

Welcome

Background

The 2009 Renewable Energy Directive (REDI) defines the Guarantee of Origin (GO) as an instrument which provides information or evidence to electricity customers on the renewable source of the energy. As such, the GO empowers the consumer to choose 'green' in a trustworthy manner. A recast Renewable energy Directive (REDII) text, now finalized following a political agreement between the European Council and the European Parliament this summer, expands and refines the existing REDI provisions on GOs.

CertifHy WG4 on regulatory issues aims to identify regulatory shortcomings to the implementation of a CertifHy GO scheme for green and low carbon hydrogen, and to suggest ways to address these. At the kick-off meeting of WG4, in November 2017, it was agreed to focus firstly on the REDII with regard to possible alignment issues concerning the proposed CertifHy GO scheme.

The purpose of this survey is to collect the view of WG4 with regard to the proposed CertifHy GO scheme and possible barriers created by the relevant provisions of the REDII text.

The questions are linked to CertifHy's objective to create an EU-wide scheme for hydrogen GOs.

Scope of the proposed REDII

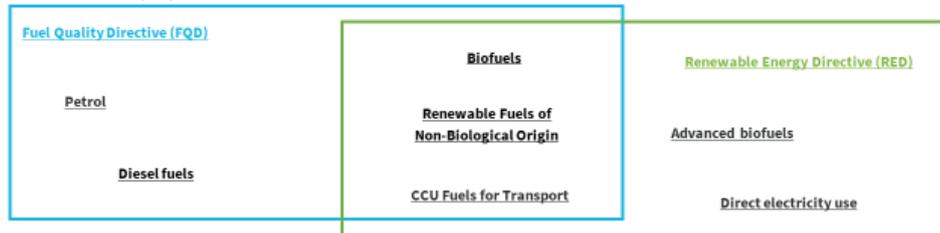
Before answering the survey questions below, the following paragraphs aim to give some clarifications on the scope and limitations of the REDII with regard to promoting hydrogen.

The prime focus of the REDII is on the promotion of the deployment of Renewable Energy Sources (RES), and in particular on setting provisions that will contribute to reaching the EU-wide RES target of 32% by 2030. The EU 2030 target needs to be achieved through a partnership with Member States (MS) combining their national actions in promoting RES, which is supported by a framework of measures. Hence, the REDII includes a number of obligations and requirements on MS concerning the promotion on RES in the electricity, heating and cooling, and transport sector.

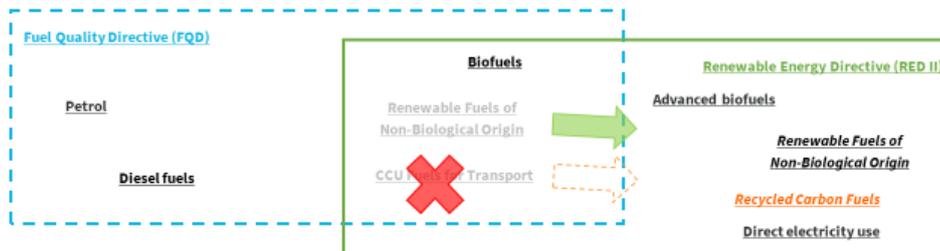
REDII covers a few hydrogen applications, such as the use of hydrogen for transport and heating purposes. Refineries are now covered in the final REDII, through the inclusion of "renewable liquid and gaseous transport fuels of non-biological origin for the production of intermediary products". Use of hydrogen in other sectors and for other applications, such as steel and production of ammonia, are not covered. For refineries, other directives such as the Fuel Quality Directive (FQD) could be considered more relevant. FQD requires transport fuel suppliers to reduce average GHG emission intensity of fuels by 2020. However, no future role for FQD beyond 2020 is foreseen. Furthermore, whilst low-carbon hydrogen produced from fossil sources with carbon capture and sequestration (blue hydrogen) could be covered via 'recycled carbon fuels' in the REDII text, additional provisions covering blue hydrogen are likely to be included in the forthcoming revision of the EU gas directive/regulations, which is expected in 2020. The following slides provides additional clarity on the fuel definition in the EU legal framework as well as fuel definitions in REDII.

Fuel definition for Transport

EU Legal Framework until 31/12/2020



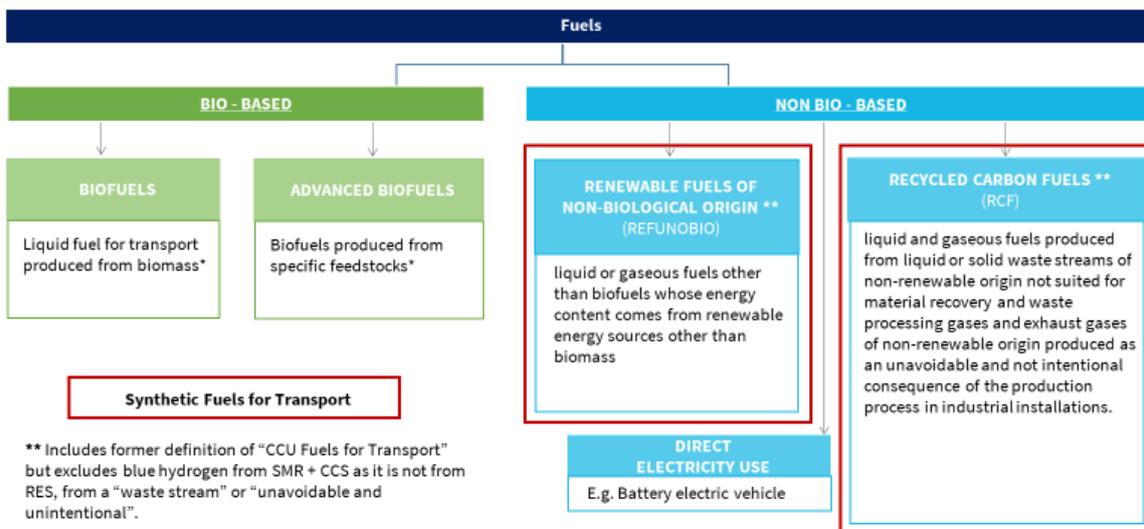
EU Legal Framework from 1/01/2021 until 31/12/2030



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Fuels Definitions for Transport in RED II



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Article 19 of the REDII includes some modifications to the existing GO system, such as:

1. to extend the guarantees of origin (GOs) system to gas;
2. to make the issuance of GOs for heating and cooling and gas (including hydrogen) mandatory upon a producer's request;
3. to make the use of GOs mandatory for RES-E and renewable gas disclosure;
4. to enable the issuance of GOs to supported RES-E allocated through auctioning, with revenues raised to be used to offset the costs of renewable support; and
5. to improve the administrative procedures through the application of the CEN standard. Article 25 of the REDII proposal is also relevant.

Whilst Article 25 states that renewable liquid and gaseous transport fuels of non-biological origin (e.g. hydrogen) are to be included in the calculation of the share of renewable energy in liquid and gaseous transport fuels, it does not specifically define a role for GOs, the wording implies a link between the GO for RES-E and the fuel obligation. Among others, restrictions on what can count as renewable when using electricity from the grid applies to both electricity for transport use as well as hydrogen for transport use (these restrictions also apply to RES-E for transport).

Please keep in mind the limitations of the REDII proposal when answering the survey questions below.

1. Definition of green hydrogen

Background: Certifhy aims to provide assurances to buyers of hydrogen that what they buy meets their environmental and origin expectations. This requires an appropriate definition of green hydrogen in precise and technical terms, for which Certifhy has proposed a definition. REDII, on the other hand, does not include a definition of green hydrogen.

1. Do you consider the fact that the REDII does not include a definition of green hydrogen as a barrier for the Certifhy GO scheme?

Yes

No

Please provide a short elaboration to support your response:

2. If you responded 'Yes' above, please indicate whether this need is specific to hydrogen or also applies to electricity.

Specific to hydrogen

Also applies to electricity

Please provide a short elaboration to support your response:

2. REDII limits GO to consumer disclosure

Background: A GO could in principle serve purposes beyond consumer disclosure, such as showing compliance with environmental/GHG emission requirements in order to claim subsidy from the national support scheme, or to prove compliance with an obligation. In addition, technically speaking, GOs can be used to prove either production or consumption of a certain type of product. On the one hand, the REDII states that "the sole function of proving to a final customer that a given share/quantity of energy is produced from RES", hence limiting the GO to consumer disclosure. On the other hand, there is the example from the region of Flanders in Belgium where the same scheme is used for two functions, i.e. a GO which provides information on the origin of RES-E for consumer disclosure purpose and a green certificate which provides support to the production of RES-E.

3. Do you consider the fact that the REDII explicitly mentions that the GO is limited to having "the sole function of proving to a final customer that a given share/quantity of energy is produced from RES" as a barrier to a CertifHy GO scheme?

Yes

No

Please provide a short elaboration to support your response:

4. As a follow up to Question 3, could the CertifHy scheme be used to cover multiple purposes, such as in Flanders (i.e. renewable energy generators receive a GO and a Certificate for each MWh injected)?

Yes

No

Please provide a short elaboration to support your response:

5. Do you know of any countries that have a similar system as that of Flanders?

If Yes, please specify which countries:

3. Implementation of GO scheme(s) across all Member States

Background: When GOs were first introduced in EU legislation in 2001 (Directive 2001/77/EC), GO schemes for electricity from renewable energy sources (RES-E) were implemented at national level. A CEN standard was developed for RES-E GOs, while the Association of Issuing Bodies (AIB) created a common framework (covering many items beyond the scope of the CEN standard), the EECS scheme, which has been important for facilitating international exchange of GOs and creating market acceptance across Member States (MS). In more recent years, MS have introduced national GO schemes for green gas or biomethane, which to a large extent do not allow for cross-border trade of GOs. This is now being overcome by the implementation of an interface registry allowing GOs to be issued in one country on the basis of the cancellation of a GO in another participating country (ERGaR). In contrast to the introduction of national GOs schemes for green gas or biomethane, the Certifhy project aims to develop an EU-wide GO scheme for green and low carbon hydrogen from the outset, as the AIB did before the majority of MS started to implement the GO scheme at national level. However, REDII provisions under Art. 19 give MS leeway to introduce differences in the implementation of e.g. GO schemes for green hydrogen.

6. Do you consider the leeway Member States will have in transposing the GO related provisions in REDII to be a threat to the implementation of an EU-wide Certifhy GO scheme from the outset?

Yes
No

Please provide a short elaboration to support your response:

7. If you responded 'Yes' to above question, do you think the risk of fragmentation due to the MS being in charge of implementation can be overcome by coordination and interaction between stakeholders?

Yes
No

Please provide a short elaboration to support your response:

4. Renewable fuels of non-biological origin (e.g. hydrogen) under REDII

Background: Renewable fuels of non-biological origin (which includes hydrogen) are eligible for counting towards the numerator set out in Art 25 (which requires MS to set an obligation of fuel suppliers to ensure a given share of RES supplied for final consumption in the transport sector). However, Art. 25(3) (relevant paragraphs from Art. 25(3) can be found at the end of this questionnaire, see page 7) sets restrictions on what can be counted as renewable with regard to the use of grid electricity for the production of renewable fuels of non-biological origin. (Note: these restrictions also apply to electricity for transport use, and the Article states that further conditions still have to be defined).

8. Do you consider Art. 25(3) as a barrier to the Certifhy GO scheme?

Yes

No

Please provide a short elaboration to support your response:

9. Please provide any additional views you may have concerning alignment issues between the proposed Certifhy GO scheme and the provisions in the REDII text.

Relevant paragraphs from Art. 25(3) regarding Survey Question 4:

“To determine the share of renewable electricity for the purposes of paragraph 1 the share of electricity from renewable energy sources in the Member State where the electricity is supplied, as measured two years before the year in question may be used.

By way of derogation from the first subparagraph, to determine the share of electricity for the purposes of paragraph 1 in the case of electricity obtained from a direct connection to an installation generating renewable electricity and supplied to road vehicles, that electricity shall be fully counted as renewable.

In order to ensure that the expected increase in demand of electricity in the transport sector beyond the current baseline is provided by additional renewable capacities, the Commission shall develop a framework on additionality in the transport sector and present options in view of determining Member States' baseline and of measuring additionality.

For the purposes of this paragraph, the following provisions shall apply:

a) When electricity is used for the production of renewable liquid and gaseous transport fuels of non-biological origin, either directly or for the production of intermediate products, the average share of electricity from renewable energy sources in the country of production, as measured two years before the year in question, may be used to determine the share of renewable energy.

However, electricity obtained from direct connection to an installation generating renewable electricity (i) that comes into operation after or at the same time as the installation producing the renewable liquid and gaseous transport fuel of non-biological origin and (ii) is not connected to the grid or is connected to the grid but can provide evidence that the respective electricity has been provided without importing electricity from the grid, can be fully counted as renewable electricity for the production of that renewable liquid and gaseous transport fuel of non-biological origin.

In addition, electricity that has been imported from the grid may be counted as fully renewable if the electricity is produced exclusively from renewable energy sources and the renewable properties and any other appropriate criteria [] have been demonstrated, ensuring that the renewable properties of this electricity are claimed only once and only in one end-use sector.”