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Energy savings — Determination of energy savings in organizations

Économies d'énergie — Détermination des économies d'énergie dans les organismes



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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is Technical Committee ISO/TC 301, *Energy management and energy savings*.

Introduction

This International Standard describes approaches for determining energy savings based on one of the following two approaches:

- a) an organization-based approach, i.e. a change in the amount of energy consumed by the organization, as measured within the organizational boundaries;
- b) an EPIA-based approach, i.e. aggregating energy savings from energy performance improvement actions (EPIAs) measured within the organizational boundaries.

Both approaches compare energy consumption for a defined period of time, the energy consumption in a baseline period and a reporting period of equivalent length. Guidance is given on reconciliation between the two approaches.

This International Standard also considers the following in the context of energy savings:

- the use of primary and delivered energy;
- methods for normalizing energy consumption;
- methods for aggregating energy savings from different types of energy.

The flowchart in Annex A shows the process for determining energy savings using this International Standard.

This International Standard is designed to be broadly consistent with the overall framework for the determination and reporting of energy savings in projects, organizations and regions set out in ISO 17743, as well as with the principles and guidelines given in ISO 50015 on the measurement and verification of energy performance of organizations.