



ISO 50001 - The Management Systems Standard for those that don't like Management Systems Standards

Jon Feldman, CEM Chair CSA User Task Group -ISO 50001 PowerLogic ION Users Group Conference

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ISO 50001 - What is it, in a nutshell?

ISO 50001:2011 – "Energy Management Systems – Requirements with guidance for use"

is a **voluntary** international framework for the effective and sustainable management of energy in any business large or small. Implementation of this standard will assist organizations in **reducing energy use** through the utilization of international best practices, measurement and reporting disciplines, continuous improvement and promoting energy efficiency throughout the supply chain. Reduction in energy leads to **reduced GHGs** and **reduced operational costs**.

ISO 50001 - What is it not?

Prescriptive An energy management plan Recognises technical dimensions only in terms of related business processes Does not provide process for technical assessment of plant systems and procedures Does not reflect specific regulatory requirements



What is Energy Management?

The use of engineering and economic principles to control the cost of energy to provide needed services in buildings and industries

Association of Energy Engineers



ISO 50001 - Why is it important?

Energy is critical to the functioning of organisations Energy can be a significant controllable cost Improved energy performance can provide immediate benefits as well as long term sustainable benefits The management system model has a proven track record The standard is internationally recognised



ISO 50001 - Why a Standard?

Promote global best practices in Energy Management Reinforce good energy management behaviours Builds Energy Management into business practices Framework for promoting energy efficiency throughout supply chain International and credible recognition of management practices Benchmarking of management practices



ISO 50001 - What will it do?

Assist in making better use of existing energy using assets Create transparency and facilitate communication on the management of energy resources Assist facilities in evaluating and prioritising the implementation of new energy-efficient technologies Facilitate energy management improvements for GHG reduction projects Allow integration with other organisational management systems



ISO 50001 - What are the expected benefits?

Sustainable energy and environmental impact reductions Continual improvement of energy use Access to external financial incentives Improved evaluation and prioritisation of new energy efficient technologies and projects More effective operational, maintenance and capital cost decisions Works across a broad range of organisations of different sizes and within different sectors



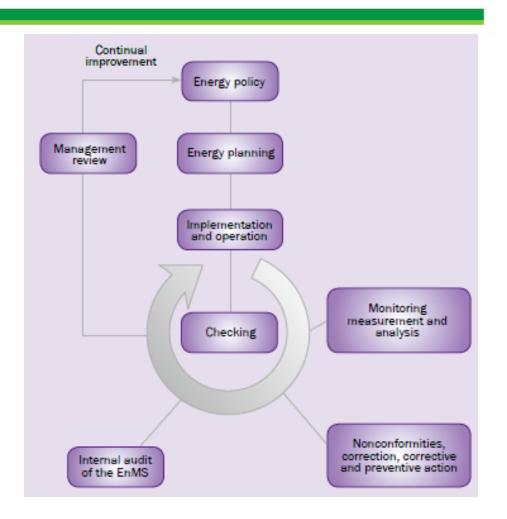
ISO 50001 - What is in the standard?

- Copyrighted by ISO
- Top Management Commitment & Management Representative
- Energy Policy and Energy Management Plan
- Energy Review and Energy Baseline
- Energy Performance Indicators and Objectives
- Awareness, Training and Communication
- Operations and Maintenance
- Procurement and Energy Efficiency Design
- Monitoring, Measurement and Analysis
- Documentation and Documentation Control
- Internal Audit and Non-conformance Management
- Management Review



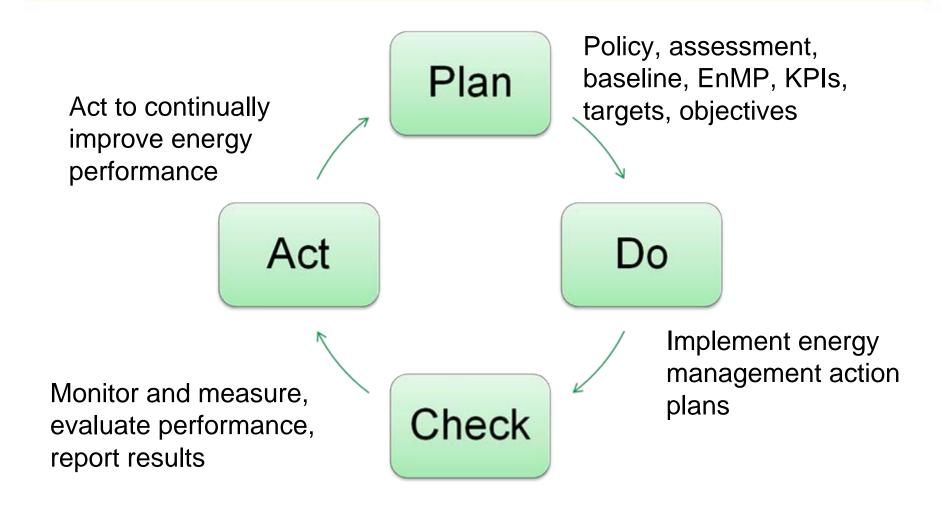
ISO 50001 - How does it work?

The International Standard is based on the Plan-Do-Check-Act continual improvement framework and incorporates energy management into everyday organisational practices





ISO 50001 - How does PDCA fit in?



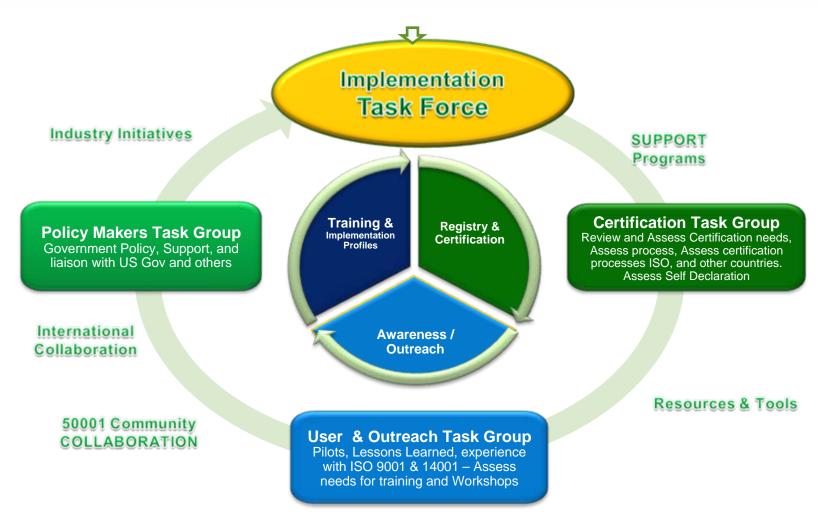


ISO 50001 - How was it developed?

- Request from United Nations Industrial Development Organisation (UNIDO)
- ISO identified energy management as one of top five fields for standards development
- 2008 established project committee ISO/PC 242, Energy Management
 - Led by United States and Brazil
- 44 ISO member countries participated
 - Canada included
 - 14 countries as observers
- Drew on numerous standards in existence at the time
 - China, Denmark, Ireland, Japan, Republic of Korea, Netherlands, Sweden,
 Thailand, the USA and the European Union
- Published on June 15, 2011
- Canadian National Standard published June 24, 2011



ISO 50001 - What are Canada's Plans?





ISO 50001 - What are People Saying?

We like that the ISO 50001
 approach to energy savings emphasizes teamwork and continuous improvement instead of major re-engineering. It is also a great way for us to demonstrate our sustainability effort

Daniel Marcoux Plant Manager, Lassonde Beverages Canada



 We are already ISO 9001 and ISO 14001 registered and understand how a formal system supports continuous improvement. The ISO 50001 approach is helping us dedicate similar attention to our energy savings initiatives. ISO50001 is also used as a tool for cost containment while being an environmentally responsible, efficient manufacturing company in Canada.

Adel A. Mir P.Eng Manager, Engineering Services, Lincoln Electric Canada





Hot off the Press

- 50 + Organisations worldwide already registered
- Schneider HQ in France 1st in the World
- 3M likely to be first in Canada



ISO 50001 - What are the Potential Next Steps?

- · Asses organisational readiness
- · Belief in value of management system standards
- Support from executive (financial and cultural)
- Need for enabling technologies (metering, software, etc.)
- Choose partners and management system
 - Energy Management Specialists
 - Management System Specialists
 - Technology Specialists (as required)

 Make sure you use the standard to improve your company, instead of just going through the motions



Questions and Discussion



