

BS EN 16001

Energy Management Systems

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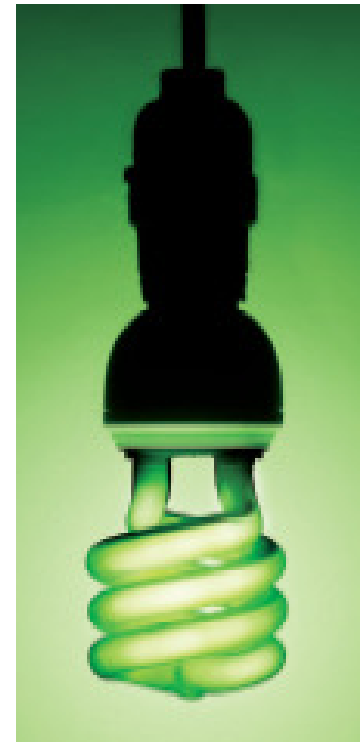


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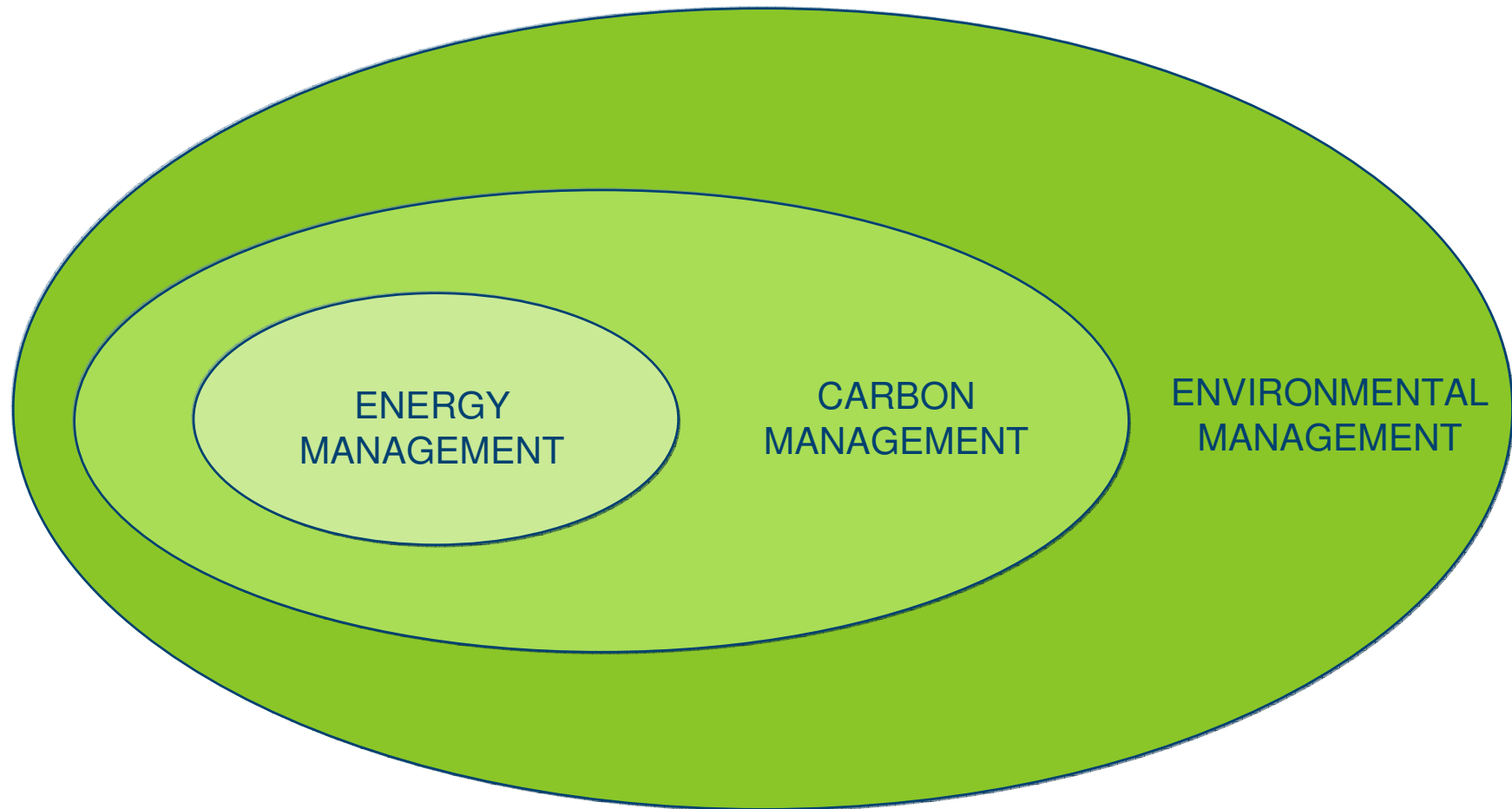


Agenda

- Energy Management in context
- Why Energy Management?
- Business Needs
- How BS EN 16001 helps organisations meet their needs
- Building an EnMS based on BS EN 16001
- BS EN 16001 solutions from BSI
- Demonstrating compliance



Energy Management in Context



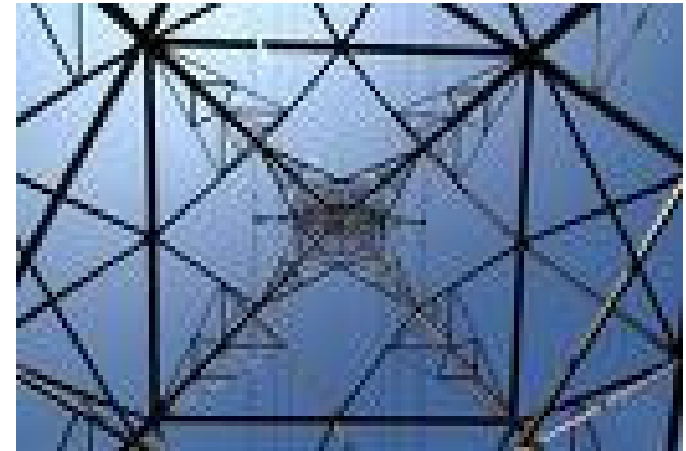
Why Energy Management?

- Rising fuel costs
- Rising energy costs
 - Direct costs
 - Climate Change Levy
- Energy security
 - Depletion of fossil fuels
 - Political instability of primary energy supplying countries
- Legislation
 - EU Emissions Trading Scheme
 - CRC Energy Efficiency Scheme



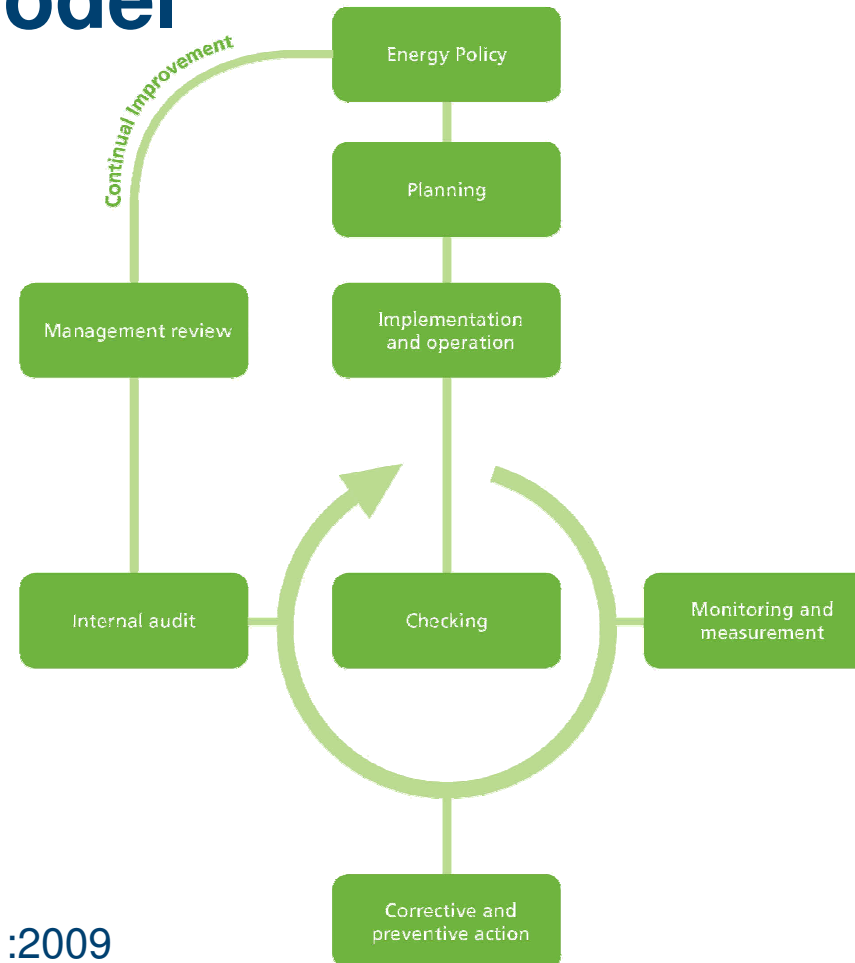
Business Needs

- Minimise wasteful practices
- Use energy more efficiently
- Reduce energy bills
- Meet CRC requirements
 - Accurately predict emissions
 - Report accurately and on time
 - Have a good position on the league table



How can BS EN 16001 help organisations to meet their needs?

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	Consistency in implementation. Process mapping leading to more efficient processes.
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. Behavioural change encouraged.

Features & Benefits of BS EN 16001

Feature	Benefit
Operational controls are put in place	Efficient use of resources is increased Waste is minimised 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. 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

Features & Benefits of BS EN 16001

- Systematic approach provided by BS EN 16001 will help you to achieve the energy reductions required to achieve points under the absolute and growth metrics
- BS EN 16001 provides the framework for a carbon management system required to meet the Carbon Trust Standard, or equivalent
- BS EN 16001 forms the basis of the BSI Kitemark Scheme for Energy Reduction Verification



BSI Kitemark Scheme for Energy Reduction Verification

- Builds on a BS EN 16001 management system
- The Kitemark scheme will:
 - Calculate the reductions in carbon emissions
 - Verify the management and measurement of the system
- Kitemark awarded to organisations achieving a reduction of at least 2.5% per annum calculated from three years worth of data



BS EN 16001 vs. ISO 14001

EMS



Environment management system focuses on:

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

BS EN 16001



Energy management system focuses on:

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

Building an Energy Management System (EnMS) based on BS EN 16001

Building an EnMS - Planning

- Understand your drivers
- Understand the management system (MS) and its requirements
- Increase your understanding of the MS
- Consider training
- Establish current performance
- Conduct a SWOT analysis
- Establish the cost of not complying
- Define your vision
- Establish energy policy and energy objectives
- Identify applicable legislation
- Establish the benefits of using the standard

Building an EnMS - Planning

- Investigate the possibility of external support
 - Do you need a consultant?
 - Training courses available
- Design the management system
 - Agree processes and establish responsibilities
 - Establish methods for energy monitoring and energy analysis
 - Identify the energy factors that affect energy consumption
 - Determine energy efficiency and energy performance indicators
 - Entropy Software solution



Building an EnMS - Implementation

- Provide resources to attain energy objectives
- Communicate your policy, objectives, targets and management programme
- Train and familiarise staff on the management system
- Implement your procedures
- Keep records



Building an EnMS - Checking

- Measure and monitor actual v. expected consumption
- Conduct an internal audit
- Complete a self assessment questionnaire
- Undertake a BSI Pre-Certification Audit

HOW READY ARE YOU FOR BS EN 16001?

How ready are you for an assessment to the requirements of BS EN 16001?

Please mark your answers ✓ for Yes and leave blank for No.

In order to help you answer the above question, please complete the following checklist (including your contact details) and return it to our Address on the back page of this form.

For more information or to order a copy of the BS EN 16001 Standard please visit www.bsigroup.co.uk/buy

Registered name:

Trading name:

Main site address:

Tel:

Fax:

Website address:

Contact:

Position:

Email:

Mobile:

Number of employees overall:

Number of employees at main site:

Nature of business (Industry sector):

Food/Retail	<input type="checkbox"/>	Services	<input type="checkbox"/>	Other (please describe)	<input type="checkbox"/>
Manufacturing/Processing	<input type="checkbox"/>	Energy and Natural Resources	<input type="checkbox"/>		
IT, Security and Telecoms	<input type="checkbox"/>	Construction	<input type="checkbox"/>		
Finance and Commerce	<input type="checkbox"/>	Automotive	<input type="checkbox"/>		
Public Sector	<input type="checkbox"/>	Aerospace and Defence	<input type="checkbox"/>		

OTHER SITES

Address of additional location:

Tel:

Fax:

Main activity:

Number of employees:

Address of additional location:

Tel:

Fax:

Main activity:

Number of employees:

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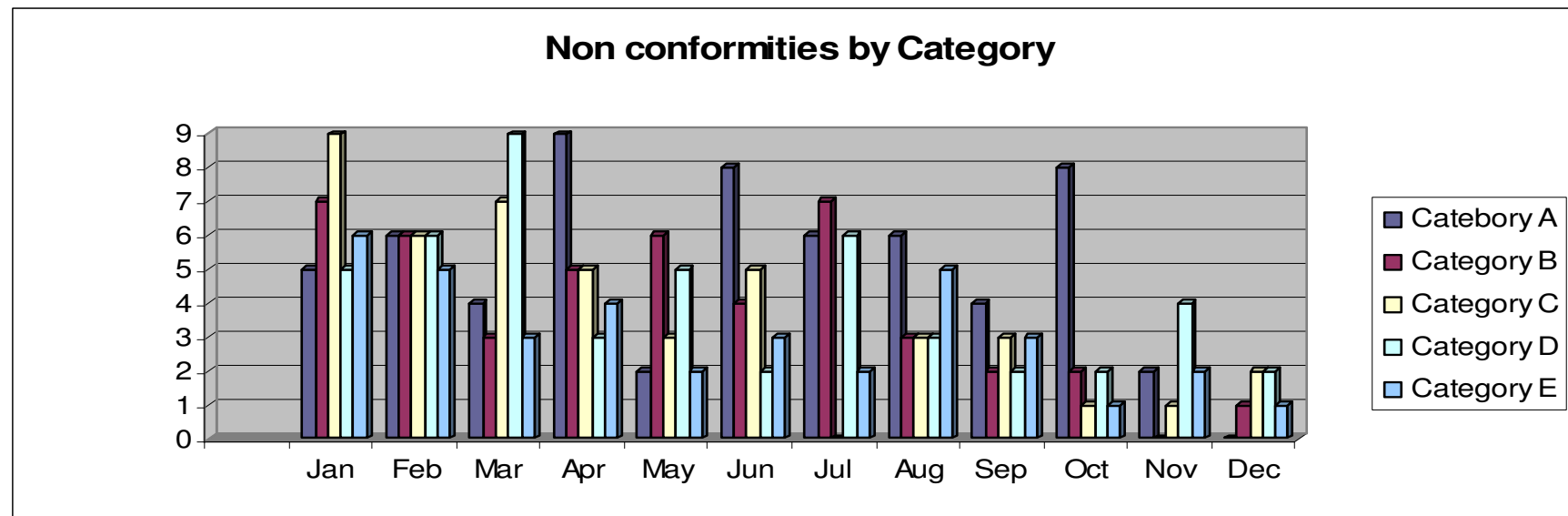


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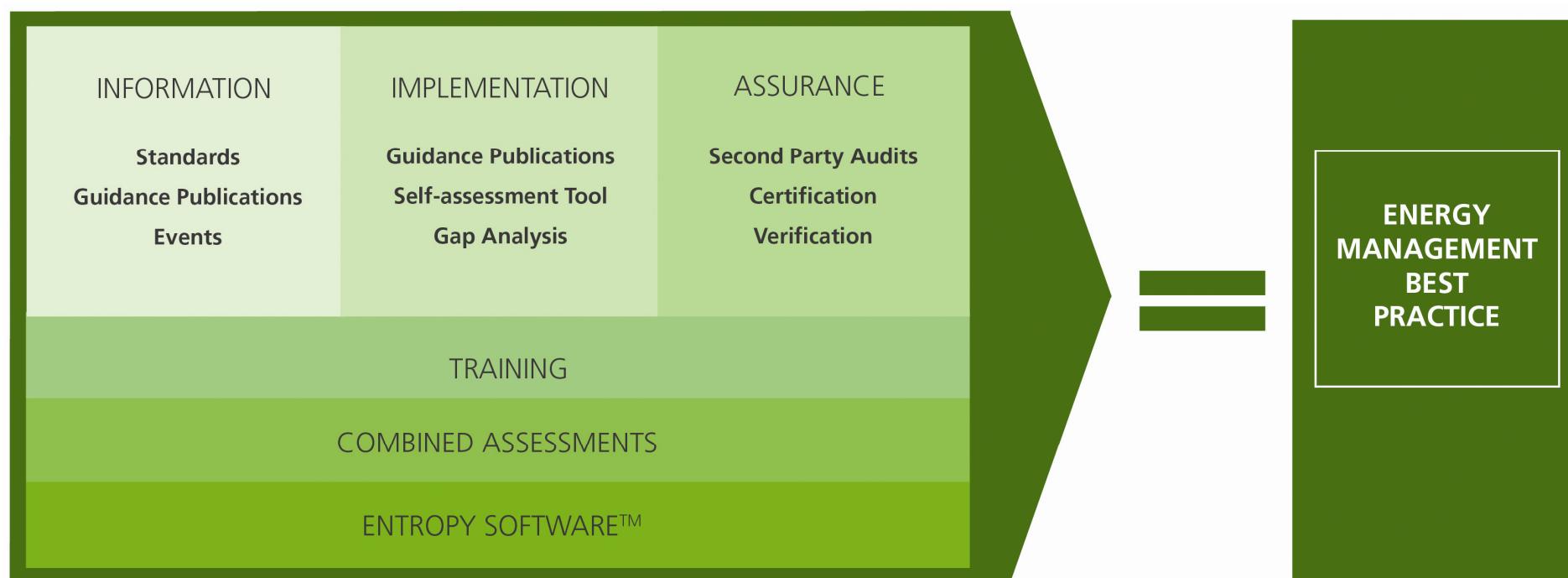


Building an EnMS – Act on findings

- Analyse and review results of audits
- Implement corrective and preventive action



BS EN 16001 Solutions from BSI



BSI Training Solutions

- **Introduction to BS EN 16001 Energy Management Systems Course**
 - Provides a general understanding of the concepts of an EnMS based on BS EN 16001. Delegates will learn how an effective EnMS can help their organization improve its energy efficiency, reduce costs and lower greenhouse gas emissions.
- **Implementing BS EN 16001 Energy Management Systems Course**
 - Provides participants with practical tools and methods for implementing an EnMS based on BS EN 16001.

BSI Training Solutions

- **BS EN 16001 Energy Management Systems Internal Auditor Course**
 - Provides participants with the skills and knowledge to conduct internal audits against the requirements of BS EN 16001
- **BS EN 16001 Energy Management Systems Lead Auditor Course**
 - Provides students with the skills and knowledge to conduct and lead effective EnMS audits in accordance with the requirements of BS EN 16001.

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 4

STEP 5

STEP 6

STEP 7

STEP 1

STEP 2

STEP 3

Step 5 – Certification assessment

Step 6 – Registration

Step 7 – Maintenance Programme

Benefits of Certification

Competitive advantage	Supply chain requirement	Respond to shareholders, investors, analysts	Financial benefits and savings (insurance, audits...)
Reduce costs of tendering	Certified businesses outperform	Recruitment and retention	Rigour and independence of the audits
Consistency across sites	Ensure staff are complying with procedures	Protect brand and reputation	Drive continuous improvement

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/how-we-work/networks/energy-management/>

Contact Us

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