



Incorporating energy conservation into your environmental management system

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Coast Guard
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Questions for the audience

- Who has a certified EMS?
- Self-certified EMS?
- From a traditional facility?
- From an HQ-type organization?
- Doesn't have, but now needs an EMS?
- Anyone completely green?



Lessons

- If you have a program you already have “energy” included
- If you are developing an EMS, “energy” will be integral
- Even if you are not “appropriate” or a “facility” an EMS with an energy component is useful and beneficial



Why include “energy” in your EMS?

Executive Order 13423

Right thing to do

Reduce consumption, cost, and pollution

“Green” what cannot be reduce



Existing self-declared systems

- Your hard task - framework - is in place
- Energy consumption is just another impact
- Most air emission aspects have energy component
- Remember off-site emissions
- Measure energy in addition to emissions
- Add improvement opportunities to plan



Existing self-declared systems

- Measurements:
 - Consumption
 - Intensity
 - Trend
 - Renewables
- Improvements:
 - Lighting
 - Insulation



Large non-appropriate “facility”

- Intellectual exercise –
Coast Guard Headquarters
- What do they do - think big... no... bigger
Operations
Logistics



Large non-appropriate “facility”

- Operations

Aspects:

Mission footprint - ships and planes

Impacts:

Air emission

Water emissions

Land emissions

Resource degradation



Large non-appropriate “facility”

- Operations

Measurements:

Fuel use - air emissions, energy,
resource degradation

Compliance status - water emissions

Waste disposal - land emissions



Large non-appropriate “facility”

- Logistics

Aspects:

Acquisition
Maintenance
Disposal

Impacts:

Air emission
Water emissions
Land emissions
Resource degradation





Large non-appropriate “facility”

- Logistics

Measurements:

Energy intensity - air emissions

Energy source - air emissions

Compliance status - water emissions

Waste disposal - land emissions

Acquisition - Resource degradation



Large non-appropriate “facility”

- Other interesting measurements:
 - Avoided costs from process or product improvements
 - Return on investments accomplished above Green product substitution
 - Commute reduction



EMS requirements - a primer

- International Standard ISO 14001
Environmental management systems –
Requirements with guidance for use
- Second edition: 2004-11-15
Reference number ISO 14001:2004(E)
© ISO 2004



EMS requirements - a primer

- General requirements

Policy

- Planning

Aspects

Legal requirements

Objectives



EMS requirements - a primer

- Implementation and operation
 - Roles and responsibilities
 - Training
 - Communication
 - Documentation
 - Document control
 - Operational control
 - Emergency procedures



EMS requirements - a primer

- Checking
 - Compliance evaluation
 - Corrective action
 - Record Control
 - Internal audit
- Management review



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For More Information

Would you like to know more about this session?

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Don't forget to fill out and drop off your session evaluations!



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