

ISO 50001 and its Benefits

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ISO 50001: Energy Management System Standard

ISO 50001 establishes a voluntary framework for any type of organization using energy- industry, buildings, and public sector.



Potential impacts:

- Could influence up to 60% of the world's energy use across many economic sectors

Uptake of ISO 50001 will be driven by companies seeking an internationally recognized response to:

- Energy cost reduction initiatives
- Demand created along the manufacturing supply chain
- Corporate sustainability programs
- Increasing market value of “green manufacturing” / reduced carbon footprint. Future national carbon or energy taxes;
- International climate agreements

ISO 50001

- Developed by ISO Project Committee 242; United States and Brazil lead effort with the United Kingdom and China
- 56 countries participating, 13 of which are observing
- Final Draft International Standard (FDIS) released March 2011
- Final Publication June 15 2011

ISO 50001- Key Elements

Plan - Do - Check - Act

Consistent with ISO 14001, ISO 9001 etc.

- *Energy policy* top management's official statement of the organization's commitment to managing energy
- *Cross-divisional management team* led by a representative who reports directly to management and is responsible for overseeing the implementation of the energy management system
- *Energy review* to assess current and planned energy use, energy sources and consumption and identify opportunities for improvement
- *Baseline(s)* of the organization's energy use
- *Energy performance indicators* (EnPIs) that are unique to the company and are tracked against the baseline to measure progress

ISO 50001- Key Elements

- *Energy objectives and targets* for energy performance improvement at relevant functions, levels, processes or facilities within an organization
- *Action plans* to meet those targets and objectives
- *Operating controls and procedures* for significant energy uses
- *Measurement, management, and documentation* for continuous improvement for energy efficiency
- *Internal audit of progress* reported to management based on these measurements.

ISO 50001 Benefits

- Builds energy management into business practices
- Optimize energy-consuming assets
- Improves operations and capital cost decisions
- Facilitates energy management best practices
- Improves the ability to benchmark, measure and report energy intensity improvements
- Improves transparency and communication on the management of energy resources
- Helps in evaluating and prioritizing new energy-efficient technologies
- Framework for promoting energy efficiency throughout the supply chain

Support for ISO 50001

US CEEM

- Acts as champion of U.S. industry in pursuing national energy efficiency goals.
- Seeks to improve the energy intensity of U.S. manufacturing through a series of initiatives.
- EnMS Pilot program based upon ISO 50001



Texas Industries of the Future

Pilot Results

CCP Plant – Houston Texas

- 36 Employees
- Manufactures and distributes coatings resins, structural resins, gel coats

Significant Energy Use Equipment:

- Hot Oil Boilers, Steam Boilers, Thermal Oxidizer, Cooling Towers,
- Air Compressor
- N2 Generator

Results

- 14.9%** energy savings/24 months
- Savings of \$250,000** per Year
- \$0 capital investment** required



Thank you

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