The concept of ERGaR for cross-border transfer and mass balancing biomethane within the European natural gas network



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ERGAR SET UP – BUILDING ON EXISTING NATIONAL REGISTRIES

Basic data:

- European Renewable Gas Registry
- Established on 28th September 2016
- Aisbl International no-profit organisation
- 25 members from 13 countries
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25 members from 13 countries



ERGaR is foreseen to

- be the Europe-wide recognised organisation for administering and mass balancing volumes of biomethane virtually distributed along the European natural gas network
- rely on the national biomethane registries as primary source of documentation
- ✓ follow jointly agreed procedures for issuing and cancelling European Proofs (Guarantees) of Origin for consignments with export destinations
- ✓ provide for cross-border transfer of sustainability claims (GHG emission characteristics) related to the consignments



ERGaR: cooperation between the natural gas and biogas industries

- ERGaR is a joint undertaking of the biogas and natural gas industries.
- Several TSOs and DSOs have already joined ERGaR: Energinet.dk, ENAGAS, GRDF, Gasunie/Vertogas, NEDGIA, SWEDEGAS
- Other ERGaR members are from the natural gas industry: AGCS, Gas.BE, RGFI, VSG
- The biomethane GO issuing bodies should be closest linked to the natural gas TSOs and DSOs, who are the direct source of injection/withdrawal information.



TWO ERGAR SCHEMES

Two schemes

Scheme title	ERGaR Mass Balancing Scheme	ERGaR GoO Scheme
Character	to be recognised by the EC under RED as voluntary scheme	to be operated without recognition by the EC
RED II ready	according to Articles 27-30	according to Article 19
Use	biofuel for transportation	any
Methodology	mass-balancing	book and claim
Core document	ERGaR Proof of Origin	ERGaR Guarantee of Origin
	(ERGaR PoO)	(ERGaR GoO)
Transferability	Yes	Yes
Sustainability verification	mandatory according to the EU rules regarding biofuels	ontional
Expected timeline	details under negotiation with EC resubmission to EC in Q2 of 2019	operational with ERGaR hub going online soon

Two ERGaR schemes – present status

- 1. The full (updated and expanded) documentation of the **"ERGaR RED" voluntary scheme** was submitted to the European Commission in December 2018 for recognition under the Renewable Energy Directive. ERGaR RED is designed to perform mass-balancing in the European natural gas grid on a consignment by consignment basis.
- 2. For the GoO market ERGaR is establishing a hub connecting the registries the IT work is completed and the hub is in testing phase.
- 3. Several **bilateral agreements** are already in operation between registries exchanging biomethane GoOs.



Comments on GoOs in RED II

- It is a welcomed to have renewable gas GoOs included in RED II but we all need to be realistic and not enthusiastic about these GoOs.
- We should not mislead ourselves believing that the introduction of GoOs in RED II in itself will be sufficient for expected renewable gas industrial development.
- The GoOs provide no replacement for the necessary political actions neither at EU nor at national levels. The discussion and work on GoOs are good but it should not divert attention from the need for a series of political measures.
- What is the declared function of GoOs? Informing the final consumers about the renewable origin of the energy carrier. It cannot be expected that the voluntary readiness of final consumers to pay for the green value in the future will provide the foundation for financing investments today.
- In real life the industry would need more powerful tools for cashing the intrinsic ("green", renewable, sustainable, etc.) value of renewable gases than the GoOs as defined in RED II – a challenge for REGATRACE!



BASIC PRINCIPLES OF THE ERGAR MASS BALANCING SCHEME

ERGaR RED MB core principles

1. Sustainability

ERGaR RED handles exclusively biomethane consignments where sustainability has been duly verified in accordance with Articles 17. and 18. of the RED. No Proof of Origin can be issued for any injected biomethane consignment without having a valid Proof of Sustainability for that consignment. The PoS must be inseparably attached to the PoO.

2. Export destination

ERGaR RED is exclusively concerned with biomethane consignments destined for export and not counted in the country of production for the meeting of national biofuel quota targets.

3. Single logistical facility

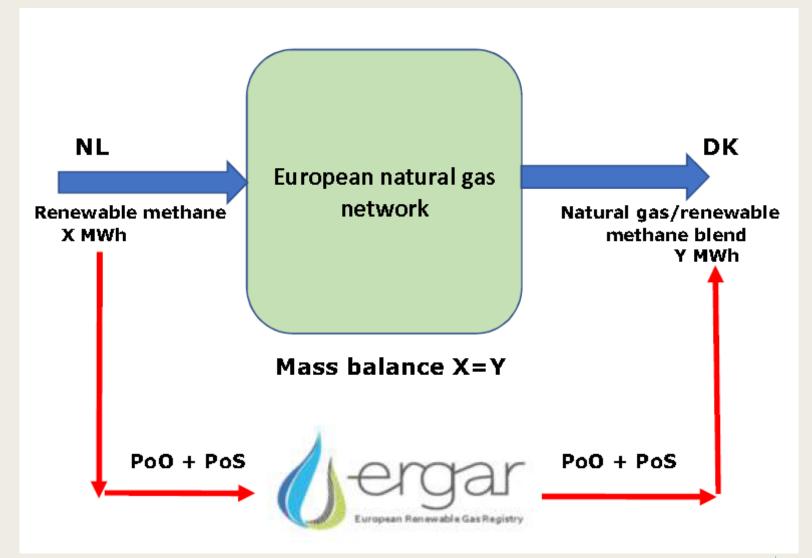
The European natural gas network is recognized as a single logistical facility with the effect that mass balancing according to RED Art. 18 sec. 1.shall be done at European level However, ERGaR RED mass balancing covers only biomethane consignments traded internationally, i.e. crossing at least one country border.

4. Mass balancing

Biomethane volumes injected into the European natural gas network are mass balanced with withdrawn volumes on a consignment to consignment basis.



Mass balancing by ERGaR





FUNCTIONS OF THE PARTICIPATING NATIONAL REGISTRIES

Functions of the registries

- Complex functions incl. GO issuing bodies
- Participation in national subsidy management
- Providing harmonized and transparent electronic documentation of injected biomethane,
- Best positioned to properly address renewable gas specific issues: sustainability, mass-balancing, GHG characteristics, etc.
- Providing a platform for market participants to generate, exchange and redeem electronic documents representing biomethane consignments,
- Controlling, auditing, verification in relation to both injection and withdrawal.
- Serving as a "lighthouse", a knowledge centre for project developers, providing a platform for information exchange
- Instrumental in connecting the biomethane and natural gas industries
- National biomethane registries join into one European network



Key requirements towards the participating registries

The registries must

- accept and follow the mass balancing methodology in relation to both domestic and international operations,
- maintain independence from economic operators,
- be trustworthy and carry out operations in a professional and transparent manner, adhering to the relevant laws and regulations,
- have an auditable system for issuing, handling and cancelling the PoOs, performing the mass balancing of biomethane consignments and transferring the sustainability claims
- follow appropriate auditing procedures;
- not own biomethane PoOs;
- not participate in markets associated with biomethane PoOs (other than the functions defined in their foundation documents).



THE WAY FORWARD

Interactions with other schemes

- The ERGaR PoO scheme (mass-balancing) is the only RED conform solution with regard to biomethane distributed through the NG grid for use as RED qualified transportation fuel (biofuel, advanced biofuel);
- The ERGaR GoO scheme ("book and claim") should be compatible with other GoO schemes (such as electricity, heating&cooling);
- The ERGaR GoO scheme should be compatible with other renewable gas GoO schemes (based on "book and claim" - such as CertifHy, AIB);
- The promotion of the Power-to-Gas technology (both for H₂ and CH₄) requires close cooperation among the involved schemes (ERGaR, AIB, CertifHy) to enable proper transfer of GoOs covering different energy carriers.
- The REGATRACE project can and should substantially contribute to finding mutually acceptable and efficient solutions



THANKS FOR YOUR ATTENTION!

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