

ICS 13.020.40

English Version

**Greenhouse gases - Carbon footprint of products -  
Requirements and guidelines for quantification and  
communication (ISO/TS 14067:2013)**

Gaz à effet de serre - Empreinte carbone des produits -  
Exigences et lignes directrices pour la quantification et la  
communication (ISO/TS 14067:2013)

Treibhausgase - Carbon Footprint von Produkten -  
Anforderungen an und Leitlinien für Quantifizierung und  
Kommunikation (ISO/TS 14067:2013)

This Technical Specification (CEN/TS) was approved by CEN on 8 June 2014 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of ISO/TS 14067:2013 has been prepared by Technical Committee ISO/TC 207 “Environmental management” of the International Organization for Standardization (ISO) and has been taken over as CEN ISO/TS 14067:2014.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO/TS 14067:2013 has been approved by CEN as CEN ISO/TS 14067:2014 without any modification.

# Contents

Page

<b>Foreword</b>	<b>iv</b>
<b>Introduction</b>	<b>v</b>
<b>1 Scope</b>	<b>1</b>
<b>2 Normative references</b>	<b>1</b>
<b>3 Terms, definitions and abbreviated terms</b>	<b>1</b>
3.1 Terms and definitions	1
3.2 Abbreviated terms	11
<b>4 Application</b>	<b>11</b>
<b>5 Principles</b>	<b>11</b>
5.1 General	11
5.2 Life cycle perspective	12
5.3 Relative approach and functional unit	12
5.4 Iterative approach	12
5.5 Scientific approach	12
5.6 Relevance	12
5.7 Completeness	12
5.8 Consistency	12
5.9 Coherence	13
5.10 Accuracy	13
5.11 Transparency	13
5.12 Avoidance of double-counting	13
5.13 Participation	13
5.14 Fairness	13
<b>6 Methodology for CFP quantification</b>	<b>13</b>
6.1 General	13
6.2 Use of CFP-PCR	14
6.3 Goal and scope of the CFP quantification	15
6.4 Life cycle inventory analysis for the CFP	20
6.5 Life cycle impact assessment	28
6.6 Life cycle interpretation	29
<b>7 CFP study report</b>	<b>29</b>
<b>8 Preparation for publicly available CFP communication</b>	<b>31</b>
8.1 General	31
8.2 CFP disclosure report	31
<b>9 CFP communication</b>	<b>32</b>
9.1 Options for CFP communication	32
9.2 CFP communication intended to be publicly available	35
9.3 CFP communication not intended to be publicly available	36
9.4 CFP communication programme	36
9.5 Creation of CFP-PCR	39
9.6 Additional aspects for CFP communication	39
<b>Annex A (normative) The 100-year GWP</b>	<b>41</b>
<b>Annex B (normative) Limitations of the carbon footprint of a product</b>	<b>44</b>
<b>Annex C (informative) Possible procedures for the treatment of recycling in CFP studies</b>	<b>46</b>
<b>Annex D (normative) Comparison based on the CFP of different products</b>	<b>50</b>
<b>Bibliography</b>	<b>51</b>

## Introduction

Climate change arising from anthropogenic activity has been identified as one of the greatest challenges facing countries, governments, business and individuals, with major implications for both human and natural systems. In response, international, regional, national and local initiatives are being developed and implemented to limit greenhouse gas (GHG) concentrations in the Earth's atmosphere. Such GHG initiatives rely on the assessment, monitoring, reporting and verification of GHG emissions and/or removals.

GHGs are emitted and removed throughout the life cycle of a product (i.e. cradle-to-grave) from raw material acquisition through production, use and end-of-life treatment.

This Technical Specification<sup>1)</sup> details principles, requirements and guidelines for the quantification and communication of the carbon footprint of products (CFPs), including both goods and services, based on GHG emissions and removals over the life cycle of a product. Requirements and guidelines for the quantification and communication of a partial carbon footprint of products (partial CFP) are also provided. The communication of the CFP to the intended audience is based on a CFP study report that provides an accurate, relevant and fair representation of the CFP.

This Technical Specification is based on existing International Standards ISO 14020, ISO 14024, ISO 14025, ISO 14040 and ISO 14044 and aims to set specific requirements for the quantification and communication of a CFP, including additional requirements where the CFP information is intended to be publicly available.

This Technical Specification is expected to benefit organizations, governments, communities and other interested parties by providing clarity and consistency in quantifying and communicating CFPs. Specifically, using life cycle assessment according to this Technical Specification with climate change as the single impact category may offer benefits through:

- providing requirements for the methods to be adopted in assessing the CFP;
- facilitating the tracking of performance in reducing GHG emissions;
- assisting in the creation of efficient and consistent procedures to provide CFP information to interested parties;
- providing a better understanding of the CFP such that opportunities for GHG reductions may be identified;
- providing CFP information to encourage changes in consumer behaviour which could contribute to reductions in GHG emissions through improved purchasing, use and end-of-life decisions;
- providing correct and consistent communication of CFPs which supports comparability of products in a free and open market;
- enhancing the credibility, consistency and transparency of the quantification, reporting and communication of the CFP;
- facilitating the evaluation of alternative product design and sourcing options, production and manufacturing methods, raw material choices, recycling and other end-of-life processes;
- facilitating the development and implementation of GHG management strategies and plans across product life cycles as well as the detection of additional efficiencies in the supply chain;

CFPs prepared in accordance with this Technical Specification contribute to the objectives of GHG related policies and/or regimes.

---

1) As the subject on quantification and communication of a carbon footprint of products is still under development, the agreement to publish an International Standard could not be reached and ISO/TC 207/SC 7 decided that the publication of a Technical Specification (according to the ISO/IEC Directives, Part 1) is appropriate.

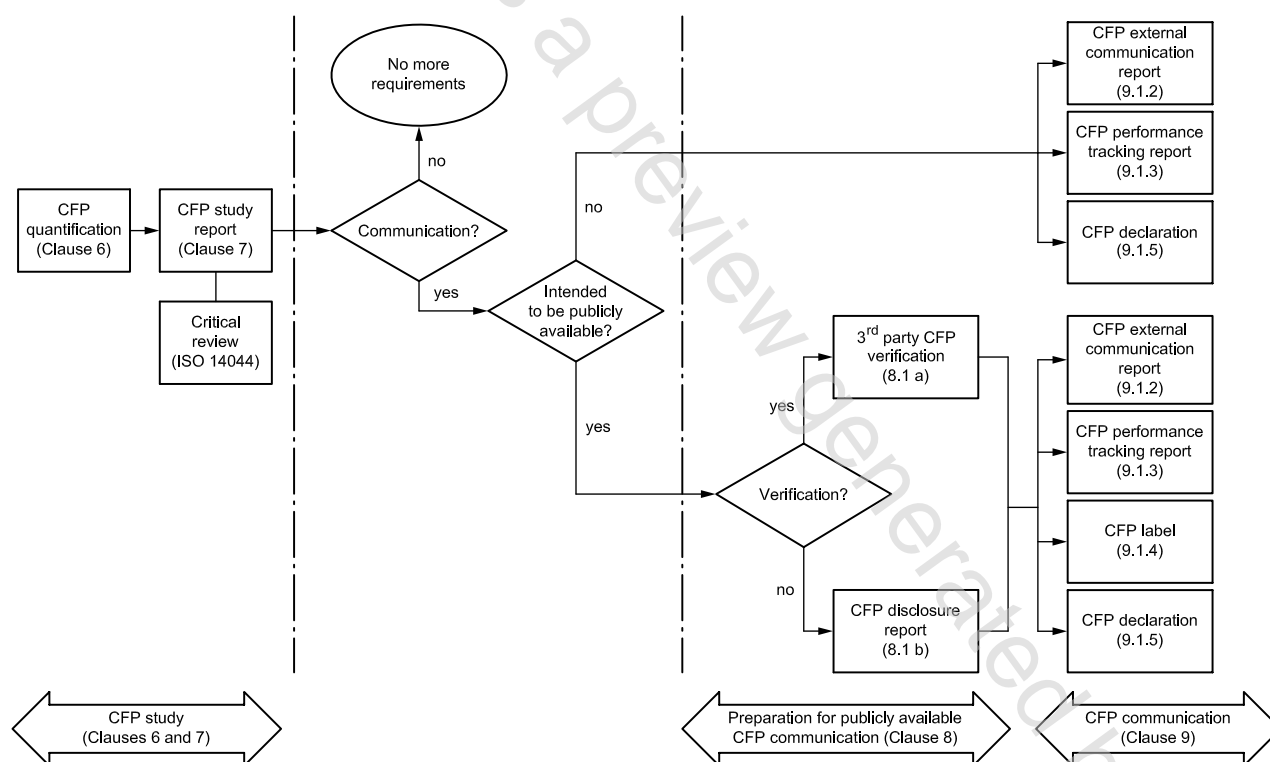
An organization may wish to publicly communicate a CFP for many reasons which may include:

- providing information to consumers and others for decision-making purposes;
- enhancing climate change awareness and consumer engagement on environmental issues;
- supporting an organization's commitment to tackling climate change;
- supporting implementation of policies on climate change management.

The requirements for communication provided in this Technical Specification vary with the option chosen for the CFP communication and the intended target group.

[Figure 1](#) shows how CFP quantification is linked to CFP communication in this Technical Specification. The specific linkage depends on the choice of different options with respect to communication and verification. The structure of this Technical Specification corresponds to the flow as presented in [Figure 1](#).

This Technical Specification addresses the single impact category of climate change. It does not assess any social or economic aspects or impacts or any other potential environmental aspects and related impacts arising from the life cycle of a product. Therefore a CFP assessed in accordance with this Technical Specification does not provide an indicator of any social or economic impact or the overall environmental impact of a product. Information on limitations of the CFPs based on this Technical Specification is included in [Clause 4](#) and [Annex B](#).



NOTE For more information on CFP communication options, see [Figure 3](#).

**Figure 1 — Linkage of CFP quantification and CFP communication**

# Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification and communication

## 1 Scope

This Technical Specification specifies principles, requirements and guidelines for the quantification and communication of the carbon footprint of a product (CFP), based on International Standards on life cycle assessment (ISO 14040 and ISO 14044) for quantification and on environmental labels and declarations (ISO 14020, ISO 14024 and ISO 14025) for communication.

Requirements and guidelines for the quantification and communication of a partial carbon footprint of a product (partial CFP) are also provided.

This Technical Specification is applicable to CFP studies and different options for CFP communication based on the results of such studies.

Where the results of a CFP study are reported according to this Technical Specification, procedures are provided to support both transparency and credibility and also to allow for informed choices.

This Technical Specification also provides for the development of CFP-product category rules (CFP-PCR), or the adoption of product category rules (PCR) that have been developed in accordance with ISO 14025 and that are consistent with this Technical Specification.

This Technical Specification addresses only one impact category: climate change.

Offsetting is outside of the scope of this Technical Specification.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14025:2006, *Environmental labels and declarations — Type III environmental declarations — Principles and procedures*

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

ISO 14050, *Environmental management — Vocabulary*

## 3 Terms, definitions and abbreviated terms

### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14050<sup>2)</sup> and the following apply.

---

2) Terms and definitions in ISO 14050 are available via the ISO Online Browsing Platform (<https://www.iso.org/obp/ui/>).