

ISO 50001:2018 Energy Management Systems Lead Auditor Training Course

Professional Development Training Course Outline

Category	Quality Assurance and ISO standards	Duration	10 Days
Base Fee	\$3,000 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

The ISO 50001:2018 Energy Management Systems (EnMS) Lead Auditor Training Course is designed to provide participants with in-depth knowledge, practical auditing skills, and a comprehensive understanding of energy management systems. With the global shift towards sustainability, organizations are focusing on reducing energy consumption, enhancing operational efficiency, and complying with international standards. This training equips professionals with the expertise to conduct first, second, and third-party audits in accordance with ISO 50001:2018 requirements and ISO 19011 guidelines, preparing them to lead audit teams effectively.

This program is tailored for professionals seeking to gain competitive advantage, align with energy efficiency standards, and contribute to organizational sustainability goals. With a focus on energy performance improvement, environmental compliance, and strategic auditing, the training integrates industry case studies, trending best practices, and hands-on exercises to ensure practical application. The ISO 50001:2018 Lead Auditor certification opens doors to global career opportunities, helping organizations meet compliance needs, reduce costs, and drive continuous improvement.

Programme Curriculum

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Course Objectives

1. Understand ISO 50001:2018 requirements and energy management principles.
2. Apply energy performance indicators (EnPIs) in energy management systems.
3. Master audit planning, execution, reporting, and follow-up processes.
4. Conduct risk-based thinking and life cycle energy assessments.
5. Lead audit teams in compliance with ISO 19011:2018 guidelines.
6. Analyze energy efficiency data to ensure continual improvement.
7. Implement strategic energy performance objectives and targets.
8. Identify nonconformities and recommend corrective actions.
9. Integrate EnMS with ISO 9001, ISO 14001, and ISO 45001 systems.
10. Enhance energy sustainability and operational performance.
11. Demonstrate leadership in energy policy compliance and implementation.
12. Use audit techniques to evaluate supplier and contractor performance.
13. Achieve global recognition as a certified ISO 50001 Lead Auditor.

Organizational Benefits

1. Improved energy efficiency and cost savings.
2. Enhanced compliance with global energy regulations.
3. Reduction in greenhouse gas emissions.
4. Strengthened organizational sustainability strategies.
5. Increased competitiveness in global markets.
6. Improved stakeholder trust and corporate reputation.
7. Integration of EnMS with existing management systems.
8. Enhanced employee awareness and energy responsibility.
9. Streamlined internal audit and reporting processes.
10. Long-term operational excellence and continual improvement.

Target Audiences

1. Energy Managers
2. Quality Managers
3. Environmental Managers
4. Health and Safety Managers
5. Internal Auditors
6. External Auditors
7. Consultants and Energy Advisors
8. Professionals seeking ISO 50001:2018 Lead Auditor Certification

Course Duration: 10 days

Course Modules

Module 1: Introduction to ISO 50001:2018 Energy Management Systems

- Overview of energy management systems and key concepts
- Global energy challenges and sustainability context
- Structure and framework of ISO 50001:2018
- Key terms, definitions, and EnMS requirements
- Benefits of implementing ISO 50001 in organizations
- Case Study: Successful implementation of ISO 50001 in a manufacturing firm

Module 2: ISO 50001:2018 Requirements and Clauses

- Context of the organization and interested parties
- Leadership roles and responsibilities
- Planning and risk-based thinking in EnMS
- Support, resources, and documented information
- Operation and control measures for energy performance
- Case Study: Addressing energy risks in an industrial setting

Module 3: Energy Performance Indicators and Baselines

- Establishing energy baselines for measurement
- Identifying and selecting EnPIs
- Monitoring and analyzing energy use and consumption
- Tools and techniques for energy data collection
- Performance tracking and evaluation strategies
- Case Study: Energy baseline establishment in a utility company

Module 4: Audit Principles and ISO 19011 Guidelines

- Fundamentals of auditing principles and integrity
- Auditor roles, responsibilities, and competencies
- Audit planning and preparation methods
- Conducting opening and closing meetings
- Evidence gathering and sampling techniques
- Case Study: Applying ISO 19011 guidelines in energy audits

Module 5: Risk Management in Energy Management Systems

- Identifying risks and opportunities in EnMS
- Integrating risk-based thinking into audits
- Risk assessment tools and frameworks
- Developing mitigation strategies for energy risks
- Evaluating residual risks during audits
- Case Study: Risk-based approach in energy sector audits

Module 6: Internal Auditing for ISO 50001:2018

- Planning and conducting internal audits

- Developing audit checklists and questionnaires
- Identifying nonconformities and opportunities for improvement
- Reporting and communicating audit findings
- Corrective action planning and follow-up
- Case Study: Internal audit program in a large organization

Module 7: Lead Auditor Roles and Responsibilities

- Leadership skills in managing audit teams
- Assigning roles and responsibilities to team members
- Effective communication and conflict management
- Managing audit timelines and resources
- Ethical considerations for lead auditors
- Case Study: Leading a multinational audit team

Module 8: Energy Data Management and Analysis

- Collecting and validating energy-related data
- Applying statistical tools for data interpretation
- Identifying significant energy uses (SEUs)
- Benchmarking energy performance
- Using digital tools for real-time monitoring
- Case Study: Energy data analytics in smart buildings

Module 9: Integration of EnMS with Other Management Systems

- Alignment of ISO 50001 with ISO 9001, ISO 14001, ISO 45001
- Common frameworks and clauses across standards
- Benefits of integrated management systems
- Implementation strategies for integration
- Challenges in harmonizing multiple standards
- Case Study: Integrated management system in a service industry

Module 10: Documentation and Record Management

- Types of documented information in EnMS
- Document control procedures and retention policies
- Ensuring accuracy, accessibility, and confidentiality
- Records for energy performance monitoring
- Digital documentation and management tools
- Case Study: Document management in an energy company

Module 11: Audit Reporting and Corrective Actions

- Preparing clear and comprehensive audit reports
- Communicating findings to top management
- Nonconformity classification and documentation
- Developing corrective and preventive actions
- Monitoring effectiveness of corrective actions
- Case Study: Corrective action implementation in an oil refinery

Module 12: Energy Policy and Strategic Planning

- Developing and implementing an energy policy
- Aligning policies with organizational objectives
- Setting measurable energy targets and goals
- Linking strategy with continual improvement
- Leadership commitment and employee engagement
- Case Study: Energy policy development in a government agency

Module 13: Continual Improvement in EnMS

- Importance of continual improvement in energy systems
- Tools and techniques for performance enhancement
- Linking continual improvement with sustainability goals
- Feedback loops for monitoring progress
- Case Study: Continual improvement in renewable energy projects
- Case Study: Long-term sustainability improvements in energy systems

Module 14: Certification Process for ISO 50001:2018

- Certification requirements and procedures
- Selection of accredited certification bodies
- Audit stages in certification audits
- Maintaining certification compliance
- Renewal and surveillance audits
- Case Study: Certification journey of a global corporation

Module 15: Final Examination and Practical Exercises

- Mock audits and practical exercises
- Group assignments and role plays
- Examination guidelines and requirements
- Evaluation of audit skills and knowledge
- Certification and recognition process
- Case Study: Group exercise simulating an energy audit

Training Methodology

- Instructor-led interactive lectures
- Group discussions and brainstorming sessions
- Practical workshops and simulation exercises
- Real-life case study analysis
- Mock audits and role-play sessions
- Continuous assessment and feedback mechanisms

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.com or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

- a. The participant must be conversant with English.
- b. Upon completion of training the participant will be issued with an Authorized Training Certificate
- c. Course duration is flexible and the contents can be modified to fit any number of days.
- d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- e. One-year post-training support Consultation and Coaching provided after the course.
- f. Payment should be done at least a week before commencement of the training, to FINESKILL TRAINING CENTER account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
07 Sep 2026	18 Sep 2026	Physical	\$3,000
14 Sep 2026	25 Sep 2026	Physical	\$3,000
21 Sep 2026	02 Oct 2026	Physical	\$3,000
28 Sep 2026	09 Oct 2026	Physical	\$3,000
05 Oct 2026	16 Oct 2026	Physical	\$3,000
12 Oct 2026	23 Oct 2026	Physical	\$3,000
19 Oct 2026	30 Oct 2026	Physical	\$3,000
26 Oct 2026	06 Nov 2026	Physical	\$3,000

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