



Latest update  
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Final  
Standard

# ISO 50001:2018

Understanding the changes to the  
energy management systems standard

Includes our Mapping Guide

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# ISO 50001:2018

## Energy Management Systems

Used by organizations across the world to manage and reduce energy use and costs, ISO 50001 is an excellent framework to help implement an energy management system (EnMS).

### The key changes and benefits of the revised standard include:

- A stronger emphasis on the responsibility of leadership
- Clarification of key concepts related to energy performance
- Improved compatibility with ISO 14001 and other ISO management system standards
- Improved sections on data collection and normalization
- The realignment of the content of the standard to the high level structure

#### An integrated approach

ISO 50001 is based on Annex SL – the ISO high level structure (HLS) that brings a common framework to all management systems. This helps to keep consistency, align different management system standards, offer matching sub-clauses against the top-level structure and apply common language across all standards. With the new standard in place, organizations will find it easier to incorporate their energy management system into the core business processes and get more involvement from senior management.

#### Leadership and empowerment

There is a much greater focus on top management to demonstrate leadership and commitment with respect to the management system and to ensure consultation and participation of workers in the development, planning, implementation and continual improvement of the energy management system. Top management have a responsibility to ensure that the importance of effective energy management is communicated and understood by all parties and ensuring that the EnMS achieves its intended outcomes.

#### Risk and opportunity

ISO 50001 takes a business oriented approach that requires broader risks and opportunities to be identified. This robust approach will enable the identification of opportunities that contribute to further improvement in energy performance. Organizations will improve their ability to identify and manage risks more effectively making them more resilient.

**Commitment to management standards is proven to deliver real business benefits. Our clients who have adopted an EnMS tell us they benefit in the following ways\*:**



\*Source: 2017 BSI Benefits – BSI clients were asked which benefits they obtained from certification to ISO 50001.

# ISO 50001:2011 to ISO 50001:2018 Mapping Guide

The following table has been designed to help you identify how the clauses of the new standard align with the structure of the 2011 version.

ISO 50001:2011		ISO 50001:2018	
Introduction			Introduction
Scope	1	1	Scope
Normative references	2	2	Normative references
Terms and definitions	3	3	Terms and definitions
		4	Context of the organization
		4.1	Understanding the organization and its context
Energy management system requirements	4		
General requirements	4.1	4.3	Determining the scope of the energy management system
		4.4	Energy management system
Management responsibility	4.2	5.1	Leadership and commitment
Top management	4.2.1	4.3	Determining the scope of the energy management system
		5.1	Leadership and commitment
		7.1	Resources
Management representative	4.2.2	5.1	Leadership and commitment
		5.3	Organization roles, responsibilities and authorities
Energy policy	4.3	5.2	Energy policy
Energy planning	4.4	6	Planning
General	4.4.1	6.1	Actions to address Risks and Opportunities
Legal requirements and other requirements	4.4.2	4.2	Understanding the needs and expectations of interested parties
Energy review	4.4.3	6.3	Energy review
		6.1	Actions to address Risks and Opportunities
Energy baseline	4.4.4	6.5	Energy baseline
Energy performance indicators	4.4.5	6.4	Energy performance indicators
Energy objectives, energy targets and energy management action plans	4.4.6	6.2	Objectives, energy targets and planning to achieve them
Implementation and operation	4.5	7	Support
		8	Operations

# Mapping Guide – continued

ISO 50001:2011		ISO 50001:2018	
General	4.5.1		
Competence, training and awareness	4.5.2	7.2	Competence
		7.3	Awareness
Communication	4.5.3	7.4	Communications
		7.4.1	General
		7.4.2	Internal communication
		7.4.3	External communication
Documentation	4.5.4	7.5	Documented information
		7.5.1	General
		7.5.2	Creating and updating
		7.5.3	Control of documented information
Operational control	4.5.5	8.1	Operations planning and control
Design	4.5.6	8.2	Design
Procurement of energy services, products, equipment and energy	4.5.7	8.3	Procurement
Checking	4.6	9	Performance evaluation
Monitoring measurement and analysis	4.6.1	9.1	Monitoring, measurement, analysis and evaluation of energy performance and the EnMS
		6.6	Planning for collection of energy data
Evaluation of compliance	4.6.2	9.1.2	Evaluation of legal and other requirements
Internal audit of the EnMS	4.6.3	9.2	Internal EnMS audit
Nonconformities, correction, corrective action and preventive action	4.6.4	10.1	Nonconformity and corrective action
Control of records	4.6.5	7.5	Documented information
Management review	4.7	9.3	Management review
		10	Improvement (title only)
		10.2	Continual improvement

# Preparing for ISO 50001:2018

## Five steps for a successful transition

### Don't delay – start today

BSI has identified a step-by-step journey to help you understand and realize the benefits of the revised ISO 50001. We have mapped out a framework which guides you through the options and support available from BSI to ensure you have the knowledge and information you require. While some of the steps will have to wait for the official publication of the new standard, you can get a head start.

- 1 Talk to your BSI Client Manager**
  - Discuss your challenges and timelines
  - Review the latest content on the BSI website for background information
- 2 Attend the BSI Training Academy**
  - Delivered by experts, understand the new requirements faster and in greater detail by attending one of our training courses
- 3 Communicate with your organization**
  - Talk to your leadership team about the new requirements
  - Communicate the revision to your wider organization to gain buy-in
  - Send regular updates on progress
- 4 Set up an internal project team**
  - Create an implementation plan and monitor progress
  - Take a fresh look at your EnMS
  - Review your EnPIs and baselines and update as appropriate
  - Implement the new requirements on leadership, risk and context of the organization
  - Adapt your documentation to reflect the new structure
- 5 Gap Assessment**
  - To help you prepare for ISO 50001 we can use our experts to complete a gap analysis to identify your strengths and weaknesses

### ISO 50001 Transition Timeline



# Why BSI?



“BSI is our supplier of choice. We have a good relationship with our contacts there, who keep in touch regularly so that we’re informed about new standards, changes to existing standards or to legislation, and other developments. We’re not interested in doing it on the cheap – it’s about the all-round package, and you get what you pay for with BSI.”

Denise Graham, Technical Manager, Tata Global Beverages

## About BSI

BSI is the business improvement company that enables organizations to turn standards of best practice into habits of excellence. For over a century BSI has championed what good looks like and driven best practice in organizations around the world. Working with over 86,000 clients across 193 countries, it is a truly international business with skills and experience across a number of sectors including automotive, aerospace, built environment, food, and healthcare. Through its expertise in Standards Development and Knowledge Solutions, Assurance and Professional Services, BSI improves business performance to help clients grow sustainably, manage risk and ultimately be more resilient.

To learn more, please visit: [bsigroup.com](https://www.bsigroup.com)

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