

SUSTAINABLE ENERGY
SET@Work
 TECHNOLOGY AT WORK

Certified energy management systems

Introduction

www.setatwork.eu

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Course structure

1. Introduction
2. Organisation and planning
3. Review of energy aspects
4. Target and Monitoring
5. Training and communication
6. Purchase and project design
7. Management review

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Course structure

- 1. Introduction**
2. Organisation and planning
3. Review of energy aspects
4. Targets and objectives
5. Monitoring
6. Training and communication
7. Purchase and project design
8. Management review

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Agenda

- Background
- Existing standards
- Management systems
- Plan-Do-Check-Act
- Link to other management systems
- Experience from companies

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Background

- Strong focus on Climate change in private sector
- Need for a management process to control and reduce energy consumption
- Existing standards fail to efficiently address energy aspects
- National level standards already exists

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Course outline

- Introduce existing energy management systems standards
- Discuss feasibility of implementing another management system
- Introduction to standard requirements (EN16001)
- How to minimise required resources for implementation

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Existing and future standards

Year	Country	Standard
2001	Denmark	DS 2403
2003	Sweden	SS 627750
2005	Ireland	IS 393
2009	EN	EN 16001
2011	ISO	ISO 50001

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Energy management system

- Is about creating
 - Common focus and values
 - Common point of origin
 - Common targets and measures

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Why save energy?

- Reduced energy expenses
- Reduced environmental impact
- Company profile
- Improved credibility with authorities

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The potential?

Energy source → Conversion → [Person with question mark] → Goods →

Emissions ↑

- Purchase
- Process optimisation
- Behavior
- Maintenance
- Production schedule
- Project design
- Internal transportation

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What is energy management

- Assures energy aspects are included in decision making where relevant
- Assures identification of saving potentials within the organisation
- Includes energy aspects in operation, purchase and maintenance

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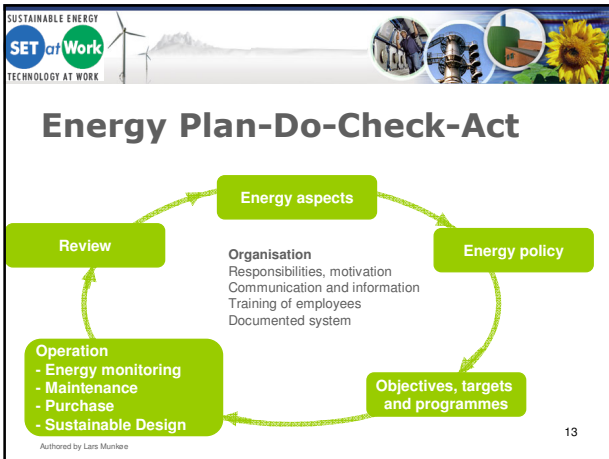
Generic Plan-Do-Check-Act

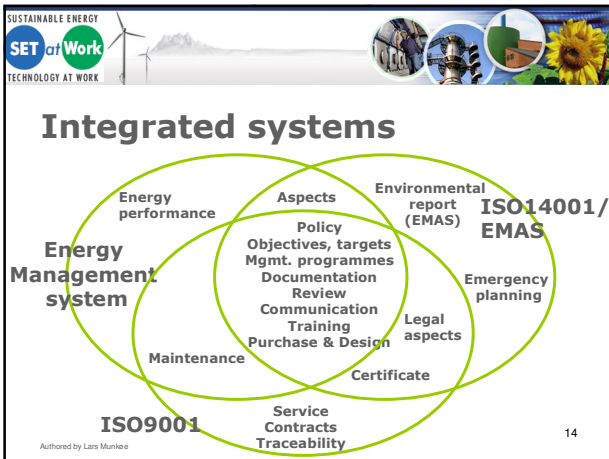
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    graph TD
      EP[Energy Policy] --> P[Planning]
      P --> IO[Implementation and Operation]
      IO --> MM[Monitor and Measure]
      MM --> CPA[Corrective and Preventive Action]
      CPA --> IA[Internal Audit]
      IA --> MR[Management Review]
      MR --> EP
      IA --> CI[Continual Improvement]
      CI --> EP
  
```

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- Advice from companies**
- Establish an organisation that challenges management
 - Quantify targets
 - Get commitment from all employees
 - Focus and follow up is important
 - Avoid complicating the initial energy review
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Practical experiences

- Continuous saving potential >15% p.a.
- Systematic approach targets highest savings first
- Creates overview of energy flows
- Documentation of performance
- Internal benchmarking
- Clear link to EU-ETS
- Increased management focus on energy consumption
- Changed behavior of employees improves energy performance

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The end

Thank you for your attention

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