

MAURITIAN
STANDARD

MS ISO
50009:2021

First Edition
2021-06-12

**Energy management systems —
Guidance for implementing a
common energy management
system in multiple organizations**

ICS: 03.100.70; 27.015



**Mauritius Standards Bureau
Moka**

National foreword

This Mauritian Standard is identical with the International Standard ISO 50009:2021, *Energy management systems — Guidance for implementing a common energy management system in multiple organizations*. It was adopted by the Mauritius Standards Bureau on the recommendation of the Energy Management Standards Committee. The standard was approved by the Standards Council on 27 May 2021 and notified in the Government Gazette on 21 June 2021. *

* General Notice No 825 of 2021



COPYRIGHT PROTECTED DOCUMENT

© MSB 2021

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without permission in writing from Mauritius Standards Bureau at the address below

*Mauritius Standards Bureau
Villa Road
Moka
Mauritius*

Telephone + (230) 433 3648
Fax + (230) 433 5051/ 433 5150
E-mail msb@intnet.mu

Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms, definitions and abbreviated terms	1
3.1 Terms related to organization.....	1
3.2 Terms related to management system.....	2
3.3 Terms related to requirement.....	3
3.4 Terms related to performance.....	5
3.5 Terms related to energy.....	7
3.6 Abbreviated terms.....	8
4 Context of the energy management group	9
4.1 Understanding the energy management group and its context.....	9
4.2 Understanding the needs and expectations of interested parties.....	9
4.2.1 General.....	9
4.2.2 Understanding the legal requirements and other requirements.....	10
4.3 Determining the scope of the common energy management system.....	10
4.3.1 Establishing the scope of the common energy management system.....	10
4.3.2 Changes to the composition of the energy management group.....	11
4.4 Energy management system.....	11
5 Leadership	12
5.1 Leadership and commitment.....	12
5.1.1 Top management of each constituent organization.....	12
5.1.2 Energy management committee.....	12
5.2 Common energy policy.....	14
5.3 Organizational roles, responsibilities and authorities.....	14
6 Planning	15
6.1 Actions to address risks and opportunities.....	15
6.2 Objectives, energy targets and planning to achieve them.....	15
6.3 Energy review.....	16
6.4 Energy performance indicators.....	17
6.5 Energy baseline.....	18
6.6 Planning for collection of energy data.....	18
7 Support	18
7.1 Resources.....	18
7.2 Competence.....	19
7.3 Awareness.....	19
7.4 Communication.....	19
7.5 Documented information.....	19
8 Operation	20
8.1 Operational planning and control.....	20
8.2 Design.....	20
8.3 Procurement.....	20
9 Performance evaluation	20
9.1 Monitoring, measurement, analysis and evaluation of energy performance and the EnMS.....	20
9.1.1 General.....	20
9.1.2 Actions to improve energy performance by constituent organizations.....	21
9.1.3 Evaluation of compliance with legal requirements and other requirements.....	21
9.2 Internal audit.....	21
9.3 Management review.....	22

10	Improvement	22
10.1	Nonconformity and corrective action.....	22
10.2	Continual improvement by constituent organizations.....	22
Annex A	(informative) Roles and responsibilities of the energy management committee	24
Annex B	(informative) Examples of energy management groups and common energy management systems	26
Bibliography	29

PREVIEW

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*.

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

ISO 50001 has been developed to enable a single organization to establish the systems and processes necessary to continually improve energy performance. In some situations, better energy management results are accomplished when several organizations work together to manage their energy collectively by forming an energy management group (EnMG). These situations can be driven by changes in technology and the spread of distributed energy resources.

EnMGs can include organizations which:

- operate in a geographical region, such as a city, district or a single industrial park;
- are in a single sector, such as food processing, rail transportation or universities;
- share a common customer (supply chain members), such as a supermarket chain or car manufacturer;
- are served by a common service supplier, such as a building landlord in a shopping mall;
- share one utility system (steam, electricity, etc.);
- form part of a franchise group, which can have (but does not need to have) a common supplier, such as a franchised fast food chain (with common supplier), or independent retail stores that operate under a cooperative banner;
- form part of a wider economic group, with financial links or common ownership;
- are different type of facilities owned by a municipal government (city office, library, hospital, etc.);
- share a common objective or energy target (either voluntarily set or mandated);
- have agreed to improve the same energy performance indicator (EnPI);
- are members of a trade association.

The approach within this document may also be used by a multi-site organization covered by a single or common management system.

Groups of organizations can derive energy management benefits beyond those realizable by a single organization through a joint or common approach to energy management by several organizations. In addition, opportunities can be found by focusing on the energy that flows across the boundaries of each constituent organization. This type of opportunity cannot be found in a single organization. Generally, the wider the boundary becomes, the more opportunities there are to improve energy performance and the amount of improvement.

The establishment of the EnMG can be driven by common energy needs, with the aim of facilitating synergies or sharing expertise to improve energy performance.

EXAMPLE 1 Large energy investments can be more efficient (one large boiler rather than several small).

EXAMPLE 2 Waste heat or local renewable energy supplies can be shared.

It can be helpful for the implementation of an energy management system (EnMS) for a group of organizations if at least one constituent organization has experience in energy management.

This document presents guidance on establishing a common EnMS modelled on ISO 50001 but focusing on the issues that arise when multiple organizations coordinate energy management. The presence of multiple organizations requires guidance with respect to management aspects of a common EnMS, such as:

- leadership;
- planning;

- support for common or joint actions;
- operations or execution of common or joint actions;
- knowledge transfer;
- sharing of best practice;
- performance evaluation;
- ensuring continual improvement.

One additional benefit of a common EnMS is the ability to share expertise, equipment, etc. among constituent organizations to reduce costs and promote system improvements.

EXAMPLE 3 In an isolated mining or agricultural region it can be costly to bring in expertise (e.g. pumping experts to reduce energy consumption in irrigated agriculture) or to hire specialized machinery. An EnMG is often able to share experts' fees, travel and accommodation costs.

PREVIEW

Energy management systems — Guidance for implementing a common energy management system in multiple organizations

1 Scope

This document gives guidelines for establishing, implementing, maintaining and improving a common energy management system (EnMS) for multiple organizations.

This document follows the general structure used in ISO 50001:2018.

2 Normative references

There are no normative references in this document.

3 Terms, definitions and abbreviated terms

For the purposes of this document, the following terms and definitions 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 Terms related to organization

3.1.1 organization

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.4.11)

Note 1 to entry: The concept of organization includes, but is not limited to, sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

Note 2 to entry: This document refers to “multiple organizations”. Multiple simply means “more than one” and these organizations need not all have the same form or legal structure.

[SOURCE: ISO 50001:2018, 3.1.1, modified — Note 2 to entry has been added.]

3.1.2

constituent organization

organization (3.1.1) within the *energy management group* (3.1.7) that implements a *common energy management system* (3.2.3)

3.1.3

top management

person or group of people who directs and controls a *constituent organization* (3.1.2) at the highest level

Note 1 to entry: Top management is empowered to delegate authority and provide resources within the constituent organization.

Note 2 to entry: If the scope of the *management system* (3.2.1) covers only part of a constituent organization, then top management refers to those who direct and control that part of the constituent organization.