

ISCC Updates on RFNBO Certification Approach

Juliane Pohl, Senior Manager, ISCC System GmbH ISCC Technical Stakeholder Meeting – Renewable Fuels of Non-Biological Origin 16 January 2024 – Online Meeting



Years experience of certifying global value chains

ISCC at a glance



Total Certificates issued 130

Total Countries 8,800+

Current System Users

1700+ Total ISCC Auditors trained 210+ ISCC training courses conducted

260+ Current ISCC association members

60+ Current Cooperating certification bodies



Data as of May 2023

 $\boxed{=}$

Hydrogen accelerator: REPowerEU increases ambitions for renewable hydrogen until 2030



Source: https://energy.ec.europa.eu/topics/energy-systems-integration/hydrogen_en



Source: Commission staff working document: Implementing the RePower EU Action Plant: Investment needs, hydrogen accelerator and achieving the bio-methane targets



Regulatory basis for RFNBOs and useful Q&A's provided by EC for further guidance

L 328/82 EN Official Journal of the European Union

DIRECTIVES

DIRECTIVE (EU) 2015/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2018 on the promotion of the use of energy from renewable source (recast) (Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 194(2) thereo

Having regard to the proposal from the European Commission

ission of the draft legislative act to the national parliament

Having regard to the opinion of the European Economic and Social Committee (7)

20.6.2023 EN Official Journal of the European Union L 157/11 COMMISSION DELEGATED REGULATION (EU) 2023/1184 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out detailed rules for the production of renewable liquid and gazeous transport feels of non-biological origin THE EUROPEAN COMMISSIO

Having regard to the Treaty on the Functioning of the European Union

Having regard to Directive (EU) 2015/2001 of the European Parliament and of the Council of 11 December 2015 on the otion of the use of energy from renewable sources (9), and in particular Article 2.7(3), seventh subparagraph thereof

Whereas

21.12.2018

RED II Directive (EU) 2018/2001

Autom processing and the states of a state of the state o

The increased use of energy from resemple sources also has a fundamental part to play in promoting the security of energy supply, transmable energy at affordabe prices, technological development and anoruzion as well as technological and admirtal indexchip while provides genericamental, social ad-hash baselest as well as major exportances with low populational development, expectilly in rural and lookind senses, in regions or territories with low population density or undergoing autial densitation.

) 0] C 246, 28.7.2017, p. 55.) 0] C 342, 12.10.2017, p. 79.) Fontion of the European Parliament of 13 Nevember 2018 (not vet published in the Official Journal) and decision of the Council of a Electrolity 2015. [5] Direction: 2021[2][6] of the European Parliaments and of the Council of 23 April 2029 on the presention of the score of energy from researchic touriest and standing and subsequently repealing Directives 2003/17/1[6]: and 2003/10/16: [0][1:10, 5.6.2009, p. 16].

Delegated Regulation on renewable electricity (EU) 2023/1184¹

Utraine, the need of the Union for a rapid clean energy transition and the reduction of its dependency on fossil fuel imports has become even clearer and stronger. The Commission outlined in the ReproverEU Communication (?) its strategy to become independent from Russian formit fuels well before the end of the decade. Renervable liquid and gaseous transport fuels of non-biological origin play an important role in this endeavour as well as reducing reliance on focal fuel imports in general. Therefore, the criteria to be laid down are also important to prevent that electricity demand to produce hydrogen necesary for renewable transport fuels of non-biological origin would lead to increased focal lisel imports from Russia for the production of the required electricity.

The rules set out in this Regulation should apply regardless of whether the liquid and gaseous transport fuel of nonbiological origin is produced inside or outside the territory of the Union. Where reference is made to bidding zone unstopic aregin in produced makes or outside the territory of the cluster, white retretives in mole to issuing acute and imbalance settlement period, concepts that exist in all clubins but not in all other counties, it is appropriate to allow find produces in third countries to rely on equivalent concepts provided the objective of this Regulation is maintained and the provision is impedemented based on the most similar concept existing in the third country concerned in case of bidding scores such concept could be similar market regulations, the physical characteristics of the characteristic of the stopic score such concept could be similar market regulations, the physical characteristics of the electricity grid, notably the level of interconnection or as a last resort the country

specifying a methodology for assessing GHG savings from RFNBOs and from recycled carbon fuels

¹ (EU)2023/1184 delegated regulation on establishing a Union methodology setting out detailed rules for the production of RFNBOs ² (EU)2023/1185 delegated regulation on establishing a minimum threshold for GHG savings of recycled carbon fuels and by

OJL 325, 21.12.2018, p. 52. COM(2022) 106 final.

³ "Q&A Implementation of hydrogen delegated acts" v.26/07/2023, available at:

L 157/20	EN	Official Journal of the European Union	20.6.2023
		COMMISSION DELEGATED REGULATION (EU) 2023/1185	
		of 10 February 2023	
	supplementing Dire	crive (EU) 2018/2001 of the European Parliament and of the	Council by

establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon toess and by specifying a methodology for assessing greenhouse gas emissions savings from rearwable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels

THE REPORTAN COMPARISON

Having regard to the Treaty on the Functioning of the European Union.

Having regard to Directive (EU) 2015/2001 of the European Parliament and of the Council of 11 December 2018 on the tion of the use of energy from renewable sources (%), and in particular Articles 25(2) and 28(5) thereof

Taking into account the need to substantially reduce greenhouse gas emissions in the transport sector and the possibility for each fael to make significant greenhouse gas emissions savings by applying carbon capture and merage techniques, among other measure, and considering the greenhouse gas saving requirements set for other feels in Directive GR2 30 0112/01. To should be set for the saminary metal set of the set of the same set of the set of

Delegated Regulation on GHG methodology (EU) 2023/1185²

The origin of carbon used for the production of renewable liquid and gateous transport fuels of non-biological the origin to chickn show for the production to charmanist apput sing particle products affinite the shower and the production of the production of the shower and the production of the production of the shower and the production of the production of the shower and the production of the production economy on a trajectory towards finanze neutralby by 2005, source of carbon's fast rais be captured thould become areas in the mediant to long areas, increasingly verticed as Q to emission that are builters to also it, and discussion of the second that contain carbon from non-stratable field is an econgentified with a trajectory towards classes instability by 2005 and the second secon

O[L 328, 21.12.2018, p. 82.
 Directive 2003[12]/BC of the Buropean Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas matinize allowance trading within the Community and amending Council Directive 99(6),BC (0]L 275, 25.10.2003, p. 32).

Q&A implementation of hydrogen delegated acts

Version of 26/07/2023

In meetings with certifiers and voluntary schemes, the Commission has discussed how hydrogen producers and voluntary schemes could implement the requirements set out in the "RFNBO delegated act"¹ and the delegated act setting out the GHG calculation methodology for renewable fuels of nonbiological origin and recycled carbon fuels ("GHG methodology")². This document sets out questions that have been raised by fuel producers and certifiers in the aftermath of the adoption of the delegated acts. The replies do not address any of the additional requirements in relation to the agreed revision of the renewable energy directive ("RED")3

This report summarises the outcome of those meetings and does not create any enforceable right or expectation. The binding interpretation of EU legislation is the exclusive competence of the Court of Justice of the European Union. The views expressed in this document are without prejudice to the position that the Commission might take before the Court of Justice.

Neither the European Commission nor any person acting on behalf of the European Commission is

Q&A implementation of hydrogen delegated acts EC, v.26 July 2023³

¹ Commission Delegated Regulation (EU) 2023/1184 ² Commission Delegated Regulation (EU) 2023/1185 https://eur-lex.europa.eu/legal-content/EN/TXT/PDE/?uri=CONSIL:ST_10794_2023_INIT



https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/voluntary-schemes en#approved-voluntaryschemes-and-national-certification-schemes. Note: This report summarises the outcome of stakeholder meetings and does not create any enforceable right or expectation.

RFNBOs/PtX can already be certified under ISCC PLUS

 ISCC applied for recognition by the EU COM for RFNBO certification

ISCC

EU

- RFNBOs can be certified once recognition by EC is in place
- ISCC is participating in pilot audits





ISCC RFNBO approach will be part of ISCC EU that is already recognised by the EC under RED II

The ISCC EU system documents are already recognised by EC ISCC EU 201 **ISCC EU 102 ISCC EU 204** SYSTEM BASICS RISK MANAGEMENT GOVERNANCE **ISCC EU 103 ISCC EU 203** REQUIREMENTS FOR CERTIFICATION TRACEABILITY AND CHAIN OF BODIES AND AUDITORS

ISCC has set up two system documents for RFNBOs certification (recognition by EC pending)









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ISCC certification approach for RFNBOs has been set up

- ISCC developed a certification approach for Renewable Fuels of Non-Biological Origin (RFNBOs)
- Approach is based on delegated legislations as published on 20 June 2023*
- Approach was successfully tested in pilot audits that were initiated by the Dutch authorities EZK and RVO**
- ISCC submitted updated RFNBO System Documents to the EC for recognition in August 2023
- ISCC EU RFNBO certification audits will be possible, once recognition is in place
- The first ISCC RFNBO Training took place in May next training will be on 18 January 2024

* (EU)2023/1184 delegated regulation on establishing a Union methodology setting out detailed rules for the production of RFNBOs and (EU)2023/1185 delegated regulation on establishing a minimum threshold for GHG savings of recycled carbon fuels and by specifying a methodology for assessing GHG savings from RFNBOs and from recycled carbon fuels.

** Dutch Ministry of Economic Affairs and Climate Policy (EZK) and Netherlands Enterprise Agency (RVO)







To cover RFNBO supply chains renewable electricity units are added to the existing scopes





Forwarding sustainable material in the supply chain





Principles to count electricity for RFNBO production as renewable

	The electricity must be produced exclusively from renewable sources excluding bioenergy:
Renewability	 Rules if electricity is sourced from direct connection between electricity and RFNBO installation Rules to count electricity taken from the grid as fully renewable

To prevent increased electricity production from fossil sources the production of RFNBOs should...

Additionality	Incentivise additional deployment of renewable electricity capacity for RFNBO production
Temporal correlation	Take place at times when renewable electricity is available (i.e. when the RFNBO production supports the integration of renewable power generation into the electricity system and reduces the need for dispatching renewable electricity)
Geographical correlation	Take place in places where renewable electricity is available (i.e. the electrolyser and the installation production renewable electricity should be located in the same or interconnected bidding zone)



Five possible scenarios for renewable electricity



& Carbon Certification

The GHG methodology included in the DA differs from RED II. Minimum GHG savings are 70%

$$\mathbf{E} = \mathbf{e}_{i} + \mathbf{e}_{p} + \mathbf{e}_{td} + \mathbf{e}_{u} - \mathbf{e}_{ccs}$$

Where:

E = total emissions from the use of the fuel in $g CO_2/MJ$ $e_i = e_i \text{ elastic} + e_i \text{ rigid} - e_{ex-use}$: supply of inputs $e_i \text{ elastic} = emissions$ from elastic inputs $e_i \text{ rigid} = emissions$ from rigid inputs $e_{ex-use} = emissions$ from inputs' existing use or fate $e_p = emissions$ from processing $e_{td} = emissions$ from transport and distribution $e_u = emissions$ from combusting the fuel

 e_{ccs} = emission savings from carbon capture and geological storage

Source: Annex on Delegated Act on Renewable Fuels of Non-Biological Origin – GHG methodology (2023)

Elastic: Supply can be expanded to meet additional demand (e.g. electricity)

Rigid: Supply <u>cannot</u> be expanded to meet additional demand (e.g. MSW, inputs for RCFs)



Requirements for traceability chain of custody

Traceability

- Every certified element in a RFNBO supply chain issues a sustainability declaration for amounts of outgoing sustainable material
- Sustainability declarations contain
 - General information on the supplier and recipient (e.g. name and address, place of dispatch and receipt)
 - Product specific information (e.g. country of origin of renewable energy, relevant GHG information

Chain of Custody

- The mass balance approach is applicable for RFNBO supply chains
- "Proportional approach (or stoichiometric approach)" to be applied for allocation of sustainability and GHG characteristics
 - Sustainable share to be attributed to all process products in the same ratio in which products are generated per unit of consumed electricity





Documentation&Training

 Tailored ISCC EU RFNBOs System Documents* (existing ISCC EU System Documents will also apply)

Training of auditors through ISCC RFNBOs Training

RFNBOs under ISCC EU in a nutshell

Chain of Custody Options

- Mass balance
- Physical segregation



Certification of the whole supply chain From point of origin or electrolyser to the final market

Recognition

Under recognition process by the European Commission (along with Recycled Carbon Fuels)



*Since ISCC is under recognition by the EC, we are not allowed to share those documents with third parties

ISCC registration and certification process







ISCC Integrity Assessments

- Complete audits or specific focus (CoC, GHG etc.)
- ISCC Integrity Auditors

Choice of Candidates

- Randomly / risk basis after risk evaluation
- complaints
- Report of non-conformity or fraud
- On a global scale
- On-site/remote
- Results documented in Audit Report
- Consequences: Conditions for recertification, sanctions (e.g. suspension, withdrawal of certificate)



Final messages

- ISCC EU certification approach for RFNBOs is with EC for recognition
 - ISCC EU RFNBO certification possible once recognition by European Commission is in place
- ISCC PLUS certification of RFNBOs is already possible today
- Second ISCC RNFBO Training takes place on 18 January 2024 (further dates tbc)
- Next meeting of ISCC Technical Committee on RFNBOs tbc
 - Sign up for ISCC Newsletter to stay informed (https://www.iscc-system.org/about/news/newsletterregistration/)



Thank you!

ISCC System GmbH

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