



50001 Certified Professional Training Program

About This Program

This program is designed to take an individual with a strong understanding of energy and the technical ways in which energy improvements can be made and broad knowledge of the ISO 50001 Standard. Over four days, participants will transform into individuals with a complete understanding of the energy management systems process with all its integral components and give them the competencies to implement, analyze or audit an energy management system against the energy management requirements but also to form an opinion as to whether the energy management system is fit for purpose within the organization and will lead to energy improvements within that organization.

Learning Objectives

- Requirements of the the Energy Management Standard
- How to assess the requirements of an organization implementing an EnMS
- Multiple ways for EnMS and “tick the box” compliance standardization
- How to audit an organization’s Energy management system for compliance but also effectiveness

At-a-Glance

- » This training program prepares attendees to take the 50001 Certified Professional (50001 CP) exam.
- » This course is held over 4 days
- » You earn 3 CEUs | 30 PDH | 6.0 AEE Credits for completing this program.

Key Takeaways

- » A comprehensive set of reference notes.

Registration

Candidates should visit the website for additional information on available training courses, certification application process, exam registration, and associated fees. Visit www.aeecenter.org/training

All Participants should have a copy of the ISO 50001 Standard; it will not be provided as a part of this course offering

Who Should Attend

Certified Energy Managers who are providing ISO 50001 support to clients

Certified Energy Auditors who are providing ISO 50001 support to clients

Sustainability Leads/ Sustainability Managers that want to improve the outcomes from their management systems

Engineering Managers that want to better understand the requirements of the management standards

Energy Management System auditors that wish to get a better understanding of the interactions of the various components of the energy management standard and the end users in a certified organization

Course Outline

- Personal Competencies
- General Understanding Competencies
- Management Systems Competencies
- Analysis Competencies
- Technical Analysis Competencies
- Technical Competencies

Our Instructors

This multi-day program is taught by approved instructors with extensive experience with implementing, managing and auditing Energy Management Systems using 50001. They present the latest practices, strategies, and theories, while leading discussions in an open, interactive environment. Through the design of the course, attendees will also spend invaluable time connecting with and learning from other program attendees.

Detailed Agenda

General Understanding Competencies

- Understand energy management systems terminology and energy management systems principles.

Management Systems Competencies

- Understand the context of an organization and the needs and expectations of interested parties, when determining the scope and boundaries of an organization's EnMS.
- Understand the requirements of Top Management within an EnMS and the relevance to the EnMS roles, responsibilities and authorities within the organization and the stated energy policy.
- Identify potential conflicts with organization context and unintended consequences with different proposed energy management system approaches and/or potential energy performance improvement opportunities.
- Assess a given approach in relation to communication and awareness for a particular situation and assess for conformance, or otherwise, against EnMS requirements.
- Assess documented information against EnMS standard requirements.
- Review a given set of circumstances in relation to Legal Obligations & Other obligations and determine conformance or otherwise (comparison of the facts (data) v/s legislation stated). (This does not imply that an individual has an in-depth knowledge of all legal requirements)
- Assess an internal audit plan for a given set of circumstances and identify shortfalls, or otherwise, in the plan, in relation to the EnMS Standard.
- Assess a management review set of notes and identify shortfalls, or otherwise, in EnMS standard conformance.
- Review non-conformities and associated actions taken, and to assess for conformance, or otherwise, to the EnMS standard.
- Identify relevant legal and other requirements related to energy and to conclude whether these have been appropriately considered in each set of circumstances in an energy management application.

Analysis Competencies

- Use and interpret basic statistics. This shall include the use of control charts and similar approaches to display and analyze data (e.g., Sankey, Pie, Poisson Distribution, Heatmaps etc.).
- Predict potential improvements, or assess the level of proposed energy improvements, when presented with a set of different stated opportunities and associated savings potential. This would include the context of where the savings will be delivered (i.e., identification and recognition of interactive effects).
- Assess provided data and other relevant information, along with stated objectives and targets, and to assess the level of energy performance improvement delivered or not delivered. Consider
- Review provided energy data from monitoring and measurement against stated EnPI's and Baselines and to identify potential anomalies between actual and expected energy data and possible causes.
- Identify alignment or misalignment with different sets of opportunities for improvement and a given set of objectives, targets, and action plans and EnMS requirements.
- Assess data collection plans for robustness, related to a particular set of organization circumstances and to assess against EnMS standard requirements.