



**SLOVENSKI STANDARD**  
**oSIST prEN IEC 63333-3:2026**  
**01-junij-2026**

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**Ocenjevanje krožnih vsebin v proizvodih - 3. del: Delež recikliranih materialov  
(predlagana horizontalna objava)**

Assessment of circular content in products - Part 3: Proportion of recycled materials  
(Proposed Horizontal Publication)

Sample Document

**Ta slovenski standard je istoveten z: prEN IEC 63333-3:2026**

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**ICS:**

13.020.30	Ocenjevanje vpliva na okolje	Environmental impact assessment
31.020	Elektronske komponente na splošno	Electronic components in general

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# 111/881/CDV

## COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: <b>IEC 63333-3 ED1</b>	
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IEC TC 111 : ENVIRONMENTAL STANDARDIZATION FOR ELECTRICAL AND ELECTRONIC PRODUCTS AND SYSTEMS	
SECRETARIAT: Italy	SECRETARY: Mr Alfonso Sturchio
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 2,TC 4,TC 5,TC 9,TC 14,TC 18,TC 20,TC 21,TC 22,TC 23,TC 32,SC 34A,SC 34D,TC 35,TC 40,TC 59,TC 62,SC 65B,TC 80,TC 82,TC 88,TC 100,TC 110,TC 114,TC 120,TC 121,TC 124,TC 125,PC 131,ACEA	HORIZONTAL FUNCTION(S): TC 111 Horizontal Basic Environment - Assessments of proportion of recycled, reused and renewable content
ASPECTS CONCERNED: Environment	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING <b>Attention IEC-CENELEC parallel voting</b> The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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TITLE:

**Assessment of circular content in products - Part 3: Proportion of recycled materials (Proposed Horizontal Publication)**

PROPOSED STABILITY DATE: 2032

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Assessment of circular content in products -  
Part 3: Proportion of recycled materials (Proposed Horizontal Publication)**

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IEC 63333-3 has been prepared by IEC technical committee TC 111: Environmental standardization for electrical and electronic products and systems. It is an International Standard.

IEC 63333-3 is based on [EN 45557:2020 \[1\]](#)<sup>1</sup>, which was prepared by the CEN and CENELEC Joint Technical Committee 10 "*Energy-related products - Material efficiency Aspects for Ecodesign*" (CEN-CLC/JTC 10). The document has been adopted with modifications.

The text of this International Standard is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

<sup>1</sup> Numbers in square brackets refer to the bibliography.

## INTRODUCTION

Recycled material content is a characteristic of a product or its parts, which contributes to material efficiency and circularity.

Focusing on the efficient and effective use of natural resources, substituting primary materials with recycled materials reduces primary materials demand and can positively affect environmental, societal and economic aspects. These could include reduced mining and consumption of natural resources, reduced landfill, reduced emissions to water, air, and land, and energy savings. The net environmental impact associated with replacing primary materials depends on the difference in the impacts of producing raw materials from primary sources (oil, ore, etc.) vs. reprocessing end-of-life (EoL) products or waste into recycled materials.

This document facilitates the provision of substantiated claims of the recycled content of products. Key for substantiated claims for new products is the recognition of the chain of custody (CoC), which refers to all players in the supply chain that take possession (custody) of the recycled material, including manufacturers, transporters, exporters, processors and recyclers as well as traceability, which allows to follow the movement of the recycled materials through the specified stages of production, processing and distribution.

Primary materials and recycled materials are often physically or chemically indistinguishable and emerging methods for measuring the recycled content in a product or part in a reliable, accurate and reproducible manner are currently not available. For the purpose of this document, the verification of recycled content in a product, part of material therefore relies on documented proof for traceability (see Clause 6) provided by the relevant actors in the chain of custody (CoC). Recycled content is expressed as the mass ratio of recycled materials used to the total production output of products over a specific period of time.

This document elaborates on the following aspects in assessing recycled content:

- a) Description of the scope of the assessment (see 4.1);
- b) Description of the system boundary for each production process in the supply chain (see 4.2);
- c) Description of the source of the recycled material inputs to each production process (including breakdown of pre-consumer or post-consumer recycled material), and the material composition of output products, parts or materials (see 5.4);
- d) A process to trace the type of material inputs (primary and recycled materials) separately and the link with chain-of-custody models (see Clause 6 and Annex A);
- e) Balancing the input and output masses calculation, linking recycled content of products, parts and materials in relation to total mass of materials in the products, parts and materials produced (see 7.2).
- f) Finally, 7.3 elaborates on how to calculate the recycled content of a product or its parts, as well how to determine the recycled content of materials.

NOTE 1 Manufacturers can be product manufacturers, part manufacturers or material manufacturers.

The IEC 63333 series on 'Assessment of circular content in products' consists currently of the following planned or published parts:

- IEC 63333: General method for assessing the proportion of reused components in products
- IEC 63333-3: Assessment of circular content in products - Part 3: Proportion of recycled materials

NOTE 2 During its first review, IEC 63333 will have its number and title modified to IEC 63333-2: Assessment of circular content in products - Part 2: Proportion of reused content.

## 1 Scope

This part of IEC 63333 series specifies a general method for assessing the recycled content in products, parts or materials.

This document can be also applied by technical committees to develop product specific standards.

This document applies to electrical and electronic products, parts or materials and can also be applied to other product types.

This document does not cover aspects such as quality, conformity with legislation or physical properties of recycled materials. It is the responsibility of the user of this document to address these aspects.

This document has the status of horizontal publication of the category basic and type test method in accordance with [IEC GUIDE 123:2025 \[2\]](#) and [IEC GUIDE 108:2019 \[3\]](#). It belongs to the approved Horizontal Function “*Assessments of proportion of recycled, reused and renewable content in electrical and electronic products and systems*”.

## 2 Normative references

There are no normative references in this document.

## 3 Terms, definitions and abbreviations

### 3.1 Terms and definitions

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

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

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

#### 3.1.1 Terms and definitions relating to products, parts and materials

##### 3.1.1.1

##### **primary material**

virgin material

primary raw material

virgin raw material

material that has not been previously used or subjected to processing other than its own production

[SOURCE: IEC/FDIS 60050-193:2026, 193-03-09]

##### 3.1.1.2

##### **recovered material**

useful material that has been recovered from discarded material generated during a manufacturing process, end-of-life products or waste

Note 1 to entry: Recovered material refers to the sum of the various fractions of materials obtained from manufacturing processes, end-of-life products or waste excluding material used to produce energy and excluding material used for backfilling purposes.

[SOURCE: IEC/FDIS 60050-193:2026, 193-03-11, modified – The Figure and the Note 2 to entry related to homographs were removed]

### 3.1.1.3

#### **recycled material**

material reprocessed from end-of-life products or waste that is of the same or similar type as the original material and that is ready to be used in manufacturing of products

Note 1 to entry: Recycled material can be pre- or post-consumer.

Note 2 to entry: Recycled material refers to the sum of the various fractions of materials recycled from end-of-life products or waste like metals, plastics, etc., excluding alternate material and material used to produce energy.

[SOURCE: IEC/FDIS 60050-193:2026, 193-03-12, modified – The reference to the Figure was removed]

### 3.1.1.4

#### **pre-consumer recycled material**

material that has been recycled from material discarded during a manufacturing process

Note 1 to entry: Excluded is reutilization of materials such as rework, regrind or scrap capable of being reclaimed within the same process.

Note 2 to entry: Pre-consumer recycled material is sometimes referred to as post-industrial recycled material.

[SOURCE: IEC/FDIS 60050-193:2026, 193-03-13]

### 3.1.1.5

#### **post-consumer recycled material**

material that has been recycled from end-of-life products or waste originated from end-users

Note 1 to entry: End-users can be individuals or entities such as households, or commercial, industrial or institutional facilities in their role as end-users.

Note 2 to entry: This also includes returns of material from the distribution chain.

[SOURCE: IEC/FDIS 60050-193:2026, 193-04-14]

### 3.1.1.6

#### **recycled content**

recycled material content  
proportion, by mass, of recycled material

Note 1 to entry: Only pre-consumer and post-consumer recycled content are considered as recycled content.

[SOURCE: IEC/FDIS 60050-193:2026, 193-04-16, modified – The Figure and Note 2 to entry have been removed]

### 3.1.1.7

#### **product**

good, service, or combination thereof

Note 1 to entry: Product can be an individual part, component, device, equipment, subsystem, or system.

Note 2 to entry: A product can consist of hardware, liquid, gas or other physical matter, software, firmware or any combination thereof.

Note 3 to entry: A combination of goods and services is sometimes referred to as "solution".

[SOURCE: IEC/FDIS 60050-193:2026, 193-02-01, modified – The Figure and Notes 4 and 5 to entry were removed]

**3.1.1.8****finished product**

manufactured article ready for end-use

[SOURCE: ISO 19376-1:2025, 3.4.2]

**3.1.1.9****part**

constituent of a product

EXAMPLE Hardware or other physical matter (e.g. liquid or gas), software, firmware, etc.

Note 1 to entry: A part can be an assembly, a sub-assembly or a component.

Note 2 to entry: Firmware and software are not relevant for the purpose of this document.

[SOURCE: IEC/FDIS 60050-193:2026, 193-02-02, modified – The Figure and Note 2 to entry were removed and a new Note 2 to entry was added]

**3.1.1.10****waste**

material or object that the holder discards or is required to discard

Note 1 to entry: Triggers to discard can include:

- function no longer available,
- change in the holder's needs or desires,
- interoperability loss,
- object no longer repairable or serviceable due to loss or unavailability of spare parts, consumables or technical information.

Note 2 to entry: Material or object that is lost or abandoned by the holder (litter or rubbish) can also be considered waste.

Note 3 to entry: For environmental protection and traceability purposes, waste must be captured by a waste management system.

[SOURCE: IEC/FDIS 60050-193:2026, 193-04-01, modified – The Figure and Note 4 to entry were removed]

**3.1.2 Terms and definitions relating to chain of custody and traceability****3.1.2.1****chain of custody**

CoC

process by which inputs and outputs and associated information are transferred, monitored and controlled as they move through each step in the relevant supply chain

[SOURCE: ISO 22095:2020, 3.1.1]

**3.1.2.2****traceability**

ability to trace the origin, history, application, location or certain characteristics of a product or material

[SOURCE: IEC/FDIS 60050-193:2026, 193-01-09, modified – Note 1 to entry referring to homographs was removed]

**3.1.2.3****attribution**

assignment of specified characteristics to outputs or part of the outputs