

Guarantees of origin in the Fit for 55 package

Accelerate the energy transition by growing consumer demand for renewable energy

Key points

Following the European Commission's proposal for an updated Renewable Energy Directive (RED-3) the European Parliament and European Council should:

1. Retain the requirement to issue GOs for all renewable energy generation, whether it benefits from a support scheme or not;
2. Retain the requirement that any associated guarantees of origin can be transferred to the buyer of the renewable energy under a renewable power purchase agreement;
3. Introduce additional requirements to support the development of full disclosure schemes in all Member States.

Background

Guarantees of Origin (GOs) were created because energy transported through a grid or pipeline cannot be tracked from a specific producer to a specific consumer. Consumers wanting to support the energy transition by buying renewables need to be able to separate the physical energy from its attributes (e.g. generation technology, time of production, location of production device etc.). These attributes are recorded in Energy Attribute Certificates – in Europe called Guarantees of Origin (GOs) – with one GO representing the attributes of one megawatt hour (MWh) of energy.

GOs are traded and transferred through a book & claim accounting system. In such systems, renewable energy producers *book* the attributes of their generation into GOs when they inject energy into a grid or pipeline. The certificates and the attributes they contain are then transferred through a market to consumers, who then cancel them in order to *claim* their use and to prove that they paid for a given unit of energy. GOs can either be traded in a contract with energy (bundled) or separately from energy (unbundled). Consumers can buy GOs directly from a producer, through a market broker or trader, their supplier as part of a green tariff, or through a national auction of GOs (see below).

The GO system and market in Europe is enshrined in EU law and has been developed through the Renewable Energy Directives that came into force in 2001 (Art.5), 2009 (Art.15), and 2018 (Art.19). Through each of these directives, the EU legal basis for GOs has been strengthened – a trend that must be continued with the RED-3.

GOs in the Fit for 55 package

GOs for all renewable energy generation

The European Commission's proposal for an updated Renewable Energy Directive (RED-3) as published on the 14th July 2021¹ calls for all renewable energy generation to be able to receive GOs. This is an important provision that should be maintained by the European Council and European Parliament through the co-decision process.

Specifically, the Commission's proposal for a RED-3 amends Article 19(2) and (8) of the REDII to remove Member States' ability not to issue guarantees of origin to a producer that receives financial support (pp. 34/35). This proposal should be maintained because without it the ability of consumers to buy renewable energy is curtailed since some producers are unable to book the attributes of the power they generate into a GO. In Member States where GOs are not issued to producers that receive financial support, consumers can't buy locally generated energy. Corporate consumers with commitments to buy 100% renewable are, for example, obliged to conclude power purchase agreements with producers from different Member States.

Those Member States who currently do not issue GOs to producers that receive financial support do so to ensure that such producers do not gain the 'double benefit' of public support and private income for producing renewable energy. This concern can be alleviated in line with the RED-2's requirement that *'Member States shall ensure that when a producer receives financial support from a support scheme for the production of energy from renewable sources, the market value of the guarantee of origin for the same production is appropriately taken into account in the relevant support scheme'* (Art.19.2). The same article provides several options for meeting this requirement: *It shall be presumed that this [Member States taking account of the value of the GO] is the case when:*

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

A fourth option for Member States to *'issue a guarantee of origin to the producer and cancel it immediately'* (Art.19.2 sub-para 5) is proposed to be deleted by the RED-3 (pp.35).

For any support scheme that is competitively tendered, there should be no issue with 'double benefit' as those bidding for support will take into account the expected volume and value of both the energy they expect to generate and the GOs they expect to receive in order to make the lowest bid possible and win the tender. As competitive tendering is increasingly used for support schemes, the concern of 'double benefit' will reduce over time. However, where competitively tendered support was offered without GOs being issued, and/or when the support was based on a fixed feed-in-tariff in schemes that are due to run after the entry into force of the RED-3, other solutions are needed.

Currently, France, Italy, Croatia and Luxembourg address this matter by using option C above. They issue GOs for renewable energy generation that benefits from a support scheme but instead of giving those GOs to the producer these states retain and auction them to consumers, with the

¹ https://ec.europa.eu/info/sites/default/files/amendment-renewable-energy-directive-2030-climate-target-with-annexes_en.pdf

proceeds being used to help meet the cost of the original support scheme. This solution addresses the concern of ‘double benefit’, but does not address the limitation on agreeing power purchase agreements – a concern dealt with in the next section.

Supporting the uptake of Power Purchase Agreements (PPAs)

As the Commission’s proposal states; *‘In order to establish a coherent Union base for the use of guarantees of origin and to provide access to appropriate supporting evidence for persons concluding renewable power purchase agreements, all renewable energy producers should be able to receive a guarantee of origin without prejudice to Member States’ obligation to take into account the market value of the guarantees of origin if the energy producers receive financial support.’* Specifically, the Commission proposes to amend Art.15 of the RED-2 to replace the current paragraph 8 with a new paragraph 8 requiring Member States, inter alia, to ensure *‘that any associated guarantees of origin can be transferred to the buyer of the renewable energy under the renewable power purchase agreement’* (pp.32). Member States that currently do not issue GOs to producers that benefit from support schemes, or who issue the GOs but retain them for sale through state auctions will need to consider how they can meet this requirement.

The first step is to issue GOs to all renewable energy generation. The second step is to decide how those GOs could be marketed or transferred, and how their value could be taken into account by the support scheme. Auctions limit the development of power purchase agreements since their competitive nature means that neither the producer nor the auction administrator can be certain that a given consumer will be able to purchase the GOs specified in a PPA. Therefore, further work will need to be done by legislators and other stakeholders to develop models of how Member States may best take into account the value of the GO if a producer benefits from a support scheme.

Going further – full disclosure is the future

The Commission’s proposal for amending the RED-2 into a new RED-3 retains the provision through which *‘Member States may arrange for guarantees of origin to be issued for energy from non-renewable sources’* (Art.19.8). This is welcome as it allows for the implementation of full disclosure schemes. While most Member States only issue GOs for the production of renewable energy, two – Austria and the Netherlands – go further and issue GOs for all energy generation. Such schemes are called full-disclosure schemes. Full disclosure schemes require all power consumers to prove the origin of all of the power they consume – ensuring a level playing field between renewable and non-renewable electricity sources. Currently, end-users willing to consume renewable electricity must go through the process of buying and cancelling GOs. Consumers of non-renewables face no such requirements. If all consumers had to actively purchase energy attributes and prove the origin of the energy they use they would be more aware and conscious of where their energy comes from, which could motivate them to buy renewables. There are different means of achieving full disclosure:

- Full Production Disclosure (All production must be certified)
- Full Consumption Disclosure (Certificates must be cancelled for all energy consumed)
- Full Supplier Disclosure (Sub-form of full consumption disclosure that requires suppliers to cancel GOs for all of their end-users’ energy use – also known as a supplier mandate).

More detail on each of these versions is available in a RECS International paper which makes the case for full consumption disclosure with the option of a mandate for suppliers to cancel on behalf of customers.²

To give stronger encouragement to Member States to implement full disclosure schemes the co-legislators of the European Commission and Parliament should require Member States to report on

² https://recs.org/download/?file=RECS-International-What-full-disclosure-means-and-why-it-is-so-important_FINAL.pdf&file_type=documents

the feasibility of introducing a full disclosure GO scheme on their territory. Such a report could form part of the Member State's national energy and climate plans.

Conclusion

The European Commission's proposals for strengthening the EU's GO schemes are welcome, particularly the proposed requirement to issue GOs to all renewable energy production and support for the use of power purchase agreements. These proposals should be supported by the European Council and Parliament and could be further strengthened through greater encouragement of the implementation of full disclosure schemes in all Member States.