

## Energy audits - Part 1: General requirements

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## EESTI STANDARDI EESSÕNA

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 03.120.10, 27.010

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ICS 03.120.10; 27.010

English version

## Energy audits - Part 1: General requirements

Audits énergétiques - Partie 1: Exigences générales

Energieaudits - Teil 1: Allgemeine Anforderungen

This European Standard was approved by CEN on 16 June 2012.

CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN and CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN and CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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## Foreword

This document (EN 16247-1:2012) has been prepared by Technical Committee CEN/CLC/JWG 1 “Energy audits”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2013, and conflicting national standards shall be withdrawn at the latest by January 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This part covers the general requirements common to all energy audits. There are three further parts of EN 16247, currently under development, which will provide additional material to Part 1 for three specific sectors.

The other parts of EN 16247 will be:

- *Energy audits — Part 2: Buildings;*
- *Energy audits — Part 3: Processes;*
- *Energy audits — Part 4: Transport.*

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

An energy audit is an important step for an organisation, whatever its size or type, wanting to improve its energy efficiency, reduce energy consumption and bring related environmental benefits.

This European Standard defines the attributes of a good quality energy audit. It states the requirements for energy audits and corresponding obligations within the energy auditing process. It recognises that there are differences in approach to energy auditing in terms of scope, aims and thoroughness, but seeks to harmonise common aspects of energy auditing in order to bring more clarity and transparency to the market for energy auditing services. The energy audit process is presented as a simple chronological sequence; this does not preclude however repeated iterations of certain steps.

This standard applies to commercial, industrial, residential and public-sector organisations, excluding individual private dwellings.

This standard does not deal with the energy audit programme/scheme properties (such as programme administration, training of energy auditors, quality control issues, energy auditors' tools, etc.).

## 1 Scope

This European standard specifies the requirements, common methodology and deliverables for energy audits. It applies to all forms of establishments and organisations, all forms of energy and uses of energy, excluding individual private dwellings.

This European standard covers the general requirements common to all energy audits. Specific energy audit requirements will complete the general requirements in separate parts dedicated to energy audits for buildings, industrial processes and transportation.

## 2 Normative references

Not applicable.

## 3 Terms and definitions

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

### 3.1

#### **energy audit**

systematic inspection and analysis of energy use and energy consumption of a site, building, system or organisation with the objective of identifying energy flows and the potential for energy efficiency improvements and reporting them

### 3.2

#### **energy auditor**

individual, group of people or body carrying out an energy audit

Note 1 to entry: A group or body can include subcontractors.

### 3.3

#### **adjustment factor**

quantifiable parameter affecting energy consumption

EXAMPLE Weather conditions, behaviour related parameters (indoor temperature, light level) working hours, production throughput, etc.

### 3.4

#### **audited object**

building, equipment, system, process, vehicle or service which is the subject of the energy audit

### 3.5

#### **organisation**

person or body who owns, operates, uses or manages the audited object(s)

### 3.6

#### **energy consumption**

quantity of energy applied

[SOURCE: EN ISO 50001:2011, 3.7]

### 3.7

#### **energy efficiency**

ratio or other quantitative relationship between an output of performance, service, goods or energy, and an input of energy

EXAMPLE Conversion efficiency; energy required/energy used; output/input; theoretical energy used to operate/energy used to operate.