

**What is needed for the  
common European renewable  
gas market?**

**Guarantees of Origin for  
renewable gases in RED II**



# First production ... then trade

- Present biomethane production: ~2 bcm (20 TWh)
- European natural gas consumption: ~550 bcm (5.500 TWh)
- Number of biomethane producing installations: ~540
- 5% share in NG consumption can be reached by building >5.000 new biomethane production facilities at total investment costs of >30 billion EUR
- Can this investment level be achieved merely through trading GOs?

# What is needed for production uptake?

- **First and utmost: political and financial support** by the national governments
- **Equal treatment** of domestic and imported biomethane regarding financial benefits related to consumption (just as for liquid biofuels)
- **Common European market**
- **Recognition** of national, respectively European natural gas grids as **single logistical facilities** with regard to injected biomethane
- **National biomethane registries**
- **Etc.**

# 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**

# ERGaR – the European network

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

# 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	optional
Expected timeline	details under negotiation with EC	operational with ERGaR hub going online 2019
	resubmission to EC in Q2 of 2019	

# 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.

# Recommendations 1

## Within the scope of the RED II ERGaR supports the recommendations by ENTSOE/GIE:

- ✓ *Within a MS, national issuing bodies for different energy carriers are encouraged to work towards setting up interoperable schemes for all GOs. These schemes include the criteria and process for recognition by every issuing body of GOs issued by every other issuing body.*
- ✓ *Additionally, to facilitate MS obligation to recognise each other's GO, a European-wide solution for the above-mentioned cooperation, i.e. how to issue, register, transfer and cancel GOs for gas, should be established.*



## Recommendations 2

- ✓ *All GOs need to be convertible from one energy carrier into another when such is physically taking place. ERGaR, CertifHy, AIB and other associations of issuing bodies (if any) are encouraged to elaborate agreed rules, conditions and procedures for converting GO's issued in one sector to GO's applied in another sector.*
- ✓ *To accommodate points above, extend CEN16325 standard to include GOs for gaseous energy carriers. MSs shall dedicate specific resources to work on this standardisation. Issuing bodies for renewable gases GOs to be included in the Technical Committee.*

# Recommendations 3

- ERGaR notes that in practice not all GOs need to be convertible and the envisaged cooperation is to be focused on the following pathways:

Energy source	Intermediate product	Product consumed	Pathway
Electricity from biomass	Green hydrogen	Biomethane	Electricity > H <sub>2</sub> > CH <sub>4</sub>
Electricity from biomass		Green hydrogen	Electricity > H <sub>2</sub>
Renewable electricity of non-biological origin	Green hydrogen	Renewable methane of non-biological origin	Electricity > H <sub>2</sub> > CH <sub>4</sub>
Renewable electricity of non-biological origin		Green hydrogen	Electricity > H <sub>2</sub>
Biomethane		Green hydrogen	CH <sub>4</sub> > H <sub>2</sub>
Biomethane		Green electricity	CH <sub>4</sub> > electricity

# Summary:

- 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 I and RED II (Articles 27-30) qualified **transportation fuel**;
- The ERGaR GO scheme (“**book and claim**”) should be compatible with other GO schemes (such as electricity, hydrogen, heating&cooling);
- The promotion of the **Power-to-Gas** technology (both for H<sub>2</sub> and CH<sub>4</sub>) requires close cooperation among the involved schemes (ERGaR, AIB for renewable electricity, CertifHy) to enable proper transfer of GoOs covering different energy carriers.
- ERGaR is **supporting the recommendations** and is ready for close cooperation.

# THANKS FOR YOUR ATTENTION!

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