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ISO 50001 – Counting the cost and benefits of an effective EnMS

Liam McLaughlin

UNIDO International Energy Efficiency Expert

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Overview

Context

- Issues
- Opportunities

Industrial Energy Management

- Energy Management Systems (EnMS)
- ISO 50001
- Culture and Operations
- System Optimisation
- Benefits and costs

Supports

- Regulation & Resources
- UNIDO



Industrial Energy Efficiency Benefits

- Energy efficiency has demonstrated, time and again, that
 - ✓ It saves industrial firms money
 - ✓ It increase reliability of operations
 - ✓ It has a positive effect on productivity and competitiveness
 - ✓ It can offer attractive financial and economic returns
 - ✓ Reduces exposure to rising energy prices
 - ✓ Increases security of supply
 - ✓

then

Why it is not happening?



Slide from 2 day training programme

- Most managers have limited resources
 - They can't give all of us everything we want
- They need to be persuaded that this is a good idea
 - They already have been if you are here!
- You need to show quick results to sustain their interest
- Your efforts will reduce costs
 - This feeds directly into increasing profits
- You will improve the organisations environmental performance
 - This is very good public relations
 - Make the boss feel good
- You need to keep them convinced



What resources are required?

➤ Management Resources required

- Consider the opportunity
- Make the decision to go ahead
- Review and approve the policy
- Participate in the regular review meeting
- Make on-going decisions as required
- Offer encouragement and support

➤ Operational resources

➤ Implementation cost (for EnMS itself)

➤ Capital Investment



What resources are required?

- Management Resources required
- Operational resources
 - Completion of planning steps
 - Training is probably the largest cost
 - Support from other departments
 - Some time for energy manager to focus on Energy Efficiency
- Implementation cost (for EnMS itself)
- Capital investment



What resources are required?

- Management Resources required
- Operational resources
- **Implementation cost (for EnMS itself)**
 - Consultancy support (if required)
 - Certification cost (if required)
- Capital investment



What resources are required?

- Management Resources required
- Operational resources
- Implementation cost (for EnMS itself)
- **Capital investment is straightforward!**
 - Either finance is justifiable and available or it isn't!
 - The focus of the EnMS is on prioritising opportunities
 - Low Cost First
 - Capital projects are also identified and justified



Highlights

- Significant improvements in energy performance are possible and not difficult
- Continuous improvement
 - “Small steps all the time involving everyone”
- Needs top management commitment
- Develop a logical action plan
- Prioritise operational control
 - Need to know what is going on
 - Need appropriate training
 - Need systematic checking
- Capital investment as appropriate



Two Day training agenda

- Why Manage Energy?
- Overview of Energy Efficiency
- Detailed learning of all the steps in running an EnMS (core)
- Development and use of energy metrics
- How to manage the implementation project
- Hands on use of toolkit
- Workshop on practical implementation (using real plant information)
- Introduction to financial appraisal applied to energy management



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THANK YOU

