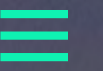


The LRQA logo consists of the letters 'LRQA' in a white, sans-serif font. A green checkmark is integrated into the letter 'A'. The logo is enclosed within a thin green square border.

# ISO 50001: Avoiding the top nonconformities for energy management success







ISO 50001 provides a framework to help organisations enhance energy performance, reduce costs and achieve sustainability goals. However, many encounter challenges during implementation and certification. This guide explores the key aspects of ISO 50001, including the top nonconformities that organisations face.

## Understanding ISO 50001

ISO 50001 is the leading international Energy Management Systems (EnMS) standard. It provides organisations with a structured approach to improving energy efficiency, reducing energy costs and minimising environmental impact. The standard applies to organisations of all sizes and sectors and is designed to integrate with other management systems such as ISO 9001 or ISO 14001.

By certifying to ISO 50001, organisations demonstrate a commitment to sustainability, regulatory compliance and continual improvement in energy performance. This standard also supports organisations in meeting corporate social responsibility (CSR) goals and addressing the challenges of energy price volatility and resource scarcity.







# Glossary of terms

**Baseline:** A reference point or benchmark used to compare energy performance over time.

**Energy management system (EnMS):** A structured framework for managing energy performance and achieving energy-related objectives.

**Energy review:** A detailed analysis of energy use and consumption to identify SEUs and opportunities for improvement.

**Objectives and energy targets:** Specific goals an organisation sets to improve energy performance, often expressed as measurable outcomes.

**Energy performance indicators (EnPIs):** Metrics used to track and evaluate energy performance.

**Management review:** A formal evaluation by leadership to assess the performance and alignment of the EnMS with organisational goals.

**Major nonconformities:** Significant deviations from ISO 50001 requirements that could jeopardise the system's effectiveness or compliance.

**Minor nonconformities:** Smaller, isolated deviations that do not significantly impact the overall effectiveness of the EnMS.

**Operational control:** Measures or procedures implemented to ensure significant energy uses are managed effectively.

**Planning for data collection:** The process of defining how energy data will be gathered, monitored, and used to support decision-making and continual improvement.

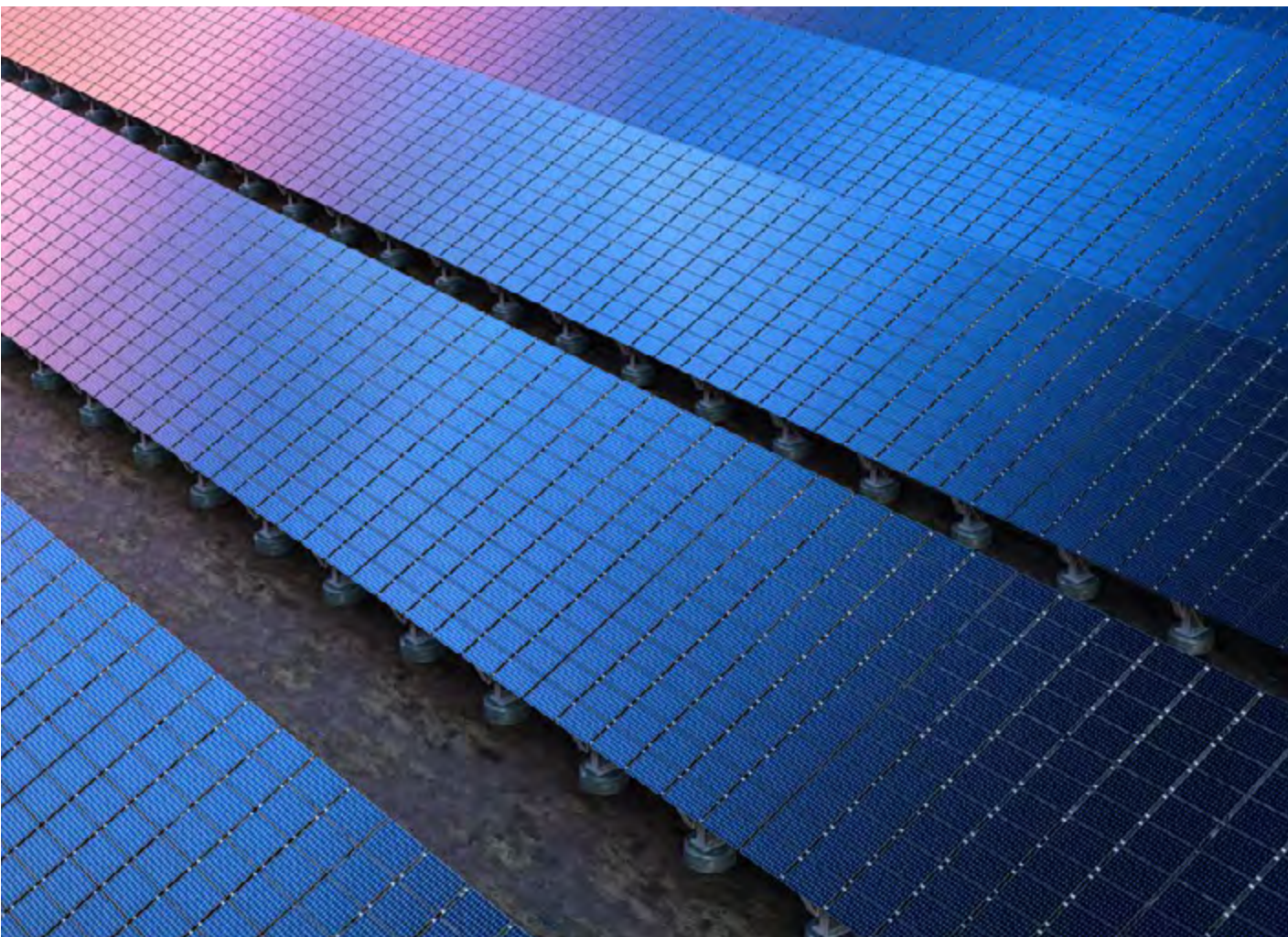
**Significant energy use (SEU):** Equipment, processes or systems that consume substantial energy and have considerable potential for energy improvement.





# The top 5 major nonconformities

Organisations often encounter specific challenges during audits. The following are the most common major nonconformities identified in ISO 50001 certification, based on insights from LRQA experts.



## 1. Energy review

(clause 6.3)

Many organisations fail to conduct a thorough energy review, which is the foundation of the EnMS. This review identifies significant energy uses, consumption patterns and opportunities for improvement. Common issues include incomplete and missing data related to changes or future consumptions, lack of regular updates or insufficient analysis and criteria to identify SEUs, prioritising opportunities for improvements in energy performance.

### How to address:

Perform a detailed energy review that covers all operations, using a defined methodology and criteria. Regularly update this review with accurate data to ensure ongoing relevance as well as when there are major changes introduced.



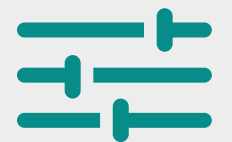
## 2. Operational planning and control

(clause 8.1)

Operational controls are critical for managing significant energy uses, yet many organisations lack clear procedures or fail to implement them effectively. Common issues include ineffective implementation of maintenance and calibration processes, operational criteria for processes not always in place and detection of energy related risks when implementing changes.

### How to address:

Establish robust operational controls, provide staff training to ensure consistency and compliance with defined processes and carry out regular checks.





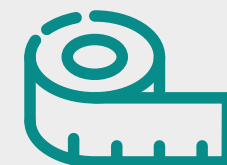
### 3. Objectives, energy targets and planning to achieve them

(clause 6.2)

Unclear or poorly defined objectives and targets often lead to nonconformities. These goals should align with organisational strategy and be supported by actionable plans. Common issues include non-identification of appropriate objectives, energy indicators and associated action plans, ineffective assessment of implemented plans and non-measurable targets.

#### How to address:

Use SMART criteria (specific, measurable, achievable, relevant and time-bound) to set objectives and ensure regular monitoring of progress.



### 4. Planning for collection of energy data

(clause 6.6)

Accurate and reliable data collection is essential for tracking energy performance, but many organisations lack proper planning for how this data is gathered and analysed. Common issues include ineffective collection of data, accuracy of measuring equipment not known and data reliability.

#### How to address:

Define clear processes for data collection, invest in reliable monitoring tools and verify data accuracy regularly.



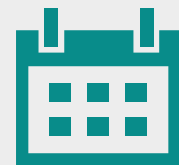
### 5. Management review

(clause 9.3)

Leadership plays a vital role in maintaining an effective EnMS, yet many organisations fail to conduct meaningful management reviews. Common issues include insufficient focus on strategic alignment, not including all items to be discussed and reviewed and the lack of follow-up actions.

#### How to address:

Ensure management reviews are scheduled regularly and cover all required elements, including EnMS performance, objectives and opportunities for improvement.





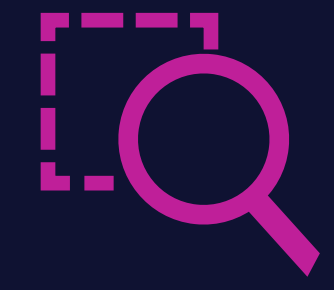


# Our ISO 50001 services



## Training

Grow your knowledge of ISO 50001 with training courses that are designed to match your experience level and personal development goals.



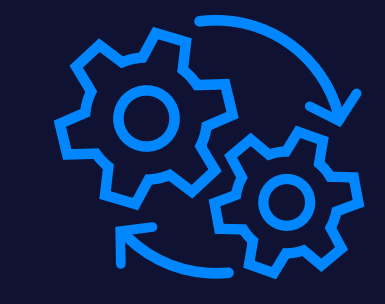
## Gap analysis

Put your existing EnMS to the test and discover areas that need attention and improvement prior to undertaking your ISO 50001 audit.



## Certification

A two-phase process that first validates your EnMS according to ISO 50001 and then assesses the effectiveness of it in meeting the standard, resulting in accredited certification.



## Integrated audits

Save time and money through an integrated audit and assessment program that covers all of your management systems holistically.

[Find out more about LRQA's ISO 50001 solutions →](#)



## About LRQA:

LRQA is the leading global assurance partner, bringing together decades of unrivalled expertise in assessment, advisory, inspection and cybersecurity services. Our solutions-based partnerships are supported by data-driven insights that help our clients solve their biggest business challenges.

Operating in more than 150 countries with a team of more than 5,000 people, LRQA's award-winning compliance, supply chain, cybersecurity and ESG specialists help more than 61,000 clients across almost every sector to anticipate, mitigate and manage risk wherever they operate.

In everything we do, we are committed to shaping a better future for our people, our clients, our communities and our planet.

## Get in touch

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