



BSI Standards Publication

Bio-based products — Guidelines for Life Cycle Inventory (LCI) for the End-of-life phase

National foreword

This Published Document is the UK implementation of CEN/TR 16957:2016.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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TECHNICAL REPORT

CEN/TR 16957

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September 2016

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English Version

Bio-based products - Guidelines for Life Cycle Inventory (LCI) for the End-of-life phase

Produits biosourcés - Lignes directrices relatives à
l'inventaire du cycle de vie (ICV) pour la phase de fin
de vie

Biobasierte Produkte - Leitlinien für die
Sachbilanzierung von Produkten in der
Nachnutzungsphase

This Technical Report was approved by CEN on 22 May 2016. It has been drawn up by the Technical Committee CEN/TC 411.

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European foreword

This document (CEN/TR 16957:2016) has been prepared by Technical Committee CEN/TC 411 “Bio-based products”, the secretariat of which is held by NEN.

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

Introduction

Bio-based products from forestry and agriculture have a long history of application, such as paper, board and various chemicals and materials. The last decades have seen the emergence of new bio-based products in the market. Some of the reasons for the increased interest lie in the bio-based products' benefits in relation to the depletion of fossil resources and climate change. Bio-based products may also provide additional product functionalities. This has triggered a wave of innovation with the development of knowledge and technologies allowing new transformation processes and product development.

Acknowledging the need for common standards for bio-based products, the European Commission issued mandate M/492, resulting in a series of standards developed by CEN/TC 411, with a focus on bio-based products other than food, feed and biomass for energy applications.

The standards of CEN/TC 411 "Bio-based products" provide a common basis on the following aspects:

- Common terminology;
- Bio-based content determination;
- Life Cycle Assessment (LCA);
- Sustainability aspects;
- Declaration tools.

It is important to understand what the term bio-based product covers and how it is being used. The term 'bio-based' means 'derived from biomass'. Bio-based products (bottles, insulation materials, wood and wood products, paper, solvents, chemical intermediates, composite materials, etc.) are products which are wholly or partly derived from biomass. It is essential to characterize the amount of biomass contained in the product by for instance its bio-based content or bio-based carbon content.

The bio-based content of a product does not provide information on its environmental impact or sustainability, which may be assessed through LCA and sustainability criteria. In addition, transparent and unambiguous communication within bio-based value chains is facilitated by a harmonized framework for certification and declaration.

1 Scope

This Technical Report provides guidance on how to compile an inventory for the end-of-life phase in LCA of bio-based products. All the end-of-life treatments here addressed are shown in Figure 1.

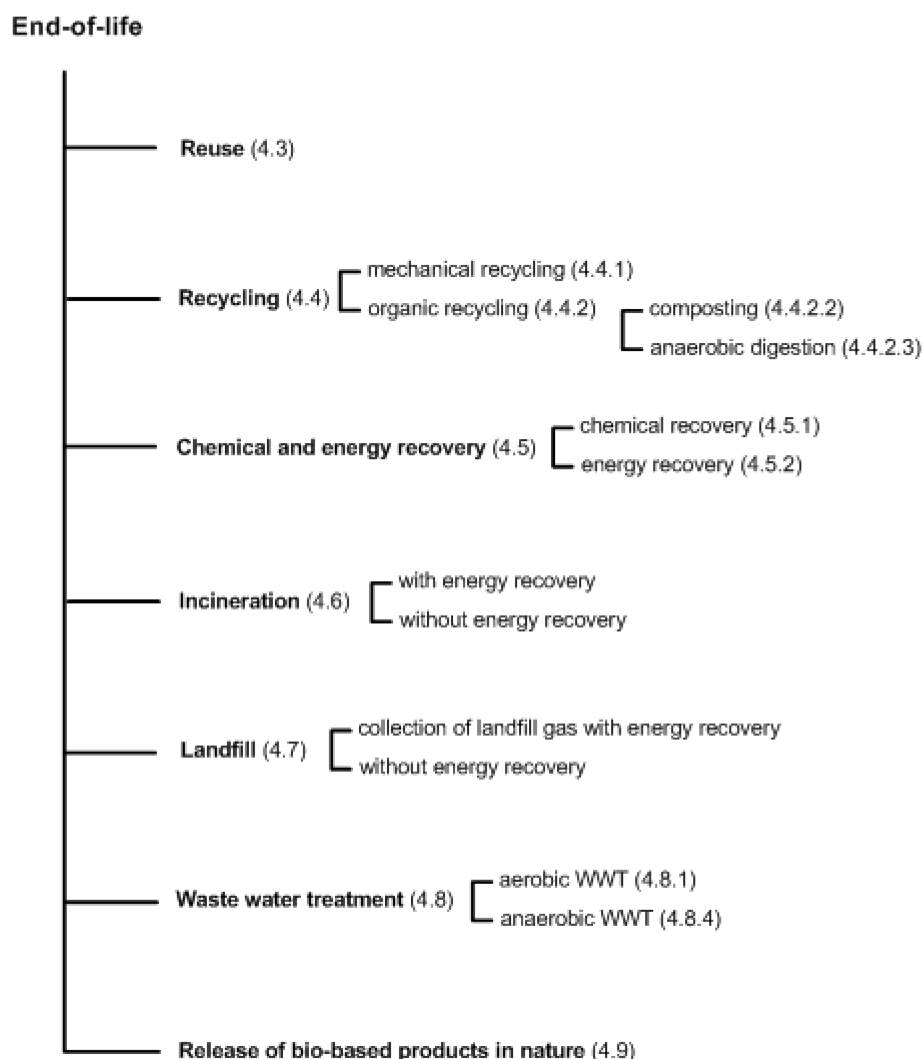


Figure 1 — End-of-life treatments addressed in this TR and related clauses

NOTE The order of the end-of-life options indicated in Figure 1 respect the Directive 2008/98/EC on waste. This list is not exhaustive, but illustrates the content of this Technical Report.

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.

EN 16575, *Bio-based products - Vocabulary*

EN 16760, *Bio-based products - Life Cycle Assessment*