BS ISO 17743:2016

BSI Standards Publication

Energy savings — Definition of a methodological framework applicable to calculation and reporting on energy savings

Documents
Document Sharing Hub

Full document details: BS ISO 17743:2016

National foreword

This British Standard is the UK implementation of ISO 17743:2016.

The UK participation in its preparation was entrusted to Technical Committee SEM/1/2, Energy Efficiency Saving Calculations and Benchmarking.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2016. Published by BSI Standards Limited 2016

ISBN 978 0 580 81822 6

ICS 27.010

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 August 2016.

Amendments issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS ISO 17743:2016

INTERNATIONAL STANDARD

ISO 17743

First edition
2016-06-01

Energy savings — Definition of a methodological framework applicable to calculation and reporting on energy savings

Économies d'énergie — Définition d'un cadre méthodologique pour le calcul et la déclaration des économies d'énergies

Reference number
ISO 17743:2016(E)

Documents
Document Sharing Hub
© ISO 2016

COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

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 prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

© ISO 2016 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS ISO 17743:2016

Contents

Page

Foreword ..... **iv**

Introduction ..... **v**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Energy savings and methods for determination **3**
- 4.1 General 3
- 4.2 Principles 4
- 4.3 Energy savings 4
- 4.4 System boundary(s) 5
- 4.5 Energy baseline determination 5
- 4.6 Unadjusted energy savings and adjusted energy savings 7
  - 4.6.1 General 7
  - 4.6.2 Use of adjustment(s) 9
  - 4.6.3 Types of adjustments 10

5 Reporting energy savings **11**
- 5.1 General information on reporting energy savings 11
- 5.2 Communication of energy saving results 12

Annex A (informative) **Energy savings for different levels of analyses** **13**

Annex B (informative) **Example of adjustment used in different energy saving calculation methods** **15**

Bibliography **16**

© ISO 2016 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 17743:2016

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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 257, *Evaluation of energy savings*.

© ISO 2016 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS ISO 17743:2016

Introduction

This International Standard aims to provide standards used to determine the energy savings covering regions, cities, organizations and projects.

This International Standard provides a framework with definitions, types of information used to evaluate the energy savings in order to enable consistency for the standards developed by ISO/TC 257.

Figure 1 illustrates the relationship between the different working groups of ISO/TC 257, as well as ISO 50015, developed by ISO/TC 242 which is about energy management.

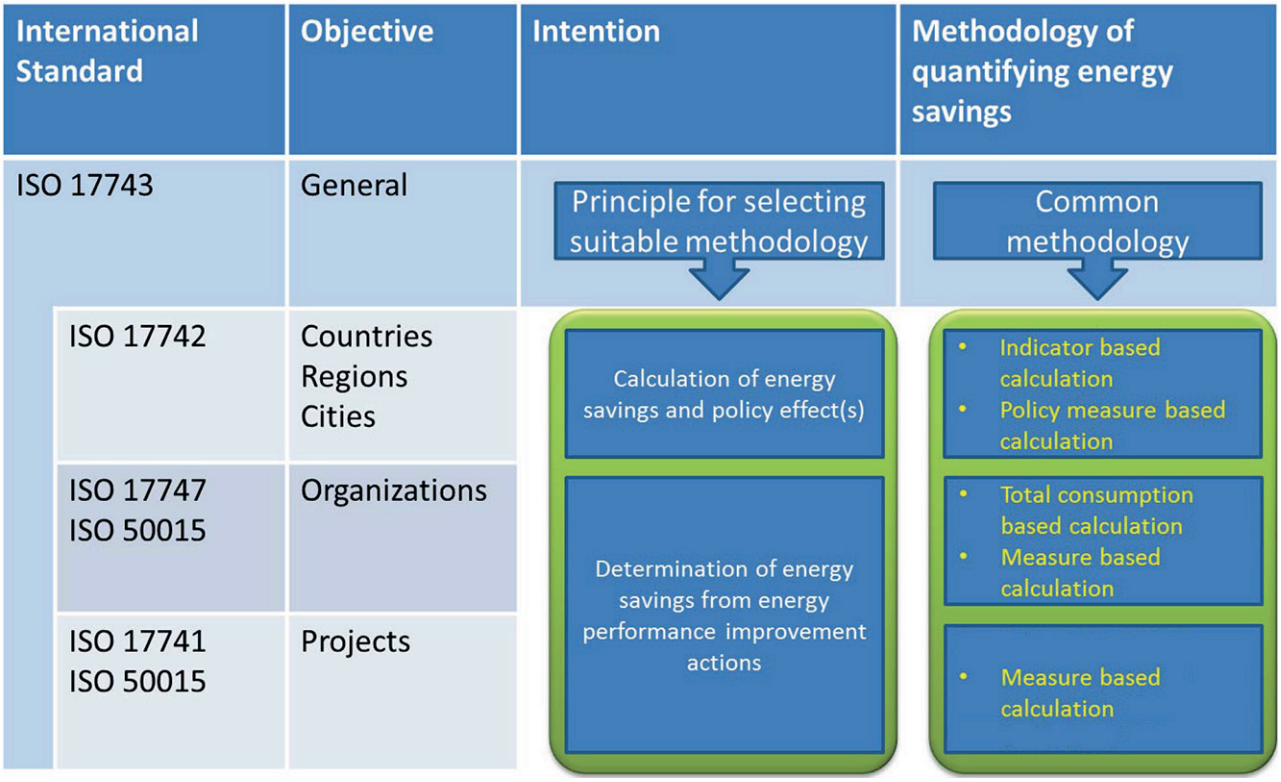

Figure 1 — Work programme of ISO TC 257

This International Standard may be used by any stakeholder (policy maker, decision maker, company, organization, NGOs, etc.) that aims to determine energy savings.

© ISO 2016 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 17743:2016

Documents
Document Sharing Hub

INTERNATIONAL STANDARD ISO 17743:2016(E)

Energy savings — Definition of a methodological framework applicable to calculation and reporting on energy savings

1 Scope

This International Standard establishes a methodological framework that applies to the calculation and reporting of energy savings from existing (implemented) and prospective measures and actions which intend to save energy. This framework standard will be applicable to other standards in the field of energy saving determination.

This International Standard addresses the following in the context of energy savings:

— terminology;

— definition of the system boundaries;

— principles for the determination of a baseline;

— principles for statistical indicator-based methods;

— data used;

— principles for reporting.

The development of the methodology for measurement and verification of the energy savings is not in the scope of this International Standard.

The methodology of construction of the scenarios for future energy saving measures and actions is not in the scope of this International Standard.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
baseline period
specific period of time before the implementation of *energy performance improvement action* (3.7) selected for the comparison with the *reporting period* (3.11) and the calculation of *energy savings* (3.9)

[SOURCE: ISO/IEC 13273-1:2015, 3.3.8.1, modified — "energy performance" replaced by "energy savings" and deleted "and of energy performance improvement action"]

3.2
energy
capacity of a system to produce external activity or to perform work

Note 1 to entry: Commonly, the term energy is used for electricity, fuel, steam, heat, compressed air and other like media.

Note 2 to entry: Energy is commonly expressed as a scalar quantity.

© ISO 2016 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 17743:2016