ISO 50001 Standard
Energy Management Systems

Presented by
Jim Quinn
Advanced Manufacturing Office,
Energy Efficiency and Renewable Energy
U.S. Department of Energy

ANSI – ESO Conference: Transatlantic Standardization Partnerships
on E-Mobility/Electric Vehicles, Energy, and Security

October 12, 2011
ISO 50001 Background

- Published in June 2011 by a committee of over 50 countries
- Culmination of almost 3 years of work through excellent consensus
- Used U.S. and EU standards as key strawman documents
- Passed in the first ballot with unanimous approval!
- Modeled after other ISO management system standards
- Applicable to all organizations that use energy
ISO 50001 Summary

- Establishes a framework for industrial and commercial facilities and organizations to manage energy

- Imposes requirements on energy supply and consumption:
  - Measurement
  - Documentation and reporting
  - Design and procurement practices for energy-using equipment and systems
  - Processes and personnel

- Applies to all factors that can be monitored and influenced by the organization to affect energy use

- Does not prescribe specific performance criteria with respect to energy
Adoption of ISO 50001

- Uptake of ISO 50001 will be driven by companies seeking an internationally recognized response to:
  - Corporate sustainability programs
  - Energy cost reduction initiatives
  - Demand created along the manufacturing supply chain
  - Future national cap and trade programs; carbon or energy taxes; increasing market value of “green manufacturing” / reduced carbon footprint
  - International climate agreements

- Expectation is for greater and faster uptake of energy management systems (EnMS) than occurred with other management system standards
50001 as Foundation for U.S. DOE Voluntary Program—Superior Energy Performance (SEP)

- SEP is a market-based, ANSI/ANAB-accredited certification program that provides industrial and commercial facilities with a roadmap for achieving continual improvement in energy efficiency while boosting competitiveness.
  - EnMS is a foundational requirement for SEP
  - U.S. DOE is using 50001 for the required EnMS

- Superior Energy Performance for industry will be launched nationwide in 2012.

- DOE is hoping to go global with a similar program, working in partnership with other nations.

http://www.superiorenergyperformance.net/
U.S. Council for Energy-Efficient Manufacturing

- 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.
- Guides development of Superior Energy Performance for industry.
Global Superior Energy Performance Partnership (GSEP)

GSEP objective is to reduce global energy use by:

- Encouraging industrial facilities and commercial buildings to pursue continuous improvements in energy efficiency
- Promoting public-private partnership

[http://www.cleanenergyministerial.org/gsep/](http://www.cleanenergyministerial.org/gsep/)
Thank you!

Advanced Manufacturing Office
Contacts:

James Quinn
International Industrial Energy Efficiency
james.quinn@ee.doe.gov

Paul Scheihing
Lead for Technology Deployment and Superior Energy Performance
paul.scheihing@ee.doe.gov