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General method for assessing the proportion of recycled material content in energy-related products

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.04.2020.	Date of Availability of the European standard is 29.04.2020.
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English version

## General method for assessing the proportion of recycled material content in energy-related products

Méthode générale pour l'évaluation du contenu en matériaux recyclés des produits liés à l'énergie

Allgemeines Verfahren zur Bewertung des Anteils an recyceltem Material von energieverbrauchsrelevanten Produkten

This European Standard was approved by CEN on 13 February 2020.

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.



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## European foreword

This document (EN 45557:2020) has been prepared by Technical Committee CEN/CLC/JTC 10 “Energy-related products – Material Efficiency Aspects for Ecodesign”, the secretariat of which is held by NEN.

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 October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

The dual logo CEN-CENELEC standardization deliverables, in the numerical range of 45550 to 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 re-use components or recycle materials from products at end-of-life;
- c) Use of re-used components and/or recycled materials in products.

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-specific, or product-group, standards, e.g. developed by product technical committees.

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

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

Attention is drawn to safety and other legislation relevant to ErP. Their purpose is to ensure that all products intended for or likely to be used by consumers and other users under normal or reasonable foreseeable conditions are safe.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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 the United Kingdom.

## Introduction

The recycled material content of a new product is a characteristic of the product and its parts, which contributes to material efficiency, in addition to the potentials of reusability, recyclability and recoverability.

With a focus on the efficient and effective use of natural resources, primary materials are often able to be substituted by recycled materials, reducing the demand for primary materials, with related potential environmental, social and economic implications. These could include reduced mining and consumption of natural resources, reduced landfill, reduced emissions and energy savings. The overall environmental impact will depend on the difference in the impacts of making materials from primary sources (oil, ore, etc.) vs. reprocessing waste into secondary materials which would directly substitute primary materials.

The benefit of increasing recycled materials content in products is, in many cases, the incentivisation of recycling of end-of-life (EoL) waste material through the stimulation of demand for recycled materials. In other cases, where there is already high demand for recycled materials compared to the available supply, the link between specification of higher recycled materials content and the incentivisation of recycling is weaker. In that case, specification of recycled materials content may not be relevant to eco-design. The rationale for specifying recycled materials content, therefore needs to be considered for each material individually depending on the specific supply/demand situation.

This document facilitates the provision of substantiated claims of the recycled materials content of energy-related products (ErPs). Key for substantiated claims for new products is the recognition of the chain of custody (CoC), which allows the tracing of recycled materials from different sources.

## 1 Scope

This document specifies a general method for assessing the proportion of recycled material in an energy-related product. This document is applicable as the framework to be used for defining the assessment of recycled materials content in specific product groups.

It is not intended to generate publicly available product information and compare products in the absence of a product standard based on this document.

This document does not cover aspects such as quality and physical properties of recycled materials.

This document does not apply to the assessment of reused components.

NOTE EN 45556:2019 provides a general method for assessing the proportion of reused components in ErPs.

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

## 3 Terms and definitions

### 3.1 Definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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

NOTE See CLC/TR 45550:<sup>-1</sup> for additional definitions related to material efficiency of ErP.

#### 3.1.1 Definitions related to materials

##### 3.1.1.1

##### **primary material**

material made from virgin raw material(s)

##### 3.1.1.2

##### **recycled material**

material which is either pre-consumer material or post-consumer material

Note 1 to entry: The terms “recycled material” and “secondary material” have the same meaning in this document.

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<sup>1</sup> Under preparation. Stage at time of publication: CLC/prTR 45550:201X.