

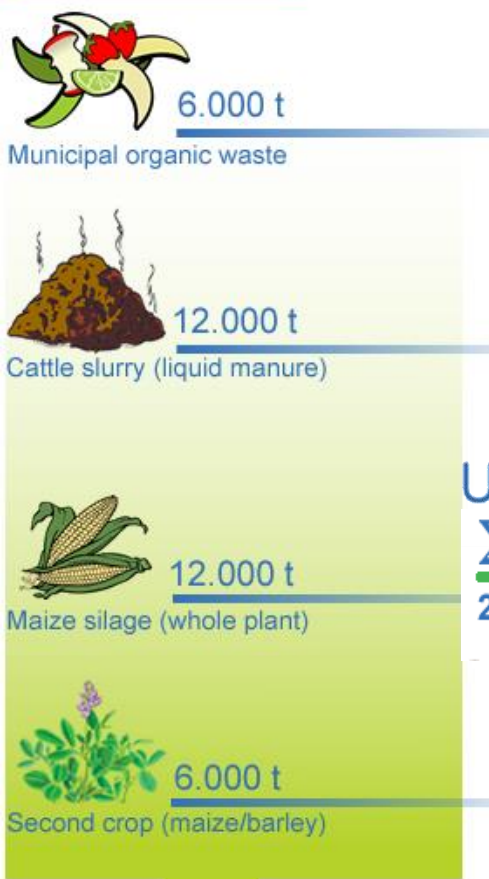
European Biogas Association

A single European biomethane grid: Progress and Challenges

Brussels, 03rd September, 2015

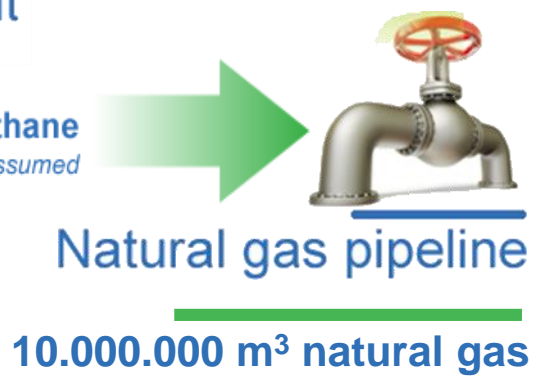


Production input

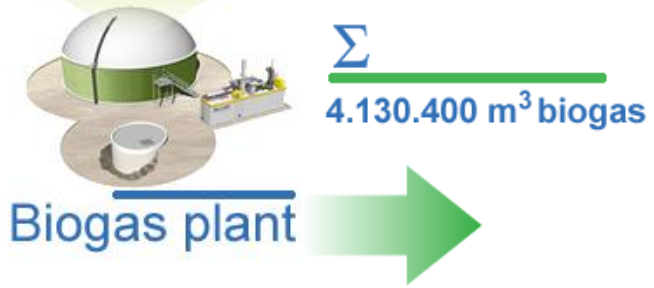
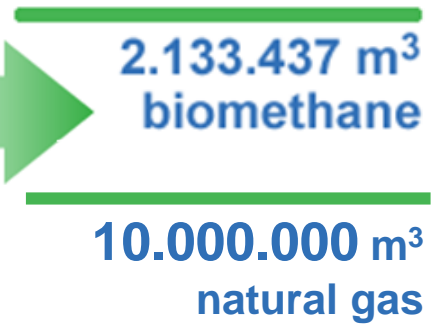


Upgrading unit

Σ
2.133.437 m³ biomethane
2% methane loss assumed



Market



- 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 quantified (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

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

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Challenges and tasks

Political:

- equal treatment of domestic and imported product
- harmonisation of national support systems
- support for biomethane (as advanced biofuel)
- investment protection

Virtual volume transfer through mass balancing in the European natural gas network

Cross-border transfer of sustainability claims

Brussels, 03rd September, 2015

Progress made

- **Green Gas Grids** project (www.greengasgrids.eu);
- **BIOSURF** project (www.biosurf.eu);
- **National biomethane registries** in 6 EU Member States;
- **Biomethane Registry Club** – international cooperation started;
- **Communication** (meetings/letters) **with EC officials**,
- **Communication** (discussion paper, meetings) **with European natural gas organisations** (GIE, ENTSOG, Eurogas, GEODE);
- **CEN TC 408 – standards for biomethane** injected into the natural gas grid and for vehicle fuel application

Brussels, 03rd September, 2015

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**

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)*

Three pillars of cross-border biomethane administration

1. **Sustainability verification** covering the production of biomethane to be completed prior to grid injection – the fuel to be considered as released for consumption upon the act of injection into the pipeline
2. **Declaration of the European natural gas network for single logistical facility** with regard to biomethane injected into the grid.
3. **Mass balancing of injected and withdrawn biomethane** in the European natural gas network

Possible ways for the cross-border transfer of sustainability claim

1. **International cooperation among the national biomethane registries** covering the cross-border transfer of the sustainability claims together with the cross-border transfer of quantity,
2. **Voluntary scheme recognized by the Commission for the special purpose** of mass balancing biomethane distributed along the European natural gas network,
3. **European Biomethane Registry**

Suggested solution

As the potential solution EBA suggests an

Annex to COM 2010/C 160/01

which would address the following biomethane related issues:

- 1. cross-border transfer of volumes and mass balancing of biomethane in the European natural gas network,**
- 2. sustainability verification for biomethane completed prior to injection into the European natural gas network,**
- 3. definition of European natural gas network (with respect to mass balancing)**
- 4. definition of national biomethane registries and their role in cross-border mass-balancing.**

Thanks for your attention!

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Biomethane – national markets

- **UK:** Renewable Heat Incentive (RHI)+ gas market value up to 11,0 €Cent/kWh
- **FR:** Fixed FIT 6,4 – 9,5 €Cent/kWh
depending on capacity (350 m³/h– 50 m³/h) and substrates
example: 150 m³/h, 50% manure+50% org. waste > 9,38 €Cent/kWh
- **DK:** Guaranteed biomethane feed-in-bonus (FIB)
- **IT:** FIT set by law, 8,0 – 10,0 €Cent/kWh
- **NL:** SDE+ scheme, „biotickets“ for vehicle fuel use
- **AT:** „Technologiebonus“ at green electricity generation
- **DE:** Biofuel GHG emission reduction certificates
- **SE:** Complex support system, incl. tax relief
- **FI:** Tax relief, (high taxes for fossile vehicle fuels)
- **NO:** Tax relief till end 2015