What is an Energy Management System?

Energy Management Systems (EnMS) offer a systematic approach and a recognized framework to monitor and reduce the energy consumption in all types of organizations including industrial, commercial, hospitality and health care. ISO 50001 is based on a Plan-Do-Check-Act cycle, with requirements for: establishing an energy policy with measurable objectives, taking actions to monitor and reduce energy use, verifying energy savings and planning improvements. ISO 50001 has a similar structure to ISO 14001 and can integrate into an existing quality, safety and/or environment management system.

What are the benefits of implementing an EnMS?

- Significant financial savings and profitability can be achieved through energy efficiency and reduced operational and overhead costs
- Increase understanding of energy use and consumption through defined methods and processes of data collection
- Demonstrate to stakeholders your commitment to environmental preservation, as well as cost reduction and profitability.
- Raise your staff’s awareness on the importance of energy consumption and reduction
- Positive contributions toward depletion of energy resources
- Mitigate worldwide effects of energy use
- Utilize a single, harmonized standard for implementation across multiple locations, including international locations
- Provide a framework for promoting energy efficiency throughout the supply chain
- Easily integrate with other organizational management systems such as environmental, health and safety
- Reduce air emissions such as GHG’s
- Enhance marketing capabilities
- Ensure best practice energy management systems are in place
- Allocate cost/CO2 across all manufacturing processes
- Benchmark for continuous process improvement
- Prioritize/verify energy efficiency measures
WHERE DO I START?

☐ **Obtain Top Management Commitment**
  Make the business case for success of the Energy Management System.

☐ **Acquire, Track and Analyze Energy Data**
  To improve energy use, you must understand all uses of energy in the organization. This can be achieved through an energy review by collecting and analyzing data on your current energy sources as well as past energy consumption.

☐ **Determine Significant Energy Uses**
  Prioritize major sources of energy consumption.

☐ **Establish a Baseline**
  Establish an appropriate time period to serve as an energy baseline and “draw a line in the sand”.

☐ **Identify and Prioritize Opportunities for Energy Improvements**
  Identify areas of improvement through numerous sources - employee suggestions, utility representatives, service technicians, equipment vendors, equipment standards, as well as a variety of energy assessment tools, standards and guides. Once areas for improvement are discovered, a systematic approach (using decision criteria such as ROI, energy savings, business goals, etc..) helps prioritize and focus organizational efforts.

What about Certification?

The initial step is applying to a Registrar, followed by document review and a Stage 1 readiness assessment. Once completed, a Stage 2 on-site implementation assessment is required. Any issues identified are resolved in a timely manner. Once issues are resolved, a certificate of conformance is issued (valid for three years) followed by a routine surveillance program to ensure compliance.