Draft for Public Comment

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Responsible committee: SEM/1 Energy Management

Interested committees:

Title: Draft BS EN 17669 Energy Performance Contracting - Minimum requirements.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx

1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex **(e.g. 3.1)**	Paragraph/Figure/ Table/Note	**Type of comment**	**Commend (justification for change) by the MB**	**Proposed change by the MB**	**Secretariat observations on each comment submitted**
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 17669

May 2021

ICS 27.015

English version

Energy Performance Contracting - Minimum requirements

Contrat de performance énergétique - Exigences minimales

Energiespar-Contracting - Mindestanforderungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/CLC/JTC 14.

If this draft becomes a European Standard, 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.

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European foreword

This document (prEN 17669:2021) has been prepared by Technical Committee CEN/CLC/JTC 14 “Energy management and energy efficiency in the framework of energy transition”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

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Introduction

Energy efficiency improvement is one of the pillars of the energy transition. It is considered as one of the most cost-effective ways of addressing the growing demand for energy, climate change mitigation, energy security and increased competitiveness.

Directive 2012/27/EU on energy efficiency defines Energy Performance Contracting (EPC) as "contractual agreement between the beneficiary and the provider of an energy efficiency measure verified and monitored during the whole term of the contract, where investment (work supply or service) in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criteria, such as financial savings".

The new energy efficiency directive (EU) 2018/2002 highlights that reaching an ambitious energy efficiency target requires barriers to be removed to facilitate investment in energy efficiency measures. One step in that direction is the clarification provided by Eurostat on how to record energy performance contracts in national accounts, which removes uncertainties and facilitates the use of such contracts.

The lack of broadly accepted best practices or guidelines for EPC demands the development of a standard defining the minimum requirements of the contractual agreement that matches the needs of:

- Policy Makers to provide tools for quality, transparency and effectiveness in Energy Performance Improvement Actions (EPIA);
- Building owners, public or private organizations and energy service providers to adopt a contractual framework for energy services that provides clear and transparent risk allocation and guaranteed energy efficiency improvement and other agreed energy performance criteria;
- Financial institution and banks to have a reference contractual framework between user and energy service provider that clearly define value generation (including multiple benefits or co-benefits of energy efficiency) and risks allocation;
- Property valuators to help assessing the value of the asset in relation to its energy efficiency and sustainability performance for the project lifetime.

The standard addresses the multiple domains of the contractual agreement: technical, financial, legal and provides a common framework of methods to integrate the minimum requirements of energy efficiency improvement

Because EPC usually has an impact on the risk allocation between the energy service provider, the financial institution and the beneficiary of the energy efficiency improvement services, the requirements have implication on the economic evaluation, legal, fiscal and accounting procedures for both public and private organizations.

This document can be used in conjunction with the following

- management system standards,
- energy management standard,
- risk management standards,
- asset management standards,
- underwriting procedures of financial institutions (European Bank Authority – EBA),
- international accounting standards (International Financial Reporting Standards - IFRS);

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- Eurostat statistical treatment of EPC,
- Environmental Social and Governance (ESG) requirements, or
- Action plan for Sustainable Finance.

The production of renewable energy on site does not necessarily achieve energy efficiency improvement. Even if energy consumption across the boundary decreases, there may be no measurable improvement in energy efficiency related to the energy use as a result of the change.

However, renewable energy production may be a component of an EPC and is therefore considered to be in the scope of this document when delivered in combination with an EPIA.

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1 Scope

This document defines the minimum requirements for an energy performance contracting (EPC). The energy performance improvement actions (EPIAs) are meant to achieve a guaranteed level of energy efficiency improvement and other agreed energy performance related criteria irrespective of the quantity, use, or types of energy consumed.

This document is intended to be applied to EPIA(s) on existing assets.

The requirements are set in order to provide:

- transparency throughout the whole process that will result in the Energy Performance Contract,
- cost effectiveness in relation to the benefits generated by the energy efficiency measure,
- a quality assurance, risk mitigation and risk allocation toolkit,
- material information necessary for financial and technical calculations for both beneficiary and energy service provider.

The document is applicable to energy service providers and beneficiaries regardless of their type, size, complexity or geographical location.

This document may be used by financial institutions and other stakeholders of the process.

NOTE This document can be used in conjunction with Eurostat and International Accounting Standards Board (IASB) guidance.

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
energy consumption
quantity of energy applied

[SOURCE: EN ISO 50001:2018]

3.2
energy efficiency
ratio or other quantitative relationship between an output of performance, service, goods, commodities, or energy, and an input of energy

EXAMPLE Conversion efficiency, energy required/energy consumed

Note 1 to entry: Both input and output should be clearly specified in terms of quantity and quality and be measureable

[SOURCE: EN ISO 50001:2018]

3.3
energy performance
measurable result(s) related to energy efficiency, energy use, and energy consumption

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Note 1 to entry: Energy performance can be measured against the organization's objectives, energy targets and other energy performance requirements

[SOURCE: EN ISO 50001:2018]

3.4
energy performance contracting
EPC
contractual agreement between the beneficiary and the provider of an energy efficiency measure verified and monitored during the whole term of the contract, where investment in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion

[SOURCE: Directive 2012/27/EU]

3.5
energy performance contracting boundary
physical, geographical or organizational limit as agreed between the beneficiary and the energy service provider

EXAMPLE Industrial plant, building(s) or their parts (a production line, a group of processes, a boiler, air compressing equipment, lighting system, building envelope, building HVAC system, vehicles of a fleet of vehicles)

3.6
energy performance contracting scope:
set of facilities and/or activities that the EPC addresses

Note 1 to entry: the scope can include several boundaries

3.7
energy performance improvement action (EPIA)
action or measure or group of actions or measures, implemented or planned, intended to achieve energy performance improvement through technological, managerial or operational, behavioral, economical, or other changes

[SOURCE: ISO 50015:2014, 3.5, and ISO 50046:2019, 3.11]

EXAMPLE A non exhaustive list of EPIAs is the following:

- measures in order to reduce the energy consumption;
- replacement, modification or addition of equipment;
- more efficient operation;
- continuous optimization of operation of technical installations;
- improved maintenance;
- deployment of behavioral change programs;
- implementation of an energy management system

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Note 1 to entry: for the purpose of this document the term "energy performance improvement action/measure" is equivalent to "energy efficiency improvement action/measure" since the only kind of performance that can be normalized, as requested by this standard is the energy efficiency

3.8
energy service provider
a natural or legal person who delivers energy services or other energy efficiency improvement measures in a final customer's facility or premises

Note 1 to entry: an ESCO (Energy Service Company) is a type of energy service provider

3.9
energy use
application of energy

EXAMPLE Ventilation; lighting; heating; cooling; transportation; data storage; production process

Note 1 to entry: energy use is sometimes referred to as 'energy end-use'

[SOURCE: EN ISO 50001:2018]

3.10
materiality
importance or significance of financial and non financial aspects of an organization's activity for stakeholders evaluation of its development, performance, position and impact

[SOURCE: ISO CD 32210 - 2020-08-14 Framework for sustainable finance: Principles and Guidance - ISO TC 322/WG 1]

EXAMPLE Example of material information, intended as significant information both quantitative and qualitative related to the EPC and EPIA(s) affecting a decision from the beneficiary (stakeholder), the energy service provider and the third interested party, are, as non exhaustive list, the following:

- relevance of Energy Performance Indicator (EnPI) adopted to measure energy efficiency improvement;
- baseline measured EnPI leading to the evaluation of guaranteed energy efficiency improvement, environmental impact reduction and economic saving;
- measured EnPI measured after the implementation of the EPIA(s);
- adjustment factors to determine energy efficiency improvement;
- investment (capex), operational costs (opex), emerging costs (stranded assets) and measurable benefits that have an economic value;
- any information that if omitted, misstated or obscured could reasonably be expected to influence the decision of the beneficiary, the energy service provider or a third party

4 Scope and boundaries of the EPC

The EPC shall:

- be appropriate and cost effectiveness in relation to the benefits generated by the EPIA;
- provide a risk mitigation and risk allocation framework both in technical and monetary terms;

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- deliver material information for the due diligence and underwriting procedures of financial institutions to support financeability;
- provide material information for statistical treatment and financial accounting;
- define reporting guidelines for financial, non financial, sustainability disclosure and property valuators;
- meet the beneficiary energy performance requirements related to the expected level of service such as comfort, level of maintenance, production output, etc.

The scope and boundaries of the EPC shall be defined.

The scope of the EPC shall be described in an exhaustive and unequivocal way.

The boundaries within which the EPIAs shall be implemented shall be described including the energy types for each energy use and the detail of each individual action.

The energy efficiency improvement achieved by the EPC shall be demonstrated through measurement and verification.

5 EPC's Energy Targets

The EPC shall define the guaranteed energy targets to be achieved during the contract duration. Energy targets shall be measurable and associated to relevant EnPIs. Each EnPI should be related to a contractually agreed baseline.

Energy targets shall be expressed in the same units as the relevant EnPIs defined in the baseline. The change of EnPI value can be expressed as absolute values or percentage.

The energy targets shall include the level of service and/or comfort to be achieved.

The EPC can also include other objectives such as:

- environmental: CO_2 or other emissions reduction objectives;
- costs reduction;
- safety measures improvement;
- improvement of earthquake building code.

EPC investments, operational costs and economic profit for the energy service provider are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed level of energy efficiency improvement or other agreed energy performance criterion or financial savings.

NOTE Additional objectives set in the EPC and that do not lead to savings directly connected to energy efficiency savings are generally paid in relation to other criteria defined in the contractual agreement.

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