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**Merila za trajnostnost in zmanjševanje emisij toplogrednih plinov za biomaso za energijsko uporabo - Načela, merila, kazalniki in preskuševalniki - 1. del: Terminologija**

Sustainability and greenhouse gas emission saving criteria for biomass for energy applications - Principles, criteria, indicators and verifiers - Part 1: Terminology

Nachhaltigkeitskriterien für die Herstellung von Biokraftstoffen und flüssigen Biobrennstoffen für Energieanwendungen - Grundsätze, Kriterien, Indikatoren und Prüfer - Teil 1: Terminologie

Critères de durabilité pour la production de biocarburants et bioliquides pour des applications énergétiques - Principes, critères, indicateurs et vérificateurs - Partie 1 : Terminologie

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English Version

## Sustainability and greenhouse gas emission saving criteria for biomass for energy applications - Principles, criteria, indicators and verifiers - Part 1: Terminology

Critères de durabilité pour la production de  
biocarburants et bioliquides pour des applications  
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Nachhaltigkeitskriterien für die Herstellung von  
Biokraftstoffen und flüssigen Biobrennstoffen für  
Energieanwendungen - Grundsätze, Kriterien,  
Indikatoren und Prüfer - Teil 1: Terminologie

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 383.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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## European foreword

This document (prEN 16214-1:2022) has been prepared by Technical Committee CEN/TC 383 “Sustainably produced biomass for energy applications”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 16214-1:2012+A1:2019.

In comparison with the previous edition, the following technical modifications have been made:

The document has been updated to be in accordance with the current edition of the sustainability criteria of the European Commission Directive 2018/EU/2001, the recast of the Renewable Energy Directive (RED II). In particular, the RED II introduces sustainability criteria for forest biomass and the directive has also been extended to include solid biomass.

This European Standard comprises the following parts:

- prEN 16214-1, Sustainability and greenhouse gas emission saving criteria for biomass 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;
- prEN 16214-3, Sustainability and greenhouse gas emission saving criteria for biomass for energy applications — Principles, criteria, indicators and verifiers — Part 3: Sustainability criteria related to environmental aspects;
- 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.

## Introduction

In December 2018, the recast Renewable Energy Directive 2018/2001/EU (RED II) entered into force, as part of the Clean energy for all Europeans package, helping the EU to meet its emissions reduction commitments under the Paris Agreement. In RED II, the overall EU target for Renewable Energy Sources consumption by 2030 has been raised to 32 %.

The RED II defines a series of sustainability and greenhouse gas savings criteria that biomass for energy applications must comply with to be eligible for financial support by public authorities. Some of these criteria are the same as in the original RED, while others are new or reformulated. In particular, the RED II introduces sustainability for forestry feedstocks as well as greenhouse gas savings criteria for solid and gaseous biomass fuels.

It is widely accepted that sustainability at large encompasses environmental, social and economic aspects. However, this standard series only cover a selection of environmental aspects since the standard series has been developed with the aim to assist EU Member States and economic operators with the implementation of RED II. This standard series is therefore limited to certain aspects relevant for a sustainability assessment of biomass produced for energy applications. This means that compliance with this standard series or parts thereof alone does not substantiate claims of the biomass being produced sustainably.

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## 1 Scope

This document defines the terminology to be used in the field of sustainability and greenhouse gas emission saving criteria for biomass for energy applications. This document specifically considers some relevant terms and definitions used in European Commission Directive 2018/EU/2001, the recast of the Renewable Energy Directive (RED II), and the European Commission Directive 2009/30/EC referred to as Fuel Quality Directive (FQD), or in other related European regulations.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

### 3.1 accreditation

third-party attestation related to a *conformity assessment body* (3.29), conveying formal demonstration of its competence, impartiality and consistent operation in performing specific *conformity assessment* (3.28) activities

[SOURCE: EN ISO/IEC 17000:2020, definition 7.7]

### 3.2 accreditation body

authoritative body that performs *accreditation* (3.1)

[SOURCE: EN ISO/IEC 17000:2020, definition 4.7]

### 3.3 actual value

*greenhouse gas emissions savings* (3.58) for some or all of the steps of a specific *biofuel* (3.13), *bioliquid* (3.17) or *biomass fuel* (3.20) production *process* (3.86)

Note 1 to entry: Calculated in accordance with the methodology laid down in Part C of Annex V or Part B of Annex VI of RED II.

[SOURCE: European Commission Directive 2018/EU/2001]

### 3.4 advanced biofuels

*biofuels* (3.13) that are produced from the feedstock listed in Part A of Annex IX of RED II

[SOURCE: European Commission Directive 2018/EU/2001]

**prEN 16214-1:2022 (E)****3.5****agricultural, aquaculture, fisheries and forestry residues**

*residues* (3.97) that are directly generated by agriculture, aquaculture, fisheries and forestry and that do not include *residues* from related industries or processing

[SOURCE: European Commission Directive 2018/EU/2001]

**3.6****agricultural biomass**

*biomass* (3.19) produced from agriculture

[SOURCE: European Commission Directive 2018/EU/2001]

**3.7****agrobiodiversity**

component of biodiversity that contributes to food and agriculture production, encompassing within species, species and *ecosystem* (3.43) diversity

**3.8****agroforestry**

agroforestry systems which include land-use systems where trees are managed together with crops or animal production systems in agricultural settings

[SOURCE: Commission Regulation (EU) 1307/2014 Article 1]

**3.9****allocation**

partitioning the input or output flows of a *process* (3.86) or a *product* (3.88) system between the *product* system under study and one or more other *product* systems

[SOURCE: EN ISO 14040:2006, definition 2.17]  
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**3.10****ambient energy**

naturally occurring thermal energy and energy accumulated in the environment with constrained boundaries, which can be stored in the ambient air, excluding in exhaust air, or in surface or sewage water

[SOURCE: European Commission Directive 2018/EU/2001]

**3.11****area for nature protection purposes**

area designated by law or other equivalent *competent authority* (3.27) for the long-term conservation of nature with associated *ecosystem* (3.43) services and biodiversity values

Note 1 to entry: Within Forest Europe's classification, long-term is minimum 20 years for *forests* (3.49) and can be different in other *ecosystems* and regions.

Note 2 to entry: Some clauses or elements of classification schemes might fall out under this definition, for example IUCN scheme.



### 3.12 audit

systematic, independent and documented *process* (3.86) for obtaining objective evidence and evaluating it objectively to determine the extent to which the audit *criteria* (3.35) are fulfilled

Note 1 to entry: Internal audits, sometimes called first party audits, are conducted by, or on behalf of, the *organization* (3.80) itself.

Note 2 to entry: External audits include those generally called second and third party audits. Second party audits are conducted by parties having an interest in the *organization*, such as customers, or by other individuals on their behalf. Third party audits are conducted by independent auditing *organizations*, such as those providing certification/registration of conformity or governmental agencies.

[SOURCE: EN ISO 19011:2018, definition 3.1]

### 3.13 biofuel

liquid fuel for transport produced from *biomass* (3.19)

[SOURCE: European Commission Directive 2018/EU/2001]

### 3.14 biofuel producer

*organization* (3.80) or unit responsible for the production of the fuel

Note 1 to entry: The producer can be responsible for any operation with the purpose of changing the *biofuel* (3.13) properties.

Note 2 to entry: The producer can also be the supplier of the fuel.

[SOURCE: EN ISO 16559:2022, definition 3.156, modified, term changed to “biofuel producer” instead of “producer”]  
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### 3.15 biofuel production

transformation of *biomass* (3.19) or of an intermediate *product* (3.88) derived from *biomass* into a *biofuel* (3.13)

### 3.16 biogas

gaseous fuels produced from *biomass* (3.19)

[SOURCE: European Commission Directive 2018/EU/2001]

### 3.17 bioliquid

liquid fuel for energy purposes other than for transport, including electricity and heating and cooling, produced from *biomass* (3.19)

[SOURCE: European Commission Directive 2018/EU/2001]

### 3.18 bioliquid production

transformation of *biomass* (3.19) or of an intermediate *product* (3.88) derived from *biomass* into a *bioliquid* (3.17)

**prEN 16214-1:2022 (E)****3.19****biomass**

biodegradable fraction of *products* (3.88), *waste* (3.118) and *residues* (3.97) from biological origin from agriculture, including vegetal and animal substances, from forestry and related industries, including fisheries and aquaculture, as well as the biodegradable fraction of *waste*, including industrial and municipal *waste* of biological origin

[SOURCE: European Commission Directive 2018/EU/2001]

**3.20****biomass fuel**

gaseous and solid fuel produced from *biomass* (3.19)

[SOURCE: European Commission Directive 2018/EU/2001]

**3.21****biowaste**

biodegradable garden and park *waste* (3.118), food and kitchen *waste* from households, restaurants, caterers and retail premises and comparable *waste* from food processing plants

[SOURCE: European Commission Directive 2008/98/EC]

**3.22****blending**

*process* (3.86) of defined intentional mixing of a *biofuel* (3.13) or a *bioliquid* (3.17) with a *fossil fuel* (3.52) or of a *biofuel* with a *biofuel* or a *bioliquid* with a *bioliquid*

Note 1 to entry: See also *mixture* (3.77).

**3.23****certificate**

attestation document issued by an independent third-party certification body

[SOURCE: ISO 22222:2005, definition 2.2]

**3.24****chain of custody**

*process* (3.86) by which inputs and outputs and associated information are transferred, monitored and controlled as they move through each step in the relevant *supply chain* (3.110)

[SOURCE: ISO 22095:2020, definition 3.1.1]

**3.25****CO<sub>2</sub> equivalent**

unit for comparing the radiative forcing of a *GHG* (3.56) to that of carbon dioxide

Note 1 to entry: The carbon dioxide equivalent is calculated using the mass of a given *GHG* multiplied by its *global warming potential* (3.54).

[SOURCE: EN ISO 14064-1:2019, definition 3.1.13]

**3.26****combined heat and power  
CHP****cogeneration**

simultaneous generation in one *process* (3.86) of thermal energy and electrical and/or mechanical energy

[SOURCE: European Commission Directive 2004/8/EC]

**3.27****competent authority**

regulatory body, authority or *organization* (3.80) which implement the requirements of legislation and has the legally delegated (or invested) authority, capacity, or power to perform a designated function

**3.28****conformity assessment**

demonstration that specified requirements are fulfilled

Note 1 to entry: The *process* (3.86) of conformity assessment as described in the functional approach in Annex A of EN ISO/IEC 17000:2020 can have a negative outcome, i.e. demonstrating that the specified requirements are not fulfilled.

Note 2 to entry: Conformity assessment includes activities defined elsewhere in this document, such as but not limited to testing, inspection, validation, verification, certification, and *accreditation* (3.1).

Note 3 to entry: Conformity assessment is explained in Annex A of EN ISO/IEC 17000:2020 as a series of functions. Activities contributing to any of these functions can be described as conformity assessment activities.

Note 4 to entry: This document does not include a definition of “conformity”. “Conformity” does not feature in the definition of “conformity assessment”. Nor does this document address the concept of compliance.

[SOURCE: EN ISO/IEC 17000:2020, definition 4.1]

**3.29****conformity assessment body**

body that performs *conformity assessment* (3.28) activities, excluding *accreditation* (3.1)

[SOURCE: EN ISO/IEC 17000:2020, definition 4.6]

**3.30****consignment**

quantity of unfinished or finished *product* (3.88), consisting of one or more batches of the same sustainability characteristics, which is transferred from one *economic operator* (3.42) to another one at the same time

Note 1 to entry: Transfer from/to two *economic operators* involves two consignments.

**3.31****continuously forested area**

*forest* (3.49) with a canopy cover more than 30 %

[SOURCE: European Commission Directive 2018/EU/2001 and Communication from the Commission 2010/C 160/02]

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## 3.32

**conversion**

chemical, biological or physical *process* (3.86) whereby *biomass* (3.19) or an intermediate product is converted into a finished *biofuel* (3.13)/*bioliqid* (3.17) or into an intermediate product

## 3.33

**co-processing**

simultaneous *conversion* (3.32) of feedstocks and/or materials of different origins in one *process* (3.86), e.g. *biomass* (3.19) and fossil feedstocks

[SOURCE: European Commission Directive 98/70/EC]

## 3.34

**co-product**

substance or object resulting from a production *process* (3.86) not being a *product* (3.88), *residue* (3.97) or *waste* (3.118)

Note 1 to entry: See also *product* (3.88), *residue* (3.97) and *waste* (3.118).

## 3.35

**criterion**

requirement that describes what is to be assessed

Note 1 to entry: A criterion adds meaning and operability to a *principle* (3.85) without itself being a direct measure of performance.

Note 2 to entry: A criterion is characterized by a set of related *indicators* (3.66).

[SOURCE: ISO 13065:2015, definition 3.11]

## 3.36

**default value**

value derived from a *typical value* (3.114) by the application of pre-determined factors and that may, in circumstances specified in RED II, be used in place of an *actual value* (3.3)

[SOURCE: European Commission Directive 2018/EU/2001]

## 3.37

**degraded**

<in relation to biodiversity status of land> state characterised by long-term loss of biodiversity due to for instance overgrazing, mechanical damage to the vegetation, soil erosion or loss of *soil quality* (3.104)

Note 1 to entry: The term “degraded” is applied in the context of the high biodiverse value status of an area, namely for *highly biodiverse forest and other wooded land* (3.62) and for *highly biodiverse non-natural grassland* (3.64) and *forest* (3.49).

Note 2 to entry: The term “degraded” defined here is not related to the term “severely degraded land” used in the methodology for *greenhouse gas emissions* (3.57) calculation (see Annex C 9. of RED II).

[SOURCE: COMMISSION REGULATION (EU) No 1307/2014, Art 1, (4) (b), modified to fit the structure of a definition in a European Standard]