



SLOVENSKI STANDARD
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Energy efficiency services - Definitions and essential requirements

Energieeffizienz-Dienstleistungen - Definitionen und wesentliche Anforderungen

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ICS:

01.040.03	Storitve. Organizacija podjetja, vodenje in kakovost. Uprava. Transport. Sociologija. (Slovarji)	Services. Company organization, management and quality. Administration. Transport. Sociology. (Vocabularies)
03.080.10	Industrijske storitve	Industrial services
91.120.10	Toplotna izolacija stavb	Thermal insulation

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English Version

Energy efficiency services - Definitions and essential requirements

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/SS F23.

If this draft becomes a European Standard, CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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Foreword

This document (prEN 15900:2009) has been prepared by Technical Committee CEN/BT/TF 189 “Energy Management and related services General requirements and qualification procedures”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

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Introduction

Energy efficiency services play a very important role in the control of energy consumption and the improvement of energy efficiency.

Improved energy efficiency can be achieved by increasing the availability of and demand for energy efficiency services.

This standard may be used as a reference document for appropriate qualification, accreditation and/or certification schemes for providers of energy services, as mentioned in article 8 of Directive 2006/32/CE.

This standard is written to provide guidance to both customers and providers of energy efficiency services and to contribute to the development of a market for energy efficiency services.

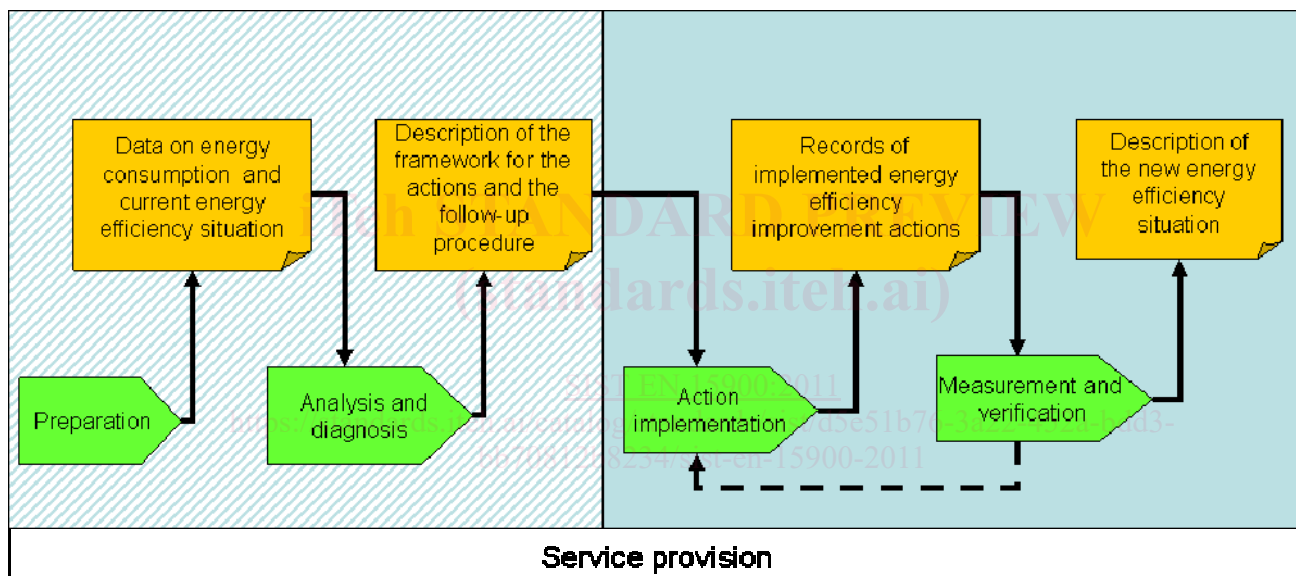


Figure 1 — Typical scheme of an energy efficiency improvement service provision process

The service provider and the customer should strive to implement a continuous improvement in energy efficiency.

1 Scope

This standard specifies the definitions and minimum requirements for an energy efficiency service.

2 Normative references

This standard does not include normative references at present.

3 Terms and definitions

For the purposes of this European Standard the following terms and definitions apply

3.1 baseline

energy consumption calculated or measured over a period of time normalized by adjustment factors

3.2 energy consumption

amount of energy used

NOTE energy consumption is a widely used term, although technically incorrect, because energy is transformed or converted but cannot be consumed

3.3 energy efficiency

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

3.4 energy efficiency improvement:

increase in energy efficiency

3.5 adjustment factor

quantifiable parameter affecting energy consumption

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

3.6 guarantee of energy efficiency improvement

commitment of the service provider to achieve the degree of expected energy efficiency improvement.

NOTE The commitment is generally expressed through a compensation for customer in case of lower performances

4 Requirements of energy efficiency services

4.1 General requirements

An energy efficiency service shall be designed to achieve an improvement in energy efficiency and meet other agreed performance criteria.

The energy efficiency service shall be based on collected data related to energy consumption.

The energy efficiency service shall include identification, selection and implementation of actions (4.2) as well as verification (4.3).

A documented description of the proposed or agreed framework for the actions and the follow-up procedure (4.4) shall be provided.

The improvement of energy efficiency shall be measured and verified over a contractually defined period of time through contractually agreed methods.

NOTE A typical scheme for an energy efficiency service provision process is given in **annex A**

prEN 15900:2009 (E)**4.2 Energy efficiency improvement actions**

Energy efficiency improvement actions shall include one or more of the following

- a) actions to reduce the energy need;

EXAMPLE installing building insulation, reduction of leakage of compressed air

- b) replacement, modification or addition of equipment;

EXAMPLE combined heat and power generation, high efficiency boilers, variable speed motors, energy efficient lighting

- c) more efficient operation;

EXAMPLE building automation, raw material routing, control parameter adjustment

- d) improved maintenance;

EXAMPLE maintenance planning, instruction of the operation and maintenance staff

- e) deployment of behavioural change programmes;

EXAMPLE training, advertising

- f) implementation of an energy management system.

EXAMPLE system compliant with prEN16001

4.3 Verification of energy efficiency improvement

Verification of energy efficiency improvement shall include, as a minimum, the following steps:

- a) definition of the baseline with its related adjustment factors;
- b) definition of procedures (including contractually agreed calculation or estimation methods) that will ensure valid comparisons of energy consumption period to period;
- c) development and implementation of the measurement and verification plan for the assessment of the actual energy efficiency improvement;
- d) reporting to the customer at agreed intervals. The report shall include details of achieved energy efficiency improvement and if applicable comparison with contractually agreed levels.

4.4 Description of the framework for the actions and the follow-up procedure

The description shall include:

- a) the baseline definition;
- b) the proposed or agreed actions;
- c) the energy efficiency improvement expected including a statement on whether a guarantee of energy efficiency improvement is provided or not; and if provided the guaranteed level;
- d) the other proposed or agreed performance criteria;
- e) the commitment and responsibilities of all parties;

EXAMPLE operation and maintenance; information on changes in adjustment factors

- f) the verification method;
- g) the timeframe of the above items.

The energy efficiency improvement shall be characterized by the reduction in energy consumption in comparison with the baseline.

The reduction in energy consumption shall be determined by measuring and/or estimating consumption, before and after the implementation of the actions, taking account all agreed adjustment factors.

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