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## Allmänna metoder för bedömning av möjligheten att reparera, återanvända och uppgradera energirelaterade produkter

*General methods for the assessment of the ability to repair, reuse and upgrade energy related products*

Som svensk standard gäller europastandarden EN 45554:2020. Den svenska standarden innehåller den officiella engelska språkversionen av EN 45554:2020.

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ICS 13.030.50

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Denna standard är fastställd av SEK Svensk Elstandard, som också kan lämna upplysningar om **sakinnehållet** i standarden.  
Postadress: Box 1284, 164 29 KISTA  
Telefon: 08 - 444 14 00.  
E-post: [sek@elstandard.se](mailto:sek@elstandard.se). Internet: [www.elstandard.se](http://www.elstandard.se)

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### *Standarder underlättar utvecklingen och höjer elsäkerheten*

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

### *SEK är Sveriges röst i standardiseringsarbetet inom elområdet*

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

### *Stora delar av arbetet sker internationellt*

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

### *Var med och påverka!*

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

### **SEK Svensk Elstandard**

Box 1284  
164 29 Kista  
Tel 08-444 14 00  
[www.elstandard.se](http://www.elstandard.se)

ICS 13.030.50

English Version

## General methods for the assessment of the ability to repair, reuse and upgrade energy-related products

Méthodes générales pour l'évaluation de la capacité de réparation, réutilisation et amélioration des produits liés à l'énergie

Allgemeine Verfahren zur Bewertung der Reparatur-, Wiederverwendbarkeits- und Upgrade-Fähigkeit energieverbrauchsrelevanter Produkte

This European Standard was approved by CENELEC on 2 December 2019. 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.

CEN and CENELEC members are the national standards bodies and national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom



European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 45554:2020) has been prepared by CEN/CLC/JTC 10 “*Energy-related products - Material Efficiency Aspects for Ecodesign*”.

The following dates are fixed:

- latest date by which this document has to be implemented (dop) 2020-12-02  
at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2022-12-02  
this document have to be withdrawn

The dual logo CEN-CENELEC standardization deliverables, in the numerical range of 45550 – 45559, have been developed under standardization request M/543 of the European Commission and are intended to potentially apply to any product within the scope of the Directive 2009/125/EC concerning energy-related products (ErP).

Topics covered in the above standardization request are linked to the following material efficiency aspects:

- a) Extending product lifetime
- b) Ability to reuse components or recycle materials from products at end-of-life
- c) Use of reused components and/or recycled materials in products

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

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association

These standards are general in nature and describe or define fundamental principles, concepts, terminology or technical characteristics. They can be cited together with other product publications, e.g. developed by product technical committees.

This document is intended to be used by technical committees when producing horizontal, generic, and product-specific, or product group publications.

NOTE CEN-CENELEC JTC 10 uses either CEN or CENELEC foreword templates, as appropriate. The template for the current document is correct at the time of publication.

## Introduction

In this document, common elements for the ability of an ErP to be repaired, reused or upgraded, such as an evaluation of the ability of parts to be disassembled, are addressed at part and product levels.

This document is especially linked to the generic documents on "Durability" and "Ability of ErPs to be remanufactured", EN 45552, "General method for the assessment of the durability of energy-related products", and EN 45553, "General method for the assessment of the ability to remanufacture energy-related products", [1], respectively.

## 1 Scope

This document provides generic methods to assess the following aspects:

1. the ability of products to be repaired
2. the ability of products, or parts thereof, to be reused
3. the ability of products to be upgraded

For the purposes of this document, “product” refers to “Energy-related Product (ErP)”.

This document includes generic criteria and methods relevant for assessing the ability of certain parts to be removed from products for the purpose of repair, reuse or upgrade.

NOTE The ability to of a product to be remanufactured is covered in prEN 45553:2018.

The methods in this document include product-related and support-related criteria when the product is placed on the market, taking into account knowledge of parts that are likely to fail, need replacing, or have reuse potential.

The decision whether a product should be repaired, reused or upgraded, is dependent on a range of factors such as health and safety, as well as economic, legal and environmental aspects. However, the question of whether it is reasonable to repair, reuse or upgrade products is outside of the scope of this document.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 45552:—,<sup>1</sup> *General method for the assessment of the durability of energy-related products*

EN 45559, *Methods for providing information relating to material efficiency aspects of energy-related products*

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<sup>1</sup> Under preparation. Stage at the time of publication: prEN 45552:2018