

RENEWABLE ENERGY DIRECTIVE REDIII – ANALYSIS

1 SUMMARY

On 9 October 2023, the long awaited REDIII, was adopted by the European Council, being the revision of the Directive 2018/2001 on the promotion of energy from renewable sources.

The main changes impacting the Guarantees of Origin landscape are:

- Timestamp on GOs encouraged.
- GO Size Defined: Default is set at 1 MWh, with provision for fractions where appropriate.
- GO Expiry Clarified: With a 12-month transaction time and 18-month cancellability before expiry.
- Usage of Gas GOs: This should correspond to the "relevant network characteristics".
- Residual Mix: Member States obligation to annually publish the residual mix.
- Gas Supplier Disclosure: GO cancellation obligation for Suppliers of renewable gas over gas or hydrogen network, except for supported gases or Residual Mix.
- Small Production Devices: mandatory simplified registration procedures for GOs.
- Green label based on GOs: GOs provide information a green label on new installations.
- GO Market Monitoring: Observing supply and demand dynamics within the GO market.
- PPAs:
 - Barriers to renewable PPAs have been removed.
 - A new link, albeit loose, between PPAs and GOs is introduced.
 - \circ $\;$ Support schemes will consider GOs issued to PPA buyers.
- Link between GOs and the Union Database for sustainable biofuels: new process flow.
- Overall, RES target increase.

2 HISTORY AND STATUS OF REDIII

In 2009 the <u>EU Renewable Energy Directive 2009/28 (RED)</u> was adopted to deliver a minimum 20 % share of renewable energy sources (RES) in EU final energy consumption by 2020. The RED was substantially revised in 2018 (REDII, 2018/2001) to deliver the EU objective of a minimum 32 % share of RES in final energy consumption by 2030. On 14 July 2021, the Commission adopted the 'fit for 55' package, part of the European Green Deal, which included a significant revision of the RED.

Trilogue negotiations between the Parliament, the Council and the Commission concluded with a provisional agreement on 30 March 2023. The Council formally endorsed the final text on 16 June 2023. The ITRE committee voted on the provisional agreement on 28 June, and the vote in the plenary session of the Parliament took place on 12 September 2023. On 9 October the Council approved the Directive of the European Parliament and of the Council amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (COM(2021)0557 – C9- 0329/2021 – 2021/0218(COD)). The final text is published <u>on this link</u>.

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

It must be transposed into national law 18 months after entry into force.



3. UPDATES IN RED III, COMPARED TO REDII

The main updates in REDIII on energy origin tracking are highlighted here.

[Note: The passage in strikethrough indicates remarkable modifications introduced by the Council as compared to the version approved by the Parliament.]

Article 3 Binding overall Union target for 2030

- The raise of the share of renewables in the Union's gross final consumption of energy from 32% to 42.5% by 2030, with an additional 2.5% indicative top up that would allow the overall share to reach 45%.
- Tightening of conditions for the sustainability of biofuels, prohibiting the use of all biomasses from primary and highly biodiverse forests and the use of stumps and roots.

Opportunity for efficiency: Information of an energy producer's audit may <u>feed multiple processes</u>, <u>including the GO inspection</u> requirements.

• Member States shall establish a framework, which may include support schemes and measures facilitating the uptake of renewable power purchase agreements, enabling the deployment of renewable electricity.

Assumption of GO increase: It may be expected that the <u>amount of energy that will receive GOs, will</u> increase substantially.

Article 7 Calculation of the share of energy from renewable sources

• The definition for the calculation of gross final consumption of electricity from renewable energy sources has been extended to include renewable energy communities and electricity from renewable fuels of non-biological origin.

Statistics availability: Could it have any impact on input data for the residual mix calculation?

Article 15 Administrative procedures, regulations and codes

15.8 Encouragement of renewable energy purchase agreements (PPA). "Member States shall assess the regulatory and administrative barriers to long-term renewable energy purchase agreements, and shall remove unjustified barriers to renewable energy purchase agreements, and promote the uptake of, such agreements, including by exploring how to reduce the financial risks associated with them, in particular by using credit guarantees. Member States shall ensure that those agreements are not subject to disproportionate or discriminatory procedures or charges, and that any associated guarantees of origin can be transferred to the buyer of the renewable energy under the renewable energy purchase agreement. Member States shall describe their policies and measures promoting the uptake of renewable energy purchase agreements in their integrated national energy and climate plans. (...) They shall also provide, in those progress reports, an indication of renewable energy generation that is supported by renewable energy purchase agreements."

Article 19 Guarantees of origin for energy from renewable sources

19.1

• Remains in its original version.



19.2

- Right to receive GOs also for RFNBOs, with specific reference to Hydrogen.
 "To that end, Member States shall ensure that a guarantee of origin is issued in response to a request from a producer of energy from renewable sources including gaseous renewable fuels of non-biological origin such as hydrogen, unless Member States decide, for the purposes of accounting for the market value of the guarantee of origin, not to issue such a guarantee of origin to a producer that receives financial support from a support scheme."
- The possibility of issuing a GO for energy from non-renewable sources remains.
- Encourages Member States to more temporal granularity on guarantees of origin, granular and closer to realtime. Those should be of the size of 1 Wh and option for moving closer to real time with a timestamp on the GOs.

"A guarantee of origin shall be of the standard size of 1 MWh. Where appropriate, such standard size may be divided to a fraction size, provided that the fraction is a multiple of 1 Wh."

- New included, has an impact on the IB: *"Simplified registration processes and reduced registration fees shall be introduced for small installations of less than 50 kW and for renewable energy communities.";*
- The possibility of not issuing a GO remains where the State decides not to issue such a GO to a producer that receives financial support from a support scheme.

"In order to take into account the market value of the guarantee of origin, Member States may, inter alia, decide to issue a guarantee of origin to the producer and immediately cancel it.

Member States shall ensure that when a producer receives financial support from a support scheme, the market value of the guarantee of origin for the same production is taken into account appropriately in the relevant support scheme.

It shall be presumed that the market value of the guarantee of origin has been taken into account appropriately in any of the following cases:

- a. where the financial support is granted by way of a tendering procedure or a tradable green certificate system;
- b. where the market value of the guarantees of origin is administratively taken into account in the level of financial support; or
- c. where the guarantees of origin are not issued directly to the producer but to a supplier or consumer who buys the energy either in a competitive setting or in a long-term renewables power purchase agreement.";



19.3

• The lifetime of the GO has been modified as follows: *"For the purposes of paragraph 1, guarantees of origin shall be valid for transactions for 12 months after the production of the relevant energy unit. Member States shall ensure that all guarantees of origin that have not been cancelled expire at the latest 18 months after the production of the energy unit. Member States shall include expired guarantees of origin in the calculation of their residual energy mix.";*

19.4

• Introduces an obligation for MS to ensure that energy companies cancel GOs no later than 6 months after the end of the validity and to publish residual mix data on an annual basis. The text has been modified as follows:

"For the purposes of disclosure referred to in paragraphs 8 and 13, Member States shall ensure that energy undertakings cancel guarantees of origin at the latest six months after the end of the validity of the guarantee of origin. Furthermore, by ... [18 months after the date of entry into force of this amending Directive], Member States shall ensure that the data on their residual energy mix are published on an annual basis.";

19.5

• Remains in its original version

19.6

• Remains in its original version

19.7

• Timestamp for gas GOs should be linked to an hourly or sub hourly interval. Timestamp for electricity GOs should be linked to the imbalance settlement period of the area where it is related to. 15-minute timestamp. The text of a) has been modified as follows.

a) the energy source from which the energy was produced and the start and end dates of production, which may be specified:

(i) in case of renewable gas, including gaseous renewable fuels of non-biological origin, and renewable heating and cooling, at an hourly or sub hourly interval;

(ii) for renewable electricity, in accordance with the imbalance settlement period as defined in Article 2, point (15) of Regulation (EU) 2019/943.';

19.8

• Obligation for gas suppliers to use GOs when demonstrating the RES share to consumers the original 19.8 for electricity is now extended to gas. Novelty is that the cancellation of GOs correspond to the relevant network characteristics. it makes sense to make sure that methane gas cannot be disclosed from a hydrogen network and vice versa. A recital will clarify this content. More about network characteristics in the meeting paper <u>AIB-2023-GSG-04-09</u> <u>Categorizing gases based on Network Characteristics</u>.



"Where an electricity supplier is required to demonstrate the share or quantity of energy from renewable sources in its energy mix for the purposes of **Article 3(9)**, **point (a) of** Directive 2009/72/EC, it shall do so by using guarantees of origin except:

(a) as regards the share of its energy mix corresponding to non-tracked commercial offers, if any, for which the supplier may use the residual mix; or

(b) where a Member State decides not to issue guarantees of origin to a producer that receives financial support from a support scheme.

Where gas is supplied from a hydrogen or natural gas network, including gaseous renewable fuels of non-biological origin or biomethane, the supplier is required to demonstrate to final consumers the share or quantity of energy from renewable sources in its energy mix for the purposes of Annex I to Directive 2009/73 section 5 of [proposal for a Directive on common rules for the internal markets in renewable and natural gases and in hydrogen COM(2021)0803]. The supplier shall do so by using guarantees of origin except:

(a) as regards the share of its energy mix corresponding to non- tracked commercial offers, if any, for which the supplier may use the residual energy mix.

(b) where a Member State decides not to issue guarantees of origin to a producer that receives financial support from a support scheme.

When a customer consumes gases from a hydrogen or natural gas network, including gaseous renewable fuels of non-biological origin or biomethane, as demonstrated in the commercial offer by the supplier, Member States shall ensure that the guarantees of origin that are cancelled correspond to the relevant network characteristics.

Where Member States have arranged to have guarantees of origin for other types of energy, suppliers shall use for disclosure the same type of guarantees of origin as the energy supplied. Likewise, guarantees of origin created pursuant to Article 14(10) of Directive 2012/27/EU may be used to substantiate any requirement to demonstrate the quantity of electricity produced from high-efficiency cogeneration. For the purposes of paragraph 2 of this Article, where electricity is generated from high-efficiency cogeneration using renewable sources, only one guarantee of origin specifying both characteristics may be issued..'"

19.9 - 19.12

• Remains in its original version.

19.13

• The text has been modified as follows:

"By 31 December 2025 the Commission shall adopt a report assessing options to establish a Union-wide green label with a view to promoting the use of renewable energy generated by new installations. Suppliers shall use the information contained in guarantees of origin to demonstrate compliance with the requirements of such a label;"



19.13a

• A new provision has been added: *"The Commission shall monitor the functioning of the guarantees of origin system and assess by 30 June 2025 the balance of supply and demand of guarantees of origin in the market and in the case of imbalances identify relevant factors affecting supply and demand.'."*

Article 20a Facilitating system integration of renewable electricity

• A new article has been inserted. TSO/DSO shall make available information on the share of renewable electricity and the greenhouse gas emissions content of the electricity supplied in each bidding zone, as accurately as possible in intervals equal to the market settlement frequency but of no more than one hour, with forecasting where available. MS shall incentivise making available real-time information.

Enabler for granular certificates: This is an enabler of the timestamped GOs 24/7 rollout.

Article 22a Mainstreaming renewable energy in industry

• A new provision has been added, which introduces targets for the industry sector in share of renewables at least 1.6 percentage points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030.

Article 23 Mainstreaming renewable energy in heating and cooling

- MS shall increase the share of renewable energy in that sector by at least 0.8 percentage points as an annual average calculated for the period 2021 to 2025 and by at least 1.1 percentage points as an annual average calculated for the period 2026 to 2030.
- Emphasis on waste heat and cold.

Article 24 District heating and cooling

- Introduction of new rules and targets for heating and cooling of buildings and district heating and cooling systems. To increase the share of energy from renewable sources and from waste heat and cold in district heating and cooling an indicative 2.2 percentage points as an annual average calculated for the period 2021 to 2030.
- Emphasis on waste heat and cold.
- MS may count renewable electricity used for district heating and cooling the rules are set.

Article 25 Mainstreaming renewable energy in the transport sector

- The introduction of two options for binding targets for the transport sector in 1(a):
 - a share of renewable energy within the final consumption of energy in the transport sector of at least 29 % by 2030; or
 - to a greenhouse gas intensity reduction of at least 14,5 % by 2030," (initially 14 %)
- Emphasis on increasing the shares of RES fuels and especially the shares of RFNBO.
- For the calculation of the targets "may take into account biogas that is injected into the national gas transmission and distribution infrastructure"



Article 26 Specific rules for biofuels, bioliquids and biomass fuels produced from food and feed crops

- Emphasis on increasing the shares of RES fuels shares of RFNBO.
- In the contrary gradually decrease the contribution of high indirect land-use change-risk biofuels, bioliquids and biomass fuels produced from feedstock for which a significant expansion of the production into land with high-carbon stock is observed.

Article 27 Calculation rules with regard to the minimum shares of renewable energy in the transport sector

- Definition of procedures, what and how can be included in the targets.
- *"Electricity that has been taken from the grid may be counted as fully renewable provided that it is produced exclusively from renewable sources and the renewable properties and other appropriate criteria have been demonstrated, ensuring that the renewable properties of that electricity are claimed only once and only in one end-use sector."*

Food for thought: Would this provision create a need for more information on the GO? And for retaining information on GOs after energy carrier conversion regarding the cancelled GOs for the input of conversion?

Article 29 Sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels

- Biomass fuels shall fulfil the sustainability and greenhouse gas emissions saving criteria if used:
 - in the case of **solid biomass fuels**, in installations producing electricity, heating and cooling with a total rated thermal input equal to or exceeding **7.5 MW**, (initially 20 MW)
 - in the case of **gaseous biomass fuels**, in installations **producing electricity**, **heating and cooling** with a total rated thermal input equal to or exceeding 2 MW,
 - in the case of installations producing **gaseous biomass fuels** with the following average **biomethane flow rate**:
 - **above 200 m3 methane equivalent/h** measured at standard conditions of temperature and pressure,
 - if biogas is composed of a mixture of methane and non-combustible other gases, for the methane flow rate, the threshold set out in point, recalculated proportionally to the volumetric share of methane in the mixture.
- Biofuels, bioliquids bioliquids and biomass fuels produced from agricultural biomass shall not be made from raw material obtained from land with a high biodiversity value and from land with high-carbon stock.

Article 30 Verification of compliance with the sustainability and greenhouse gas emissions saving criteria for renewable fuels and recycled carbon fuels that are accounted to targets set in this REDIII

• Define and specify the conditions for verifying compliance with sustainability criteria and greenhouse gas emission reductions through mandatory independent and transparent audits.. "MS shall take measures to ensure that economic operators submit reliable information regarding the compliance with the sustainability and greenhouse gas emissions saving criteria".



• Confirm and refine the framework for national and voluntary schemes setting standards for the production of renewable fuels and recycled caron fuels, to provide accurate data on greenhouse gas emission savings and demonstrate compliance with the sustainability criteria.

Article 31a Union database: for tracing liquid and gaseous renewable fuels and recycled carbon fuels

• A new article has been inserted.

31a 1

• Union database is set up by 1 year after the entry into force of the Directive, to enable the tracing of liquid and gaseous renewable fuels and recycled carbon fuels.

31a 2

- Relevant economic operators shall enter in a timely manner accurate information into that database on the transactions made and the sustainability characteristics of the fuels subject to those transactions, including their life-cycle greenhouse gas emissions, starting from their point of production to the moment it is placed on the market in the Union.
- The interconnected gas system shall be considered to be a single mass balance system.
- Information about injection and withdrawal of renewable gaseous fuels **shall be provided in the Union Database**.
- Obligation for economic operators to provide information on sustainability criteria, emission savings and other information up to the point of injection into the gas network.
 "Notwithstanding the first, second and third subparagraphs, for gaseous fuels injected into the Union's interconnected gas infrastructure, economic operators shall, in the event that the Member State decides to complement a mass balance system by a system of guarantees of origin, enter into the Union database data on the transactions made and on the sustainability characteristics and other relevant data, such as greenhouse gas emissions of the fuels up to the injection point to the interconnected gas infrastructure. <i>where the mass balance system may be complemented by guarantees of origin where appropriate.

Contradiction? While art. 19.2 requires Member States to issue GOs upon request of a producer, this reads as if Member States have the choice whether or not to issue gas GOs.

Relationship between mass balance and GO system?

Unlcear whether the transactions to be reported to the UDB relate to transactions of the GOs or of the gas, or whether this assumes that the GO transfers stay connected to the commercial transfers of gas.

31a 3

 Member States shall have access to the Union database for the purposes of monitoring and data verification.



31a 4

- Mandatory Transfer of GO to UDB!
- The information in the UDB may be complemented with data on the GO.
- When GOs are transferred to the UDB then they are not tradeable outside the UDB "Where guarantees of origin have been issued for the production of a consignment of renewable gas, Member States shall ensure that those guarantees of origin are transferred to the Union database at the moment when a consignment of renewable gases is registered in the database and are respectively cancelled after the consignment of renewable gases is withdrawn from the Union's interconnected gas infrastructure. Such guarantees of origin, once transferred, shall not be tradable outside the Union database."

The need to discuss and create further action: Establish link between GOs and the Union Database? Unclear whether Union Database be able to receive transfers of GOs?

31a 5

 Obligation for MS to ensure that data entered by economic operators in the database is verified:

"Member States shall ensure in their national legal framework that the accuracy and completeness of the data entered by economic operators into the database is verified, for instance by using certification bodies in the framework of voluntary or national schemes recognised by the Commission pursuant to Article 30(4), (5f) and (6) and which may be complemented by a system of guarantees of origin."

Such voluntary or national schemes may use third party data systems as intermediaries to collect the data, provided that such use has been notified to the Commission.

Each Member State may use an already existing national databases aligned to and linked with the Union database via an interface or establish a national database that can be used by economic operators as a tool for collecting data and for entering, transferring and declaring those data into the Union Database, provided that:

(a) the national database complies with the Union Database including in terms of the timeliness of data transmission, the typology of data sets transferred, and the protocols for data quality and data verification; Member States may set up their national Database according to the national provisions, for instance to take into account stricter national requirements, as regards sustainability criteria. This should not hinder the overall traceability of sustainable consignments of raw materials or fuels to be entered into the Union Database in line with this Directive.

(b) Member States ensure that the data entered into the national database is instantly transferred to the Union database.

Member States may establish national databases in accordance with national law or practice, such as to take into account stricter national requirements, as regards sustainability criteria. Such national databases shall not hinder the overall traceability of sustainable consignments of raw materials or fuels to be entered into the Union database in accordance with this Directive.



The verification of the quality of the data entered into the Union database by means of national databases, the sustainability characteristics of the fuels related to those data, and the final approval of transactions shall be carried out through the Union database alone. The accuracy and completeness of those data shall be verified in accordance with Commission Implementing Regulation (EU) 2022/996* They may be checked by certification bodies.

Member States shall notify the detailed features of their national database to the Commission. Following that notification, the Commission shall assess whether the national database complies with the requirements laid down in the third subparagraph. If that is not the case, the Commission may require Member States to take appropriate steps to ensure compliance with those requirements.

Topic for discussion: Could the above-mentioned national database be organised in a way that it is based on (or comprises) e.g., the national GO database?

31a 6

• The aggregated data shall be made publicly available.