



Granular GO Issuance Starter Kit

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Introduction

This Starter Kit is intended for GO Issuing Bodies and legislative and regulatory authorities aiming to promote the adoption of Granular GOs within their country. Please note that while the issuance of Granular GOs is encouraged, their use for granular matching is **not mandatory** and remains at the discretion of the consumer, unless otherwise stipulated by the regulations of the consumer's country.

Regulatory Considerations

Legal Basis for Granular GOs - REDIII

The <u>updated Renewable Energy Directive</u> (RED III) encourages and enables Granular GOs (timestamped and representing energy units smaller than MWh). Annex I of this document provides relevant text excerpts.

National Transposition of RED III

As **national legislators/regulators** transpose RED III into national law, it is important that Granular GOs are enabled. In particular, national legislation should:

- Enable the issuance of Granular GOs with:
 - a face value (i.e unit of energy) smaller than a MWh, in any multiple of a Wh.
 - a reference to the bidding zone in which the production device is located, and
 - o A production period equal to the imbalance settlement period, and
- Facilitate access to the necessary measurement data for Granular GO issuance by mandating either:
 - a reporting obligation of (sub)hourly production measurement data on the measurement body (usually TSO/DSO), or
 - o a requirement to grant access to this data to the Granular GO issuer.

Production Data Acquisition

The Measurement Body should ensure:

- Production Measurement data registration is in line with the imbalance settlement procedures of the electricity market,
- This data is verified by a 3rd party that is independent of the production, trade, and supply of energy and GOs, and
- This data is accessible to the operator of the GO registry, preferably in an automated process.



Granular GO Issuance

In setting up the Granular GO scheme¹ Issuing Bodies should ensure:

- Facilitation of Granular GO data fields in addition to those on standard GOs:
 - Make the face value transparent on the certificate,
 - o Production period length identifier,
 - o Bidding zone identifier (optional but recommended in Europe),
 - Storage Tag, (i.e. indication of whether or not the represented energy is released from a storage system).
- Visualization, in the Account holder user interface, of additional information to standard GO:
 - The Granular GO face value (Wh/MWh),
 - The length of the production period,
 - o Preferably also the bidding zone identifier and storage tag.
- A choice for producers to request GO issuance either for (sub)hourly or monthly periods.
- Upon GO cancellation, Cancellation Statements are provided, including the following information:
 - o Production period with (sub-) hourly timestamp,
 - o Production period length,
 - Face value of the GO (Wh/MWh),
 - Location of production,
 - o Bidding zone of production (optional),
 - o Identification of the beneficiary and their location.
- (Optional: Preparation to accept Granular GOs from other countries²).
- Automated access to the Granular GOs on accounts in the GO registry for account holders /stakeholders (e.g this could be facilitated with an API).

¹ Note that the <u>EnergyTag standard for Granular Certificates</u> provides more detail on how GC systems are set up.

² It is expected that Granular GO demand will largely be within domain initially. While preparing automated cross-registry data flows, manual processes could be followed. The closing of an Ex Domain Cancelation agreement between the relevant GO issuing bodies is an essential precondition.



FAQ

What if I want to issue Granular GOs but do not want to stop issuing default GOs?

Issuing Granular GOs does not mean having to stop issuing default GOs if a
choice is not made to entirely transform the national GO system in one step.
You can offer the choice to producers which type of GO they want to be
issued. Offering this choice to producers will also ensure the availability of
default GOs for export to domains where an importing Issuing body does
not yet handle Granular GOs.

What about the matching of Granular GOs to energy consumption? Who's responsibility is that?

• The initial focus from issuing bodies should go to the issuance of Granular GOs and data structuring to enable hourly matching rather than focusing on the actual exercise of this matching. Matching GGOs to consumption is a task that can be taken up by other parties in the ecosystem with matching claims being verified by third parties to ensure robustness³.

What options are there to enable Granular GO other than in-house development?

• The issuing body could in this case delegate the issuance of Granular GOs to a third-party software provider who can take care of Granular GO issuance as outlined in "Configuration 2" of the EnergyTag standard⁴.

Offering Granular GO functionality is not self-evident for my registry software provider right now, what do I do?

Consider the Granular GO pilot on a smaller scale if they cannot offer this off
the shelf. In such a pilot, you may initially execute process flows manually,
which generates the relevant learning for later development of
specifications for a more automated system.

I am tendering for a new GO registry software soon, what should I include in the tender to ensure my solution is future-proof?

 In your tender, ensure that you state your desire to have a system capable of issuing Granular GOs in line with the specifications in a Granular GO Issuance section of this document. Also, ensure it is possible to handle an increased data volume (enabling registration of a number of certificate sets that equals the number of sub-hourly production periods). This will ensure that your system is future-proof.

³ See the EnergyTag Matching Standard for more details on matching.

⁴ See chapter 1.2 in the GC Scheme Standard.



Are there any stakeholders or regulations that want Granular GOs?

 Yes, <u>a broad coalition of power sector actors</u> - suppliers, consumers, storage operators, flexibility optimizers, and NGOs have called for a rapid rollout of Granular GOs in Europe. EU regulations such as the EU's hydrogen delegated acts require hourly matching which would be greatly enabled by Granular GO.



Annex I - RED III Text Excerpts

Here is the relevant EU legal text in the REDIII - EU Directive 2023/2413 (EU) which enables and encourages granular GOs.

Recital 48: In the context of a more flexible energy system and growing consumer demand there is a call for a more innovative, digital, technologically advanced and reliable tool to support and document the increasing production of renewable energy. To facilitate digital innovation in that field, **Member States should, where appropriate, enable issuing guarantees of origin in fractions and with a closer to real time timestamp.**

Art. 19, (2): 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.

Art. 19 (7): A guarantee of origin shall specify at least:

- 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.