



REGATTRACE

Renewable Gas Trade Centre in Europe

State of the Registry and renewable gases strategies in Lithuania

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Current status

Biogas



- There are 41 biogas plants operating in Lithuania with a heat capacity of 9.5 MW and electricity capacity of 33.4MW.
- Biogas is produced from agricultural wastes, from sewage, from landfill gas, biowaste and industrial waste.

Biomethane

- Currently there is no biomethane production in Lithuania.
- It is planned that first biomethane plant will be connected to Lithuanian gas transmission system in 2023.
- Amber Grid has received 14 enquiries for the conditions of connection to transmission system (13 biomethane producers and 1 hydrogen producer).

Modus Group

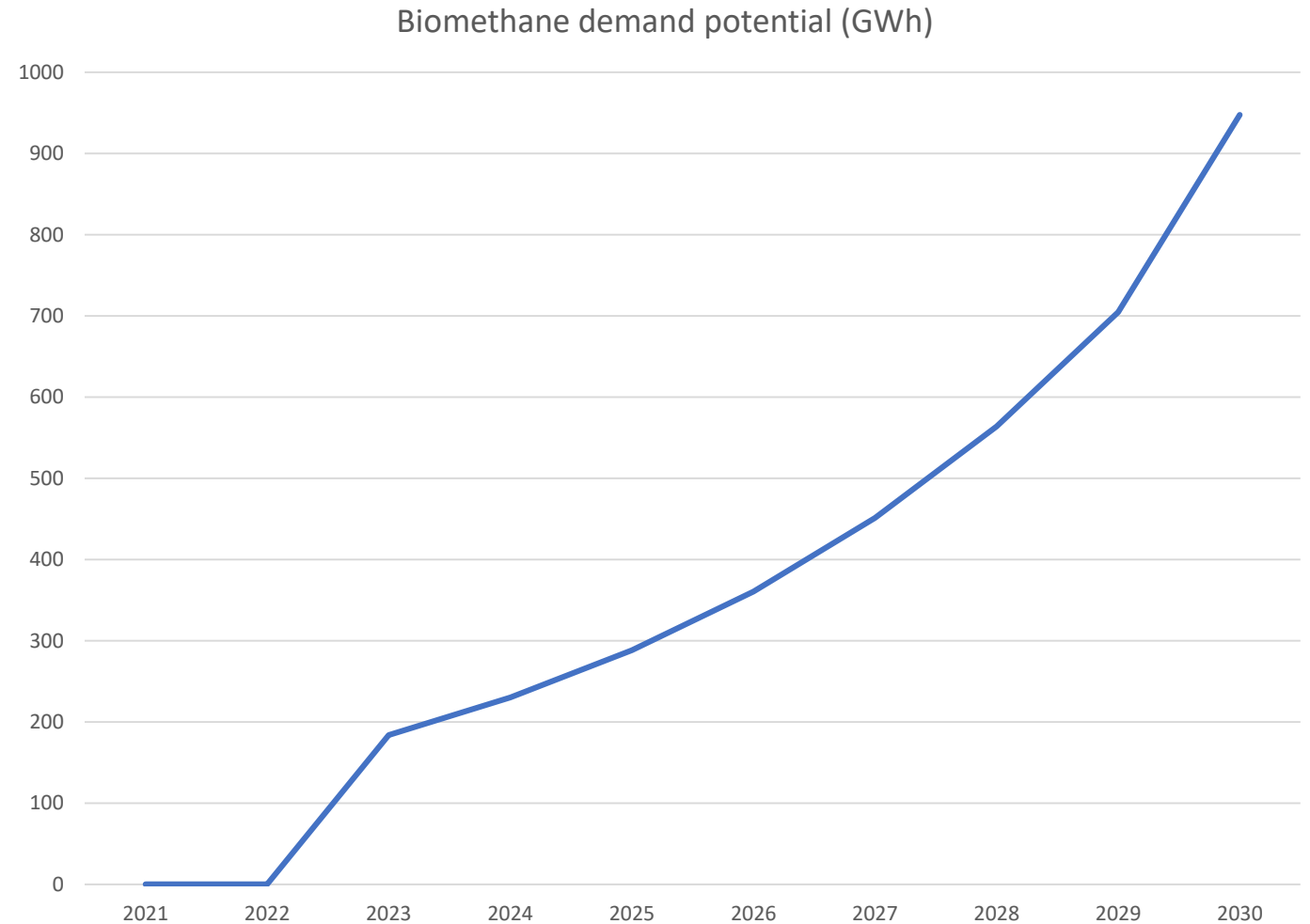


Production potential:

- Several studies about potential of biomethane production in Lithuania has been conducted in the last 5 years.
- Biomethane production potential from manure varies from 0.4 TWh to 1.04 TWh/y
- Total biomethane production potential is seen somewhere between 2.2 – 2.6 TWh/y

Biomethane demand potential

- National Climate Change plan sets a 950 GWh target for biomethane consumption in transport sector in 2030.
- Ministry of Energy expect to reach 5,2 percent of biomethane and hydrogen in final fuel mix for transport in 2030.
- Biomethane potential foreseen in other sectors in the future.



Based on National Climate Change plan



Investment support for biomethane production facilities:

2020 – 2021 from National Climate Change program - 23 million EUR.

2022 – 2026 from Recovery and Resilience Facility (RRF) - 22 million EUR.

Alternative Fuel Law

Obligations

Obligations to natural gas suppliers must ensure that biogas or non-biogas gas fuels from renewable energy sources sold shall account **at least 4.2 percentage points** in the total energy value of natural gas in 2025.

This value shall be increased steadily each year until **2030** when it will reach at least **16.8 percentage points**

Tool for achieving obligations

Renewable fuel statistics unit system.

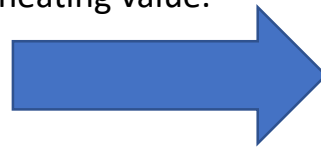
- Administrator is Baltpool (International Biomass exchange).
- The system should be operating from December 2021.
- One renewable fuel statistics unit (Unit) is assigned to renewable fuel suppliers for each renewable fuel megajoule (MJ) delivered to the domestic market during a calendar year.

Units issue for gas fuel suppliers

GO registry administrator (Amber Grid)

- Checks and approves GO cancelation in the specific consumption point and confirms that mass balancing principle was ensured.
- Submits required data to Unit system administrator

GO data;
Proof of
sustainability data;
Lower and upper
heating value.



Unit system administrator (Baltpool)

- Receives data from GO registry administrator and converts MWh into MJ.
- Assigns units to fuel supplier

Fuel supplier can:

- Use assigned units to cover his obligations or
- Sell these units to other fuel suppliers.

Units received from supplying renewable gases can be used to cover liquid fuel obligations.

Therefore, **renewable gases can be used earlier than 2025 in transport sector to cover liquid fuel obligations.**

- Registry of renewable gases Guarantees of Origin (GOs) has been established on 1st of June 2019. Amber Grid is national designated body for the administration of the registry.
- Registry is designed based on MS Access program as a database with an interface for data entry. All actions are done manually by administrator.

With the rising potential of renewable gases it was decided to **upgrade the registry**.

- **Tender for new registry shall be announced in upcoming weeks.** Goal is to adapt already in the market existing IT solution.

Benefits:

- Transparency for market participants, self service functions etc.;
- Will help on integration with registries/hubs on regional and EU level;
- Also, more efficient integration with renewable fuel statistics unit system.

Renewable gases GOs market development

National level

- From 2020 guarantees of origin with sustainability certificates that can be used in the transport sector (sector with the highest biomethane consumption potential) can be issued.
- 10 GOs (10 MWh) have been imported from DENA (Germany) on book and claim principal.
- ❖ **Goal – is to prepare registry for regional and EU level integration.**
- ❖ **Future goals for consideration:**
- ❖ **Legal and technical conditions for issuing hydrogen GOs;**
- ❖ **LNG integration into GOs system;**
- ❖ **Off grid biomethane producers integration into GOs system**

Regional level

- Green gas coordination group was established in 2020 August between Finnish, Estonian, Latvian and Lithuanian TSOs.
- At the beginning of 2020 national regulatory differences were identified, an action plan for system harmonization from 2022 was approved.
- Currently working on finalizing common rules for GOs exchange .
- ❖ **Goal – to enable GOs transfer among countries together with transfer of national statistics.**

EU level

- Participation in REGATRACE project.
- Membership in ERGaR.
- ❖ **Goal – to enable GO exchange with EU countries.**



