

Biomethane

The already existing green element
in the gas business!





AGCS Gas Clearing & Settlement AG

Basis of our work

- European Gas Law
- Austrian Gas Law (GWG)
- Standard Terms and Conditions
- **Renewable Electricity Law (ÖSG)**

Our tasks

- Balance Group Coordinator
- Clearing of the Austrian gas market
- Organisation of the balancing market in Austria
- Calculation and settlement of balancing energy
- **Tracking of all gas movements and injections in Austria (incl. biomethane)**



AGCS Biomethane Registry Austria

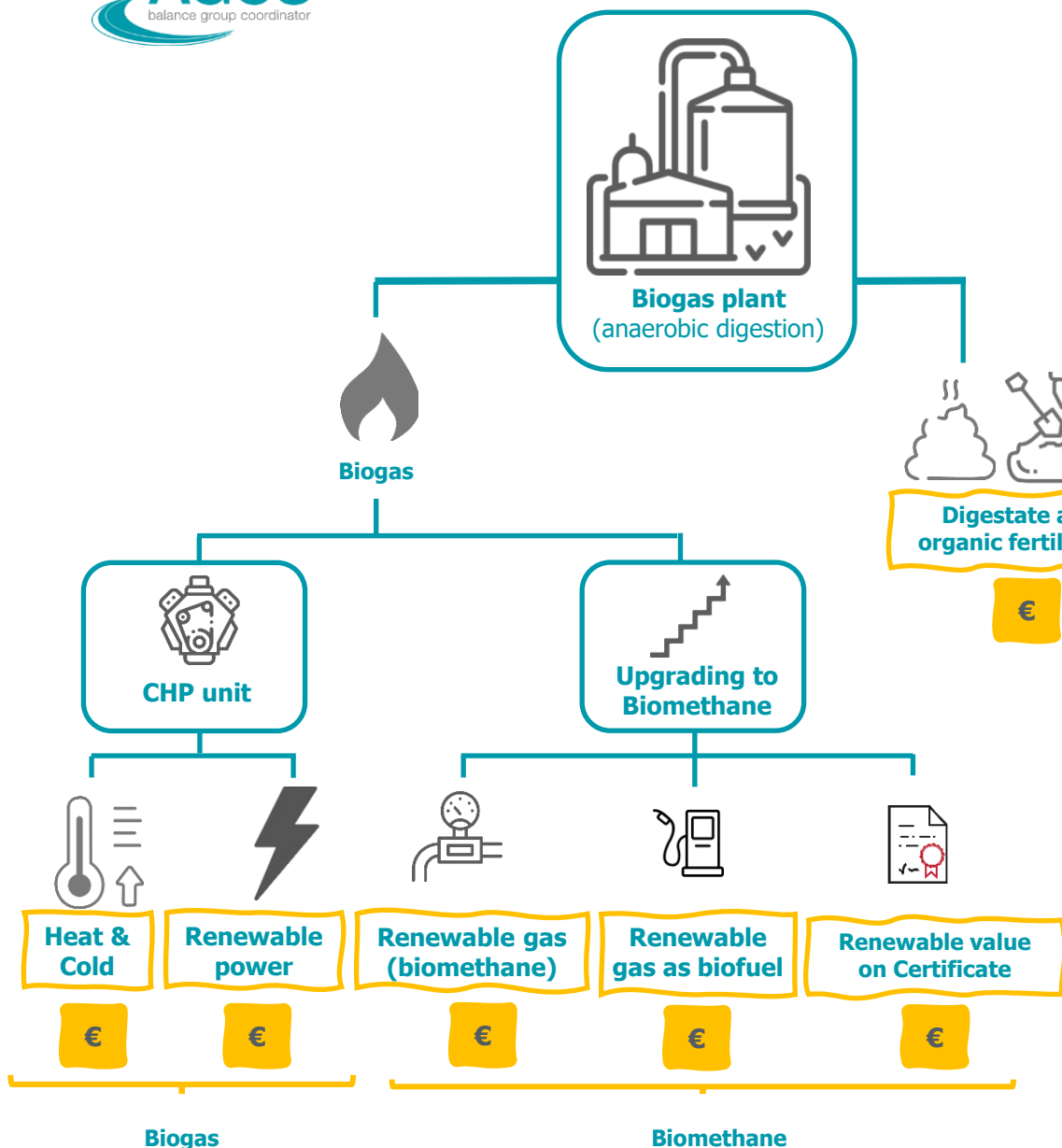
Key Facts

- In operation since July 2012
- All gas market areas covered in Austria
- 41 market participants
(incl. AustrianGreen Power Settlement Agent (OeMAG),
Biogas Registry Germany by dena)

Driver for European integration

- Founding and Board Member of ERGaR
- Project Partner in REGATRACE





- **Creating revenues for plant operators**

- Biogas plants
 - Renewable electricity
 - Heat & Cold
- Biomethane plants
 - Renewable gas
 - Renewable gas Certificate representing its green value
- Digestate as organic fertiliser

- **Biomethane does not differ from natural gas**

- Neither in physical nor in chemical properties

- **Biomethane** injection into gas grid

- Blends of biomethane and natural gas in any ratio
- Use of existing infrastructure and grids
- Conventional gas applications
- Increases diversity of possible application purposes
- Biomethane can reach every European consumer
- Separation of biomethane production and gas consumption





Need for secure, trustworthy biomethane certificates

Target Compliance



Union target
32%
(Art 3 REDII)



Transport target
(Art 25 REDII)



National targets
& quotas



Disclosure

Consumer disclosure

Guarantees of Origin
(Art 19 REDII)

price premium to be
paid by end consumer

Subsidy Schemes

National subsidy
schemes

- FiT for electrification



- Biomethane injection



- Tax exemptions €

Market initiatives

Initiatives by society
and market

Producers to market
the green value of
their product

Consumers to
increase renewable
energy shares

Future markets



? EU ETS
Emission
Trading System



? chemical
industry



? Upcoming
markets

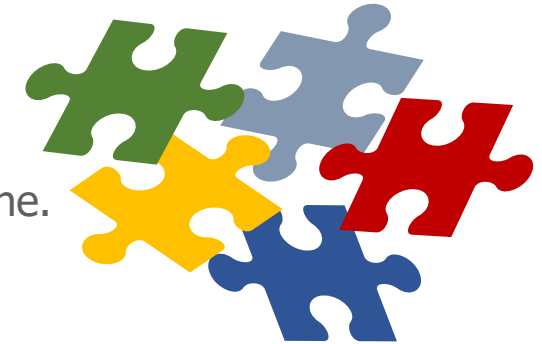
AGCS Biomethane Registry Austria

Driver for European Gas Market Integration of Biomethane



Key facts

- Free choice of market participants to use our IT-solution of the Biomethane Registry for the movements of their biomethane volumes within the Austrian gas grid.
- Trustworthy, transparent and secure documentation provides maximum trust.
- Biomethane certificates are pre-requisite to receive FiT for renewable power from biomethane.
- European cross-border transactions of biomethane certificates via interfaces to ERGaR ExtraVert Platform and German Biogas Registry (dena).

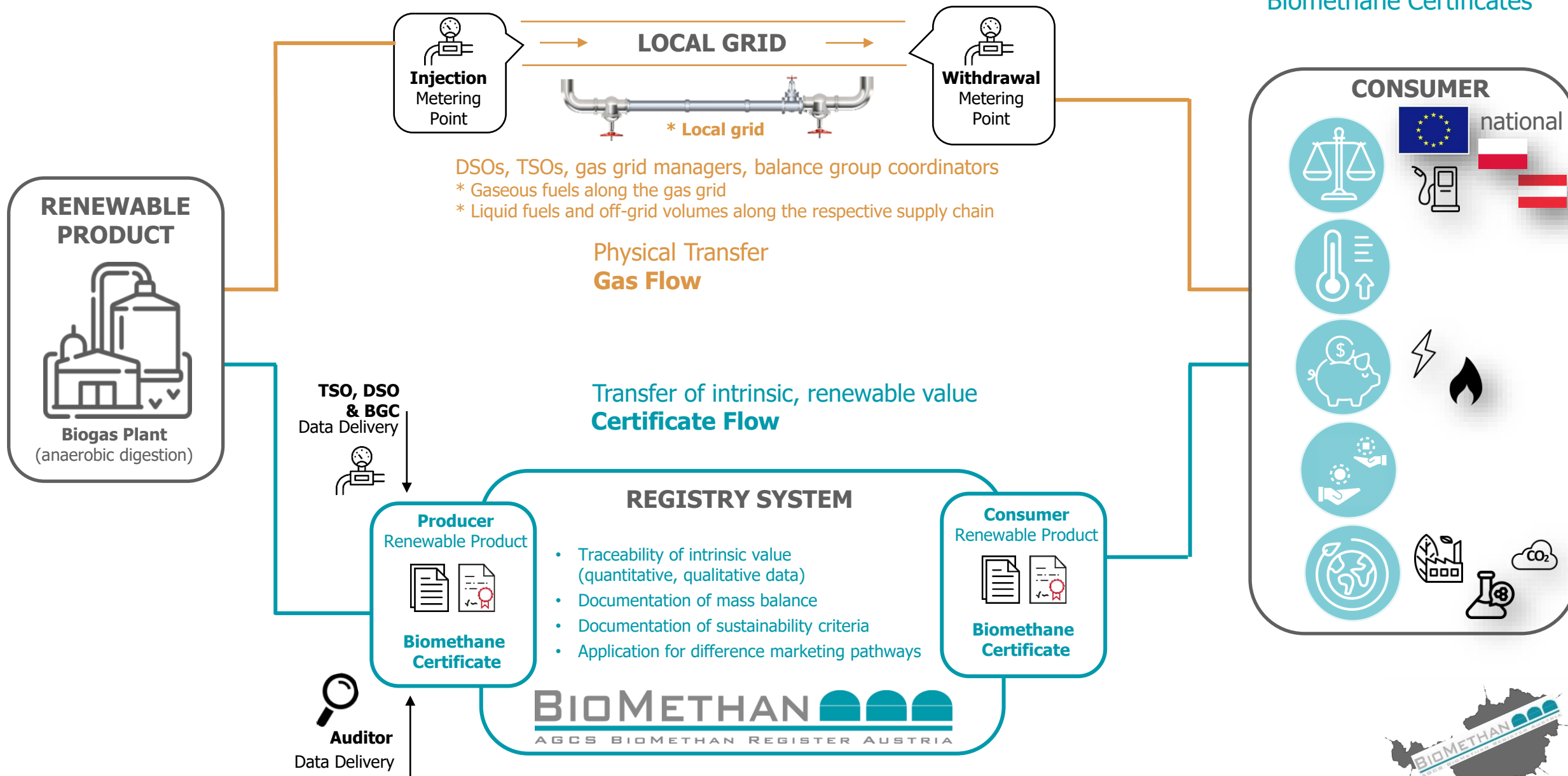


Functions of the biomethane registry

- Web-based registry system with personalised accounts
- Roles of users: biomethane producers, CHP plant operators, auditors, traders/utilities; (registry operator AGCS)
- Centralised database for biomethane certificates with direct link to gas clearing system
- Separated handling of physical value (gas) and intrinsic, green value (biomethane certificates)
- Documentation of sustainability criteria (biofuels in transportation sector)

Business Processes

- By registry operator (AGCS)
 - Monthly issuing of biomethane certificates based on clearing data from network providers
 - Creation of cancellation documents for final consumption of biomethane
- By market participants
 - Transferring certificates
 - Splitting certificates
 - Cancelling of certificates for consumption





Renewable Gas Certificate

Level 1

Plant specific

- Static data
- Third-party audit
- Country, metering point, plant type;

PoS
audit report



Level 3

Substrate specific

- Dynamic data
- Qualitative data (feedstock-related)
- Third-party audit
- Substrates, processes, GHG emission mitigation
- Sustainability criteria (REDcert, ISCC)

Level 2

Gas specific

- Dynamic data
- Quantitative data
- audit: registry-specific; first-level audit most often
- Gas volumes (metering/clearing data)

Level 4

Transfer specific

- Does NOT contribute information to the renewable gas product
- Enables IT-processes for title transfer



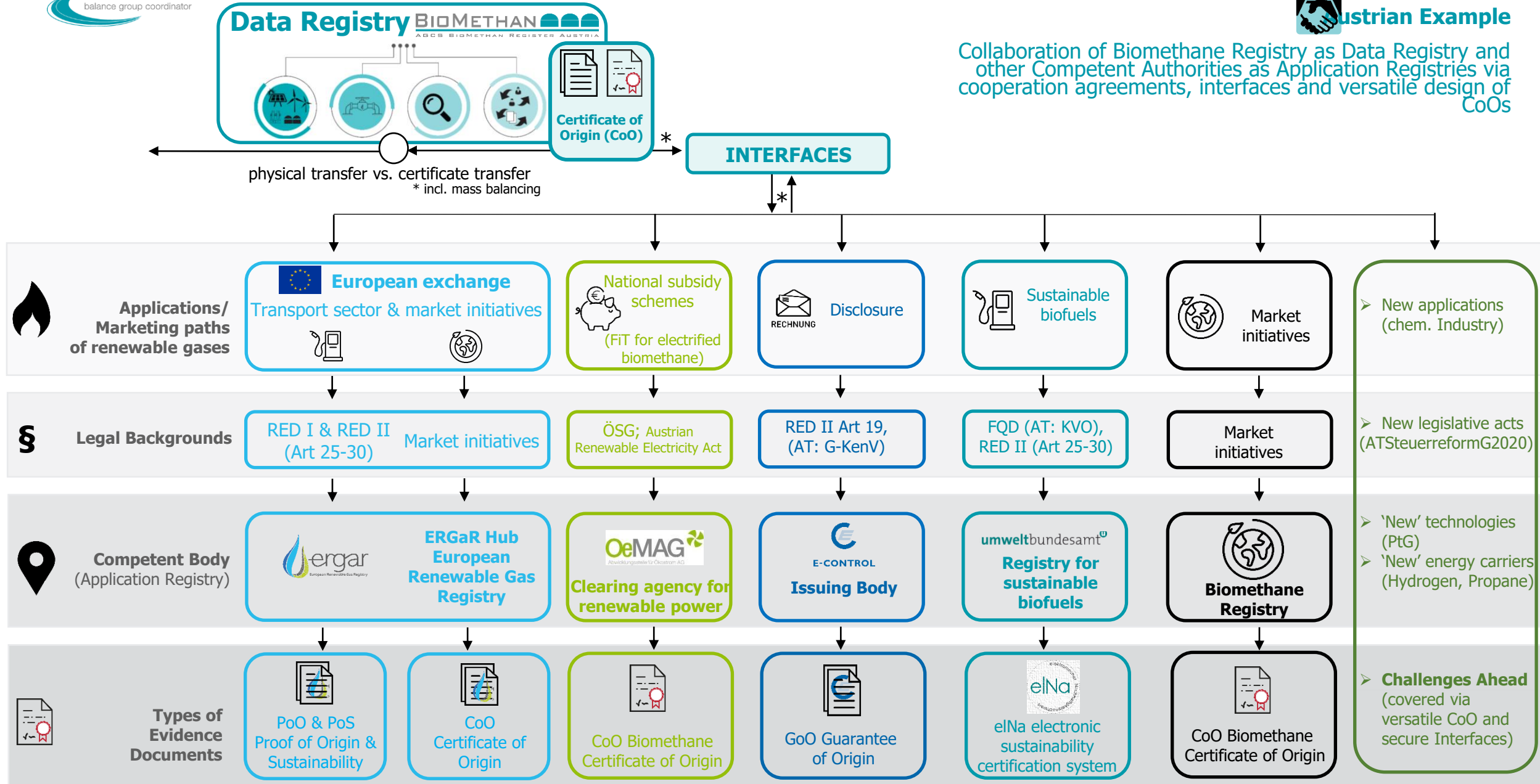
Source: Biomethane Certificate by Biomethane Registry Austria (example provided by AGCS)

Requirements on Renewable Gas Certificates

- Legal requirements are fulfilled:
 - Art 15 para 6 RED I
 - Art 19 para 7 RED II
 - Optional: Art 25 RED II (sustainability)
- Comprehensive and conclusive attributes
- Versatile and flexible design to fulfil legal requirements
- Harmonised design of attributes to enable IT-processes behind title transfers



Collaboration of Biomethane Registry as Data Registry and other Competent Authorities as Application Registries via cooperation agreements, interfaces and versatile design of CoOs



4.
Trade

- **Current trading possibilities:** bilateral trades, OTC;
- **Outlook**
 - **REGATRACE** efficient trade system based on issuing and trading biomethane/renewable gases Certificates.
 - **ERGaR:** ExtraVert Platform may be **connected to a trading platform**.

3.
European Transfers

ERGaR Schemes
ExtraVert Platform: central,
Europe-wide IT-solution

- **Cross border transfers via ERGaR**
 - Connection between biomethane registries
 - Single and central interface for biomethane registries
- **Settlement processes handled by biomethane registries**
 - Registration of producers and traders at biomethane registries
 - Closing of Mass Balance by registries (market participants and traders do not have to deal with it)

2. Registry cooperation
(bi-/multilateral trade)

- **Registries as fundament for integrated market**
- Creation, transfer and cancellation of certificates
- Enable biomethane trade
 - Harmonisation of requirements
 - Standardisation of processes

1. Registries

Establishment of a domestic renewable gas registry

REGATRACE Support to UPEBI & Poland



Recommendations for countries establishing their biomethane market

REGATRACE TARGET

Establish national Renewable Gas Registry as one centralised clearing agency for renewable gases in each European country.

to cover

- All types of renewable gases
- All types of application purposes
- All types of certificates: documentation/proofs with flexible and comprehensive attribute lists

to provide

- Maximum trust and transparency
- Simplicity for market participants
- Reduced costs for market participants

REGATRACE Knowledge Base

for organisations engaged in establishing national registries

- ✓ D6. 1 - Mapping the state of play of renewable gases in Europe
- ✓ D3.1 - Guidelines for establishing national biomethane /renewable gas registries
- ✓ D2.1 - Content and attributes of European Biomethane Guarantees of Origin
- ✓ D2.2 Report on content and attributes of GoO
- ✓ T2.4 Working paper: Establish communication interfaces between National Organisation and European Scheme
- ✓ T3.3 Provisional IT-system for start-up of registries

T3.3 Provisional IT system for start-up of registries

BE, ES, IE, IT, LT, **PL**, RO; SE



Support to target countries for their domestic registry set-up

- Detailed work plan
- Template for stakeholder analysis
- Template for set-up of master database
- Support to draw-up business processes

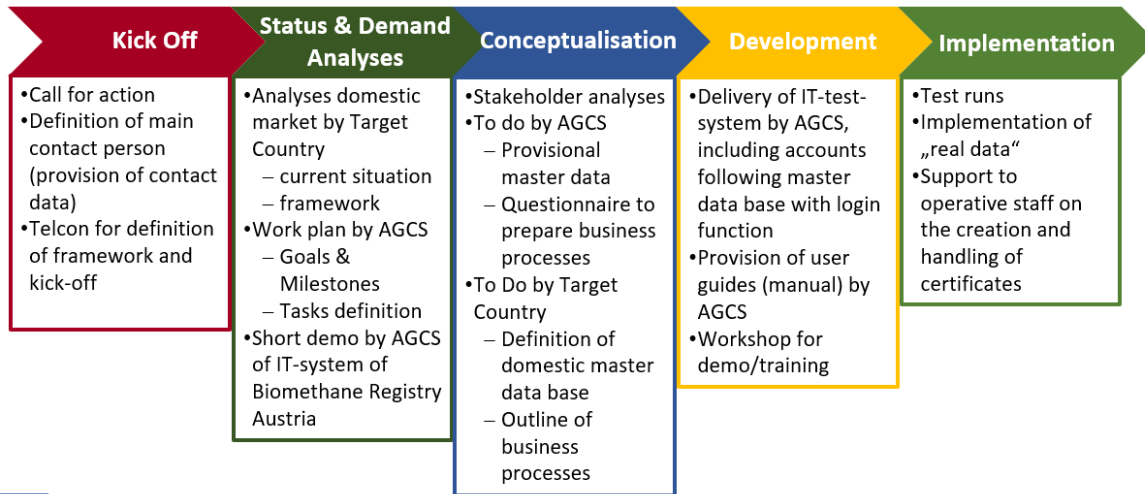


Delivery of IT-test-system for their domestic registry

- Web-based application with personalised, password-secured logins
- Personalised logo and colour scheme
- Integration of master data base
- Training sessions and manuals, first-level support

Domestic Registry Set-up

Step by Step Work Plan



This project receives funding from the European Union's Horizon 2020 Framework Programme for Research and Innovation under Grant Agreement no. 857796

The screenshot shows the 'Biomethane Registry Poland' test environment. It includes a login form with fields for 'User' and 'Password', a 'Login' button, and a 'Forgot your password?' link. Below the login form is a 'Language' dropdown menu set to 'English' and a 'Navigation' section. To the right, a 'Welcome' message is displayed, followed by instructions for login and a list of error messages. The footer indicates the version is 1.4.5.0-BIOREG-4a, © 2006-2012 by smart technologies GmbH.



REGATRACE support → support-regatrace@agcs.at



SMARTTECH

This project receives funding from the European Union's Horizon 2020 Framework Programme Research and Innovation under Grant Agreement no. 857796



REGATTRACE

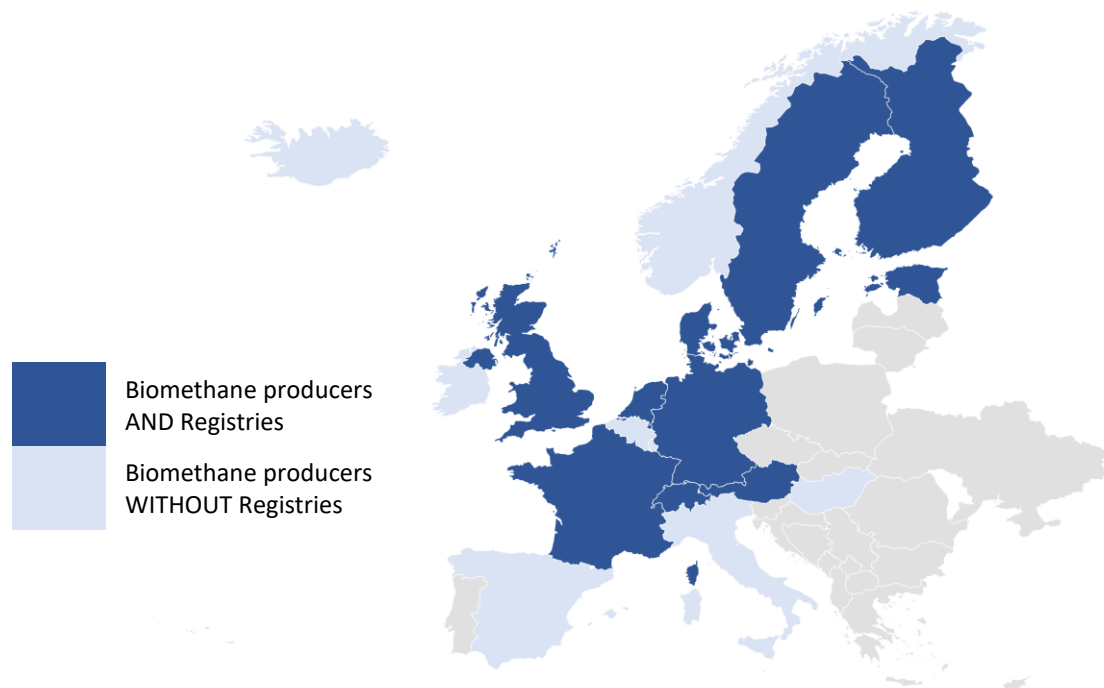
Renewable Gas Trade Centre in Europe

OUTLOOK

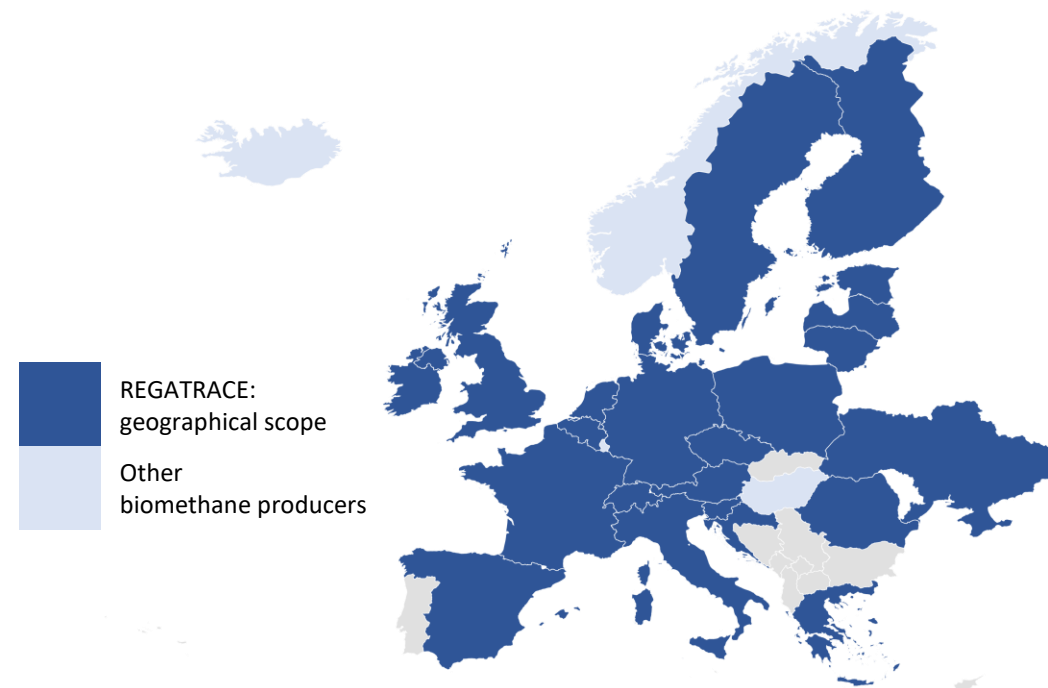


Potential development of the European biomethane market 2022 (final objective)

Biomethane activities 2019
(Biomethane producers & registries)



REGATRACE impact
Potential Biomethane market 2022



The geographical scope of the EU-funded REGATRACE project will enable the development of a European biomethane market with the potential to cover whole Europe.

REGATRACE aims at creating an integrated European renewable gases market by 2022.



Contact

AGCS Gas Clearing & Settlement AG

www.agcs.at www.biomethanregister.at
[LinkedIn](#) info@biomethanregister.at

Project Management

Stefanie Königsberger, Andreas Wolf

stefanie.koenigsberger@agcs.at andreas.wolf@smarttech.at

Operative Implementation

Stefan Thaller, Sarah Piza

stefan.thaller@biomethanregister.at sarah.piza@biomethanregister.at

REGATRACE IT-Support

support-regatrace@agcs.at

