

This is a preview of "BS EN 45553:2020". [Click here to purchase the full version from the ANSI store.](#)



BSI Standards Publication

General method for the assessment of the ability to remanufacture energy-related products

This is a preview of "BS EN 45553:2020". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 45553:2020.

The UK participation in its preparation was entrusted to Technical Committee SCP/1/5, Energy-related products - Material Efficiency Aspects for Ecodesign.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2020
Published by BSI Standards Limited 2020

ISBN 978 0 539 02193 6

ICS 13.030.50

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2020.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

This is a preview of "BS EN 45553:2020". [Click here to purchase the full version from the ANSI store.](#)

EUROPÄISCHE NORM

July 2020

ICS 13.030.50

English Version

General method for the assessment of the ability to remanufacture energy-related products

Méthode générale pour l'évaluation de la capacité d'un produit lié à l'énergie à être refabriquée

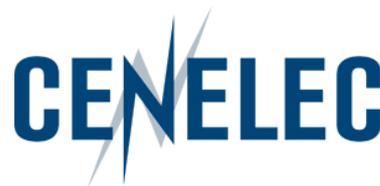
Allgemeines Verfahren zur Bewertung der Wiederherstellungsfähigkeit energieverbrauchsrelevanter Produkte

This European Standard was approved by CENELEC on 25 May 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



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

This is a preview of "BS EN 45553:2020". [Click here to purchase the full version from the ANSI store.](#)

Contents	Page
European foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms, definitions and abbreviations	5
3.1 Definitions	5
3.2 Abbreviations	6
4 How to use this document	6
5 General method to assess the ability of an energy-related product to be remanufactured	6
5.1 Remanufacturing process steps and product attributes	6
5.2 Criteria for assessing the product attributes	7
5.2.1 Evaluation of the product attribute "Ability to be identified"	7
5.2.2 Evaluation of the product attribute "Ability to locate access points and fasteners"	8
5.2.3 Evaluation of the product attribute "Accessibility of parts"	8
5.2.4 Evaluation of the product attribute "Ability to be disassembled/assembled"	9
5.2.5 Evaluation of the product attribute "Wear and damage resistance during the remanufacturing process steps"	9
5.3 Establishing a method to assess the ability of an energy-related product to be remanufactured	10
6 Documenting the ability of an energy-related product to be remanufactured	10
6.1 General	10
6.2 Elements of the assessment	10
Annex A (Informative) Examples of quantitative methods to assess different product attributes	12
A.1 Example of a quantitative assessment of the ability to be accessible	12
A.2 Example of a quantitative assessment of the disassembly sequence and disassembly depth	12
Bibliography	14

This is a preview of "BS EN 45553:2020". [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document [EN 45553:2020] 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 at national level by publication of an identical national standard or by endorsement (dop) 2021-05-25
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2023-05-25

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 standardization request given to CEN and CENELEC by the European Commission and the European Free Trade Association.

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.

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.

This is a preview of "BS EN 45553:2020". [Click here to purchase the full version from the ANSI store.](#)

Introduction

This document provides a general method for assessing the ability of an energy-related product to be remanufactured, to be used by technical committees when producing horizontal, generic, and product-specific, or product-group, publications. It identifies seven general process steps which are crucial to the remanufacturing process. Each of the seven steps (see 5.1) is linked to several product attributes of the energy-related product (see table 1). These product attributes are evaluated by their criteria described in 5.2.1 to 5.2.5.

As the terms remanufacturing and refurbishment are sometimes used interchangeably in different industry sectors it is necessary to clarify what is meant by remanufacturing in this document. Remanufacturing is identified as an industrial process where at least one change, which influences the safety, original performance, purpose or type of the product, is applied to the energy-related product.

NOTE This document does not cover general methods for assessing the ability of an energy-related product to be refurbished.

This is a preview of "BS EN 45553:2020". [Click here to purchase the full version from the ANSI store.](#)

1 Scope

This document contains a general method to assess the ability of energy-related products to be remanufactured. It is intended to be used by technical committees when producing horizontal, generic, and product, or product-group, standards.

NOTE 1 Throughout this document, reference to 'user of this document' refers to those members of technical committees that are producing horizontal, generic, and product, or product-group, standards as well as any person using the standard directly.

Assessing the ability of a part that is not considered to be an energy-related product to be remanufactured is not considered in this document.

NOTE 2 To assess the ability of an energy-related product to be remanufactured (i.e. in 5.2.1 to 5.2.5), the described criteria are applied to the parts of the energy-related product.

A scoring system to quantify the ability of an energy-related product to be remanufactured is not covered in this document. Only the criteria for the ability of an energy-related product to be remanufactured are presented in 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 45559:2019, *Methods for providing information relating to material efficiency aspects of energy-related products*

3 Terms, definitions and abbreviations

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:

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

NOTE See CLC/prTR 45550 [8] for additional definitions related to Material Efficiency.

3.1.1

remanufacturing

industrial process which produces a product from used products or used parts where at least one change is made which influences the safety, original performance, purpose or type of the product

Note 1 to entry: The product created by the remanufacturing process may be considered a new product when placing on the market. Refer to the EU Blue Guide [1] for additional information.

Note 2 to entry: Refurbishing is a similar concept to remanufacturing except that it does not involve changes influencing safety, original performance, purpose or type of the product. It is not covered by this standard.

3.1.2

part

hardware, firmware or software constituent of a product

[SOURCE: EN 45554:2020, 3.1.1]