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This European Standard was approved by CEN on 27 May 2014.

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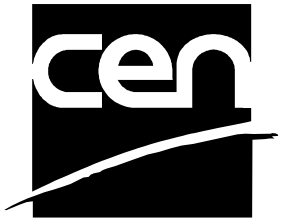

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Contents

Page

Foreword ... 3
0 Introduction ... 4
1 Scope ... 5
2 Normative references ... 5
3 Terms and definitions ... 5
4 Quality requirements ... 6
4.1 Energy auditor ... 6
4.2 Energy audit process ... 7
5 Elements of the energy audit process ... 7
5.1 Preliminary contact ... 7
5.2 Start-up meeting ... 7
5.3 Collecting data ... 7
5.3.1 General ... 7
5.3.2 Information request ... 8
5.3.3 Review of the available data ... 8
5.3.4 Preliminary data analysis ... 8
5.4 Field work ... 9
5.4.1 Aim of field work ... 9
5.4.2 Conduct ... 9
5.4.3 Site visits ... 9
5.5 Analysis ... 9
5.5.1 General ... 9
5.5.2 Energy balance and breakdown ... 10
5.5.3 Energy performance indicators ... 10
5.5.4 Identify and evaluate energy efficiency improvement opportunities ... 10
5.6 Report ... 11
5.6.1 General ... 11
5.6.2 Content of report ... 11
5.7 Final meeting ... 12
Annex A (informative) Example of energy audit process ... 13
Annex B (informative) Example list of data to be collected ... 14
Annex C (informative) Quality of data measurement plan ... 22
Bibliography ... 24

Foreword

This document (EN 16247-3:2014) 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of an identical text or by endorsement, at the latest by November 2014 and conflicting national standards shall be withdrawn at the latest by November 2014.

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 provides additional material to Part 1 for the Process sector and should be used in conjunction with Part 1.

This European Standard is part of the series EN 16247 “*Energy audits*” which comprises the following:

— Part 1 General requirement;

— Part 2 Buildings;

— Part 3 Processes;

— Part 4 Transport;

— Part 5 Competence of energy auditors.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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.

0 Introduction

An energy audit can help an organization to identify opportunities to improve energy efficiency. It can be part of a site wide energy management system.

There are various sectors with important differences in processes and utilities. It should be emphasized that there are many types of processes in industry and commerce. In general, energy is used:

— directly by a process, e.g. furnaces, direct fired dryers, etc;

— indirectly by a process (e.g. heat exchange, distillation, extrusion, etc.) including the specific conditions of production (e.g. start-up, shut-down, product change over, cleaning, maintenance, laboratory and product transfer);

— utility processes (e.g. motor driven systems (fans, pumps, motors, compressors, etc.), steam, hot water), including on site power plants;

— other processes (e.g. sterilization in hospitals, fume cupboards, laboratories etc.).

This standard defines the attributes of a good quality energy audit on a site in addition to EN 16247-1, which gives the general requirements for energy audits.

1 Scope

This European standard specifies the requirements, methodology and deliverables of an energy audit within a process. These consist of:

a) organizing and conducting an energy audit;

b) analysing the data from the energy audit;

c) reporting and documenting the energy audit findings.

This part of the standard applies to sites where the energy use is due to process. It shall be used in conjunction with and is supplementary to EN 16247-1, Energy audits — Part 1: General requirements. It provides additional requirements to EN 16247-1 and shall be applied simultaneously.

A process could include one or more production lines, offices, laboratories, research centers, packaging and warehouse sections with specific operational conditions and site transportation. An energy audit could include the whole site or part of a site.

If buildings are included in the scope of the energy audit, the energy auditor may choose to apply EN 16247-2, *Energy Audits — Part 2: Buildings*. If on-site transport on a site is included in the scope of the energy audit, the energy auditor may choose to apply EN 16247-4, Energy audits — Part 4: Transport.

NOTE The decision to apply Parts 2 and 4 could be made during the preliminary contact, see 5.1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 16247-1, *Energy audits - Part 1: General requirements*