

European Biogas Association

**BIOSURF project serving the
evolution of the European
biomethane market**

Malmö, 12th May, 2016



The importance of cross-border biomethane trade

- The size of the common market enhances the chances for financing new investments,
- The dependence on national support policies is reduced,
- Trade enables production at places/regions with the highest comparable advantage (processing low-cost substrates),
- Balancing supply and demand on regional and European levels (beyond national borders),
- Biomethane for transport applications will be available all over Europe (even in countries without biomethane production)

Introduction

- Value of biomethane:
 - **physical** (in use) value + **intrinsic** („bio“) value
 - *Physical value: corresponds to prevailing market value of natural gas*
 - *Intrinsic value: „green“, renewable, sustainable*
 - The intrinsic value can be partly quantified (e.g. GHG emission data)
 - The intrinsic value must be realised on the market, in case of international trade it must be transferred cross-border
- **Conditions for biomethane export/import:**
 - The „bio“ quality must be certified in the producer country
 - The „bio“ qualification from the producer country must be acknowledged in the consumer country

Three pillars of cross-border biomethane administration

1. **Sustainability verification** (covering production) prior to grid injection and **cross-border transfer of sustainability claims**.
2. **European natural gas network** (consisting of the transmission and distribution systems) **treated as single logistical facility** with regard to injected biomethane.
3. **Mass balancing of injected and withdrawn biomethane consignments** within the European natural gas network

Cross-border transfer of sustainability claims

The **sustainability verification** for biomethane injected into the European natural gas network for export purposes should consist of **two steps**:

1) the **first part of the chain of custody** – *from raw material supplies through production/upgrading till grid injection* – will be covered by one of the established sustainability verification procedures, exactly like in case of liquid biofuels,

2) the **second part of chain of custody** – *from the moment of grid injection till the withdrawal by the end-user* – will be covered by the new voluntary scheme applying the mass balancing methodology

Proposed solution for cross-border mass balancing and transfer of sustainability claims

- **Special purpose voluntary scheme**
- Name: **ERGaR (European Renewable Gas Registry)**
- **Function:** mass balancing of biomethane distributed along the European natural gas network
- European Biomethane **Guarantees of Origin** issued by the national biomethane registries
- **To be recognised by the Commission under the RED**

Potential partners

- **National biomethane registries**
- National biogas associations
- European natural gas industry associations
- Natural gas companies with biomethane activity
- EBA company members (e.g. AD, upgrading and gasification technology suppliers)
- Biomethane trading companies
- Recognised voluntary schemes involved in certification of sustainability of biomethane production

National biomethane registries

- Are needed in every biomethane producing country
- **Independent**, neutral, professional organisations
- Established through government actions *or* voluntary cooperation of market players (preferably with government mandate)
- Track, confirm and document the biomethane transactions along the contractual chain
- Administrative support in meeting regulative requirements
- **Independent audit controls**
- Assisting development of trade through **building market confidence**

ERGaR will

- 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 Guarantees of Origin for consignments with export destinations,
- provide for **cross-border transfer of sustainability claims** (GHG emission characteristics) attached to the consignments

Thanks for your attention!

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Back-up files

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European biomethane grid

BioCH₄ value = physical value + intrinsic value

BioCH₄ grid = NG grid + mass balancing

*European natural gas grid to bring the **physical value** to the market*

+

*Administrative system for transferring the **intrinsic value** from the producer country to the consumer country (applying the mass balancing method)*

ERGaR will not

- act on domestic biomethane markets,
- issue Guarantees of Origin,
- be involved in certification of sustainability of biomethane production,
- issue Certificates of Sustainability,
- be a trading platform of GoO's.

Existing biomethane registries

- AT: Biomethan Register Austria
- CH: Federation of Swiss Gas Industry
- DE: Biogasregister
- DK: Energinet
- FR: Gaz Réseau Distribution
- FI: Gasum
- NL: Vertogas
- UK: Green Gas Certification Scheme
Biomethane Certification Scheme

The arts of biomethane trade

Art of trade	Market	Source of bonus payments	Administration
Physical product	Regulated by EU and national governments	State aid: financial support/ incentives	Mass balancing
Product Certificate	Free market	willing consumers	"Book and claim"
Emission Certificate	Emission Trading System	environment polluters	ETS certificates

BIOMethane as SUSTainable Renewable Fuel



- Horizon 2020 project initiated by EBA
- 7 countries: AT, BE, DE, FR, HU, IT, UK
- 3 years: 2015 – 2017
- To address all important issues related to developing the European biomethane industry and market

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