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SINGAPORE STANDARD

Energy management systems – Requirements for bodies providing audit and certification of energy management systems





ISO 50003:2021, IDT (ICS 27.015; 03.120.20)

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National Foreword

This Singapore Standard was prepared by the Working Group on Energy Management Systems set up by the Technical Committee on Energy under the purview of the Environment and Resources Standards Committee.

This standard is an identical adoption of ISO 50003:2021, "Energy management systems — Requirements for bodies providing audit and certification of energy management systems", published by the International Organization for Standardization.

NOTE 1 – Reference to International/Overseas Standards are replaced by applicable Singapore Standards or Technical References.

NOTE 2 - Where numerical values are expressed as decimals, the comma is read as a full point.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

- Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "Mature Standards". Mature Standards will not be subject to further review, unless there are requests to review such standards.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

INTERNATIONAL STANDARD

ISO 50003

Second edition 2021-05

Energy management systems — Requirements for bodies providing audit and certification of energy management systems

Systèmes de management de l'énergie — Exigences pour les organismes procédant à l'audit et à la certification de systèmes de management de l'énergie



ISO 50003:2021(E)



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 301, *Energy management and energy savings*, in collaboration with the ISO Committee on conformity assessment (CASCO).

This second edition cancels and replaces the first edition (ISO 50003:2014), which has been technically revised. The main changes compared with the previous edition are as follows:

- the definitions have been updated to include the audit time, the duration of the audit and terms related to multi-site audits;
- the phrase "maintained documented information" has been used to represent procedures, work instructions or other forms of documents that provide the who, what, when, how or why information;
- the phrase "retained documented information" or "record of audit evidence" has been used to represent records that demonstrate or provide evidence of the execution of a requirement;
- the structure has been updated to align with ISO/IEC 17021-1:2015;
- the phrase "man-days" has been changed to "audit days";
- for audit day calculations, the number of energy types have been changed to those that comprise at least 80 % of total consumption;
- the weighted values for complexity have been modified;
- the sampling requirements for multi-site EnMS have been updated;
- the use of IAF MD documents as they relate to <u>Annexes A</u> and <u>B</u> has been clarified;
- the information on EnMS effective personnel has been clarified in A.2;
- <u>Tables A.3</u> and <u>A.4</u> have been modified to refer to audit time rather than the duration of the audit;
- the technical areas have been removed and requirements for technical competency added.

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Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is intended to be used in conjunction with ISO/IEC 17021-1:2015.

In addition to the requirements of ISO/IEC 17021-1:2015, this document specifies requirements for the specific technical area of energy management systems (EnMS) that are needed to ensure the effectiveness of the audit and certification, while supporting the efforts of the organization to continually improve energy performance including energy efficiency, energy use and energy consumption, and the EnMS. In particular, this document addresses the additional requirements necessary for the audit process. It covers the planning process, the initial certification audit, conducting the on-site audit, auditor competence, audit time and multi-site sampling. The structure of this document follows that of ISO/IEC 17021-1:2015. Annexes A and B are normative while Annexes C and D provide additional information to complement ISO/IEC 17021-1:2015.

This document deals with EnMS audits for certification purposes, but it does not deal with energy audits where the purpose is to establish a systematic analysis of energy consumption and energy use, and which are defined in ISO 50002.

In this document, the following verbal forms are used:

- "shall" indicates a requirement;
- "should" indicates a recommendation;
- "may" indicates a permission;
- "can" indicates a possibility or a capability.

In this document, references to the word "site" can be taken as either singular, meaning one permanent site (physical or virtual) or temporary site (physical or virtual), or can be plural, meaning more than one permanent site or temporary site, unless otherwise specified.

Energy management systems — Requirements for bodies providing audit and certification of energy management systems

1 Scope

This document specifies requirements for competence, consistency and impartiality in the auditing and certification of ISO 50001 energy management systems (EnMS) for bodies providing these services. In order to ensure the effectiveness of EnMS auditing, this document addresses the auditing process, the competence requirements for the personnel involved in the certification process for EnMS, the audit time and multi-site sampling.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 17021-1:2015, Conformity assessment — Requirements for bodies providing audit and certification of management systems — Part 1: Requirements

ISO 50001, Energy management systems — Requirements with guidance for use

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 17021-1:2015, ISO 50001 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1

audit evidence

documented information, statements of fact or other information, which are relevant to the audit criteria and verifiable

Note 1 to entry: Audit evidence can be qualitative or quantitative.

[SOURCE: ISO 9000:2015, 3.13.8, modified — The word "records" has been replaced by "documented information" and Note 1 to entry has been added.]

3.2

duration of the audit

part of *audit time* (3.3) spent conducting audit activities from the opening meeting to the closing meeting, inclusive

Note 1 to entry: Audit activities normally include:

- conducting the opening meeting;
- performing document review while conducting the audit;