

English Version

**Material efficiency - Household and similar electrical appliances -  
Assessment of applicability of EN 4555X**

Efficiency matérielle - Appareils électriques ménagers et  
analogues - Évaluation de l'applicabilité de las normes EN  
4555X

Materialeffizienz - Elektrische Geräte für den Hausgebrauch  
und ähnliche Zwecke - Bewertung der Anwendbarkeit von  
EN 4555X

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

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## European foreword

This document (CLC/TR 50727:2022) has been prepared by CLC/TC 59X "Performance of household and similar electrical appliances".

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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

## Introduction

Material efficiency is one building block of a circular economy. To increase the material efficiency of products, different aspects like durability, reparability, reusability, remanufacturability, recyclability and recycled materials content need to be assessed. The horizontal standards of the EN 4555X series provide general methodologies to assess different material efficiency aspects of energy-related products. These horizontal documents need to be adapted in order to be applicable for specific products / product groups.

## 1 Scope

This document summarizes the observations of CLC/TC 59X on the EN 4555X series of standards in view to applying them to household and similar electrical appliances.

This document assesses the applicability of EN 45552 – EN 45559 to household and similar electrical appliances that are in the scope of Ecodesign (2009/125/EC).

NOTE EN 45552, EN 45553, EN 45554, EN 45555, EN 45556, EN 45557, EN 45558 and EN 45559 are referred to as the EN 4555X series of standards to increase readability.

This document highlights where further work on metrics and measurement methodologies is necessary or may be needed for household and similar electrical appliances beyond each of the EN 4555X series of standards listed in Clause 5.

## 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.

CLC/TR 45550, *Definitions related to material efficiency*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in CLC/TR 45550 apply. In the absence of a definition in CLC/TR 45550, the user of this document may refer to the following sources:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

## 4 General considerations

The considerations on applying the EN 4555X series of standards to household and similar electrical appliances were developed using the following methodology:

- The respective standards were checked for normative requirements;
- The normative requirements were discussed in light of applicability to household and similar electrical appliances;
- The need for generic adaptation and product specific adaptation were identified;
- For EN 45554:2020, reparability were taken as a proxy for the considerations presented in 5.3. These considerations apply to reusability and upgradeability, too.

EXAMPLE:

EN 45554	EN 45554 - General methods for the assessment of the ability to repair, reuse and upgrade energy-related products	Applicability	Normative/ Informativ	Generic Adaptation	Product specific adaptation
§5	Identification of parts to be assessed				
§5.1	General conditions				
p. 8	To assess the ability of a product to be repaired, reused or upgraded, the user of this document shall establish a list of priority parts. This shall be based on available information or criteria as defined in Subclause 5.2.	yes	normative	Maybe certain common parts for all household and similar appliances	Add product specific priority parts
p. 8	In order to identify priority parts, all parts shall be considered taking into account the analysis of EN 45552. The assessment described in Clauses 6 and 7 applies to priority parts only.	yes	normative		