INTERNATIONAL STANDARD

**ISO 50009**

First edition
2021-03

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

*Systèmes de management de l'énergie — Recommandations pour la mise en oeuvre d'un système commun de management de l'énergie dans les groupements d'organismes*



Reference number
ISO 50009:2021(E)



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Published in Switzerland

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# Foreword

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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).

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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.

# 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.