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The voice of renewable gas in Europe

A historical opportunity for the sector's development

Biogas PowerON, 27 September 2023, Copenhagen

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EBA is a value-chain association representing the biogas and biomethane sector in Europe

+200 companies

46 National Associations

Research Centres

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24 - 25 OCTOBER 2023

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I. The biomethane wave has already started

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Biomethane has emerged as a significant renewable energy in the past 10 years (1/2)

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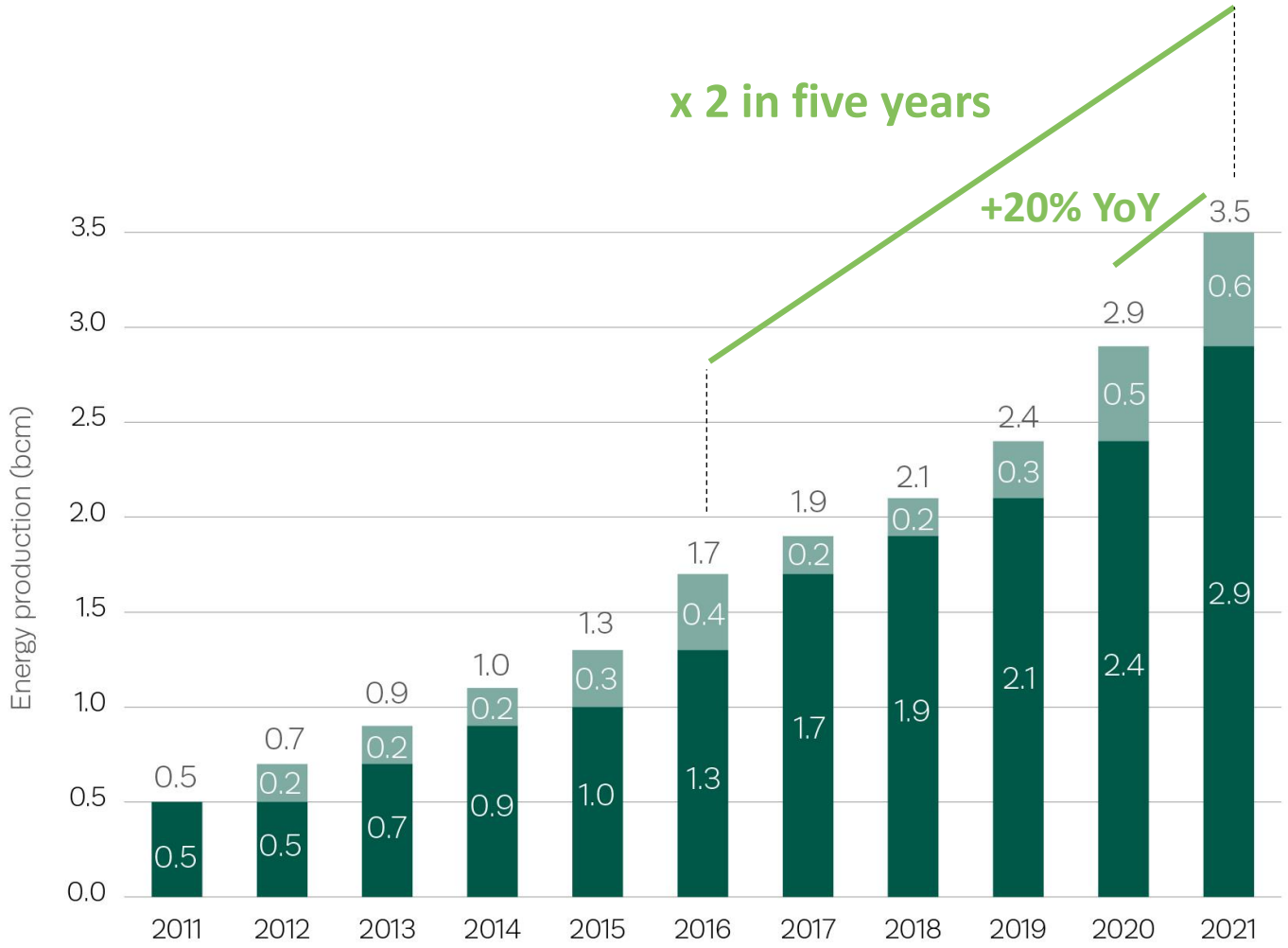

- **x 2** Actual production between 2016-2021
  - reaching 3.5 bcm/37 TWh at end of 2021
  - Whereas biogas production has stagnated since 2016
- **+ 20%** YoY from 2020-2021.
- **35 GWh/year**: EU-average of production capacity

Source: EBA Statistical Report 2022

Biomethane has emerged as a significant renewable energy in the past 10 years (2/2)

EUROPEAN BIOMETHANE MAP INFRASTRUCTURE FOR BIOMETHANE PRODUCTION 2023

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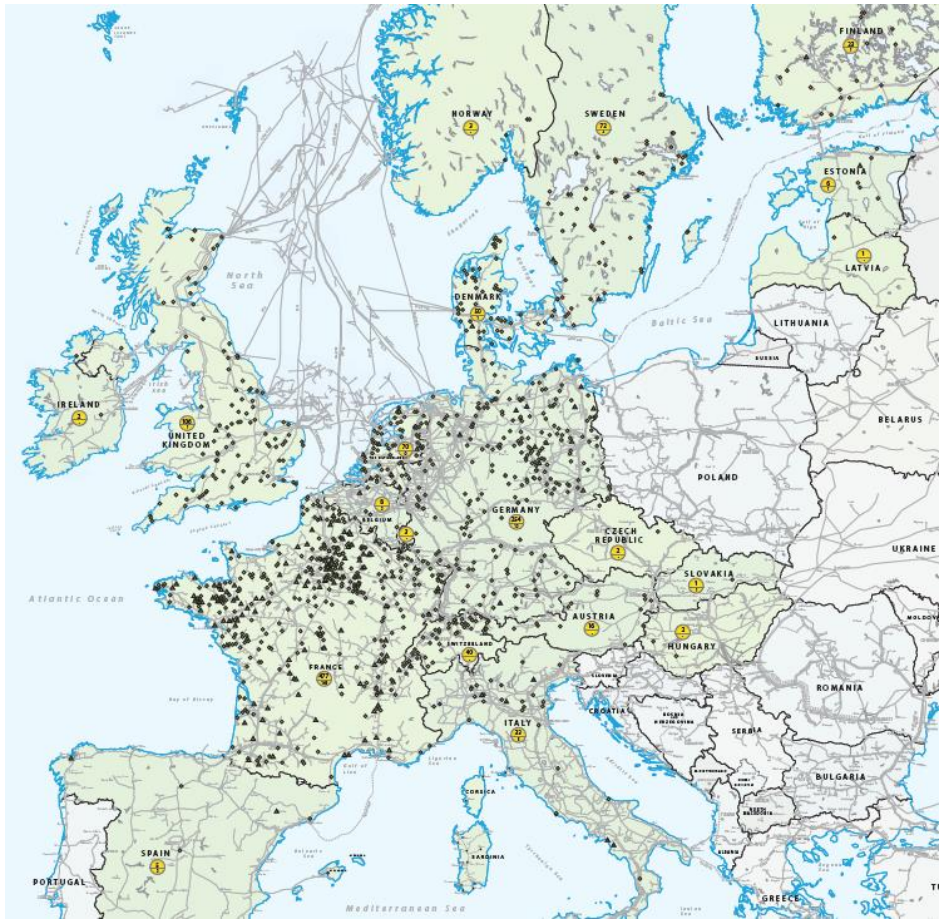
Gas Infrastructure Europe



1,322 plants **Operational in April 2023**

48 TWh (4.5 bcm) of installed production capacity **at end of 2022**

77% plants are grid-connected (April 2023)

Grid connection level by production capacity*

51% Distribution level

35% Transmission level

Since 2017 majority of new plants connected to distribution grid.

** for 871 plants (out of 1,322) for which data is available (representing 31.5 TWh/year of capacity)*

€18 billion investments already in the pipeline to scale-up biomethane production

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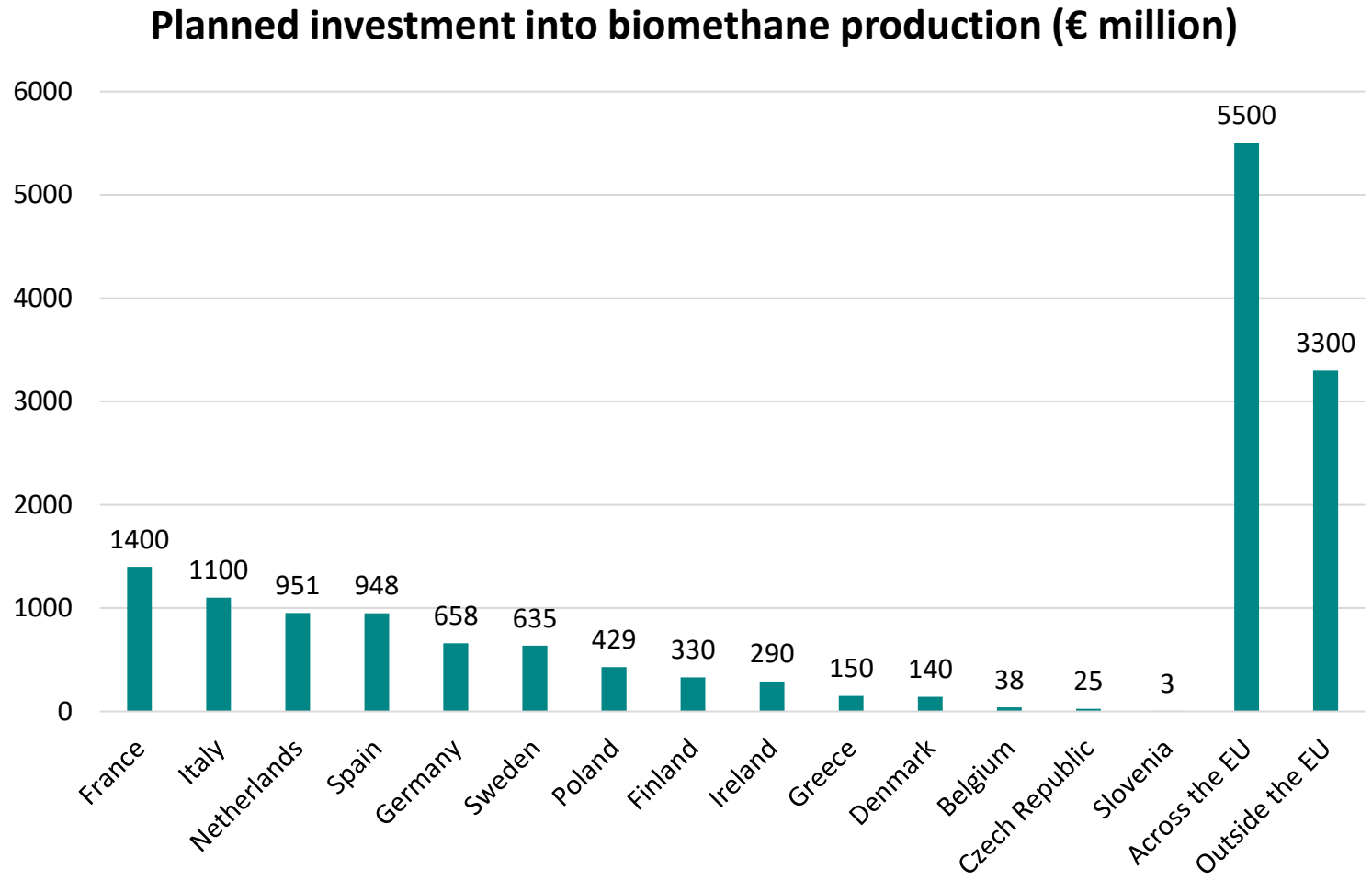
- **€4.1 billion** for 2023-2025
- **€12.4 billion** for 2026-2030
- **€1 billion** with no timeframe specified



Source: 1st EBA Biomethane Investment Outlook.

The potential for growth by 2030 is tremendous

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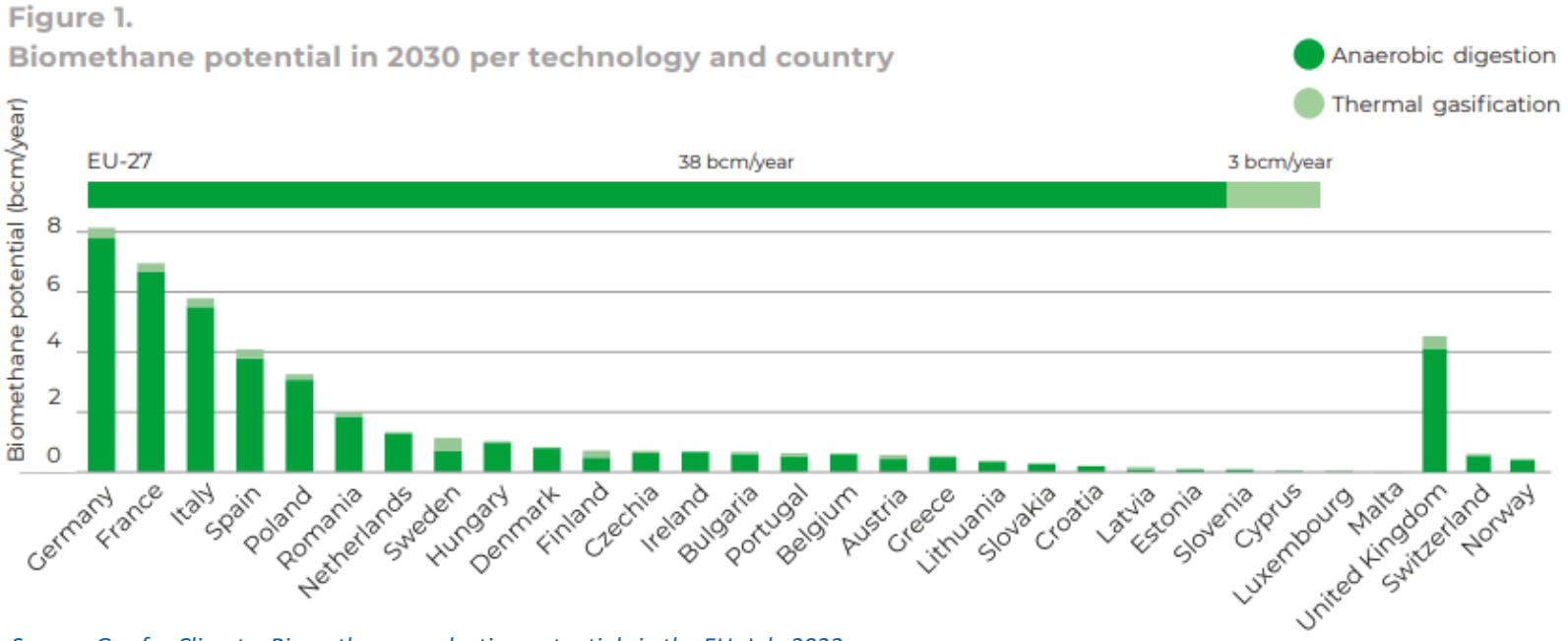
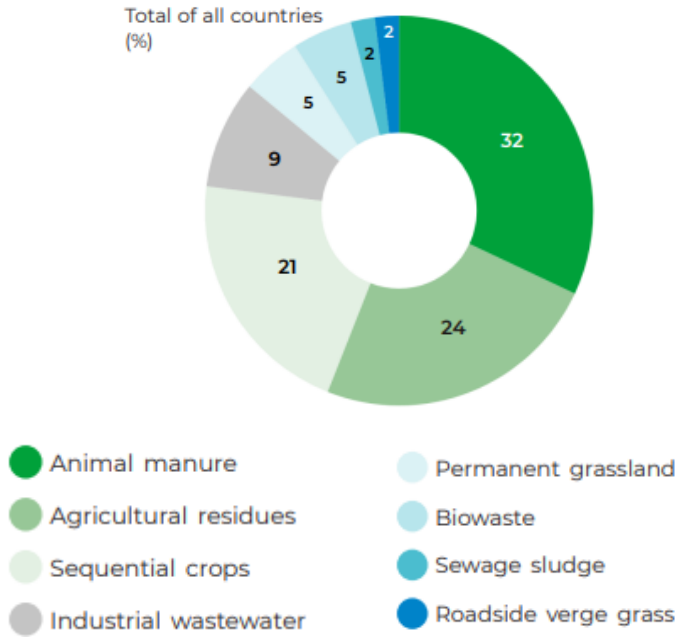
- EU-27's **sustainable production potential** (41 bcm) can **meet the REPowerEU 2030 target (35 bcm)**.
- It could replace c. **15%** of a reduced **natural gas demand** in 2030.

2030 national sustainable biomethane potentials



Source: Gas for Climate, Biomethane production potentials in the EU, July 2022

Feedstock potential



II. REPowerEU, a historical shift for the biomethane industry but challenges remain

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A. Unprecedented recognition raising the hopes for positive reforms

REPOWEREU marked a strategic high-level recognition by the European Commission

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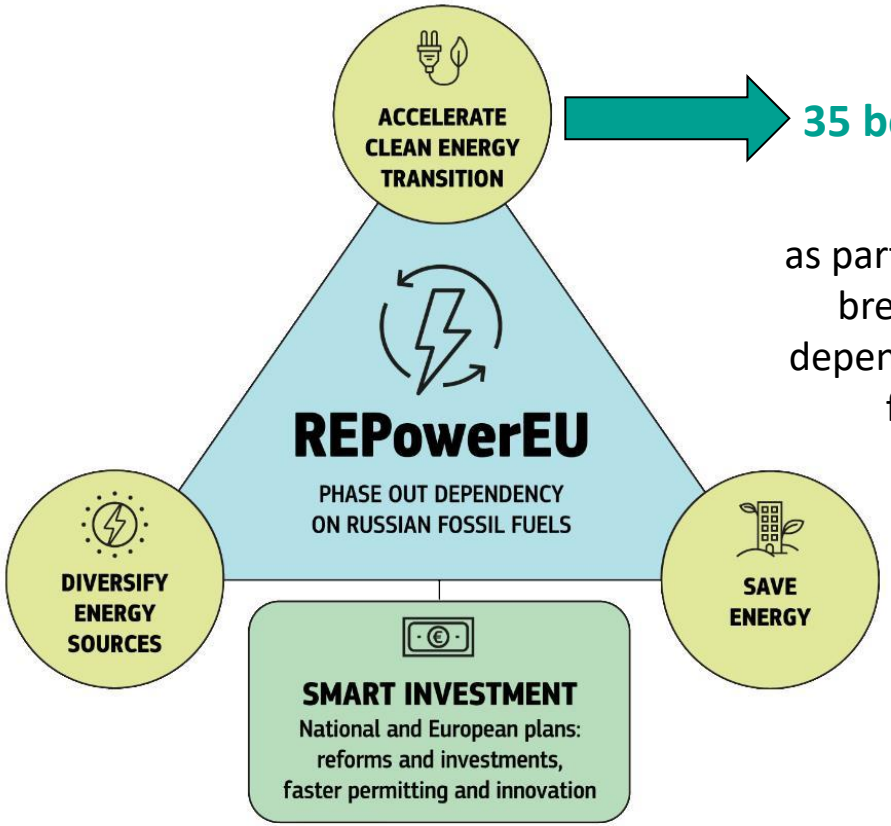
4 pillars



35 bcm biomethane by 2030

as part of an energy mix breaking from the dependency on Russian fossil import

Biomethane Action Plan

1. Promote production, use of and injection of biomethane → **Biomethane Industrial Partnership**
2. Provide incentives for biogas upgrading into biomethane
3. Promote adaptation of existing gas networks
4. Address R&D&I gaps
5. Access to finance

REPOWEREU marked a strategic high-level recognition by the European Commission

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A political target

35 bcm of biomethane production

Biomethane Action Plan

Biomethane Industrial Partnership

Revised renewable energy targets

Permitting

- Recommendation to Member States
- Targeted legislative proposal in RED III

It has led to higher EU ambition in biomethane and RES deployment (1/3)

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BUILDINGS

49%

Indicative Target, measures justified in NECPS

0.8 pp/y 2021-2025

1.1 pp/y 2026-2030

2030 OVERALL EU RES

42.5%

+ 2.5%

TRANSPORT

29% or **14.5%** **GHG intensity**

Mandatory Target, measures justified in NECPS

INDUSTRY

1.6 pp/y

Indicative Target + Subtarget RFNBOs / H2 > 42%

It has led to higher EU ambition in biomethane and RES deployment (2/3)

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MAPPING

Member States to **map deployment of RES** in their territory + assessment of domestic **potential** and the available surface (NECPs coordination)

RES ACCELERATION AREAS

- **Short and simplified permitting processes**. Priority to a list of areas these include farms, waste management sites, urban wastewater treatment sites, as well as degraded land not usable for agriculture.
- Permit granting outside RES acceleration areas: Not exceeding **2 years**.
- Permit granting inside RES acceleration areas: Not exceeding **1 year.**

CAPACITY BUILDING

Member States to provide adequate resources to ensure **qualified staff**, **upskilling**, and reskilling of their competent authorities and shall **assist regional and local authorities.**

OVERRIDING PUBLIC INTEREST

Renewables projects to be recognized as an overriding public interest

It has led to higher EU ambition in biomethane and RES deployment (3/3)

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Parlement européen

The European Parliament tabled an EU-binding volumetric target in the revision of the Gas Regulation

Article 3 c (new) (3c) Mainstreaming biomethane in the gas system
In order to support sustainable production of biomethane to safeguard the security of gas supply in the Union and decrease dependence on fossil natural gas imports, Member States shall, by 31 December 2030, ensure collectively that at least 35 bcm of biomethane is produced and injected into natural gas system in line with the REPowerEU Plan objectives.

- **Volumetric**
- **EU-binding**
- **Injected biomethane into natural gas system**
- **Based on energy security's concern and REPowerEU Plan**

Negotiations in trilogue on-going

Final deal expected end of November

Speeding up reforms and industry growth: The Biomethane Industrial Partnership

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Overview of all Task Forces

BIP Europe
Biomethane Industrial Partnership

Task Force 1
National biomethane targets, strategies and policies

Task Force 1 focuses on the creation of national biomethane targets, strategies and policies, feeding into the NECP process

Task Force 2
Accelerated biomethane project development

Task Force 2 will focus on the need to rapidly increase and secure sustainable biomethane production capacity

Task Force 3
Sustainable potentials for innovative biomass sources

Task Force 3 will identify the potentials across the EU for innovative biomass sources

Task Force 4
Cost efficiency of biomethane production and grid connection

Task Force 4 will identify and facilitate ways to decrease the cost of production and grid connection

Task Force 5
Research, Development and Innovation needs

Task Force 5 will identify the current status of R,D&I in biomethane production, grid connection and end-use applications

Speeding up reforms and industry growth: The Biomethane Industrial Partnership

TF4 at a glance Cost efficiency of biomethane production and grid injection

SCOPE OF THE WORK

Task Force 4 aims to provide insights into best practices for efficient and low-cost biomethane production and grid injection that can be directly applied by the value chain.

Sub-deliverables					
4.1	4.2	4.3	4.4	4.5	4.6
Paper on - business case optimization for biomethane production - business case analysis of e-methane production	Report on cost reduction pathways	Interactive consumer guide for investors in biomethane capacity	Report on optimization of grid injection and related grid reinforcements	Paper on the advantages and barriers of creating standardized product offerings for biomethane production	Tours of MSs showcasing best practices

B. Paradox of a conflicting approach on end-uses

The ban on ICE cars and vans

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From 2035 on, new cars and vans should have direct CO2 emission reduction of 100%.

- Obligation on car-makers to apply CO_2 performance standards for the fleets of new cars and vans
- A legislative act

Timeline

- 27 October 2022: First deal reached.
- March: Uncertainty over eventual vote on some Member States
- 28 March 2023: Adoption by the Council of the EU.

Next steps

On-going battles to avoid bans

- Derogation for vehicles running on “CO2 neutral fuels” ? A technical new type of vehicles to be defined.
- A similar proposal by the European Commission for heavy-duty vehicles (with a ban in 2040).

The proposal of the European Commission to ban gas boilers

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A proposal to ban stand-alone fuel boilers from 2029.

- Eco-design requirements for space and water heaters for appliance manufacturers
- A technical regulation

A 2nd tier of ecodesign requirements proposed by 1 Sept. 2029, setting space heating seasonal efficiency at least at 115% and thus phasing out stand-alone sales of fuel and electric resistance boilers;

State-of-art stand-alone condensing boilers reach max 96% efficiency and 98% with a smart control

Timeline

- 27/03/2023: EC publishes draft eco-design requirements for space and water heaters
- 27/04/2023: Consultation Forum with Member States and stakeholders. Significant pushback from some MSs, including Italy, Poland and Romania

Next steps

- Q3 2023: Expected proposal from EU Commission
- 2024: Entry into force (TBC)

III. Turning the REPowerEU opportunity into a breakthrough: the example of grid connection

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Barriers to injection hinder the deployment of 40% of 35 bcm biomethane

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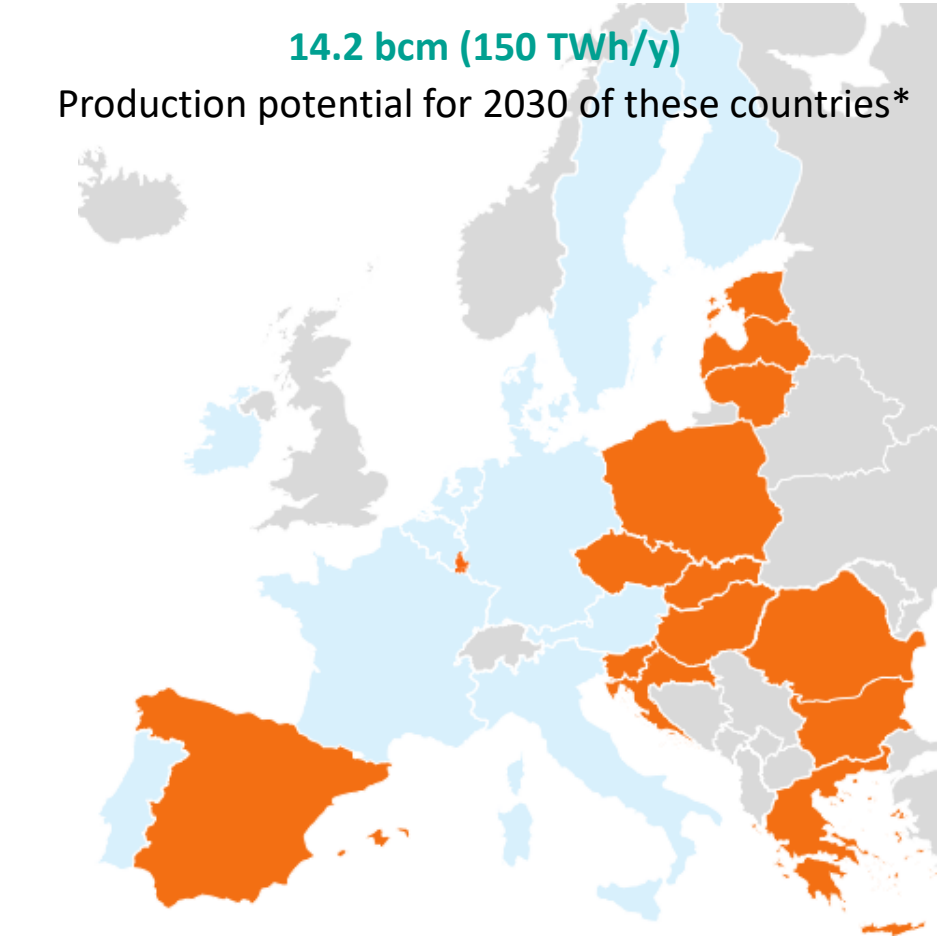
Countries where a lack of rules of grid connection hampers project development**

14.2 bcm (150 TWh/y)

Production potential for 2030 of these countries*



Main barriers reported by project developers**

- Lack of rules/regulations for the process of grid connection
- Cost of grid connection
- Gas quality requirements
- Continuous injection all year-round is not ensured
- Lack of responsiveness of grid operators to address connection requests
- Long permitting time for the connection pipeline

** Based on Gas for Climate, Biomethane production potentials in the EU, July 2023*

*** Based on EBA internal survey (results as of May 2023)*

EBA's recommendations: Easy, Timely and Affordable Grid Connection

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Issues	Recommendations
Legal and regulatory gaps	**Right to inject** • **Obligation** for grid operator to address connection requests, including when located outside gas-served areas • **Transparent** economic and technical **criteria** to assess feasibility
Financial burden (cost of grid connection)	**Cost-sharing mechanism (biomethane producer / grid operators)** • Level of cost-sharing and terms to be determined by **Regulators** • **Several factors:** plant size, grid coverage, location of other projects, grid capacity • Potential **shared connections** between several producers should be addressed to avoid the practice "first comes, first pays".

EBA's recommendation: Easy, Timely and Affordable Grid Connection

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Issues

Legal and regulatory gaps

Financial burden (cost of grid connection)

Gas Package – expectations for the final deal

Right to inject

- **Obligation** for grid operators to address connection requests, including when located outside gas-served areas
- **Transparent** economic and technical **criteria** to assess feasibility

\+ Time limits for network operators to deliver on connection requests

\+ Grid connection maps by TSOs and DSOs as a tool to ensure cost-efficient network development

Cost-sharing mechanism (biomethane producer / grid operators)

- Uncertainty that it will be tackled

Conclusion

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THANK YOU!

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