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# Austrian Biomethane Registry

Driver for European integration Dublin, 2019/06/28

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#### • TO DO:

- Clearing of the Austrian gas market
- Organization of the balancing market in Austria
- Tracking of all gas movements and injections in Austria (incl Biomethane)

#### • Basis of our work:

- Austrian Gas Law
- Standard Terms and Conditions
- Renewable Electricity Law





## **Austrian Situation**





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- Key Facts:
  - In operation since July 2012
  - All market areas covered
  - Monthly creation of biomethane Guarantees of Origin
  - Transfer of GoO possible
  - Creation of cancellation documents for final use
  - Cooperation with Environment Agency Austria (UBA) for sustainable biofuels in final stage
  - Cooperation for cross border exchange with German biomethane registry operated by dena
  - Handling of mass balancing and auditing

forced by the Renewable Electricity Law to create Guarantees of Origin for injected biomethane



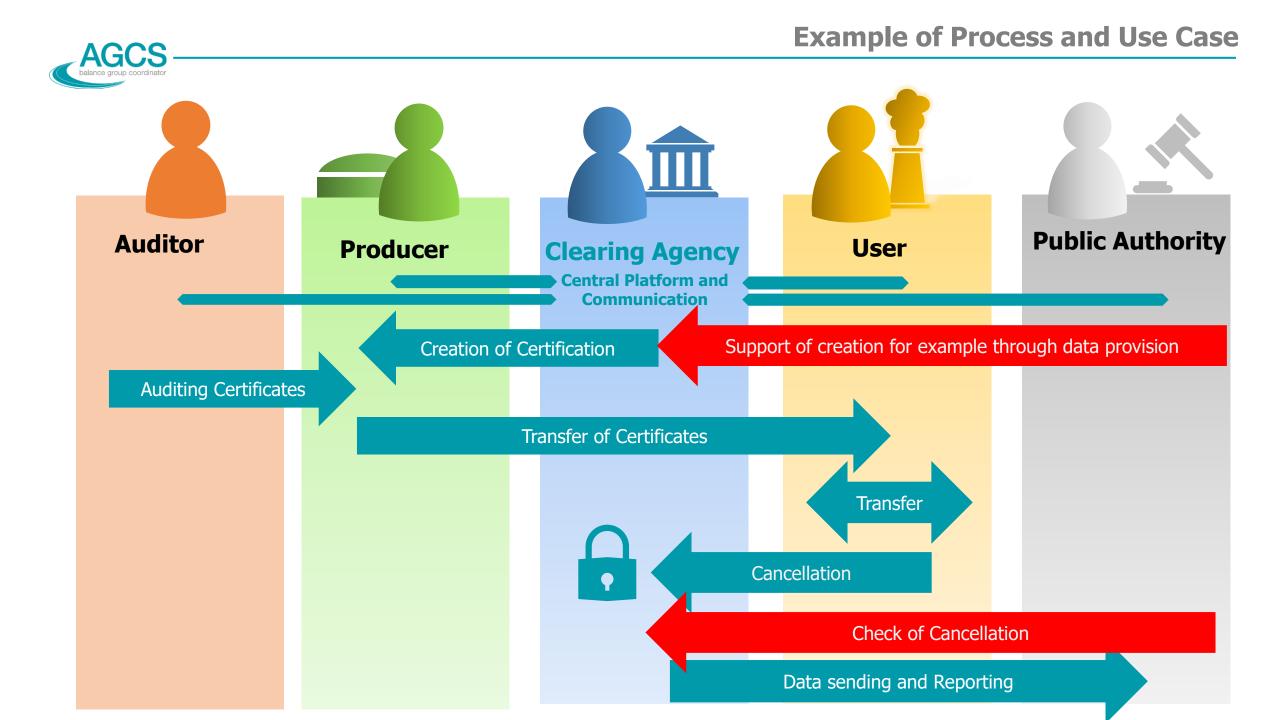


- Free choice of market participants to use our solution of the biomethane registry (maximum trust)
- Functionality of the biomethane registry:
  - Centralized data base for GoO with direct link to gas clearing system
  - monthly GoO based on clearing data from network providers
  - Transfer possibility and "mothball"
  - Physics and GoO are separated
  - Attribute handling: Country Full injection Plant type Power to Gas Sustainability Auditor Proof

**Import Link in the Biomethane Trade Chain!** 



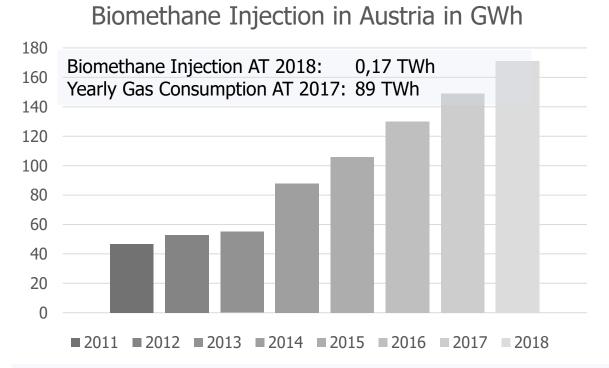




#### **Data and Facts**

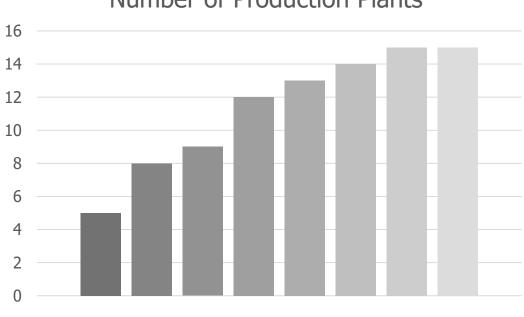


#### Biomethane Registry Austria



## About 300 biogas plants produce electricity directly within subsidy scheme covering approx. 1 TWh Gas

1 4. Quartal 2016	Einspeisemenge in kWh	Vergütung netto in €	Durchschnitts- vergütung in Cent/kWh
Kleinwasserkraft	1.772.219.457 kWh	86.181.608,89	4,86
Sonstige Ökostromanlagen	7.997.905.125 kWh	924.345.488,09	11,56
Windkraft	4.931.804.952 kWh	440.256.287,55	8,93
Biomasse fest inkl. Abfall mhbA	1.981.646.690 kWh	262.703.063,42	13,26
Biogas	564.518.806 kWh	97.704.043,93	17,31



#### Number of Production Plants

■ 2011 ■ 2012 ■ 2013 ■ 2014 ■ 2015 ■ 2016 ■ 2017 ■ 2018

#### Number of biomethane registry users

- 14 biomethane production plants
- 10 biomethane electricty production plants
- 6 traders
- 8 Auditors
- 1 Subsidy scheme organization
- 1 foreign registry





- Cooperation since June 2017: AGCS (Austrian biomethane registry) and UBA (sustainable certificate registry for biofuels)
- **Target:** prevent double-counting and double-sale; Creation of interface between both organisations.
- **Title:** Exchange of information on biomethane feeds into the gas grid and subsequently usable in biofuels
- **Implementation:** system for exchange of biomethane production information
- No direct ownership transfer
- No additional costs
- unique in Europe: cooperation of biomethane registry and sustainable certificate registry for biofuels





#### **Trade-Off of different regulatory systems**



### Certificates

- Labelling/view towards customer
- Quota system (voluntary or obligatory)
- Possibility of subsidy
- Trade possible without product



#### **Paris Target**

- Different bases for reduction calculation
- Complex national monitoring
- Different treatment of sectors
- Payments for missing target

#### Tax Advantages

- Exemption for corresponding documentation
- Focus on the consumption
- Indirect subsidy

#### **DECARBONISE / GREENING**

# **European View**

## Cooperation strengthening harmonisation







- Registries established in several European countries: AT, CH, DE, DK, FI, FR, NL, SE, UK and further in development in IT, BE
- AGCS was part of an European financed project with 10 international partners within the Horizon 2020 program – name BIOSURF (<u>www.biosurf.eu</u>): objective to increase the production and use of biomethane, for grid injection and as transport fuel, by removing non-technical barriers and by paving the way towards a European biomethane market – newly project within tender process called "REGATRACE" – follow up to BIOSURF project
- First bilateral cooperation for the exchange of biomethane Guarantees of Origin between Austria and Germany established in June 2016 – further bilateral cooperation pushed by AGCS
- Switzerland starting developments on central clearing authority for all renewable fuels (liquid and gaseous)
- Cooperation between all existing biomethane registries in a dedicated founded organisation called ERGaR (European Renewable Gas Registry) – Purpose: enable cross border trade of biomethane among the participating national registries





Biomethane Producers & Registries

Biomethane Producer without Registry



- REDII implementation in Austria Guarantees of Origin
- Individual national subsidy of biomethane limited European cooperation (ERGaR as a facilitator of cooperation among national bodies)
- Power to Hydrogen projects for example Verbund/Voest
- Power to Gas projects in preparation (Germany as driver)
- Certification of Hydrogen (CertifHy project)
- Convert biogas electricity plants to biomethane injection plants
- Electricity GoO not applicable for Power to Gas

Comparison in Austria: pumped-storage plant vs gas storages

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ca. 4.600	*******	
Pumpspeicherkraftwerk	RAG-Gasspeicher	

Derzeit stehen zur Speicherung großer Energiemengen im Stromnetz hauptsächlich Pumpspeicherkraftwerke zur Verfügung. Diese können Energie für ca. 4.600 Haushalte (bezogen auf den durchschnittlichen Jahresverbrauch) speichern und bei Bedarf in das Stromnetz einspeisen. Die Energie, die allein in den Gasspeichern der RAG Platz findet, beträgt mehr als das 400fache.



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