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INDUSTRIAL DEVELOPMENT ORGANIZATION

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

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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**