Environmental management - Eco-efficiency assessment of product systems - Principles, requirements and guidelines (ISO 14045:2012)

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NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 14045:2012 sisaldab Euroopa standardi EN ISO 14045:2012 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 14045:2012 consists of the English text of the European standard EN ISO 14045:2012.
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 15.05.2012.	Date of Availability of the European standard is 15.05.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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English Version

Environmental management - Eco-efficiency assessment of product systems - Principles, requirements and guidelines (ISO 14045:2012)

Management environnemental - Évaluation de l'éco-efficacité des systèmes de produits - Principes, exigences et lignes directrices (ISO 14045:2012)

Umweltmanagement - Ökoeffizienzbewertung von Produktsystemen - Prinzipien, Anforderungen und Leitlinien (ISO 14045:2012)

This European Standard was approved by CEN on 3 May 2012.

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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 member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Ref. No. EN ISO 14045:2012: E

Foreword

This document (EN ISO 14045:2012) has been prepared by Technical Committee ISO/TC 207 “Environmental management”.

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 November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

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

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Endorsement notice

The text of ISO 14045:2012 has been approved by CEN as a EN ISO 14045:2012 without any modification.

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Introduction

Eco-efficiency assessment is a quantitative management tool which enables the study of life-cycle environmental impacts of a product system along with its product system value for a stakeholder.

Within eco-efficiency assessment, environmental impacts are evaluated using Life Cycle Assessment (LCA) as prescribed by other International Standards (ISO 14040, ISO 14044). Consequently, eco-efficiency assessment shares with LCA many important principles such as life cycle perspective, comprehensiveness, functional unit approach, iterative nature, transparency and priority of a scientific approach.

The value of the product system may be chosen to reflect, for example, its resource, production, delivery or use efficiency, or a combination of these. The value may be expressed in monetary terms or other value aspects.

The key objectives of this International Standard are to:

— establish clear terminology and a common methodological framework for eco-efficiency assessment;

— enable the practical use of eco-efficiency assessment for a wide range of product (including service) systems;

— provide clear guidance on the interpretation of eco-efficiency assessment results;

— encourage the transparent, accurate and informative reporting of eco-efficiency assessment results.

Environmental management — Eco-efficiency assessment of product systems — Principles, requirements and guidelines

1 Scope

This International Standard describes the principles, requirements and guidelines for eco-efficiency assessment for product systems, including:

a) the goal and scope definition of the eco-efficiency assessment;

b) the environmental assessment;

c) the product system value assessment;

d) the quantification of eco-efficiency;

e) interpretation (including quality assurance);

f) reporting;

g) critical review of the eco-efficiency assessment.

Requirements, recommendations and guidelines for specific choices of categories of environmental impact and values are not included. The intended application of the eco-efficiency assessment is considered during the goal and scope definition phase, but the actual use of the results is outside the scope of this International Standard.

2 Normative references

The following referenced documents are indispensable for the application 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 14040:2006, *Environmental management — Life cycle assessment — Principles and framework*

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

ISO 14050:2009, *Environmental management — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14050 and the following apply.

3.1
product
any goods or service

[SOURCE: ISO 14021:1999, 3.1.11]

3.2
product flow
products (3.1) entering from or leaving to another product system

[SOURCE: ISO 14040:2006, 3.27]