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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 15587-2023

Replacing GB/T 15587-2008

**Energy management systems - Guidelines for a phased
implementation**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document replaces GB/T 15587-2008 "Guidelines for Energy Management of Industrial Enterprises". Compared with GB/T 15587-2008, except for structural adjustments

In addition to general and editorial changes, the main technical changes are as follows.

- a) Added the maturity model method for implementing energy management systems (see Chapter 4);
- b) Added descriptions of elements and levels (see Chapter 5);
- c) "Management", "Energy Planning and Design Management", "Energy Input Management", "Energy Processing and Conversion Management" and "Energy Distribution and Transmission" have been changed.

"Management", "Energy Usage Management", "Energy Measurement and Detection", "Energy Consumption Analysis" and "Energy Saving Technology Progress" (see Chapter 5, 2008

(Chapter 3~Chapter 11 of the annual edition).

This document is equivalent to ISO 50005:2021 "Guidelines for Phased Implementation of Energy Management Systems".

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

0.1 General

Because of the clear potential to improve energy performance, reduce energy costs, and

reduce greenhouse gas emissions, all types of organizations, especially

Especially for small and medium-sized enterprises, it is very important to implement energy management.

This document is intended to facilitate organizations, with appropriate efforts, to initiate and improve energy management through a systematic approach, taking into account their resource and environmental circumstances.

management practices to continuously promote energy performance improvements.

This document provides practical guidance for organizations to implement an energy management system step by step, for example using the organization's own capabilities. Energy management system operation

After implementation, it can be continued to be improved until it meets the requirements of the GB/T 23331 standard. Plan the step-by-step implementation of the energy management system to maximize

Minimize costs, avoid unnecessary work, and overcome implementation barriers faced by organizations with limited resources, such as small and medium-sized enterprises.

This document uses 12 core elements to explain the phased implementation of the energy management system based on GB/T 23331-2020.

This method provides an overview of the content of each element and describes four different maturity levels for each element. of this document

Appendix A provides best practices for using a step-by-step approach to continuously improve the energy management system. Organizations can select appropriate tools from best practices and find

To achieve the expected maturity of the energy management system in an effective and efficient manner. Elements and their corresponding maturity level goals depend on the organization's

goals and strategic direction. The energy management system can be integrated with other management systems and promote each other through a shared system structure.

In this document, both the definitions of "energy performance improvement" (see GB/T 23331-2020 for its definition) and "energy saving" are used. In this

The concept of "energy performance improvement" in the document covers the concept of "energy saving".

0.2 Advantages of phased implementation

Organizations may face challenges in successfully implementing an energy management system due to limited resources (such as knowledge and personnel capabilities). organize

The benefits of a phased implementation of an energy management system are numerous. The phased implementation described in this document is flexible and allows organizations to.

---Determine the scope and pace of its energy management system implementation based on resources and needs;

---Choose corresponding elements based on goals and maturity;

---Start from areas with high potential for energy performance improvement, high return on investment and no conflict with existing operations;

---Build a positive energy management culture;

---Achieve simple and/or low-cost energy performance improvements and associated energy cost savings, emission reductions and other benefits;

---Achieve initial results to enhance credibility, thereby ensuring commitments are fulfilled and supporting further development of the energy management system;

--- Lay a solid foundation for the existing energy management system to further meet the requirements of GB/T 23331.

Energy management system phased implementation guide

1 Scope

This document provides guidance for organizations adopting a phased approach to the implementation of an energy management system. The phased approach is designed to support and simplify all

types of organizations implementing energy management systems, especially small and medium-sized enterprises.

This document provides guidance on the use of 12 core elements and their 4 maturity levels for establishing, implementing, maintaining and improving energy management management system to improve energy performance.

Using a phased implementation approach, the organization can achieve a level of energy management appropriate to its objectives and establish a solid foundation through which

Meet the requirements of GB/T 23331-2020. This document is consistent with GB/T 23331-2020, but does not cover all its requirements.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations

For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to

this document.

GB/T 23331-2020 Energy management system requirements and usage guidelines (ISO 50001:2018, IDT)

3 Terms and definitions

The terms and definitions defined in GB/T 23331-2020 apply to this document.

4.1 Structure and Description of Maturity Model

Using a maturity model helps organizations assess the effectiveness of their current business processes in order to follow a systematic and orderly approach to implementation

Energy performance improvements. The maturity model that forms the basis of this document consists of 12 core elements of energy management, each with 4 components.

Doneness level.

The elements in this document refer to the chapters of GB/T 23331-2020 or its important provisions, such as. energy review.

The maturity model provides a simplified system framework for implementing and improving an energy management system to make it suitable using a phased approach.

the needs and capabilities of the organization. Maturity models provide guidelines that include specific practices, practices, and processes. First, organizations can use maturity

model to understand its current situation and establish initial improvement goals.

Subsequently, the energy management system can be implemented and improved in stages.

As organizations evolve from their respective starting points to the desired energy management system maturity, energy performance improves, such as the ability to reduce

Improved energy efficiency or reduced energy consumption at low energy costs. The 12 elements of the maturity model are described in Chapter 5.for features

For each level, the maturity criteria given by the model describe what needs to be achieved at that level, but do not provide specific "how" to achieve that level.

body method. Unless otherwise stated, these guidelines are for organizations. For clarity, elements are divided into topics to make it easier for users

Implement element guidelines.