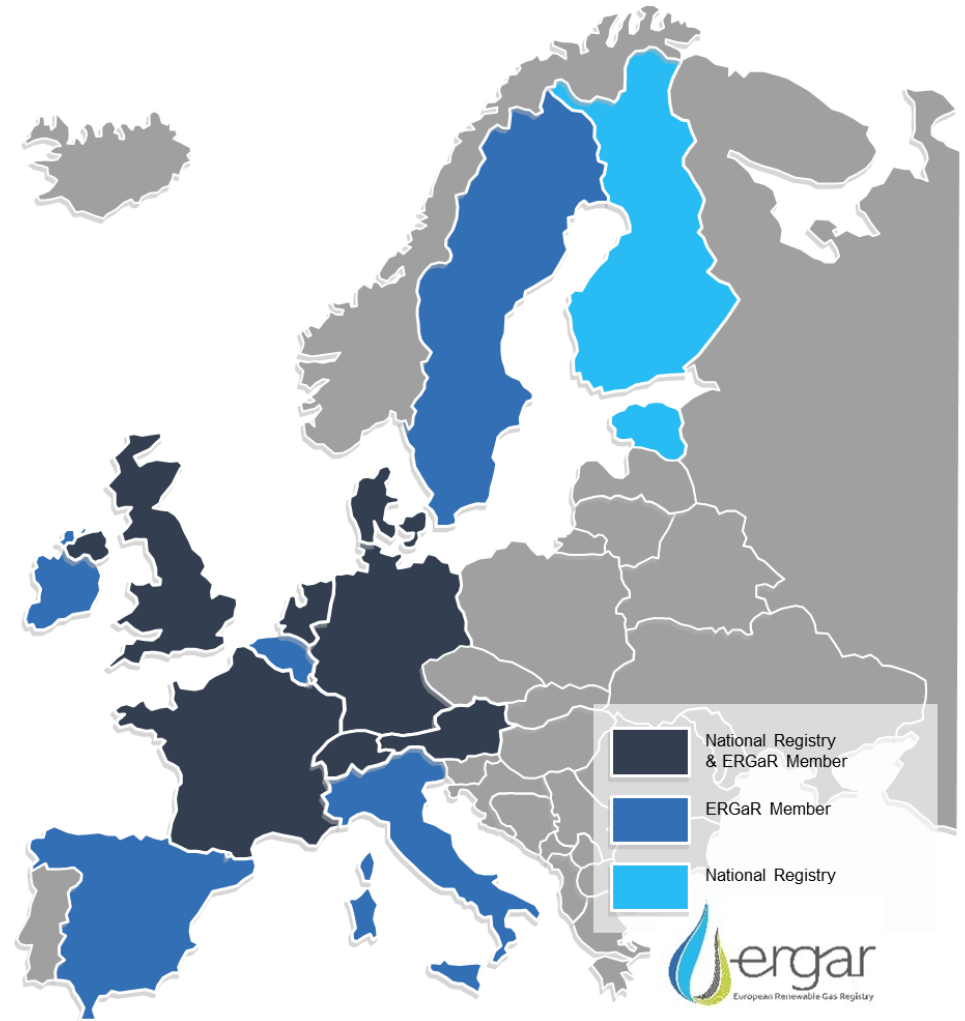


Matthias Edel, 28 June 2019, Dublin

OVERVIEW OF EUROPEAN BIOMETHANE REGISTRIES

OVERVIEW OF BIOMETHANE REGISTRIES IN EUROPE

- In 9 European countries biomethane registries are in operation
- The purpose and approach of the registries are very different
 - Framework conditions
 - Source and verification of data
 - Government mandate
 - Sustainability criteria
 -

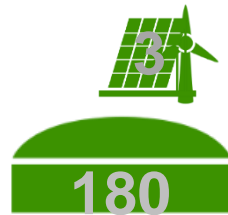


GERMANY

THE GERMAN BIOGASREGISTER – Facts & Figures



account
holders



Upgrading
plants
registered



In accordance
with German law:

- Renewable Energy Sources Act (EEG)
- Renewable Heat Act (E(E)WärmeG)
- Emission Trading Scheme (ETS)
- Cogeneration Law (KWKG)



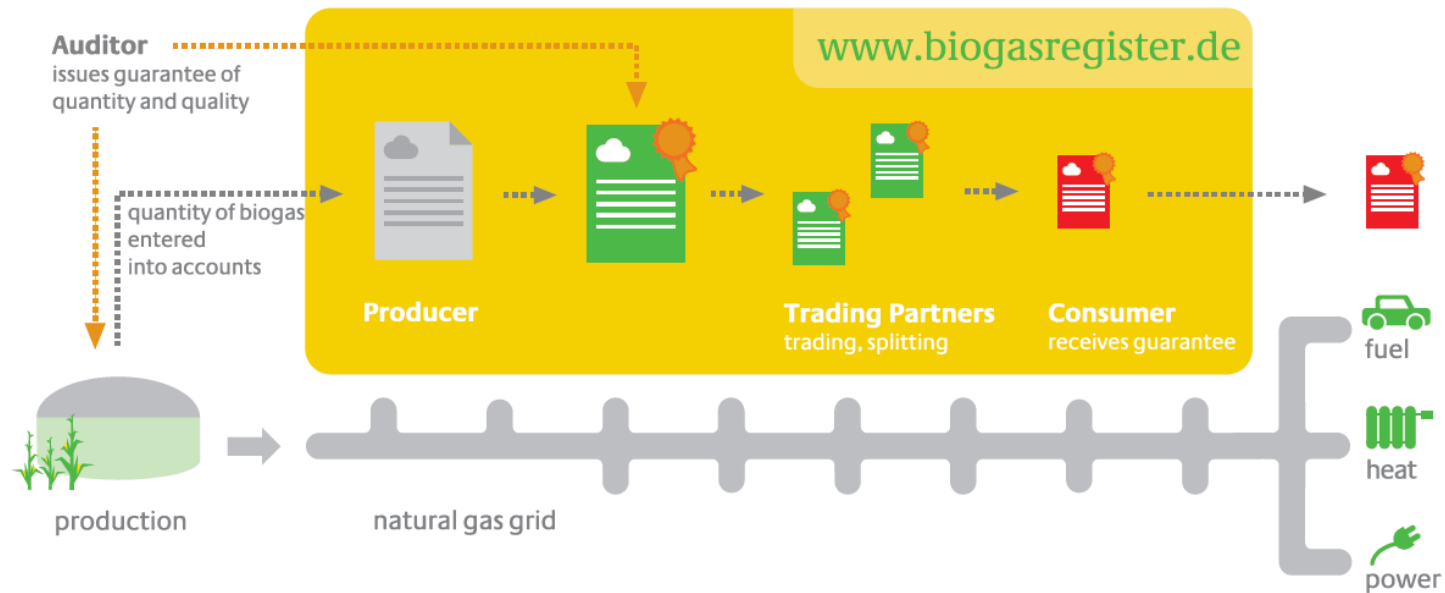
Bilateral
agreements
with
Energinet
and AGCS

GERMANY

- **Regulatory framework:**
 - financial support for biomethane use for electricity production
 - means to fulfill greenhouse gas quota obligation in transport sector
 - means to fulfill renewable heat obligation
- **Operator:** German Energy Agency based on an industry initiative of 14 companies
- **Source of data:** Auditors verify the production volume based on meter data
- **Criteria:** national sustainability criteria applied






GERMANY

BASIC FUNCTIONALITY – SCHEMATIC PROCESS FLOW



GERMANY

DOCUMENTATION OF BIOMETHANE: DIFFERENT REQUIREMENTS

	Application	Legal Framework	Mass balancing	Documentation Requirements
	CHP	EEG / KWKG	✓	Feedstock, Configuration of Plants, Energy and GHG Emission related Information
	Biofuels / Bio-LNG	37. BImSchV	✓	Feedstock, Sustainability criteria
	P2G-Fuels	37. BImSchV	✓	Pilot plant or congestion management or RE GoO
	Emission Allowances	TEHG	✓	Biogenic Source (Feedstock)
	Heat	EWärmeG & EEWärmeG	✓	Configuration of Plants, (Energy and GHG Emission related Information)
	Green Gas Products	--	✗	Individual requirements

SWITZERLAND



34 biogas upgrading plants

- **Regulatory framework:** tax exemption for biomethane as transport fuel
- **Operator:** Swiss Association of Gas Industry (VSG)
- **Source of data:** «Clearingstelle» ensures tracking and balancing of all quantities of biomethane injected into the grid
- **Cooperation with public authorities:** Reporting to Swiss Customs authority (Oberzolldirektion OZD)
- **Criteria:** national sustainability criteria applied

DENMARK

- **Regulatory framework:** feed-in tariff for biogas injection
 - Certificates are issued for disclosure
- **Operator:** Energinet Gas TSO
- **Source of data:** Injection from producers is measured by network operators
- **Ministry of Energy, Utilities and Climate gave mandate to Energinet**
- **Criteria:** national sustainability criteria applied (cap on energy crops)



32 grid connected biogas plants

FRANCE

- **Regulatory framework:** Feed-in tariff for biogas injection
 - Biomethane producer sells production to gas supplier which receives GoO from GRDF
 - No trade of GoO possible (yet)
- **Operator:** Gaz Réseau Distribution France (GRDF)
- **Source of data:** Injection from producers is measured by network operators
- **French Economy Ministry awarded GRDF**
- **Criteria:** national sustainability criteria applied (cap on energy crops)

OUTLOOK

Article 19 RED2 defines **requirements for Guarantee of Origin (GoO) of renewable gases**

- Energy sources, start and end date of production
- If it relates to gas (and hydrogen)
- Identity, location, type and capacity of installation
- Information if installation or production has benefited from national support
- Date on which the installation became operational
- Date and country of issue
- Compliance with CEN standard CEN 16325

GoO for disclosure only

OUTLOOK

- Article 29 RED2 defines **sustainability and mass balancing requirements** for biomethane used in installations for heat and power >2MW, if counting to Union Goals
 - For new installations only
 - Minimum ghg emission savings
 - Sustainable cultivation and harvesting of biomass
 - Mandatory use of a mass balancing systems

- Article 25 RED2 introduces **minimum thresholds for ghg emission savings** of renewable gaseous transport fuels of non-biological origin
 - Differentiation by 2021 (delegated act)

- **Common sustainability criteria and mass balancing requirements for biomethane in the transport and to some degree in the heat and power sector**

CONCLUSION

- Not all registries have a government mandate, some are based on industry initiative or provide a private service → **consider national circumstances**
- Biomethane registries take over different duties and provide tailor made solutions → **plenty of ideas and approaches exist**
- Most registries rely on gas meter data and therefore are limited to the injection of renewable and „carbon neutral“ gases (biomethane, hydrogen and synthetic methane) → **data collection and verification are core principles**
- Besides biomethane for transportation (sustainability verification of biofuels), there is no harmonized approach for GoO and proofs of biomethane yet → **REGATRACE works on a harmonized approach**
- RED2 requires MS to initiate issuing bodies and mass balancing schemes for the documentation of renewable gases (GoO and sustainability) → **chance for harmonization of biomethane and facilitation of cross-border trade**

THANK YOU FOR YOUR ATTENTION.

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