





# PECB CERTIFIED ISO 50001 LEAD AUDITOR

# MASTERING THE AUDIT OF AN ENERGY MANAGEMENT SYSTEM (EnMS) BASED ON ISO 50001, IN COMPLIANCE WITH THE REQUIREMENTS OF ISO 19011 AND ISO 17021

## SUMMARY

This five-day intensive course enables the participants to develop the needed expertise to audit an Energy Management System (EnMS) based on ISO 50001 and to manage a team of auditors by applying widely recognized audit principles, procedures and techniques. During this training, the participant will acquire the necessary knowledge and skills to proficiently plan and perform internal and external audits in compliance with ISO 19011 and certification audits according to ISO 17021. Based on practical exercises, the participant will develop the skills (mastering audit techniques) and competencies (managing audit teams and audit program, communicating with customers, conflict resolution, etc.) necessary to efficiently conduct an audit.



## WHO SHOULD ATTEND?

- Internal auditors
- Auditors wanting to perform and lead Energy Management System (EnMS) certification audits
- Project managers or consultants wanting to master the Energy Management System audit process
- ▶ Individuals responsible for the energy or conformity in an organization
- Members of energy team
- Expert advisors in Energy Management Systems
- > Technical experts wanting to prepare for energy audit function

## **COURSE AGENDA**

DAY 1

DAY 2

DAY 3

DAY 4

DAY 5

## **DURATION: 5 DAYS**

## Introduction to Energy Management System (EnMS) concepts as required by ISO 50001

- Normative frameworks and methodologies related to Energy
- ► Fundamental principles of Energy management
- ISO 50001 certification process
- Energy Management System (EnMS)
- Detailed presentation of the clauses of ISO 50001

### Planning and initiating an ISO 50001 audit

- Fundamental audit concepts and principles
- Audit approach based on evidence
- ▶ Preparation of an ISO 50001 certification audit
  - EnMS documentation audit
- Conducting an opening meeting

#### Conducting an ISO 50001 audit

- Communication during the audit
- > Audit procedures: observation, document review, interview, sampling techniques, technical verification, corroboration and evaluation
- Audit test plans
  - Formulation of audit findings
  - Documenting nonconformities

## Concluding and ensuring the follow-up of an ISO 50001 audit

- Audit documentation
- Quality review
- Conducting a closing meeting and conclusion of an ISO 50001 audit
- ► Evaluation of corrective action plans
- ISO 50001 surveillance audit
- ISO 50001 internal audit management program

## **Certification Exam**



## LEARNING OBJECTIVES

- ▶ To acquire expertise to perform an ISO 50001 internal audit following ISO 19011 guidelines
- ► To acquire the expertise to perform an ISO 50001 certification audit following ISO 19011 guidelines and ISO 17021 specifications
- ► To acquire the expertise necessary to manage EnMS audit team
- ► To understand the operation of an ISO 50001 conformant Energy Management System
- To understand the relationship between Energy Management System and compliance with the requirements of different stakeholders of the organization
- > To improve the ability to analyze the internal and external environment of an organization, and audit decision-making

## EXAMINATION

The "PECB Certified ISO 50001 Lead Auditor" exam fully meets the requirements of the PECB Examination and Certification Program (ECP). The exam covers the following competence domains:



## Domain 1: Fundamental principles and concepts in Energy Management

Main Objective: To ensure that the ISO 50001 Lead Auditor candidate can understand, interpret and illustrate the main Energy Management concepts related to an Energy Management System (EnMS)



### Domain 2: Energy Management System (EnMS)

Main Objective: To ensure that the ISO 50001 Lead Auditor candidate can understand, interpret and illustrate the main concepts and components of an Energy Management System based on ISO 50001

## **Domain 3: Fundamental Audit Concepts and Principles**

Main Objective: To ensure that the ISO 50001 Lead Auditor candidate can understand, interpret and apply the main concepts and principles related to an EnMS audit in the context of ISO 50001



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#### Domain 4: Preparation of an ISO 50001 audit

Main Objective: To ensure that the ISO 50001 Lead Auditor candidate can prepare appropriately an EnMS audit in the context of ISO 50001



Main Objective: To ensure that the ISO 50001 Lead Auditor candidate can conduct efficiently an EnMS audit in the context of ISO 50001

### Domain 6: Conclusion and follow-up of an ISO 50001 audit

Main Objective: To ensure that the ISO 50001 Lead Auditor candidate can conclude an EnMS audit and conduct follow-up activities in the context of ISO 50001

### Domain 7: Management of an ISO 50001 audit program

Main Objective: To ensure that the ISO 50001 Lead Auditor understands how to establish and manage an EnMS audit program

- The "PECB Certified ISO 50001 Lead Auditor" exam is available in different languages, such as English, French, Spanish and Portuguese
- Duration: 3 hours
- ► For more information about the exam, please visit: www.pecb.com

## CERTIFICATION

- After successfully completing the exam, participants can apply for the credentials of PECB Certified ISO 50001 Provisional Auditor, PECB Certified ISO 50001 Auditor or PECB Certified ISO 50001 Lead Auditor depending on their level of experience. Those credentials are available for internal and external auditors
- A certificate will be issued to participants who successfully pass the exam and comply with all the other requirements related to the selected credential:

Credential	Exam	Professional Experience	EnMS Audit Experience	EnMS Project Experience	Other Requirements
PECB ISO 50001 Provisional Auditor	PECB ISO 50001 Lead Auditor Exam	None	None	None	Signing the PECB code of ethics
PECB ISO 50001 Auditor	PECB ISO 50001 Lead Auditor Exam	<b>Two years</b> One year of Energy Management work experience	Audit activities totaling 200 hours	None	Signing the PECB code of ethics
PECB ISO 50001 Lead Auditor	PECB ISO 50001 Lead Auditor Exam	<b>Five years</b> Two years of Energy Management work experience	Audit activities totaling 300 hours	None	Signing the PECB code of ethics

## **GENERAL INFORMATION**

- ► Certification fees are included in the exam price
- Participant manual contains over 450 pages of information and practical examples
- A participation certificate of 31 CPD (Continuing Professional Development) credits will be issued to the participants
- > In case of failure of the exam, participants are allowed to retake it for free under certain conditions