

STN	Kritériá trvalej udržateľnosti na výrobu biopalív a biokvapalín na energetické účely Princípy, kritériá, indikátory a overovatelia Časť 4: Metódy výpočtu bilancii emisií skleníkových plynov použitím analýzy životného cyklu	STN EN 16214-4+A1 83 9501
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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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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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

Critères de durabilité pour la production de biocarburants et de bioliquides pour des applications énergétiques - Principes, critères, indicateurs et vérificateurs - Partie 4 : Méthodes de calcul du bilan des émissions de GES utilisant une approche d'analyse du cycle de vie

Nachhaltigkeitskriterien für die Herstellung von Biokraftstoffen und flüssigen Biobrennstoffen für Energieanwendungen - Grundsätze, Kriterien, Indikatoren und Prüfer - Teil 4: Berechnungsmethoden der Treibhausgasemissionsbilanz unter Verwendung einer Ökobilanz

This European Standard was approved by CEN on 15 September 2012 and includes Amendment 1 approved by CEN on 23 September 2019.

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European foreword

This document (EN 16214-4:2013+A1:2019) has been prepared by Technical Committee CEN/TC 383 “Sustainably produced biomass for energy applications”, the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by May 2020, and conflicting national standards shall be withdrawn at the latest by May 2020.

This document includes Amendment 1 approved by CEN on 13 November 2019.

A1 This document supersedes EN 16214-4:2013 **A1**.

"The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

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Introduction

Directive 2009/28/EC [1] of the European Commission on the promotion of the use of energy from renewable sources, referred to as the Renewable Energy Directive (RED), incorporates an advanced binding sustainability scheme for biofuels and bioliquids for the European market. The RED contains binding sustainability criteria to 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.

The sustainability criteria for biofuels are also mandated in Directive 98/70/EC [2] relating to the quality of petrol and diesel fuels, via the amending Directive 2009/30/EC [4] (as regards the specification of petrol, diesel and gasoil and introducing a mechanism to monitor and reduce greenhouse gas emissions). Directive 98/70/EC is referred to as the Fuels Quality Directive (FQD).

A1 Directive 2015/1513 [3], referred to as the ILUC Directive, amends both the RED and the FQD.

NOTE The ILUC Directive adds a new Annex VIII regarding estimated indirect land use change emissions. These do not affect the economic operator directly, but are directed towards the member states. **A1**

In May 2009, the European Commission requested CEN to initiate work on standards on:

- the implementation, by economic operators, of the mass balance method of custody chain management;
- the provision, by economic operators, of evidence that the production of raw material has not interfered with nature protection purposes, that the harvesting of raw material is necessary to preserve grassland's grassland status, and that the cultivation and harvesting of raw material does not involve drainage of previously undrained soil;
- the auditing, by Member States and by voluntary schemes of 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, [5]), 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.

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 document specifies a detailed methodology that will allow any economic operator in a biofuel or bioliquid chain to calculate the actual GHG emissions associated with its operations in a standardised and transparent manner, taking all materially relevant aspects into account. It includes all steps of the chain from biomass production to the end transport and distribution operations.

A1 The methodology strictly follows the principles and rules stipulated in the RED (amended by European Parliament and Council Directive 2015/1513, referred to as the ILUC Directive [3]), and particularly its Annex V, the EC decision dated 10 June 2010 “Guideline for calculation of land carbon stocks” for the purpose of Annex V to Directive 2009/28/EC (2010/335/EU) [6] as well as any additional interpretation of the legislative text published by the EU Commission. **A1** Where appropriate these rules are clarified, explained and further elaborated. In the context of accounting for heat and electricity consumption and surpluses reference is also made to Directive 2004/8/EC [7] on “the promotion of cogeneration based on a useful heat demand in the internal energy market” and the associated EU Commission decision of 21/12/2006 “establishing harmonised efficiency reference values for separate production of electricity and heat” [8].

NOTE This edition of the standard does not cover the requirements in Directive 2018/EU/2001, the recast of the Renewable Energy Directive (referred to as RED II).

The main purpose of this standard is to specify a methodology to estimate GHG emissions at each step of the biofuel/bioliquid production and transport chain. The specific way in which these emissions have to be combined to establish the overall GHG balance of a biofuel or bioliquid depends on the chain of custody system in use and is not per se within the scope of this part 4 of the EN 16214 standard. Part 2 of the standard, addresses these issues in detail also in accordance with the stipulations of the RED. Nevertheless, Clause 6 of this part of the standard includes general indications and guidelines on how to integrate the different parts of the chain.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 16214-1:2012+A1:2019, *Sustainably produced biomass for energy applications – Principles, criteria, indicators and verifiers for biofuels and bioliquids – Part 1: Terminology*

CEN/TS 16214-2, *Sustainably produced biomass for energy applications – Principles, criteria, indicators and verifiers for biofuels and bioliquids – Part 2: Conformity assessment including chain of custody and mass balance*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN