

BIOMETHANE IN POLAND

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UPEBI - who we are



- ❑ **The Union of Producers and Employers of Biogas Industry (UPEBI)** - an association of 50 members (companies) established in 2012 in order to integrate the biogas industry in Poland and act together for the benefit of the biogas sector in our country.
- ❑ Our motto **TOGETHER FOR BIOGAS** because every day we fight for better conditions of functioning of the biogas industry and do our best to ensure that legislation and other regulations are favorable to our industry.
- ❑ **We promote the biogas industry and conduct trainings** to increase public knowledge about the possibilities of biogas production and benefits connected with its use as a renewable energy source.
- ❑ Organiser of International conference on biogas and biomethane **GREEN GAS POLAND** (2018, 2019 and 2020)



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Development of biogas market in PL

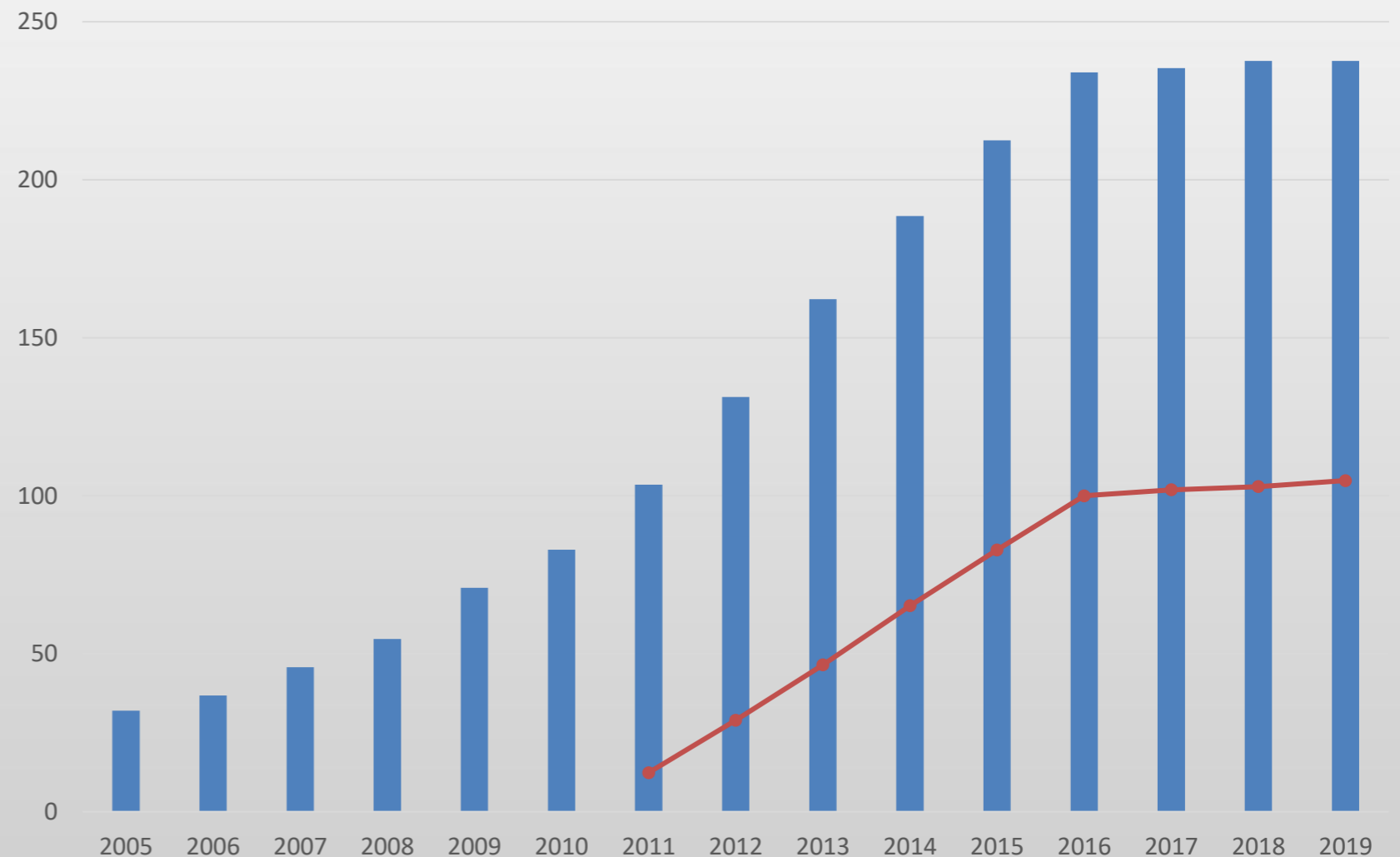
Total no. of biogas plants:
303 with installed capacity
of **238 MW**

WWTP: 109 with installed
capacity of **67 MW**

AGRI: 98 with installed
capacity of **103 MW**

Landfill: 97 with total el.
capacity of **68 MW**

Other: 3 with capacity
2 MW



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source: URE (Polish Energy Regulatory Office,) December, 2019

BIOGAS AND BIOMETHANE POTENTIAL IN POLAND

1. Landfill

- about 700 landfills have no RES installations → ca. **421 million m³** methane released into the atmosphere every year
- production potential: ca. **90 MW**

2. Sewage

- theoretical potential of Polish sewage sludge:
 - ca. **526,5 million m³** biogas/year
 - ca. **150 MW**

3. Agriculture

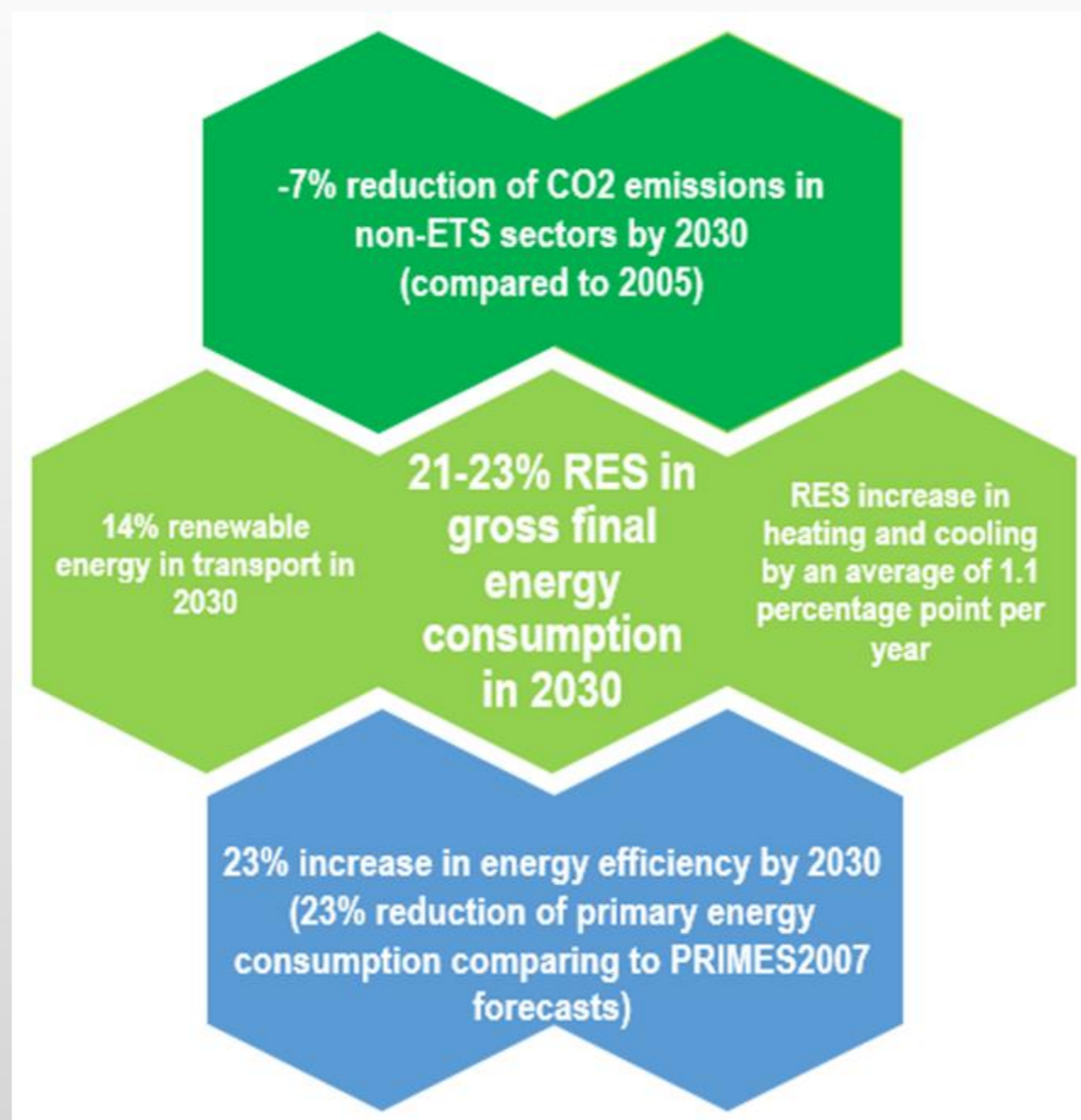
- theoretical potential of raw materials: **8 billion m³** biogas
- realistic and achievable at short term potential of by-products of agriculture and agri-food industry: **1,7 billion m³** biogas/year

4. Organic municipal wastes: potential **1,5 billion m³** biogas/year

5. Bio-waste available: over **100 million tons**

6. Biomethane production potential: over **6 billion m³**

National Energy & Climate Plan – 2021-2030



Poland's climate and energy targets till 2030 (NECP PL)

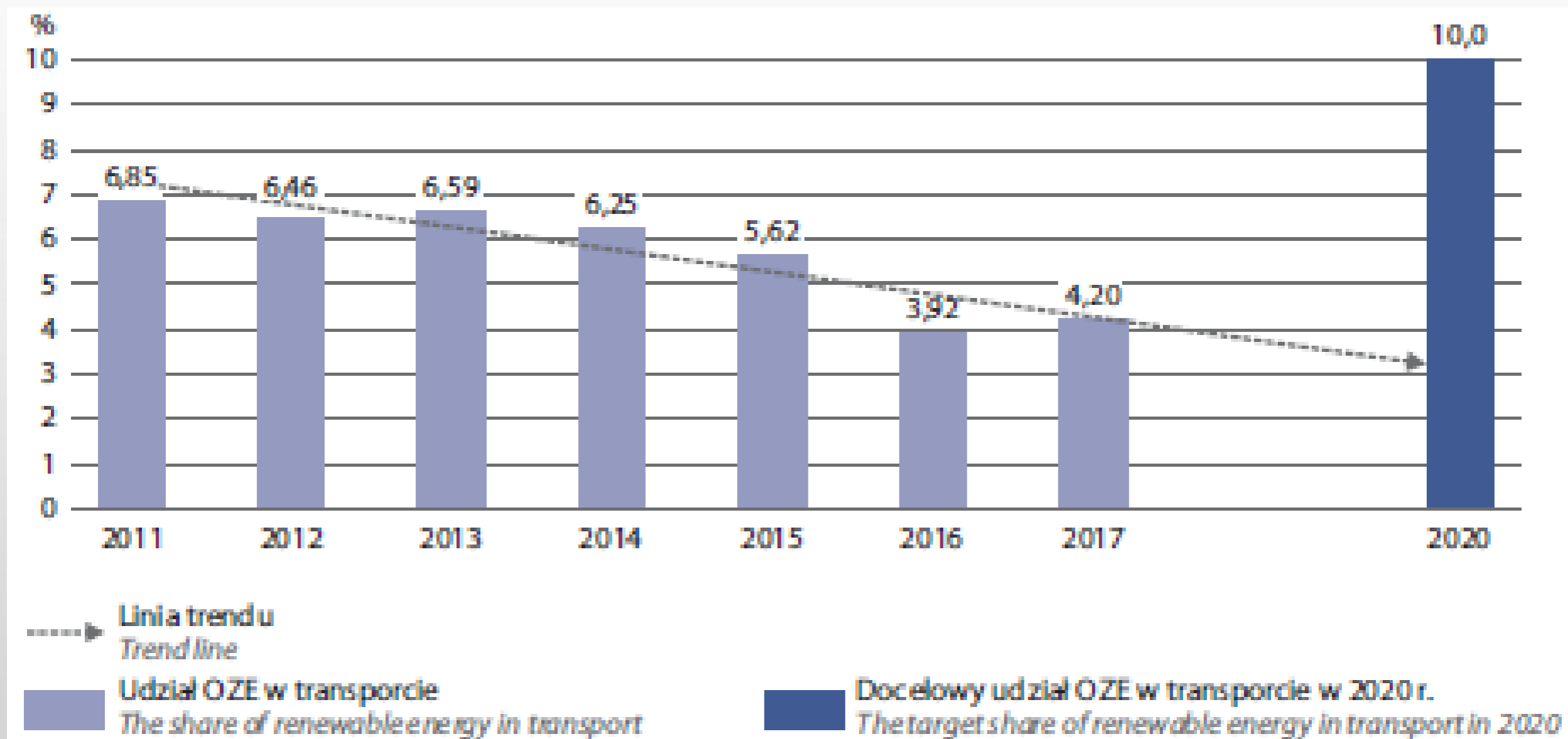
Legislation concerning biomethane

- ❑ National Framework for Alternative Fuel Infrastructure Development Policy (2017)
 - Definition of alternative fuels including natural gas CNG (biomethane), LNG, LPG, hydrogen etc.
 - Requirements concerning location of alternative fuels infrastructure
- ❑ The Act on electromobility and alternative fuels (2018)
- ❑ The Act on biocomponents and liquid biofuels – *amendment 19-07-2019 e.g. introduced new biofuels –biomethane and biohydrogen for fulfillment of national indicative target (NCW)*
- ❑ RES Act

RES Act in Poland

- ❑ RES Act does not contain a support scheme for biomethane introduced to gas distribution grid
- ❑ In particular the RES Act has not implemented FiT / FiP mechanisms for biomethane sector
- ❑ Theoretically (under art. 73.3b of the RES Act auctions for biomethane introduced for the grid are possible). In practice however these provisions are not used.
- ❑ Support system for biomethane production similar to green electricity (auction, FiT, FiP) postponed to next amendment

Share of RES in transport



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Source: Energy from RES in 2017. Statistics Poland, 2018, www.gov.pl

Drivers for biomethane development

- ❑ **Problem with decarbonisation of transport**
- ❑ **Difficulties with fulfilment of EU requirements concerning share of RES in transport in RED (10% in 2020) and RED II (advanced biofuels)**
- ❑ **Uncertain support system for "green energy" - the use of biomethane in transport or injection to grid may be an interesting alternative for biogas plants**
- ❑ **Changes in waste management - a chance to obtain energy raw material (circular economy)**
- ❑ **Agro food sector, especially poultry industry (lot of difficult but promising substrates) are interested in usage of green gas (both from grid and direct in transport) – reduction of GHG emissions from their production**
- ❑ **Energy and fuel sector are planning investment in g-mobility and e-mobility**

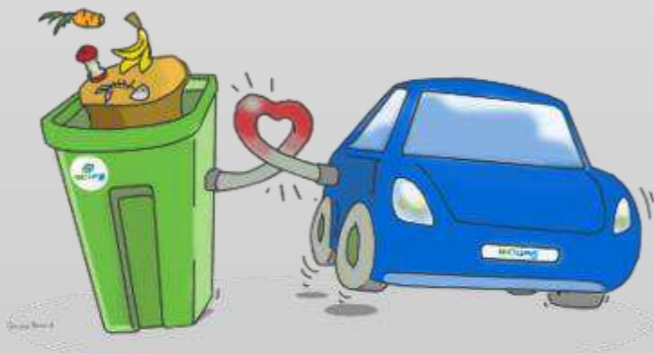
BIOMETHANE TO GRID

1. In 2014-2017, the Polish Gas Company received 15 applications for defining the conditions for connecting to the gas grid by entities dealing with the production of agricultural biogas. There were issued 9 positive and 6 negative decisions.
2. Till end of 2018 due to non clear legislation and lack of financial support to biomethane production only 2 decisions were signed (but not consumed yet).
3. In 2019 PSG received only 3 applications. Based on their experience with LNG connections PSG is working now on pilot projects.



bioCNG market

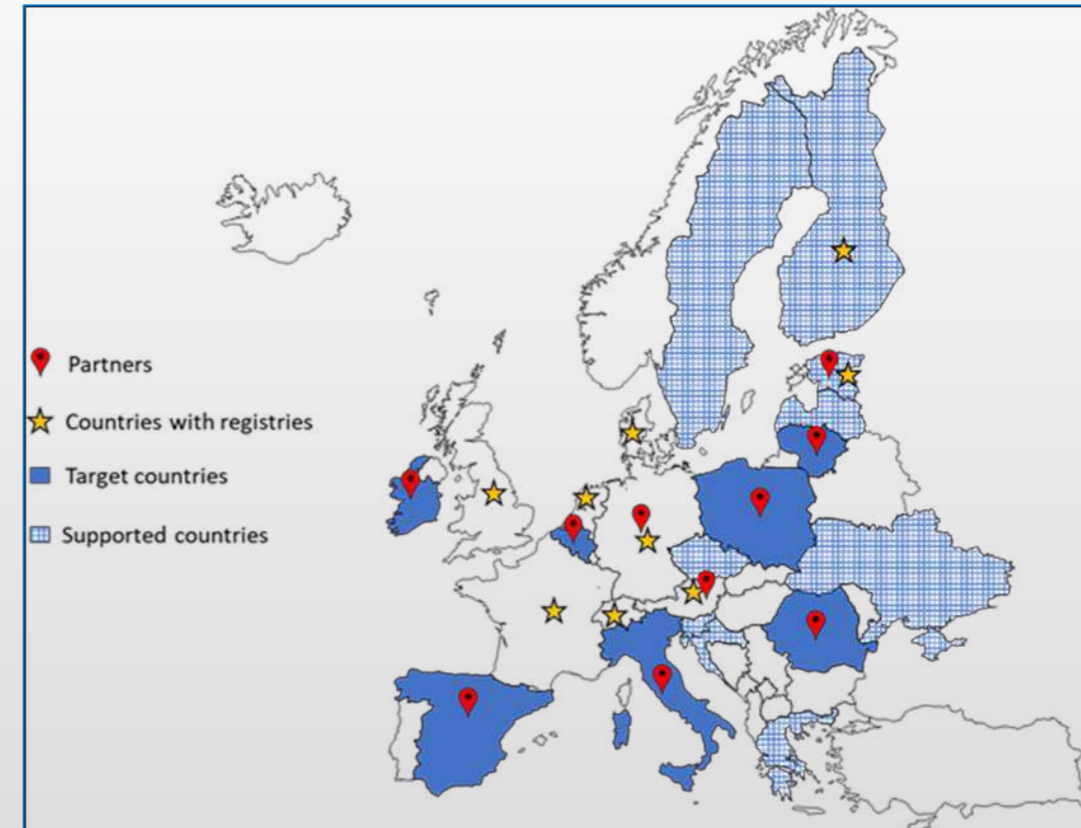
- ❑ Growing CNG sector (infrastructure and NGV)
- ❑ Development of infrastructure for alternative fuels: today < 30 CNG filling stations, in 2020 planned 70 additional CNG filling stations
- ❑ CNG, LNG, biomethane, biogas, hydrogen – zero excise tax from 14 August 2019
- ❑ Biomethane can be used directly or via gas grid.
- ❑ Fund for Low Emission Transport – grants for alternative fuels infrastructure, NGV, support for local authorities investing in clean public transport, rules published 30 -09-2019



Project REGATRACE



- **REGATRACE: REnewable GAs TRAdE Centre in Europe (HORIZON 2020);**
- **36 months (June 2019- May 2022);**
- **15 partners in 10 countries: ISINNOVA, CIB (IT), EBA, AIB, ERGaR, Fluxys (BE), RFGI (IE), DENA, DBFZ (DE), AGCS (AT), Elering (EE), UPEBI (PL), ARBIO (RO), NEDGIA (ES), Amber (LT)**
- **12 EBA Linked Third Parties + 5 ERGaR Linked Third Parties**
 - **Activities:**
 - ✓ European biomethane/renewable gases GoO system
 - ✓ Set-up of national GoO issuing bodies
 - ✓ Integration of GoO from different renewable gas technologies with electric and hydrogen GoO systems
 - ✓ Integrated assessment and sustainable feedstock mobilisation strategies and technology synergies
 - ✓ Support for biomethane market uptake
 - ✓ Transferability of results beyond the project countries
 - ✓ Dissemination & Communication.



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www.regatrace.eu

REGATRACE – UPEBI involvement (examples)

- ❑ Set up of national GoO issuing bodies (WP3)
 - Guidelines for establishing national biomethane registries
 - Set-up of national/regional biomethane registries in Poland

- ❑ Support for biomethane market uptake (WP6)
 - Elaboration of national **strategic visions and roadmaps** (with involvement of national stakeholders by 4 workshops)
 - **Elaboration of guidance** for feasibility analysis and **guidebook** on securing financing for biomethane investments

- ❑ Communication and dissemination activities (WP8)



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REGATRACE

Renewable Gas Trade Centre in Europe

Coalition for Biomethane

- ❑ established in 2019 by UPEBI and KIB (Polish Chamber of Biofuels)
- ❑ aimed at practical launch of biomethane production in Poland
- ❑ to diagnose the formal and practical barriers
- ❑ to develop favorable legislative and assistance solutions

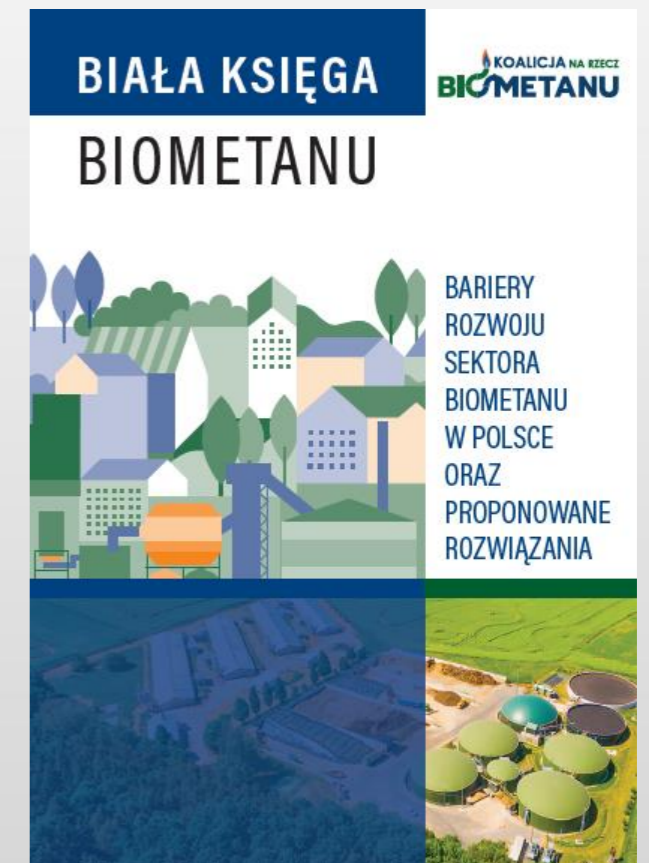


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White Paper on Biomethane

The White Paper on Biomethane is a bottom-up initiative of the biogas and biofuels industry, the aim of which is to develop a strategic document that will be a road map to action for the administration and potential investors in the "biomethan plant".

Available in Polish on [UPEBI website](#)



Main regulatory proposals in the White Paper on Biomethane

- ❑ FiT / FiP mechanisms for biomethane introduced to distribution grid
- ❑ As an alternative: obligatory purchase of biomethane introduced to a grid
- ❑ As an alternative 2: provisions regarding auctions for biomethane should be fixed
- ❑ Support scheme should also cover a biomethane generated and consumed by the generator for its own needs (e.g. biomethane filling stations located next to generation source)
- ❑ Support should also cover alternative means of biomethane transportation (not only grid but also car transportation)
- ❑ Biomethane sector requires a system of guarantees of origin, similar to the one already implemented for the electricity sector)
- ❑ The system should cover biomethane introduced to a distribution grid, direct lines and consumed for own needs
- ❑ Provisions regarding so called direct lines (connecting a producer with a final consumer), as regulated in the Energy Law, should be amended
- ❑ Currently there are no provisions which would enable refining industry to use biomethane in larger scale (as a biocomponent or biofuel)

Main regulatory proposals in the White Paper on Biomethane

Provisions regarding relations with DSOs should be amended:

- Obligation to inform the applicant on available connection capacity
- Obligation to inform on prospective adjustments to the distribution grid
- Provisions regarding technical parameters of biomethane should be adjusted
- Prerequisites of connection refusal should be more precise

GREEN GAS POLAND 2020

The **3rd International Conference of Biogas and Biomethane Producers** will be held on **1-2 October 2020** in **Warsaw**. The conference topics will focus on the following issues:

- the latest legal regulations regarding functioning in the biogas and biomethane industry
- experience of biogas and biomethane plant owners - good practices related to the selection of substrates, digestate management, use of heat, production and use of biomethane
- perspectives related to the use of biogas and biomethane
- biogas and biomethane as part of a circular economy
- optimization of energy sales
- biogas and biomethane plants in energy clusters and energy cooperatives
- investment financing and loan restructuring
- innovative technological solutions for installations producing biogas and biomethane



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THANK YOU

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