

White Paper

Revision of ISO 50001 - What changes does ISO 50001:2018 bring?



DIN EN ISO 50001, the international standard for systematic energy management, came into force in 2011. Five years later, work began on the revision and ISO 50001:2018 was published in August 2018. Companies currently certified according to ISO 50001:2011 should prepare early for the changeover. This paper aims to provide information about the most important changes and practical courses of action.

Significant changes to ISO 50001:2018

Among the major changes in **ISO 50001:2018** is the implementation of the High Level Structure (HLS), which has been incorporated into all new and revised ISO standards. The High Level Structure was introduced in 2012 by the International Organization for Standardization (ISO). This uniform common structure primarily facilitates the integration and application of various management standards. In addition, it provides a better understanding of different management systems.

Chapters of the High Level Structure comprise:

1. **Scope of application**
2. **Normative references**
3. **Terms**
4. **Context of the organization**
5. **Guidance**
6. **Planning**
7. **Support**
8. **Operation**
9. **Performance evaluation**

Direct comparison of ISO 50001:2011 and ISO 50001:2018 (New ■ Amendment ■)

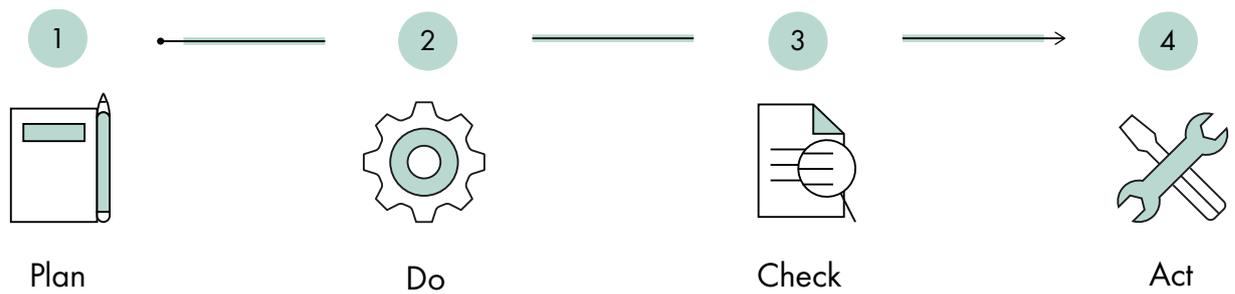
ISO 50001:2011		ISO 50001:2018	
Introductory remarks		Introductory remarks	
1	Scope	1	Scope
2	Normative references	2	Normative references
3	Terms	3	Terms
		4	Context of the organization
		4.1	Understanding the organization and its context
4	Requirements for an energy management system		
4.1	General requirements	4.3	Defining the scope of the energy management system
		4.4	Energy management system
4.2	Responsibility of management	5.1	Governance and obligation
4.2.1	Top management	4.3	Defining the scope of the energy management system
		5.1	Governance and obligation
		7.1	Resources
4.2.2	Management representative	5.1	Governance and obligation
		5.3	Roles, responsibilities and authorities in the organization
4.3	Energy policy	5.2	Energy policy
4.4	Energy planning	6	Planning
4.4.1	General information	6.1	Measures to deal with risks and opportunities
4.4.2	Legal regulations and other requirements	4.2	Understanding the needs and expectations of interested parties
4.4.3	Energetic evaluation	6.3	Energetic evaluation
		6.1	Measures to deal with risks and opportunities
4.4.4	Energetic starting base	6.5	Energetic starting base
4.4.5	Energy performance indicators	6.4	Energy performance indicators
4.4.6	Strategic and operational energy goals and energy management action plans	6.2	Objectives, energy goals and planning to achieve them
4.5	Introduction and implementation	7	Support
		8	Operation
4.5.1	General information		

(New ■ Amendment ■)

ISO 50001:2011		ISO 50001:2018	
4.5.2	Skills, training and awareness	7.2	Competence
		7.3	Awareness
4.5.3	Communication	7.4	Communication
4.5.4	Documentation	7.5	Documented information
		7.5.1	General information
		7.5.2	Creating and updating
		7.5.3	Control of documented information
4.5.5	Sequence steering	8.1	Operational planning and control
4.5.6	Design	8.2	Design
4.5.7	Procurement of energy services, products, equipment and energy	8.3	Procurement
4.6	Review	9	Performance evaluation
4.6.1	Monitoring, measurement and analysis	9.1	Monitoring, measurement, analysis and evaluation of energy-related performance and of the EnMS
		6.6	Planning of energy data collection
4.6.2	Assessment of compliance with legal requirements and other provisions	9.1.2	Assessment of compliance with legal requirements and other provisions
4.6.3	Internal auditing of the energy management system	9.2	Internal Audit
4.6.4	Non-conformities, corrections, corrective and preventive actions	10.1	Non-conformity and corrective actions
4.6.5	Records controlling	7.5	Documented information (see Documentation above)
4.7	Management evaluation (Management review)	9.3	Management evaluation
		10.2	Continuous improvement

Further innovations of ISO 50001:2018 at a glance:

- Stronger demands on top management
- Systematic consideration of opportunities and risks
- Even greater focus on energy assessment: demonstrating continuous improvements in energy-related performance, in line with the Plan, Do, Check, Act (PDCA) cycle, by identifying key consumers, as well as establishing energy performance indicators (EnPIs) and energy baselines (EnBs)
- Determination and inclusion of all relevant internal and external parties and topics, as well as their requirements for the energy management system



- Defining energy policy and strategy
- Identifying responsible persons
- Recording and analyzing energy use
- Developing an action plan

- Prioritizing and implementing effective measures, energy policy, and strategy
- EnMS Sensitization and Training
- EnMS Documentation

- Check implemented measures
- Identify improvement measures

- Evaluation by top management
- Management review
- Correct identified vulnerabilities

What doesn't change?

The core concepts of ISO 50001 were not changed, only the identified weaknesses were eliminated. The new standard also supports organizations in continuously improving their energy performance in terms of energy efficiency, energy consumption, and energy use by implementing an energy management system (EnMS).

Preparation for the transition to ISO 50001:2018

Start to prepare in time for the transition process to ISO 50001:2018.

- Find out more about the requirements of ISO 50001:2018. If you are already certified according to ISO 50001:2011, the changes are of particular interest to you.
- Identify gaps in your management system and the areas where change is needed.
- Make sure that the relevant persons in your company are informed about the new requirements and are able to understand them.

Would you like to find out more about certification according to the new ISO 50001:2018 for efficient energy management? We support you in converting to the new standard. Contact us today!

Transition period to ISO 50001:2018

With the publication of ISO 50001:2018 in August 2018, the International Accreditation Forum (IAF) has set a transitional period of three years. Until then, both the old and the new standard are valid. Companies that are already ISO 50001:2011 certified are now required to change their certificate during this period. At the end of the transition period on August 20, 2021, all ISO 50001:2011 certificates will lose their validity. It is therefore advisable to plan and implement the

transition to ISO 50001:2018 at an early stage.

From February 21, 2020, 18 months after the publication of the new standard, audits (initial, surveillance and recertification audits) may no longer be carried out according to the old standard. This may mean that the transition period for some companies will be shorter than three years. For companies that do not yet have a certification for an energy management system, it is advisable to opt for the new standard immediately.



Request your individual offer for the certification of your EnMS according to ISO 50001 now!

Other services from which you benefit

You also have the opportunity to have further quality, environmental and safety management systems, e.g. **ISO 14001**, **ISO 45001** and **IATF** and their combinations, certified by us. Our portfolio includes more than 40 accreditations! In addition, the DEKRA Group provides comprehensive services to strengthen quality management:

- Evaluations for compliance with own rules, e.g. supplier requirements
- Training and education, e.g. quality management representative
- Personal certifications, e.g. of your quality manager
- Product testing and certification, e.g. EMV, CE, GS for electrical and electronic devices

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