefits of using best practice energy management systems, EnMS as a competitive differentiator
- <http://www.2degreesnetwork.com/collaborate/networks/energy-management/>

Contact us

Certification Sales

BSI

PO Box 9000

Milton Keynes

MK14 6WT

Tel/Fax: 0845 080 9000

certification.sales@bsigroup.com

<http://www.bsigroup.co.uk>