

# Update on EU cross-border trade

**2nd Participatory Workshop Ireland**

29 July 2021, Online

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# Agenda

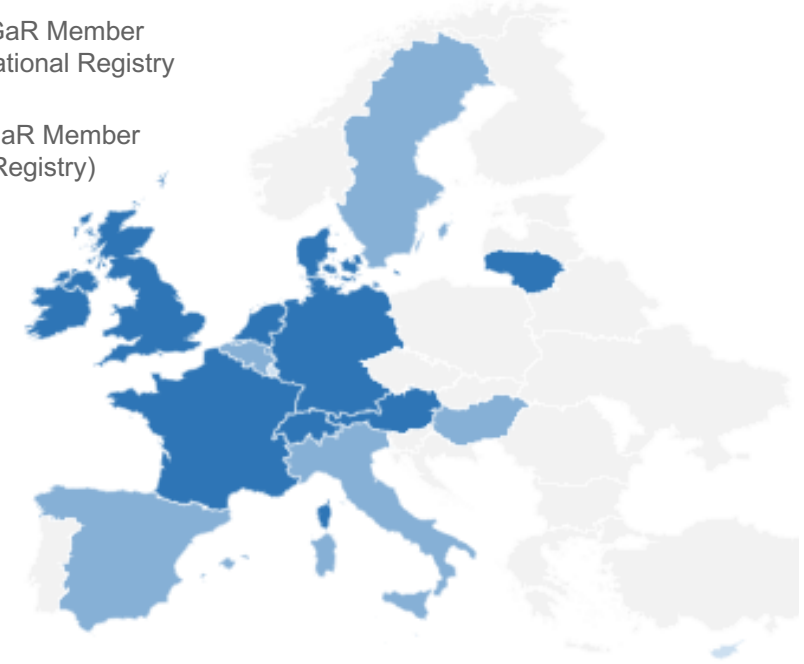
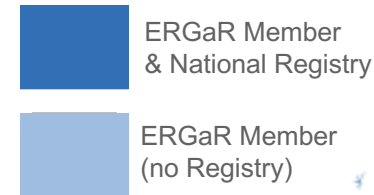
- Status quo cross-border trade of biomethane
- European framework
  - Mass balancing vs. book and claim
  - Union Database
  - EU-ETS Monitoring and Reporting Regulation
- European Schemes

# ERGaR – The association

- International non-profit, non-governmental organisation (BE law) established in September 2016.
- **Founded by established biomethane registries**
- ERGaR provides a **forum for the collaboration of renewable gas registries and market participants in Europe**

## 29 ERGaR members in 15 European Countries

- Established biomethane / renewable gas registries, appointed issuing bodies
- Gas DSOs & TSOs
- Biogas associations
- Traders
- Other major stakeholders of the European biomethane market



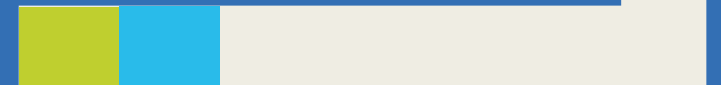
## Full Members



## Associated Members



**STATUS QUO**

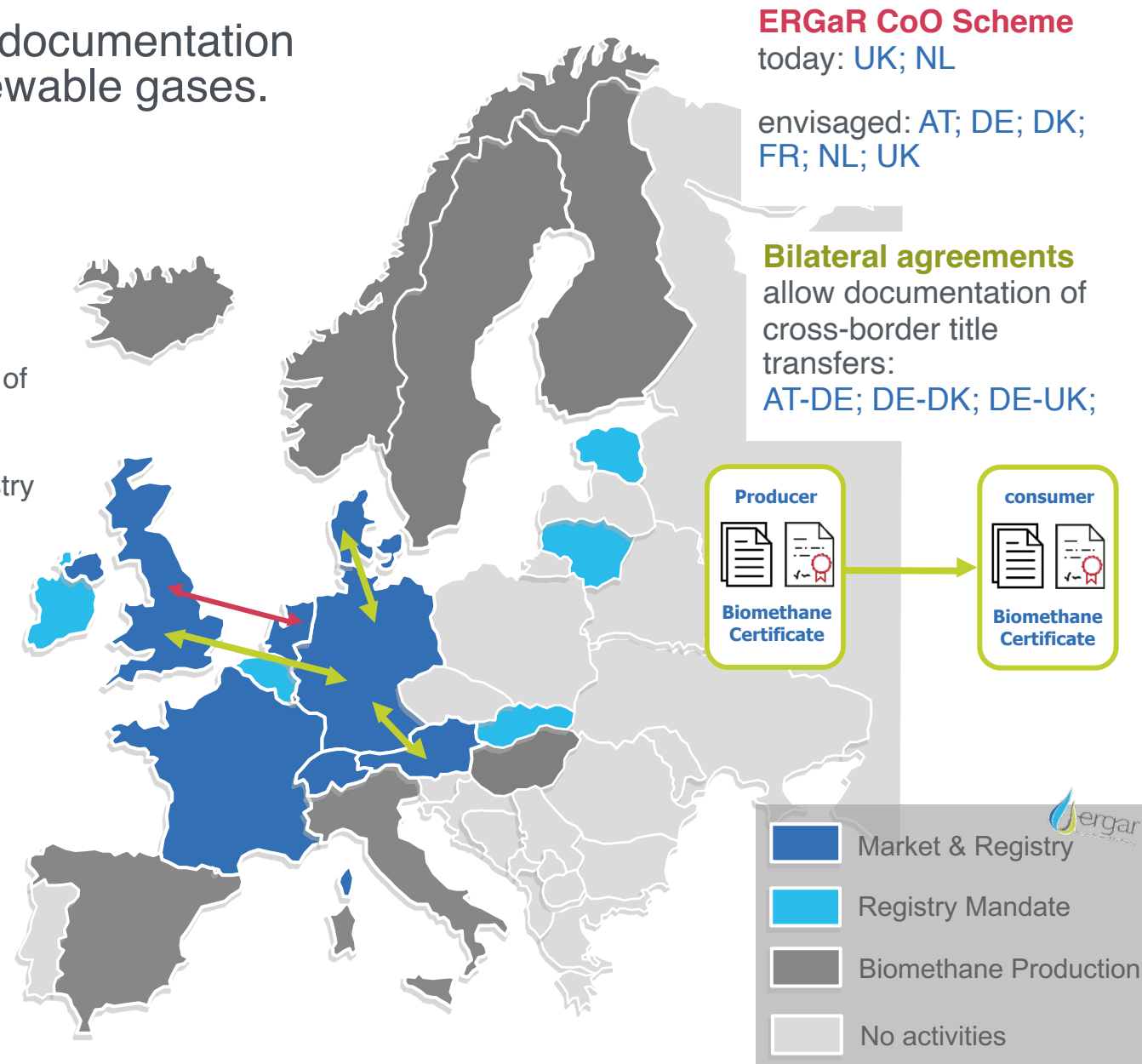


# Status Quo

National Registries as foundation for the documentation and settlement of the green value of renewable gases.

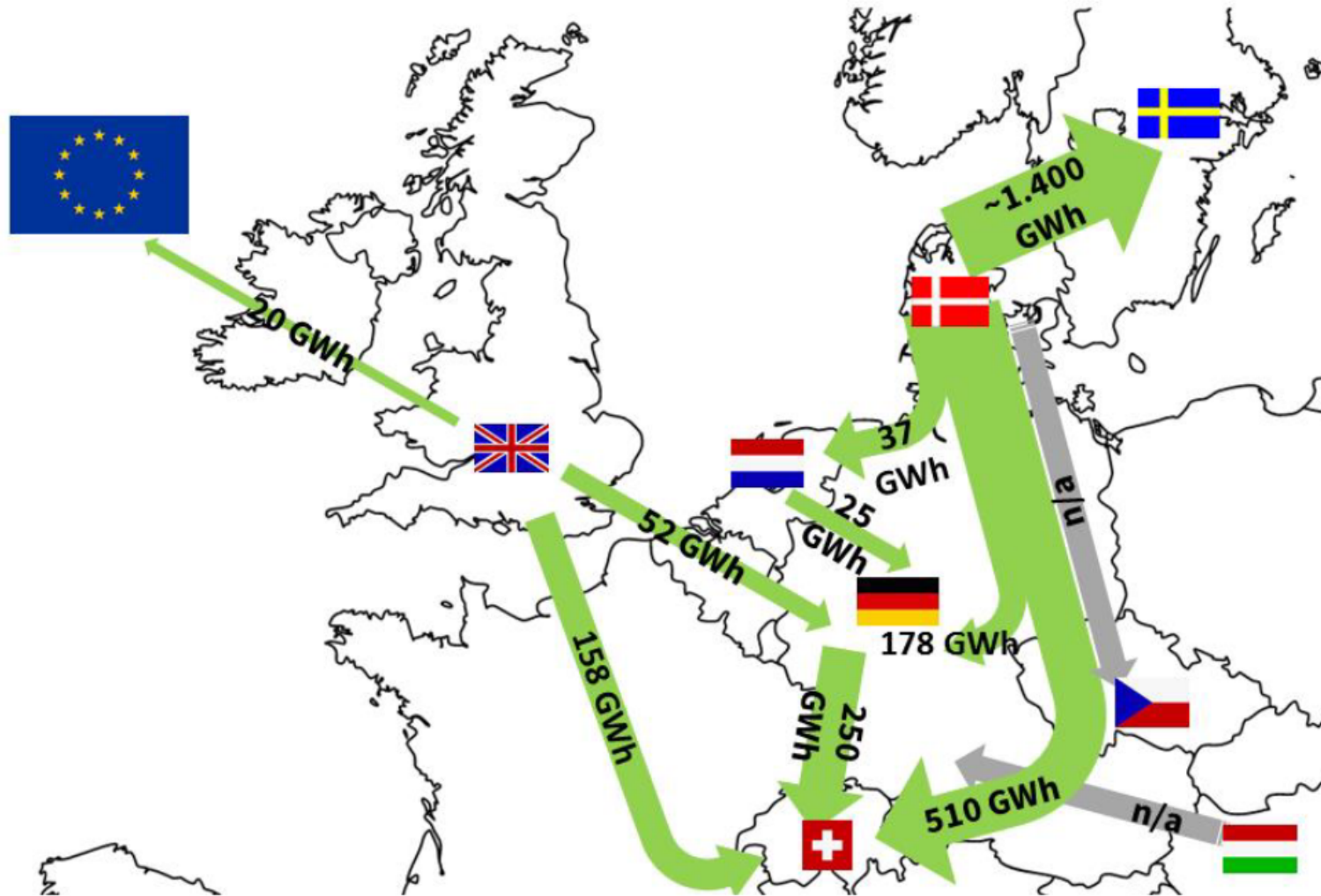
## Collaboration via ERGaR

- Austria
  - AGCS Gas Clearing and Settlement AG as operator of Biomethane Registry Austria
- Switzerland
  - VSG Verein der Schweizerischen Gasindustrie as operator of clearing agency for biomethane
- Germany
  - Dena German Energy Agency as operator of Biogas Registry
- Denmark
  - Energinet as operator of Biomethane Registry
  - Governmental mandate as IB
- France
  - GRDF as operator of Biomethane Registry
  - Governmental mandate as IB
- Ireland
  - GNI as operator of Biomethane Registry
  - Governmental mandate as IB
  - GNI supported by ERGaR member RGFI
- Lithuania
  - Amber Grid as operator of Biomethane Registry
  - Governmental mandate as IB
- Netherlands
  - Vertogas (Green Gas Registry)
  - Governmental mandate as IB



# Status Quo

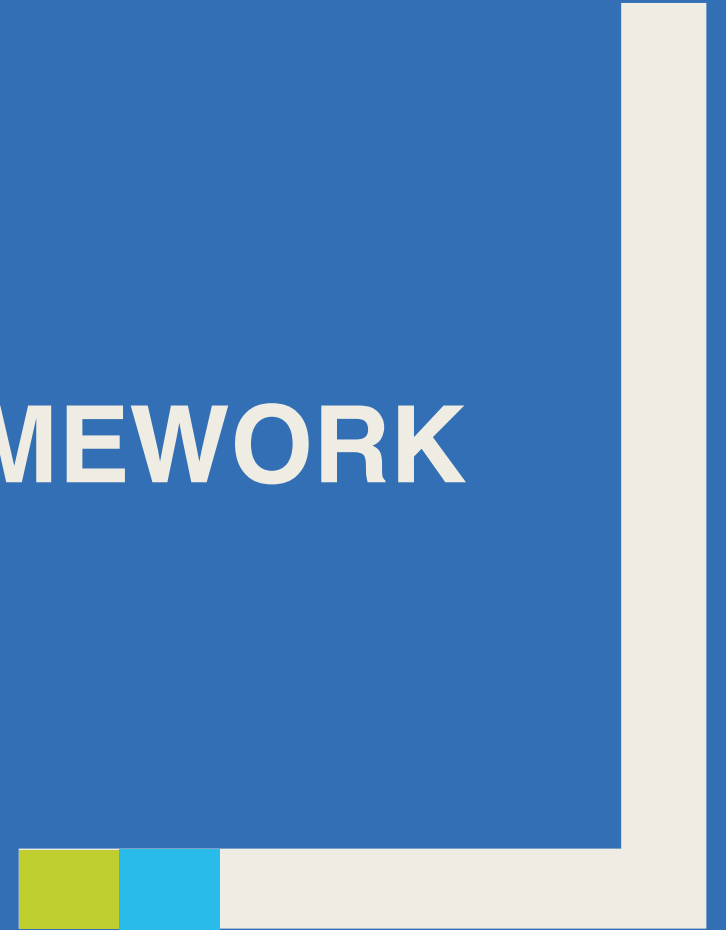
## Cross-border transfers of biomethane certificates in 2020



- The volume of transfers and the number of involved countries are increasing
- The direction was from countries with a surplus (DK, UK) to countries with a high demand and limited domestic production (CH, SE)
- Different types of certificates for various purposes were transferred
- Transfers were facilitated via bilateral cooperations and ex-domain cancellations (without registry on the other end)

Source: dena 2021: Branchenbarometer Biomethan 2021.

# EUROPEAN FRAMEWORK



# The European framework of renewable gas certification

Major purposes and elements for demonstrating compliance with European Regulatory Framework for different renewable and recycled gas categories

| Energy source of gas product  |   |   |                        |   |           |   |
|---|---|---|------------------------|---|-----------|---|
| Biogas / Biomethane   |   | Renewable Fuels of Non-Biological Origin (RFNBO)  |                        | Recycled Carbon Fuels (RCF)             |           |   |
| Requirements for demonstrating compliance with                              |   |   |                        |   |           |   |
| Sustainability<br>Sustainability criteria<br>GHG emission saving thresholds |   | Renewable energy content<br>Additionality of energy<br>Temporal correlation<br>Geographic correlation |                        | Mass balancing                          |           |   |
| Requirements and options for verification and documentation                 |   |   |                        |   |           |   |
| Certificates<br>Proof of Sustainability (PoS)<br>Guarantee of Origin (GO)   |   | Entities for documentation<br>Issuing bodies<br>Mass balancing systems<br>Union Database              |                        | Voluntary and National Schemes          |           | European Schemes for cross-border transfers<br>AIB<br>CertifHy<br>ERGaR |
| Purpose of gas certification  |   |   |                        |   |           |   |
| RED II targets<br>(union, transport, heating)                               | Disclosure renewable & low carbon energy carriers | EU-ETS<br>(zero CO2-emissions for biomass)  | Fuel Quality Directive | Taxonomy Regulation sustainable finance | Labelling | Others (e.g. national support schemes)                                  |

Source: REGATRACE D4.2 (2021)



# Mass balancing (sustainability verification) vs. book and claim (Guarantee of Origin)

## 1 Direct physical deliveries

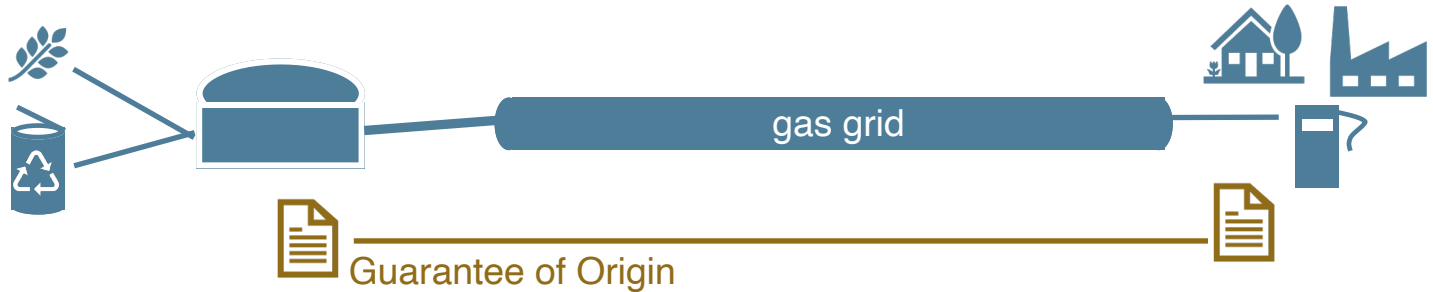
(road, rail, water)

- Renewable gas is usually **physically segregated** from fossil gas
- By means of certificates, the whole chain of custody is tracked.



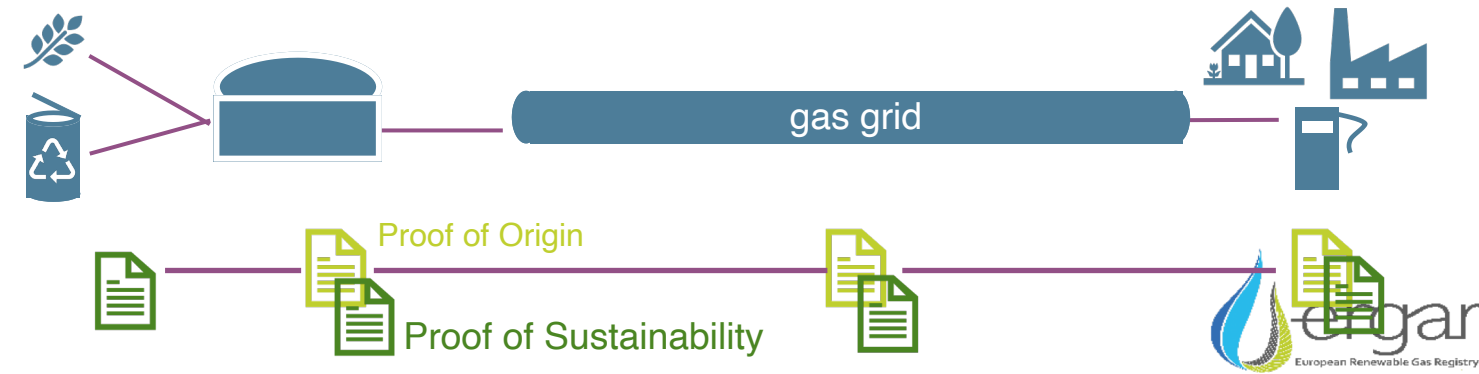
## 2 Documentation of renewable value via book & claim

- Not the whole chain of custody is reflected
- Renewable value can be separated from the delivery of gas



## 3 Documentation of renewable & green values via mass balancing

- Mass balancing is applied throughout the whole chain of custody
- Renewable characteristics remain always attached to the consignment
- Transport- and storage-related losses (e.g., within the gas grid) are considered
- REDII requires sustainability verification by means of mass balancing



# Revision of the European Standard EN 16325

**2013**

Adoption of EN 16325

- Electricity

**February 2020**

Launch of the revision of EN 16325, accordingly with RED II

- Electricity
- Hydrocarbon Gas
- Hydrogen
- Heating and cooling

CEN CLC JTC14 WG5

**December 2018**

Adoption of RED II

**Article 19 on Guarantees of origin for energy from renewable sources**

*(6) "Member States or the designated competent bodies shall put in place appropriate mechanisms to ensure that guarantees of origin are issued, transferred and cancelled electronically and are accurate, reliable and fraud-resistant. **Member States and designated competent bodies shall ensure that the requirements they impose comply with the standard CEN - EN 16325.**"*

*(9) "Member States shall recognise guarantees of origin issued by other Member States in accordance with this Directive"*

**July 2021**

Implementation of RED II

# Revision of the European Standard EN 16325

## What is a GO according to EN 16325?

“An electronic document which has the sole function of providing evidence to a final customer that a given share or quantity of energy was produced from renewable sources.”

## What is the aim of the revision of EN 16325?

“Creating a standardised transferable GO that can be used to facilitate the disclosure of the origin of energy, the identification of particular energy sources, to its final customer, including by labelling schemes, like environmental/ecological labels”.

## What is inside the current draft of the revised EN 16325?

- **Terms and definitions**
- **Generic rules for GO for all energy carriers**
  - Main objectives and principles
  - Registration of Competent Bodies, Production Devices and Account Holders
  - Issuing and content of a GO
  - Ownership of a GO
  - Transferring of a GO
  - Correction of errors
  - Lifetime of a GO
  - Disclosure Statements
  - Monitoring and Auditing
- **Rules specific to individual energy carriers**
  - Electricity
  - Hydrocarbon gas
  - Hydrogen
  - Heating and Cooling
- **Annexes**, including:
  - Normative: Energy Source Type, Technology codes, Coding structure, Cogeneration GO codes for uses of Heat
  - Informative: Methodology for quantifying the Carbon Footprint of the output for which a GO is being issued

# Union Database

The Union Database shall improve **the traceability of gaseous and liquid biofuels** with the objective to:

- avoiding double counting;
- facilitating the monitoring and reporting for voluntary schemes and Member States;
- mitigating the risks of irregularities and fraud.

Economic operators along the **chain of custody shall enter information** into the Union Database:

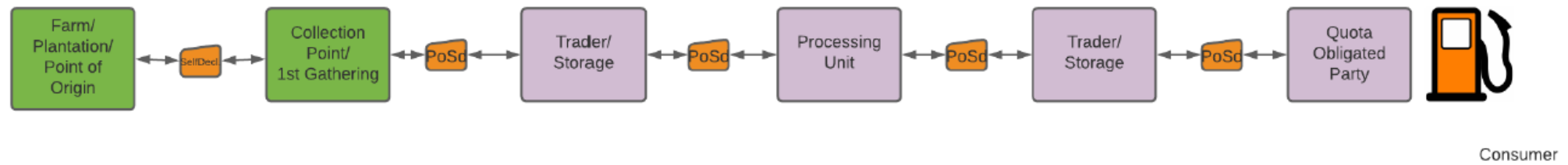
- Sustainability characteristics of the fuels;
- Transactions in relation to those fuels.

→ The European Commission expects the UDB to **support the implementation and transparency of the Mass Balancing system**

# Union Database

## ■ Supply chain scope (economic operators)

- Low Risk value chain (from collection point / Trader)
- High Risk value chain (from point of origin)



## ■ Sectoral and fuel scope

- RED II
  - Sector: Transport
  - Fuels: All liquid and gaseous fuels (biofuels, bioemthane and sustainable gases, H2), RFNBO and recycled carbon fuels (RCF)
- RED III
  - Sector: Transport / Power & Heating & Cooling (RED III)
  - Fuels: All liquid and gaseous fuels

# EU-ETS

## Monitoring and Reporting Regulation (MRR)

In the framework of the 4th trading period, operators of a EU-ETS facility can claim zero CO<sub>2</sub> emissions for the use of biomethane if the following requirements are met:

- Biomethane delivery contract
- No double counting of biomethane quantity → could be proved by disclosing Guarantees of Origin
- Operator and producer are connected to the same gas grid
- Compliance with sustainability and GHG emissions savings of RED II → use of mass balancing system

# EUROPEAN SCHEMES
















# Comparison of European Schemes

| Type of certificate                       | Energy carrier          | AIB (EECS gas and electricity)   | CertifHy       | ERGaR (CoO)  | ERGaR (MB)          |
|---|-------------------------|--|----------------|--|---------------------|
| <b>GO</b>                                 | <b>hydro-carbon gas</b> | Yes  | No             | Yes, if scheme participant is an appointed issuing body  | No                  |
|   | <b>hydrogen</b>         | Yes  | Yes            | Yes, if scheme participant is an appointed issuing body  | No                  |
|   | <b>others</b>           | bio-LNG: neither explicitly included nor excluded in gas scheme (definition to be aligned with EN16325).   | No             | No   | No                  |
|   | <b>electricity</b>      | Yes  | No             | No   | No                  |
| <b>PoS (combined with mass balancing)</b> | <b>Biogas</b>           | The concept mass balancing is not defined in the EECS Rules. The certificate contains data which could be used for mass balancing depending on the definition of the concept 'mass balancing'. As an alternative, it can be linked with a mass balancing system. | No             | PoS can be forwarded with a CoO. It is the scheme participant's decision if documentation via ERGaR CoO complies with their national requirements. | Yes (for transport) |
|   | <b>RFNBO</b>            |  | No (envisaged) | No   | No                  |
|   | <b>RCF</b>              |  | No             | No   | No                  |

Source: REGATRACE D4.2 (2021)

# The ERGaR Schemes...

|                     | ERGaR CoO Scheme  |   | ERGaR RED MB Scheme  |  |
|---------------------|---|---|--|--|
| APPLICATION PURPOSE |  Consumer disclosure       | Initiatives by Market & Society  |  Target compliance transport sector |  |
| BACKGROUND          | Art 19 RED II   | Market and Scheme Rules   | Sustainability & Mass Balance<br>Art 25-31 RED II  |  |
| COMPETENT AUTHORITY | Issuing Bodies by Government Mandate  | Registries  | Voluntary Scheme recognised by EC  | Registries via ERGaR RED MB Scheme   |
| Rules and Standards | CEN – EN 16325  | ERGaR CoO Scheme                 | E.g.: ISCC, REDCert, NTA 8080  | ERGaR RED MB Scheme         |
| DOCUMENT TYPE       | GoO  Guarantee of Origin |  CoO Certificate of Origin      | PoS  Proof of Sustainability       |  ERGaR PoO Proof of Origin |
| STATUS              | Launched (06/2021)  |   | under recognition by the European Commission as voluntary scheme   |  |

# ERGaR CoO Scheme

## Status of System Participants

- System participants
  - GGCS (UK)
  - Vertogas (NL)
- Undergoing the application process
  - AGCS (AT)
  - DENA (DE)
- Preparing for application process
  - Energinet (DK)
  - GRDF (FR)

## Transfers

- First CoO was transferred from Vertogas (NL) to GGCS (UK)

# ERGaR's 4 core principles for mass balancing

## Sustainability

No certificate can be issued without a valid **Proof of Sustainability for every biomethane consignment**

## Single logistical facility

The **interconnected European natural gas network** is treated as one single logistical facility

## Chain of custody

**Mass Balance** = coverage of the complete chain of custody for biomethane injected into the European natural gas grid

## Export destination

ERGaR provides a solution for cross-border title transfers; no national solution; Exclusively **biomethane consignments destined for export**

## ERGaR

We are the only organisation proposing an administrative solution for handling biomethane in the interconnected, European natural gas network.

## RED

*Negotiation under RED I, re-submission under RED II*  
Renewable Energy Directive

## MB

Mass Balancing as defined in  
Art 18 RED I  
Art 25 – 31 RED II

## Voluntary

Seeking recognition as VS by the European Commission

## Scheme

Administration system as defined in  
Art 19 of RED I  
Art 30 of RED II

# Summary

**The number of cross-border transfers of biomethane certificates is increasing. This development is very likely to continue.**

**The European framework includes certain elements that shall facilitate (e.g. extension of article 19 RED II to gaseous fuels, Union Database) and standardise (e.g. revision of CEN 16325) cross-border transfers.**

**The European framework is still evolving, e.g. MRR, RED III, Union Database.**

**Different European stakeholders have established or are in the process of developing solutions to harmonise and to facilitate the cross-border transfer of certificates.**

# THANK YOU !

## CONTACT US!

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