

ICS 27.190; 75.160.20

English Version

**Sustainability criteria for the production of biofuels and bioliquids  
for energy applications - Principles, criteria, indicators and  
verifiers - Part 2: Conformity assessment including chain of  
custody and mass balance**

Critères de durabilité pour la production de biocarburants et  
de bioliquides pour des applications énergétiques -  
Principes, critères, indicateurs et vérificateurs - Partie 2:  
Évaluation de la conformité, incluant chaîne de surveillance  
et bilan massique

Nachhaltigkeitskriterien für die Herstellung von  
Biokraftstoffen und flüssigen Biobrennstoffen für  
Energieanwendungen - Grundsätze, Kriterien, Indikatoren  
und Prüfer - Teil 2: Konformitätsbewertung einschließlich  
überwachter Lieferkette und Massenbilanz

This Technical Specification (CEN/TS) was approved by CEN on 14 October 2013 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**

<b>Contents</b>	<b>Page</b>
Introduction .....	3
1 Scope .....	6
2 Normative references .....	6
3 Terms and definitions .....	7
4 Principle .....	7
5 Requirements for conformity assessment.....	7
5.1 Basic elements.....	7
5.2 Requirements for sustainability.....	7
5.3 Requirements for economic operators .....	8
5.4 Competence of conformity assessment bodies.....	9
5.5 Requirements for the conformity assessment process .....	9
5.5.1 General requirements.....	9
5.5.2 Conformity assessment process .....	9
6 Requirements for chain of custody control - mass balance method .....	10
6.1 Basic elements for application of the mass balance method .....	10
6.2 Product declaration – Identification of compliant consignment .....	11
6.3 Management system requirements.....	12
6.3.1 General.....	12
6.3.2 Commitment.....	12
6.3.3 Responsibilities and authorities .....	12
6.3.4 Documentation.....	12
6.3.5 Records.....	12
Annex A (informative) Examples of conformity assessment procedures .....	14
Annex B (informative) Checklists .....	15
Annex C (informative) Example of use of self-declaration documents in a group-auditing scheme .....	18
Annex D (informative) Example of use of declaration of conformity of specific consignments.....	20
Annex E (informative) Example of mass balance.....	22
Annex F (informative) Examples for GHG balance .....	24
Annex G (informative) Example of product declaration .....	27
Annex H (informative) Relationship between this European Standard and the Essential Requirements of EU Directives 2009/28/EC and 98/70/EC .....	28
Bibliography .....	31

## Foreword

This document (CEN/TS 16214-2:2014) has been prepared by Technical Committee CEN/TC 383 "Sustainably produced biomass for energy applications", 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 [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This standard comprises the following parts:

- EN 16214-1, Sustainability criteria for the production of biofuels and bioliquids for energy applications — Principles, criteria, indicators and verifiers — Part 1: Terminology;
- CEN/TS 16214-2, Sustainability criteria for the production of biofuels and bioliquids for energy applications — Principles, criteria, indicators and verifiers — Part 2: Conformity assessment including chain of custody and mass balance;
- EN 16214-3, Sustainability criteria for the production of biofuels and bioliquids for energy applications — Principles, criteria, indicators and verifiers — Part 3: Biodiversity and environmental aspects related to nature protection purposes;
- EN 16214-4, Sustainability criteria for the production of biofuels and bioliquids for energy applications — Principles, criteria, indicators and verifiers — Part 4: Calculation methods of the greenhouse gas emission balance using a life cycle analysis approach.

This Part 2 has originally been drafted as a full standard, but due to a lack of consensus in the end it is now be proposed as a CEN/TS. This would allow the European stakeholders and economic operators to use it in harmonizing their conformity assessment without the risk of contradicting national legislation and national sustainability schemes still under development at the moment of publication of this part.

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.

## Introduction

Directive 2009/28/EC of the European Commission on the promotion of the use of energy from renewable sources, referred to as the Renewable Energy Directive (RED, [1]), incorporates an advanced binding sustainability scheme for biofuels and bioliquids for the European market. The RED contains binding sustainability criteria for greenhouse gas savings, land with high biodiversity value, land with high carbon stock and agro-environmental practices. Several articles in the RED present requirements to European Member States and to economic operators in Europe. Non-EU countries may have different requirements and criteria on, for instance, the GHG emission reduction set-off in the framework of their own national legislation.

The sustainability criteria for biofuels are also mandated in Directive 98/70/EC relating to the quality of petrol and diesel fuels [2], via the amending Directive 2009/30/EC (as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions, [3]). Directive 98/70/EC is referred to as the Fuels Quality Directive (FQD).

Created in 2008, CEN/TC 383 initiated the elaboration of a standardization programme on sustainability criteria for biomass for energy application. After being contacted by CEN, the European Commission in return in May 2009 formally wrote to request CEN to work on standard(s) on:

- the implementation of the mass balance method of custody chain management;
- the provisions of evidence that the production of raw material has not interfered with nature protection purpose;
- the auditing by member states and by voluntary schemes using them of the information submitted by economic operators.

Both the EC and CEN agreed that these may play a role in the implementation of the EU biofuel and bioliquid sustainability scheme. In the Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels (2010/C 160/02, [4]), awareness of the CEN work is indicated.

It is widely accepted that sustainability at large encompasses environmental, social and economic aspects. The European Directives make mandatory the compliance of several sustainability criteria for biofuels and bioliquids. This European Standard has been developed with the aim to assist EU Member States and economic operators with the implementation of EU biofuel and bioliquids sustainability requirements mandated by the European Directives. This European Standard is limited to certain aspects relevant for a sustainability assessment of biomass produced for energy applications. Therefore compliance with this standard or parts thereof alone does not substantiate claims of the biomass being produced sustainably.

This Technical Specification defines requirements for the verification of compliance with the sustainability criteria for biofuels and bioliquids, in accordance with legal requirements, such as in Article 18 of the RED [1]. In particular, this Technical Specification defines requirements for an adequate standard of independent auditing of the information submitted by economic operators (Clause 5), and the implementation by economic operators, of the mass balance method of chain of custody control (Clause 6).

This Technical Specification is a tool that can be used as part of voluntary schemes, national systems or bilateral agreements.

This Technical Specification defines requirements for a mass balance system which:

- a) allows consignments of raw material or biofuel or bioliquids with differing sustainability characteristics to be mixed;

- b) requires information about the sustainability characteristics and sizes of the consignments referred to in a) to remain assigned to the mixture; and
- c) provides for the sum of all consignments withdrawn from the mixture to be described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture.

Each economic operator in the chain of custody is responsible for the data supplied in the product declarations submitted to the next economic operator as detailed in 5.1. The validity of these declarations is assessed through a conformity assessment procedures carried out as described in Clause 5 of this Technical Specification.

Where applicable, the parts of this standard contain at the end an annex that informs the user of the link between the requirements in the European Directive and the requirements in the CEN Standard.

## 1 Scope

This Technical Specification defines requirements for provision by economic operators of the required evidence that biofuels and bioliquids fulfil the sustainability criteria as defined in the Renewable Energy Directive [1]. This Technical Specification is applicable to the initial biomass production or to the point of collection for waste and residue and to each stage within the chain of custody. It also defines requirements on conformity assessment bodies when checking compliance with the present standard.

NOTE An example of supply chain of biofuels and bioliquids to be covered by the chain of custody is given in Figure 1. This supply chain is a simple representation, actual supply chains are typically more complex.

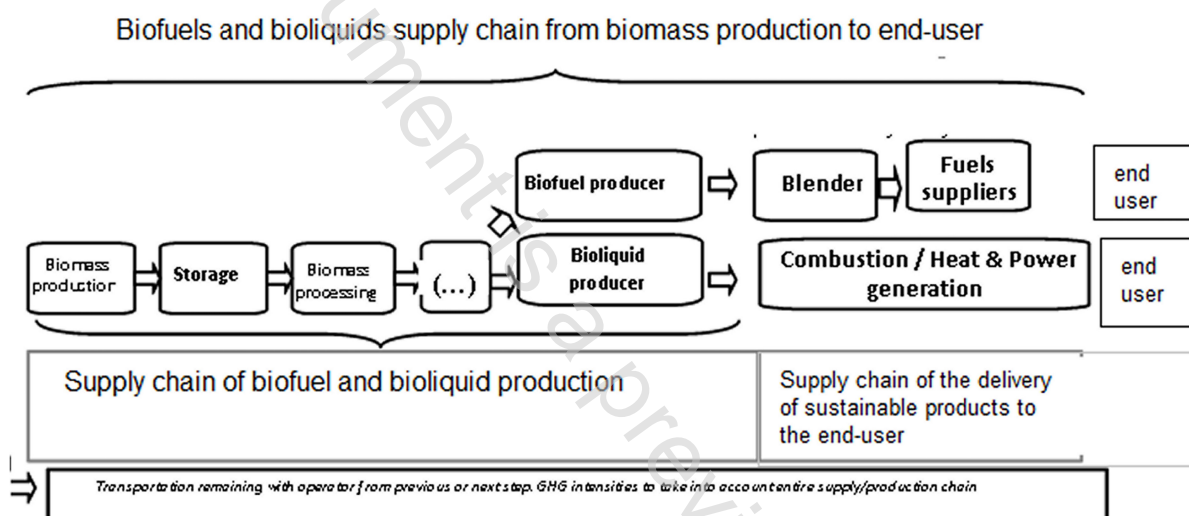


Figure 1 — Example of a supply chain of biofuels and bioliquids

## 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 16214-1:2012, *Sustainability criteria for the production of biofuels and bioliquids for energy applications – Principles, criteria, indicators and verifiers – Part 1: Terminology*

EN 16214-3, *Sustainability criteria for the production of biofuels and bioliquids for energy applications – Principles, criteria, indicators and verifiers – Part 3: Biodiversity and environmental aspects related to nature protection purposes*

EN 16214-4, *Sustainability criteria for the production of biofuels and bioliquids for energy applications – Principles, criteria, indicators and verifiers – Part 4: Calculation methods of the greenhouse gas emission balance using a life cycle analysis approach*

EN ISO/IEC 17000:2004, *Conformity assessment – Vocabulary and general principles (ISO/IEC 17000:2004)*

EN ISO/IEC 17050-1, *Conformity assessment – Supplier's declaration of conformity – Part 1: General requirements (ISO/IEC 17050-1)*

EN ISO/IEC 17050-2, *Conformity assessment – Supplier's declaration of conformity – Part 2: Supporting documentation (ISO/IEC 17050-2)*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO/IEC 17000:2004 and EN 16214-1:2012 apply.

### 4 Principle

This Technical Specification defines the requirements for the economic operators, based on the following principles:

- 1) Economic operators transfer the data of their consignments to the next operator through a product declaration, and need to meet the sustainability requirements as laid down in this document, and
- 2) Economic operators have the possibility to follow the conformity assessment procedures set out in this document (see 5.1.5).

### 5 Requirements for conformity assessment

#### 5.1 Basic elements

**5.1.1** In order to ensure that the sustainability criteria for biofuels and bioliquids are fulfilled different conformity assessment procedures as described in this clause shall be used.

**5.1.2** Each economic operator shall issue a product declaration in accordance with 6.2 and on the basis of EN ISO/IEC 17050-1 and EN ISO/IEC 17050-2 for each consignment it delivers. The product declaration is the basis of further conformity assessment procedures.

**5.1.3** The economic operator can be assessed whether it fulfils the requirements for economic operators described in 5.3.

**5.1.4** When an economic operator takes delivery from an economic operator which has not been assessed according to 5.4, it shall take responsibility for the sustainability data of the delivering non-assessed operator within its own assessment scope, including verification of supplier. This may be extended to cover previous economic operators and up to the full chain of custody.

**5.1.5** The economic operator shall be assessed.

**NOTE** This assessment may be done by a conformity assessment body in accordance with European and national legislation in this regard, the requirements of EC recognised voluntary schemes or with the requirements of a national system (see 5.5). The result of this assessment is a conformity assessment statement issued by the conformity assessment body.

#### 5.2 Requirements for sustainability

**5.2.1** The consignments taken into account for this Technical Specification shall not be made from raw material obtained from land with high biodiversity value, namely land that had one of the following statuses in or after January 2008, whether or not the land continues to have that status: