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Product category rules for life cycle assessment of electrical and electronic products and systems

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

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Règles de définition des catégories de produits pour l'analyse du cycle de vie des produits et systèmes électriques et électroniques (IEC 63366:2025)

Produktkategorieregeln für die Ökobilanzierung von elektrischen und elektronischen Produkten und Systemen (IEC 63366:2025)

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The text of document 111/804/FDIS, future edition 1 of IEC 63366, 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 63366:2025.

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Product category rules for life cycle assessment of electrical and electronic products and systems

Règles de définition des catégories de produits pour l'analyse du cycle de vie des produits et systèmes électriques et électroniques

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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PRODUCT CATEGORY RULES FOR LIFE CYCLE ASSESSMENT OF ELECTRICAL AND ELECTRONIC PRODUCTS AND SYSTEMS

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

Draft	Report on voting
111/804/FDIS	111/823/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.

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INTRODUCTION

In recent years, environmental aspects of electrical and electronic products and systems (EEPS) have gained in importance for interested parties, such as customers and regulators.

In addition to qualitative approaches already widely applied in the context of an environmentally conscious design process, quantitative information on the potential environmental impacts of the full life cycle of products have gained further interest. This generates the need to provide harmonized rules for the underlying life cycle assessment (LCA) in order to provide robust and consistent quantitative environmental data on EEPS, as well as to enable data aggregation at system level, for example, buildings, power drive systems and control and protection cabinets.

The definition of product category rules (PCR), derived from ISO 14025, is an established method for a consistent approach by setting minimum quality standards for LCA in the context of environmental product declarations (EPD); hence, PCR is now defined as core rules in this document for the variety of EEPS. It is also noted that comparability of Type III environmental declarations as described in ISO 14025 depends on PCR.

On the basis of the overarching PCR set out as core rules for EEPS, product specific rules (PSR) should be elaborated to further detail the requirements for the LCA in the specific context of the products or systems in scope. This can be done, for example, by product specific standardization committees or environmental declaration programmes.

Accordingly, IEC 63372 provides methodologies for quantification of greenhouse gas (GHG) emissions, which could also be regarded as carbon footprint of a product – product category rules (CFP–PCR) for EEPS.

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PRODUCT CATEGORY RULES FOR LIFE CYCLE ASSESSMENT OF ELECTRICAL AND ELECTRONIC PRODUCTS AND SYSTEMS

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1 Scope

This document defines product category rules (PCR) for electrical and electronic products and systems (EEPS) to develop Type III environmental declarations for electrical and electronic products and systems (EEPS). It specifies the process and requirements on how to conduct life cycle assessment (LCA) in the context of environmental declarations.

This document provides common rules for:

a) LCA, including the requirements for developing default scenarios;

b) the LCA report;

c) the development of PSR.

This document provides further guidelines for environmental declarations.

The LCA principles and framework are based on ISO 14040 and ISO 14044, and are therefore out of scope of this document.

PCR is complemented by additional product-specific rules (PSR), which further define, for example, functional units and default scenarios in the product-specific context. Therefore, this document also provides guidance on how to develop PSR in corresponding technical committees.

This document has the status of a horizontal publication in accordance with IEC Guide 108. In accordance with IEC Guide 108, this generic essential horizontal standard is intended for use by product committees as a starting point in preparing PSR standards. Specific requirements developed by product committees in PSR standard take precedence over requirements in this standard.

When there is no PSR available in a product committee, this generic essential horizontal standard could be applied by LCA practitioners with recorded complementary specifications.

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.

ISO/TS 14027, *Environmental labels and declarations – Development of product category rules*

ISO 14040:2006, *Environmental management – Life cycle assessment – Principles and framework*

ISO 14044:2006, *Environmental management – Life cycle assessment – Requirements and guidelines*