

European Overview of Registries Stakeholder Workshop Vilnius October 20th, 2021

Contact:

German Energy Agency (dena)
Milenko Matosic (matosic@dena.de)



Target Countries + 1







Poland





Austria AGCS



Denmark Energinet



France GRDF



Germany dena



Netherlands Vertogas



UK REAL (GGCS)



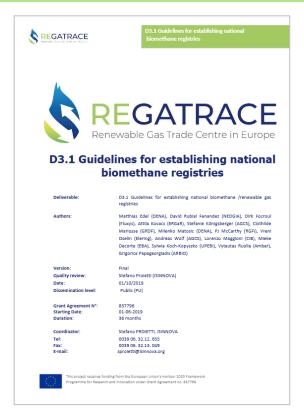
WP 3 Set-up of national GoO issuing bodies

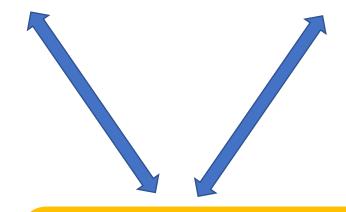


Task 3.1
Guidelines establishing national registries
(<u>link</u> to report)



Task 3.2
Set-up of national
biomethane registries
(lead: dena)





Task 3.3
Provisional IT system for start-up of registries (lead: AGCS)

Objective of WP3

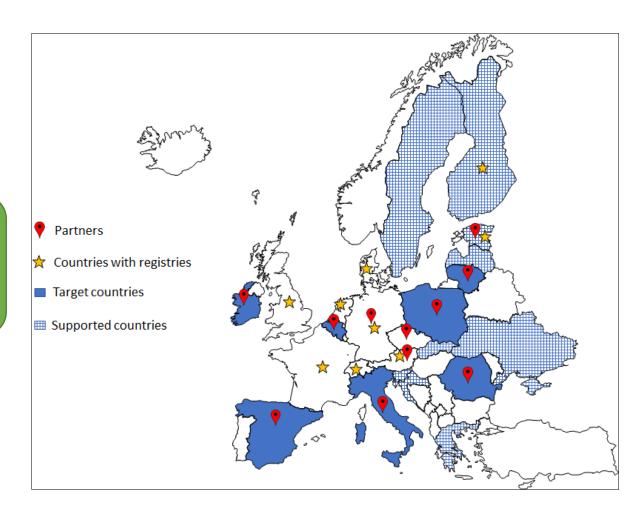


Prepare target countries (BE, CZ, IE, IT, LT, PL, SK & ES) to join the European biomethane/renewable gas trading system by:

Establishing national renewable gas GO issuing bodies

Providing a provisional IT system for the registries

Providing guidelines for establishing biomethane registries in supported countries





REGATRACE Knowledge base



for countries establishing their renewable gas market

Renewable Gas Certificates

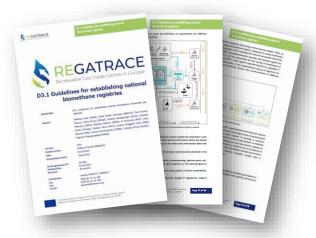
- > D2.1 Content and attributes of European Biomethane Guarantees of Origin
- > D2.2 Report on content of the Guarantees of Origin





Renewable Gas Registry Systems for Certificate Documentation

- > D3.1 Guidelines for establishing national biomethane /renewable gas registries
- Task 3.2 Set-up of national/regional biomethane registries in the target countries
- Task 2.4 Establishment of interfaces by national registries to connect to a European scheme

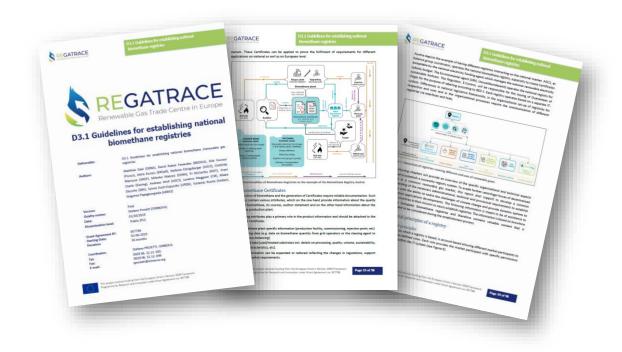




D3.1 Guidelines for establishing national biomethane /renewable gas registries



- Biomethane business cases
 - Chapter 2.1
- Certificates
 - Chapter 1.4, 5.3, 6.8.4, 6.8.5
- Renewable Gas Registry
 - Registry functionalities: Chapters 1.3, 5.2
 - Set-up of a registry: Chapter 6
 - Financial means: Chapter 6.4.1
 - Roles in the registry system: Chapter 6.7
- Business Processes: Chapter 6.8
 - Registration: Chapters 5.4, 6.8.1
 - Generation of Certificates: Chapter 6.8.4
 - Handling of Certificates: Chapter 6.8.5
 - Operative tasks 6.8.6
- Stakeholder analysis and engagement
 - Chapter 6.4







Task 3.2

Set-up of national/regional biomethane registries in the target countries



Task 3.2 Objectives and Activities



Task 3.2 Set-up of national/regional biomethane registries in target countries (lead: dena)

- Clarification of registry's nature and purpose
- Development of country specific action plans to set up biomethane registries

Putting action plans into practice

- Personalized consultation with each target country has continued.
 - LT has shown special interest in the interaction of GOs and POs for complying with the targets of the transport sector.





Task 3.3

Provisional IT system for start-up of registries



REGATRACE IT Support

for countries establishing their renewable gas market

✓ D2.5 Guidelines for tender process of IT-services

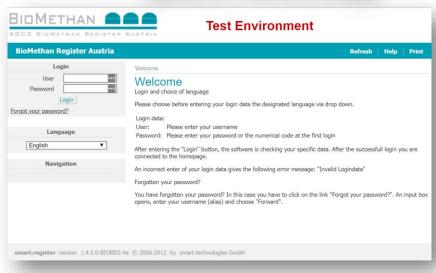
- ✓ T3.3 Provisional IT system for start-up of registries
 - Delivery of pilot IT-systems in EN language based on the Austrian application
 - ➤ Individual IT-system for each target country
 - Personalised: incl. logos and corporate identity
 - Provision of Manuals / User Guidelines, Business Process Descriptions
 - Provisional REGATRACE master data to enable test scenarios
 - > Support: support: support-regatrace@agcs.at
 - > Support by AGCS















CIB

Biomethan Register

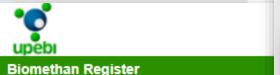


receives funding from the European Union's Horizon 2020 Framework Research and Innovation under Grant Agreement no. 857796)

Biomethan Register



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







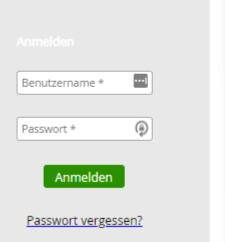
receives funding from the European Union's Horizon 2020 Framework Research and Innovation under Grant Agreement no. 857796)

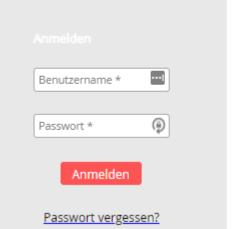
Biomethan Register



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

BioMethan Register





Target countries + 1



Countries w/ registry or issuing body







Lithuania

Countries w/
legislation in progress



Czech Republic



Poland



Slovakia

Countries preparing legislation



Italy



Third-linked countries





Target Countries w/registry or issuing body



Belgium

- **Flanders**: legislation has been adapted to comply with RED II. Future improvements will be necessary to comply with the revised CEN Standard EN16325 and delegated acts for H2.
 - Fluxys (production registrar) + VREG (issuing body)
 - Biomethane production potential: 300 GWh by the end of 2022

Brussels:

- Still considering the possibility of buying GOs from Flanders and Wallonia due to the lack of biogas/biomethane production plants.
- No information yet available regarding the construction of biogas/biomethane production plants.
- Wallonia: legislation still in process for adaptation to comply with RED II. Delay due to the future publication of RED III.
 - Most likely the Walloon GO registry will use the EECS rules → facilitate the transferability between regions.
 - Fluxys has proposed to the Walloon government to be the production registrar (like in Flanders), but the decision has not been taken yet.



Target Countries w/registry or issuing body



Ireland

- Irish biomethane registry went live on October 1st,
 2020.
- MS Excel-based solution

guarantees of origin (book & claim)



proofs of origin (mass balancing)

- One biomethane plant registered and injecting into the grid: 1000 MWh in 2020 → 1000 certificates already issued
- RGFI is working with industry to decarbonize their thermal demand for manufacturing and processing.

- Goal 2030: have 2.5 TWh of biomethane in the grid and produce 9.5 TWh of biomethane by 2050.
- Through further innovation: possibly up to 18 TWh by 2030
- National yearly demand of natural gas: 24 TWh (if 18 TWh by 2030, then **up to 75% with biomethane**).

Progress of biomethane production

2020: 1000 MWh 2021 (Sep.): 3090 MWh

2021 (target): 6300 MWh



Target Countries w/registry or issuing body



Lithuania

- Alternative Fuel Act (AFA) includes the creation of a Renewable Fuel Statistics Unit → Baltpool (International Biomass Exchange, <u>link</u>) will administer the Statistics Unit.
- Upgrade of the current registry (based on MS Access) will be finalized once the accompanying legislation (due for December 2021) to the AFA is completed. The new IT solution should be in place by Q1 2022.

AFA + its secondary legislation



Legal framework for creating demand for biomethane

GOs, together with the respective PoS, could be used in the transport sector by the gas supplier for fulfilling its supply obligations of RES in the energy mix.

15% share of RES in transport sector in 2030 (bio-CH4 & green H2 = 5.2%)

- 1st biomethane producer: planning to connect to the gas transmission system by 2023. Planned capacity: 12-41 GWh/year
- Amber Grid perceives rising interest from the market participants: 14 enquiries (13 biomethane + 1 H₂) were received from potential renewable gas producers willing to connect to the transmission grid. No contracts signed yet.







Austria AGCS



Denmark Energinet



France GRDF



Germany dena



Netherlands Vertogas



UK REAL (GGCS)









Gas Clearing & Settlement



Registry

- Operational since July 2012
- Operated by the Austrian balance group coordinator: AGCS Gas Clearing and Settlement AG
- Legal framework:
 - Austrian Gas Economy Law (GWG 2011)
 - Standard Terms and Conditions
 - Renewable Electricity Act (ÖSG 2012)
- Participant of the ERGaR CoO Scheme

Certificates

- Monthly issuance of "biomethane certificates"
- Issuance is based on metering values from grid operators delivered to the balancing group coordinator.
- Annual reporting: 150 GWh
- Around 30% receives FiT for renewable power (ÖSG)











Market participants

- Since June 1, 2021, international (European) market participants are allowed.
- Accounts for biomethane producers and auditors are free
- Accounts for other users (traders) have fees.

Mass balancing

- Possible by submitting a package consisting of the following:
 - ✓ AGCS biomethane certificate,
 - ✓ Proof of sustainability, and
 - ✓ Proof of booked border capacities







ENERGINET

Registry

- As of July 2021: only issuing body for gas GOs (RED II) by governmental mandate.
- In the process of connecting to the ERGaR
 CoO Scheme
- Constant export transfers every month to dena's Biogasregister.
- In the process of joining the ERGaR CoO
 Scheme

Certificates

- Recognized in the Danish ETS
- Used for consumer disclosure

Market participants

• Fees for market participants wishing to open an account were announced on July 1st, 2021: combination of fixed annual and a volumebased fee for issuance, export and import.

Mass balancing

 No mass balancing function yet, but a pilot project is planned in the near future.









Registry

- In operation since 2013.
- GRDF has the mandate from the Ministry of Energy to operate the registry until April 2023 (renewed by public tender)
- Issuances of biomethane GOs: 2.1
 TWh/year (+200 production facilities)
- Active accounts for producers and consumers → traders were only allowed to participate starting September 2021
- In the process of joining the ERGaR CoO
 Scheme

Certificates

- GOs are used for consumer disclosure.
- The Biomethane GOs are not completely compatible in format with the GOs from RED II.
- No official recognition in the French ETS (with some exceptions with the right authorization).

Mass balancing

No mass balancing function or label.









Registry

- Voluntary scheme established in 2010
- Objective: documentation of proofs of quantities, origin and properties for biomethane.
- Auxiliary tool for legal documentation requirements in electricity and heat sectors.
- Pure registration/verification platform → NO trading
- 256 registered companies and 200 registered plants (biomethane + 2 PtG)
- Most import process have been automated → reduction of processing times
- Participant of the ERGaR CoO Scheme

Certificates

- Issuance is based on metering data verified by an external authorized auditor (<u>link</u> to dena's auditor list)
- 2 types of certificates: with mass balancing and book & claim
- Without expiry date
- Types of certificates accepted: GOs (Art. 19
 RED II) and other Certificates of Origin.
- Able to receive imports of hydrocarbon gas, hydrogen and other gaseous energy carriers.









Market participants

- Fee schedule (<u>link</u>) for market participants: annual fee + transaction fee
- dena's Biogasregister has joined the ERGaR CoO Scheme, facilitating international transfers of biomethane certificates of origin (book & claim).
- Previous bilateral agreements with AT, DK, and UK replaced by the ERGaR CoO Scheme.
- No audits required for international transfers on a book & claim basis

Mass balancing

- A proof showing capacity booking is needed
- Audits (production plant and production quantities) are needed.









Registry

- Established in 2009
- Subsidiary of Gasunie
- Mandated since 2015 by the Ministry of Economic Affairs and Climate to operate the biomethane registry
- Issued 2 million GOs in 2020
- Close cooperation with CertiQ (issuing body for electricity Gos)
- Participant of the ERGaR CoO Scheme

Certificates

- Cover most renewable gases: green gas, hydrogen (possible CO2 in the future).
- Hydrogen GOs: starting January 1, 2022
- GOs for ETS: starting January 1, 2022
- GOs for subsidy reasons: simple disclosure
 → book & claim
- GOs for mobility: fulfill the national fuel quota → mass balancing
- Export to other EU Member States possible
- Import from other EU Member States not yet possible.









Registry

- Market-based biomethane registry (without governmental mandate)
- UK is not implementing RED II → certificates are not GOs according to Article 19 RED II
- Participant of the ERGaR CoO Scheme

Certificates

- Certificates are called "Renewable Gas Guarantees of Origin" (RGGOs)
- Not 100% compliant with RED II
- No mutual recognition agreement as third country
- Used for consumer disclosure
- No recognition in the UK ETS and cannot be used in the EU ETS either









Market participants

- Trader member fees are in place: fixed annual fees plus a retirement fee (£/MWh)
- No fees for receiving imports
- Any biomass labelling system is accepted
- Exports possible to any other registry
- Exported RGGOs will not be considered GOs under RED II, but will still have value for consumers.

Mass balancing

- No mass balancing function or label
- Any claim of mass balance requires RGGOs to be placed within a wider evidence package (e.g. audit report with gas shipping data)







Thank you for your attention!

Contact:

German Energy Agency (dena) Milenko Matosic (matosic@dena.de)

