



Green Tier Advantage 2009 – Sustainability for Wisconsin Businesses

EMS – And Auditing

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(...With Active Audience Involvement!...)

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Preview



- Why have an EMS? What is an EMS?
- Role of auditing in EMS?
- How to decide if EMS is good enough?
ISO 14001 or - Functional Equivalency?
- Benefits or value of an EMS for
Sustainability?
- Use of EMS Auditing to drive Sustainability?
- Auditing in practice

Overview of Environmental Management Systems



What are they and why should we want them?

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An EMS is

- A systematic way to:
 - manage risk
 - reduce cost
 - improve performance

and can be
- Based on the principals of continual improvement (Plan, Do, Check, Act)
- Based on a standard like ISO 14001



Why develop an Environmental Management System (EMS)?



- Eliminate surprises or disruptions from environmental incidents
- Consistency across a multiple locations
- Reduce costs
- Regulatory compliance needs
- Improve environmental performance, pollution prevention, waste minimization, energy efficiency
- Document institutional (if unwritten) knowledge

...from Compliance to Sustainable EHS Management



Compliance

- Driven by legal requirements
- Reporting on compliance
- Event-centered
- Threshold standards
- Media focused
- Operations constrained
- Pollution control
- Goal of zero violations
- Incident response

Sustainable Management System

- Driven by business requirements
- Reporting on performance
- Systems-centered
- Continuous Improvement
- Cross-media
- Operational solutions
- Pollution prevention
- Goal of zero waste
- Incident prevention



More Reasons For Management Systems

- Risk Management
- Cost Reduction
- Prevention of Pollution

Less Obvious but Emerging Risks



- Unexpected controls from global market regulation (e.g. supply chain REACH, RoHS)
- Regulatory requirements from other sources—e.g. financial reporting of liabilities
- Lack of strategy for emerging issues—GHG, cap/trade, energy costs
- “Green” marketing without ability to verify

Financial Reporting—Contingent Liabilities



- Financial Reporting to Security and Exchange Commission (10K)
- Sarbanes Oxley
 - *302: Corporate responsibility for financial reports*
 - *404: Management assessment of internal controls*
- Standards and Guidance—FAS 5, FIN 14, SOP 96-1, FAS 143, FIN 47.....
- “Material” liabilities—costs of compliance, legal proceedings, remediation liabilities.....GHG controls? Will credits be certified? Auditable?

EHS Becomes “Mission Critical”



The point: These non-traditional emerging risks will become significant driving forces for future business planning, finance and operations!

The lesson: EHS is becoming a mission-critical aspect of **business**, no longer just a support function to address “EPA/OSHA” issues.

The question: Is the EMS in your company organized, disciplined, and ready for the business challenges....and...opportunities



Audience Comments or Questions

About - Why have an EMS?
What is an EMS?



Role of Auditing in EMS

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Role of Internal Auditing

- Determines whether the planned EMS conforms to the ISO 14001 Standard
- Checks that the EMS is properly implemented and maintained
- Non-conformances go to Corrective/Preventive Actions
- Audit findings are often re-audited to verify the solutions, and confirm the root cause is resolved
- Audit results provided to management
- Opportunity for improving the system, and its performance!!! “Results Matter”....



Role of External Audits

- Stakeholder confidence
- Objective opinion for management
- Satisfy a requirement
- Value added feedback on effectiveness



Audience Comments or Questions

The role of Audits in an EMS?

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How to Decide if the EMS is Good Enough?

ISO 14001
or
Functional Equivalency?



Designing Your EMS

- **Under Green Tier, there are two options for an EMS:**
 - **ISO 14001**
 - **Functionally Equivalent EMS**



Designing Your EMS

• Pros and Cons of Using ISO 14001

PROS

- Credible
- Universal
- Scalable
- Easy to get help
- Recognizable

CONS

- Expensive
- Inflexible
- Out of House



Designing Your EMS

• Pros and Cons of Using A Functional Equivalency Approach

PROS

- Easy to tailor
- Can be done with no outside costs
- Not quite as daunting to get started
- Potentially less resources needed

CONS

- Lacks credibility
- May not satisfy other external parties
- Less experience so more difficult to get help

How to Design and Measure your EMS?



- Against the ISO 14001 Standard?
 - Pros
 - Cons
- Against the functionally equivalent EMS cited in Wisconsin Statutes?
 - Pros
 - Cons



Audience Comments or Questions

Green Tier Functional Equivalency?



Benefits or value of an EMS for Sustainability?

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Benefits of EMS - Key questions:



- Market Drivers - what is changing to create new environmental business risks? And opportunities?
- What are Environmental/Sustainability Best Practices for addressing business risks?
- How does this affect the Role of EMS and the Environmental Managers?

Benefits or Value of an EMS for Sustainability



- What some believe.
 - 70% of CEOs will delay “Greening Efforts” due to economy? (USA Today – Booze & Co.)
- What do you believe?
- What should we believe?
- Questions/Comments on benefits



Can EMS auditing be used to drive Sustainability?

Sustainability and EMS

- are audits driving this?



- Sustainability –
Triple-bottom line = economic sustainability?
- Sustainability - Walmart model
 - Customer is the driver
- Sustainability - GE model: Ecomagination,... “and make money doing it!” Business line up 21%
- Sustainability - EU Influence:
 - RoHS-WEEE - hazardous materials and wastes in electrical/electronics products
 - REACH – chemicals management
 - EOV Life – end of vehicle life for automotive recycling
 - Energy management across a foundry company

Observing Industrial Organizations



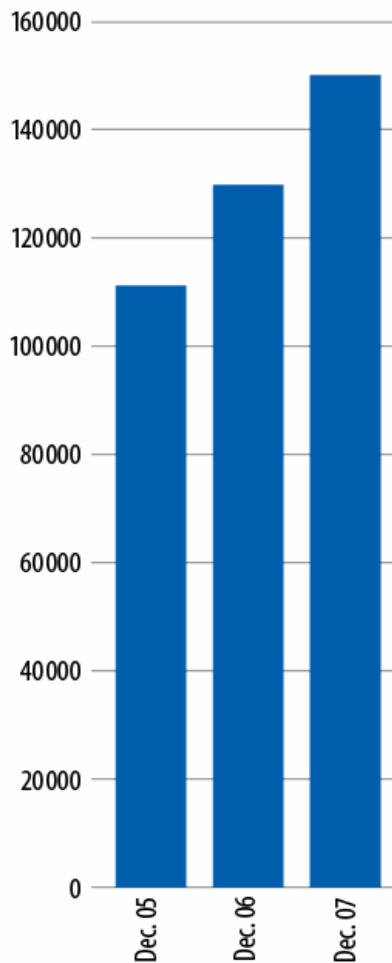
- Often EMS start as “CMS” or Compliance Management Systems
- Some come into a stable condition: e.g., an east-coast utility tells us theirs is “stale... not getting business value”
- ANAB perspective: only 5 % have EMS’s
- Consider Early innovators
 - e.g., Green Tier, GEMI, NAEM, ...
- 1% of the 5% are in the leadership mode – Green Tier Advantage sessions let us hear from some of them!

1% go thru the motions; do the 3% get true value?

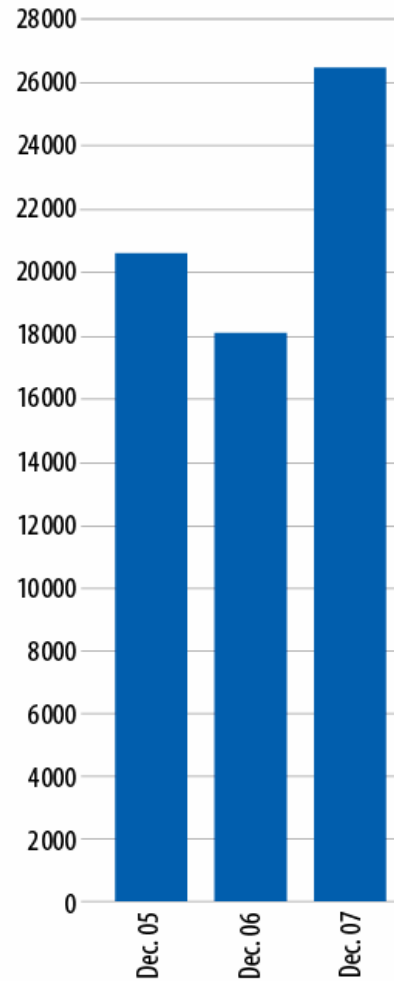
The ISO Survey for EMS Growth



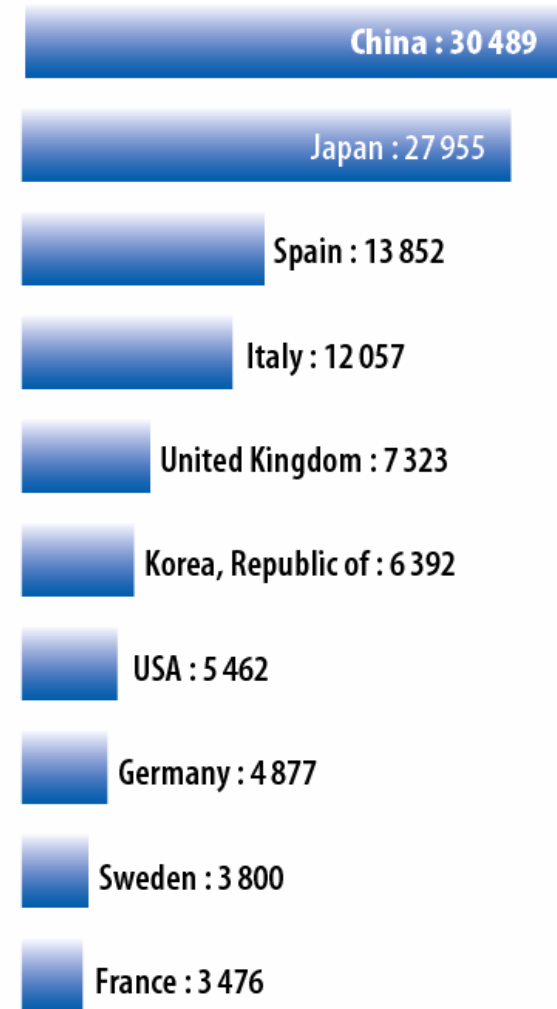
**Worldwide total of
ISO 14001:2004 certificates
December 2005 to December 2007**



**Annual growth of
ISO 14001:2004 certificates
December 2005 to December 2007**



**Top 10 countries for
ISO 14001:2004 certificates**



EMS Audits/Auditors



- Stereotypes
 - Audits
 - Auditors
- Wants
 - Certification at lowest cost and least effort
- Needs
 - Competent independent evaluation
 - Good & bad news --- drives continual improvement which promotes sustainability



Auditing in Practice

How to Ensure Audits Add Value

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Internal Audit Program/Procedure

ISO 19011



1. Planning and scheduling audits
2. Assuring the competence of auditors and audit team leaders
3. Selecting appropriate audit teams and assigning their roles and responsibilities
4. Conducting audits
5. Conducting audit follow-up, if applicable
6. Maintaining audit program records
7. Monitoring the performance and effectiveness of the audit program
8. Reporting to top management on the overall achievements of the audit program

Kestrel Observations/Conclusions



- Audits are critical to an EMS
- EMS critical to a meaningful Sustainability effort
- Not yet broadly recognized
- Marketing and Customer demands are often driving Sustainability change, and always through a business case
- EMS Audits are sometimes driving the organization towards sustainability
- Only the earliest innovators may be doing this consistently and systematically!



Audience Comments or Questions

Auditing in Practice?

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Thank you!!

- Thanks for your time and attention
... for your reactions and responses,
perspectives, and ideas!
- For further information and expanded slide set:
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