Environment, energy and climate

Energy Audit: ISO 50002-1:2025 (formerly ISO 50002:2014)

Two days to prepare, conduct or manage an energy audit under ISO 50002-1:2025: scope, data collection, measurement plan, site walk-through, analysis of uses, costing of actions and report. Participants also learn to prepare the file for a mandatory energy audit in Morocco, carried out by an approved body, and to turn its recommendations into a monitored action plan.

Duration : 2 days

Objectives

1. Explain the energy audit approach of ISO 50002-1:2025 and the role of the guides for buildings and processes
2. Define with management the scope, objectives and level of detail of an audit
3. Collect and validate energy data and establish a measurement plan
4. Analyse energy uses and cost opportunities: saving, investment, payback time
5. Write or assess an audit report and translate it into an energy efficiency plan

Programme

Day 1 — morning

• Energy audit, ISO 50001 energy review and mandatory audit: three linked but distinct exercises

• Law 47-09 and the mandatory energy audit: roles of the approved body, AMEE and the company

• ISO 50002-1:2025, which replaces the 2014 edition: audit steps; guides ISO 50002-2:2025 and ISO 50002-3:2025

• Kick-off meeting: objectives, scope, decision criteria, contacts

Day 1 — afternoon

• Data collection: invoices, meters, fuels, production variables, equipment inventory

• Site energy balance and breakdown by use

• Measurement plan: campaigns, quantities, representative durations, safety of interventions

• Exercise: energy balance and priority uses of your site

Day 2 — morning

• Site walk-through: boiler house and steam, cooling, compressed air, motors and pumps, lighting, furnaces

• Analysis: losses, gaps against good practice, heat recovery potential

• Costing of opportunities: savings in energy, cost and emissions, investment, payback time

• Place of renewable energy and self-generation in the recommendations

Day 2 — afternoon (workshop)

• Workshop: analysis of a significant use on your site and a costed action sheet

• Content of the audit report and closing meeting

• From report to energy efficiency plan: owners, deadlines, monitoring of savings

• Knowledge test and presentation

Teaching methods

• Technical visit of an installation on your site with readings and observations
• Calculation exercises on savings and payback time using your data
• Presentation of common measurements: electrical power, flow, temperature, compressed air leaks
• Critical analysis of extracts from anonymised audit reports
• Mid-course quiz on data collection, final test on costing savings

Assessment and documents

Mid-course quiz and knowledge test at the end of the session, feedback survey at D+1. Numbered training certificate, verifiable online, for each participant; the company receives the training report and the costed action sheet produced in the workshop.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

This course does not constitute approval to carry out the mandatory energy audit: it prepares your teams to manage it and make use of its results. The half-day “Mandatory Energy Audit in Morocco: Preparing the AMEE File” concentrates on the regulatory side.

Practical information

Duration	2 days
Audience	Energy and utilities managers, maintenance, engineering, QHSE
Prerequisites	Practical knowledge of the site’s technical installations
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

Is our site subject to the mandatory energy audit?
It depends on your annual energy consumption, converted into tonnes of oil equivalent and compared with the threshold set for your sector by Decree 2-17-746. The course shows how to do this calculation from your invoices; the conclusion is checked entity by entity.

Can our teams carry out the mandatory audit themselves?
No. The regulatory audit is carried out by an approved energy audit body. Your teams can, however, prepare the data, accompany the auditor and manage the action plan, which shortens the audit and improves the quality of the report.

How does it differ from the course “ISO 50001:2018 — Energy Management”?
The audit is a detailed technical snapshot of uses and savings potential at a given time. ISO 50001 installs a management system that keeps energy performance alive over time. A first audit often feeds the energy review of an ISO 50001 system.

Do we need an engineering degree to follow these two days?
No, but hands-on familiarity with the installations is useful. The course is aimed at technicians and engineers in maintenance, utilities and energy; the calculations stay within reach of a spreadsheet.