SLOVENSKI STANDARD
SIST EN IEC 63372:2026

01-maj-2026

Merjenje in sporočanje ogljičnega odtisa, zmanjšanje in preprečevanje emisij toplogrednih plinov iz električnih in elektronskih proizvodov in sistemov - Načela, metode, zahteve in vodila

Quantification and communication of carbon footprint, GHG emission reductions and avoided emissions from electric and electronic products and systems - Principles, methodologies, requirements and guidance

Quantifizierung und Kommunikation des Carbon FootPRINT, der Reduzierung und Vermeidung von THG-Emissionen durch elektrische und elektronische Produkte und Systeme – Grundsätze, Methoden, Anforderungen und Leitlinien

Quantification et communication de l'empreinte carbone et des réductions d'émissions de GES/émissions évitées des produits et systèmes électriques et électroniques - Principes, méthodologies, exigences et recommandations

Ta slovenski standard je istoveten z: **EN IEC 63372:2026**

ICS:

13.020.40	Onesnaževanje, nadzor nad onesnaževanjem in ohranjanje	Pollution, pollution control and conservation
29.020	Elektrotehnika na splošno	Electrical engineering in general
31.020	Elektronske komponente na splošno	Electronic components in general

SIST EN IEC 63372:2026 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 63372

March 2026

ICS 13.020.01; 29.100

English Version

Quantification and communication of carbon footprint, GHG emission reductions and avoided emissions from electric and electronic products and systems - Principles, methodologies, requirements and guidance (IEC 63372:2026)

Quantification et communication de l'empreinte carbone, des reductions d'émissions de GES et des émissions évitées des produits et systems électriques et électroniques - Principes, méthodologies, exigences et recommandations (IEC 63372:2026)

Quantifizierung und Kommunikation des Carbon FootPRINT, der Reduzierung und Vermeidung von THG-Emissionen durch elektrische und elektronische Produkte und Systeme - Grundsätze, Methoden, Anforderungen und Leitlinien (IEC 63372:2026)

This European Standard was approved by CENELEC on 2026-02-24. 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 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

Ref. No. EN IEC 63372:2026 E

European foreword

The text of document 111/857/FDIS, future edition 1 of IEC 63372, prepared by TC 111 "Environmental standardization for electrical and electronic products and systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63372:2026.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2027-03-31
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2029-03-31

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.

Endorsement notice

The text of the International Standard IEC 63372:2026 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

ISO 14040:2006	NOTE	Approved as EN ISO 14040:2006 (not modified)
ISO 14044:2006	NOTE	Approved as EN ISO 14044:2006 (not modified)
ISO 14025:2006	NOTE	Approved as EN ISO 14025:2010 (not modified)
ISO 14026:2017	NOTE	Approved as EN ISO 14026:2018 (not modified)
ISO/TS 14027:2017	NOTE	Approved as CEN ISO/TS 14027:2018 (not modified)
ISO 14064-1:2018	NOTE	Approved as EN ISO 14064-1:2019 (not modified)
ISO 14064-2:2019	NOTE	Approved as EN ISO 14064-2:2019 (not modified)
ISO 14064-3:2019	NOTE	Approved as EN ISO 14064-3:2019 (not modified)

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 63366	2025	Product category rules for life cycle assessment of electrical and electronic products and systems	EN IEC 63366	2025
ISO 14067	2018	Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification	EN ISO 14067	2018

IEC 63372

Edition 1.0 2026-01

INTERNATIONAL STANDARD

Quantification and communication of carbon footprint, GHG emission reductions and avoided emissions from electric and electronic products and systems - Principles, methodologies, requirements and guidance

ICS 13.020.01; 29.100

ISBN 978-2-8327-0998-6

IEC 63372:2026-01(en)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Quantification and communication of carbon footprint, GHG emission reductions and avoided emissions from electric and electronic products and systems - Principles, methodologies, requirements and guidance

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC 63372 has been prepared by IEC technical committee 111: Environmental standardization for electrical and electronic products and systems. It is an International Standard.

This document has been given the status of a horizontal document in accordance with the ISO/IEC Directives, Part 1.

This first edition of IEC 63372 cancels and replaces IEC TR 62725:2013 and IEC TR 62726:2014, which have been technically revised.

This edition includes the following significant technical changes with respect to the previous edition:

a) updating and enhancing content related to carbon footprint of a product to align with new or updated reference standards;

b) including product and system in quantification of GHG emission reductions;

c) adding the content related to avoided emissions including use cases in Annex D.

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

Draft	Report on voting
111/857/FDIS	111/865/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. The main document types developed by IEC are described in greater detail at 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 in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

There is a broad understanding that greenhouse gas (GHG) emissions must be reduced significantly from current levels in order to keep global warming within acceptable levels. Electrical and electronic (EE) products and systems play an important part in this by enabling a transition to more energy-efficient products and systems. However, even though EE products and systems can contribute to reducing GHG emissions, they lead to GHG emissions.

This document describes methods for quantifying and communicating the GHG emissions related to products. It covers three related topics: carbon footprint of a product (CFP), emission reductions, and avoided emissions.

Many governments and intergovernmental organizations are introducing, for example, carbon taxes or similar carbon pricing to incentivize reducing emissions. In this context, it is important that there is a horizontal standard to guide the calculating, in a consistent way, of the CFP of different kinds of products and systems.

Emission reductions is the difference in emissions between a baseline and a target situation, product, system, or product-related GHG project. The baseline can, for example, be a previous version of the product. In that case, the emission reductions allow the organization to quantify how they are contributing to reaching policy goals.

Avoided emissions, finally, are a special case of emission reductions. Frequently, a product or system produced by one organization can enable another to emit less GHG than it would otherwise have done. Additionally, it is possible that many EE businesses will increase their total emissions as a consequence of them expanding to meet future decarbonization needs (in contrast to, for example, a fossil fuel business that is scaling down and showing reduced emissions), and many new products will be manufactured, creating emissions that did not exist before. The concept of avoided emissions provides a way for an EE business to show that it is still contributing to a net improvement of society, even though the emission reductions occur outside of its organization and its own emissions are increasing.

Furthermore, the organization operating an EE business needs robust and reliable calculation methods to establish the amount of avoided emissions achieved by its products and systems. An important purpose of this document is to define methodologies to assess avoided emissions from the use of new technologies in a reproducible, repeatable, unambiguous, and transparent manner.

Nevertheless, avoided emissions are reported separately from GHG emissions and are not subtracted from the total GHG emissions. Moreover, avoided emissions do not offset the direct and indirect GHG emissions of an organization.

Through the information disclosure based on this document, an EE business can claim that its products and systems can reduce or avoid emissions and contribute to solving climate issues directly or indirectly linked with United Nations Sustainable Development Goal 13 (UN SDG 13): Climate Action.

1 Scope

This document describes principles and methodologies, specifies requirements and provides guidance for quantification and communication of carbon footprint a product (CFP), emission reductions and avoided emissions from electric and electronic (EE) products and systems. This document is also applicable to product-related GHG projects.

The GHG quantification such as CFP is based on life cycle assessment (LCA) methods.

This document is a basic environment horizontal publication focusing on essential requirements and is primarily intended for use by committees in the preparation of publications within the area of environment in accordance with the principles laid down in IEC Guide 123. Wherever applicable, it is the responsibility of committees to make use of environment basic publications in the preparation of their environment group and product publications. Committees can apply this document directly to products when they do not develop a product publication in the area of environment.

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.

IEC 63366:2025, *Product category rules for life cycle assessment of electrical and electronic products and systems*

ISO 14067:2018, *Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification*

3 Terms, definitions, and abbreviated terms

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 Terms related to greenhouse gas

3.1.1
CO_2 equivalent
CO_2e
unit for comparing the radiative forcing of a GHG to that of carbon dioxide

Note 1 to entry: Mass of a GHG is converted into CO_2 equivalents by multiplying the mass of the GHG by the corresponding GWP or GTP of that gas.

Note 2 to entry: In the case of GTP, CO_2 equivalent is the unit for comparing the change in global mean surface temperature caused by a GHG to the temperature change caused by CO_2.

[SOURCE: ISO 14067:2018, 3.1.2.2, modified – The term "carbon dioxide equivalent" has been deleted.]

3.1.2
global warming potential
GWP
index, based on radiative properties of GHGs, measuring the radiative forcing following a pulse emission of a unit mass of a given GHG in the present-day atmosphere integrated over a chosen time horizon, relative to that of carbon dioxide (CO_2)

Note 1 to entry: "Index" as used in this document is a "characterization factor" as defined in ISO 14040:2006, 3.37.

Note 2 to entry: A "pulse emission" is an emission at one point in time.

Note 3 to entry: The GWP values of GHG follow those in the latest IPCC assessment report.

[SOURCE: ISO 14067:2018, 3.1.2.4, modified – Note 3 to entry has been added.]

3.1.3
greenhouse gas
GHG
gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the earth's surface, the atmosphere, and clouds

Note 1 to entry: For a list of GHGs, see the latest IPCC Assessment Report.

Note 2 to entry: Water vapour and ozone, which are anthropogenic as well as natural GHGs, are not included in the CFP and partial CFP.

Note 3 to entry: The focus of this document is limited to long-lived GHGs, it therefore excludes climate effects due to changes in surface reflectivity (albedo) and short-lived radiative forcing agents (e.g. black carbon and aerosols).

[SOURCE: ISO 14067:2018, 3.1.2.1]

3.1.4
greenhouse gas emission
GHG emission
release of a GHG into the atmosphere

[SOURCE: ISO 14067:2018, 3.1.2.5]

3.1.5
GHG emission factor
coefficient relating activity data with the GHG emission

Note 1 to entry: Activity data is quantitative measure of activity that results in a greenhouse gas emissions or greenhouse gas removal.

[SOURCE: ISO 14067:2018, 3.1.2.7, modified – The term "greenhouse gas emission factor" has been deleted.]

3.1.6
GHG removal
withdrawal of a GHG from the atmosphere

Note 1 to entry: Examples of ways in which GHG removals can be achieved include carbon sequestration in soils, direct air capture, carbon capture and storage.

[SOURCE: ISO 14067:2018, 3.1.2.6, modified – The term "greenhouse gas removal" has been deleted.]