# BIOGAS AND BIOMETHANE TODAY AND TOMORROW

Salón del Gas Renovable, 1 October 2024 Giulia Cancian, EBA Secretary General



### EBA – representing the full value chain





≥ **300**MEMBERS

250 COMPANIES

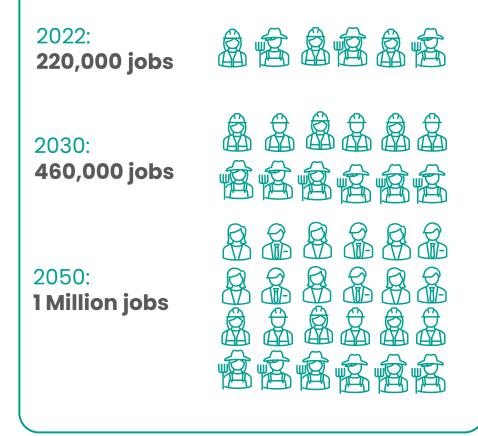
50
National associations

COUNTRIES





### Socio-economic impact of biogases value-chain





**20,000** Companies



**+20,000** Plants



**5.75 bn €** Turnover



A solid **European** value chain



**Leadership** in Manufacturing tech



Contributing to EU economic **growth**, **rural development** and **climate change** mitigation efforts

@EBA 2023



### Biomethane is growing: X2 in 4 years

#### **European biomethane production in EU-27 and Europe**



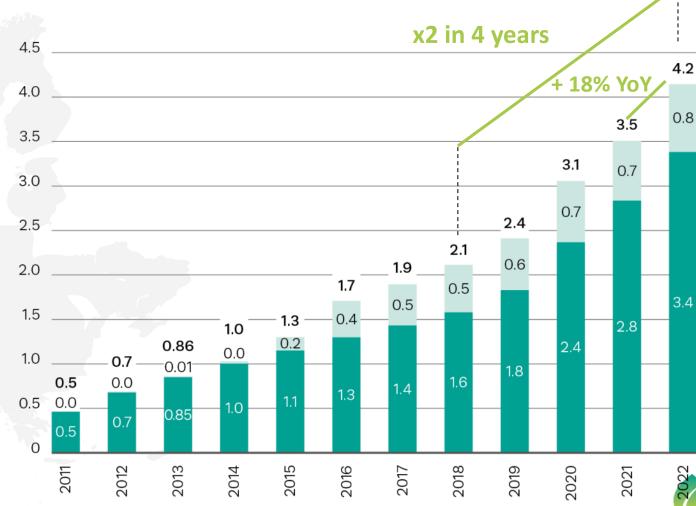
**4.2 bcm** (3.4 in EU-27)

4.5 bcm installed capacity

x2 production since 2018
France, Italy, Denmark, UK fastest growing countries

24 producing countries in 2022



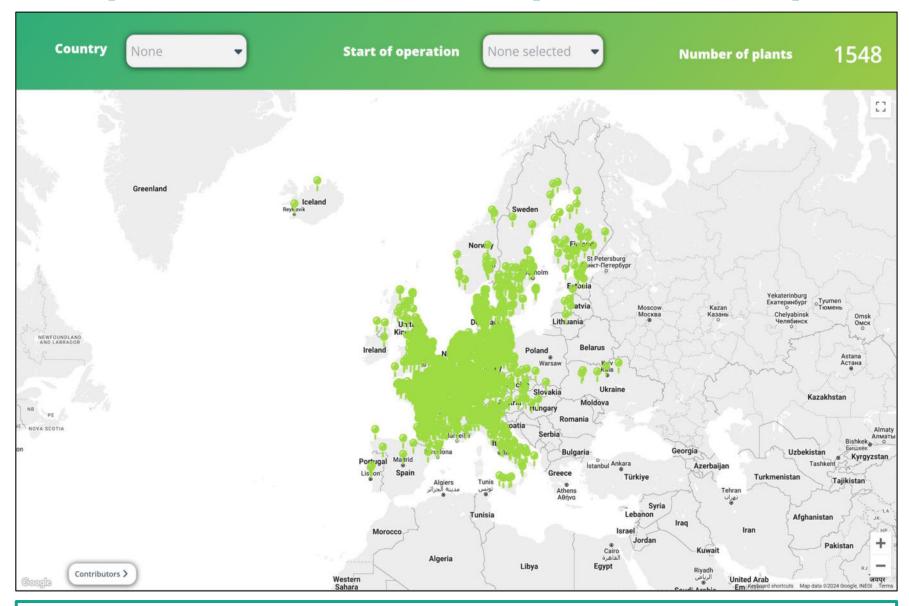








### European Biomethane Map 2024: 1,548 plants in operation





### Statistics: installed capacity

	2024		2022
Germany	147,749	Germany	147,711
France	132,818	United Kingdom	107,029
United Kingdom	114,358	France	87,691
Italy	97,757	Denmark	70,105
Denmark	85,117	Sweden	45,421

Countries with the biggest biomethane installed capacities per year in 2024 vs 2022 (in Nm³/h)

	2024		2022	
	EU-27	Non-EU	EU-27	Non-EU
Installed capacity	5.2	1.2	3.8	1.0
% of total	81	19	79	21

## Total installed capacity of biomethane plants:

6.4 bcm/year

## Growth from EBA Biomethane Map 2022 data:

32%

**Growth for EU-27:** 

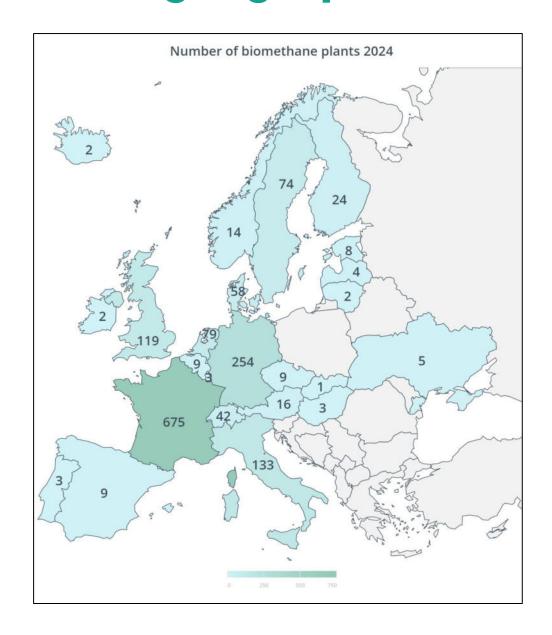
37%

**Growth for non-EU:** 

20%



### Statistics: geographical distribution



## Countries with biggest growth in installed capacity:

**Italy** 238%

France 51%

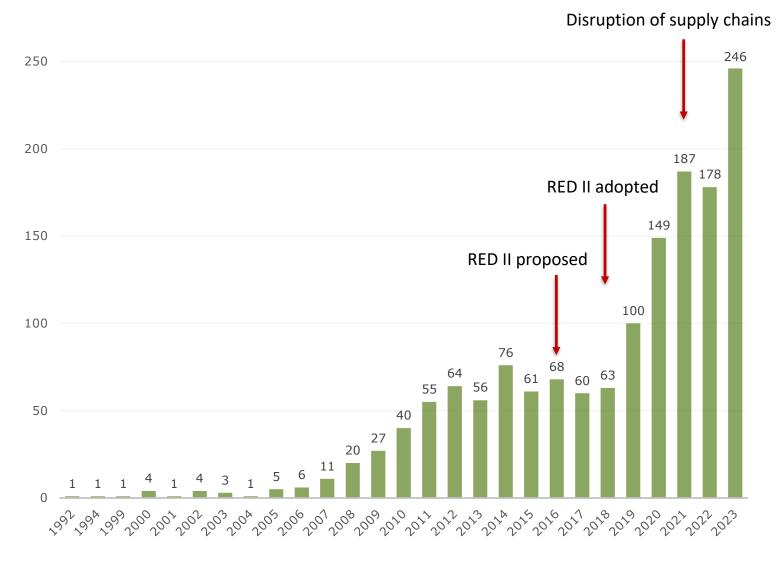
The Netherlands 23%

Average biomethane plant in Europe:

468 Nm<sup>3</sup>/h



### Statistics: historical distribution



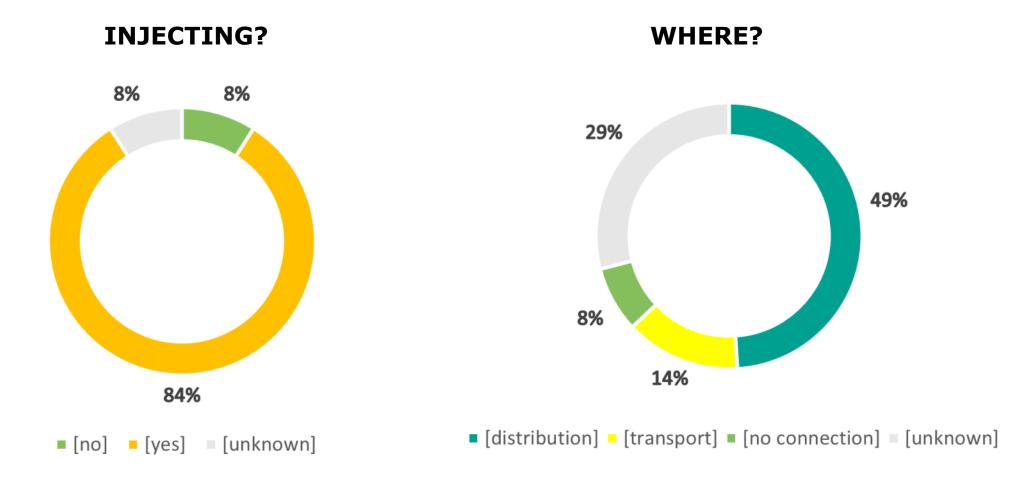
#### **Key takeaways:**

- Noticeable increase after2018 RED II adoption
- Increase despite disruption of supply chains in 2020-2022

Identified new plants in 2024: 56



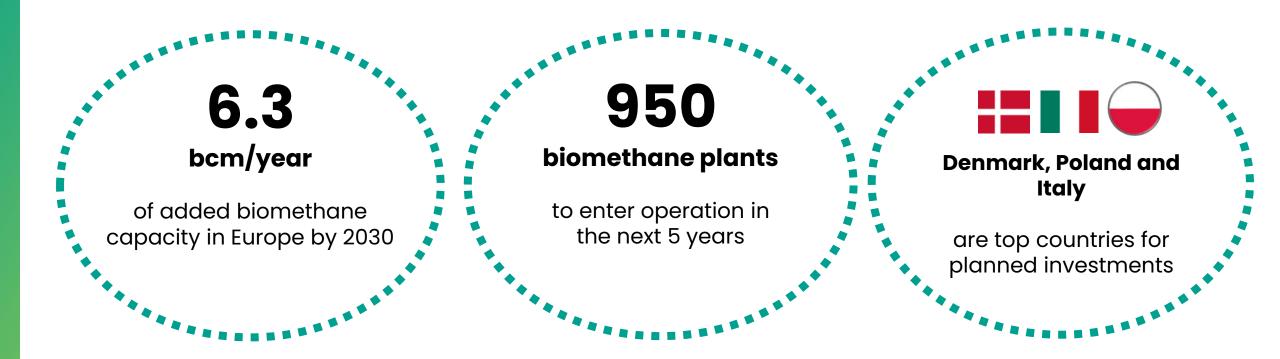
### **EUROPEAN BIOMETHANE PLANS VS GRID CONNECTION**







### €27 billion earmarked to be invested in biomethane

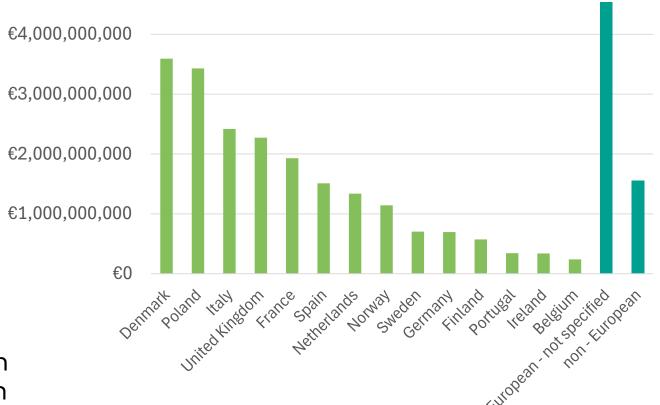




## Denmark, Poland and Italy are top countries for planned investments

#### **Top countries**

Denmark	€ 3.6 billion
Poland	€ 3.4 billion
Italy	€ 2.4 billion
United Kingdom	€ 2.2 billion
France	€ 1.9 billion



#### Other investment destinations

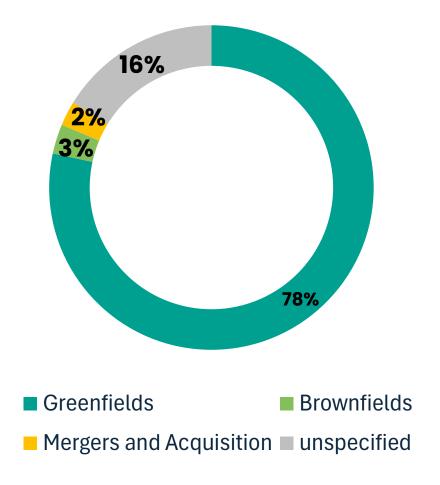
European (yet to be specified) € 4.5 billion Non-European € 1.5 billion

Geographical distribution of investment volumes



### 78% of investments are for greenfields plants

- **€20.9 billion** planned for greenfield biomethane plants
- **€0.8 billion** reserved for brownfields
- **€0.7 billion** goes to mergers and acquisition



## Biomethane in the updated NECPs (national energy and climate plants)

NECPs with 2030 biomethane target		
Belgium	0.11 bcm	
Czechia	0.5 bcm	
Denmark	<b>0.4 bcm</b> (/100% green gas in grid)	
Estonia	<b>0.04 bcm</b> (380 GWh)	
France	<b>4.15 bcm</b> (44 TWh)	
Greece	<b>0.2 bcm</b> (2.1 TWh)	
Ireland	0.58 bcm	
Italy	5.7 bcm	
Lithuania	<b>0.13 bcm</b> (1.4 TWh)	
Netherlands	2 bcm	
Slovakia	0.3 bcm	
Slovenia	<b>0.05 bcm</b> (480 GWh)	
TOTAL	14.16 bcm	

### Pre-NECP 2030 biomethane target (but no NECP target)

Austria	<b>0.39 bcm</b> (50% renewable gas target)
Finland	<b>0.38 bcm</b> (4 TWh)
Ireland	<b>0.58 bcm</b> (5.7 TWh)
Latvia	0.09 bcm (10% fossil natural gas)
Poland	0.99 bcm (50% renewable gas target)
Sweden	<b>0.94 bcm</b> (10 TWh)

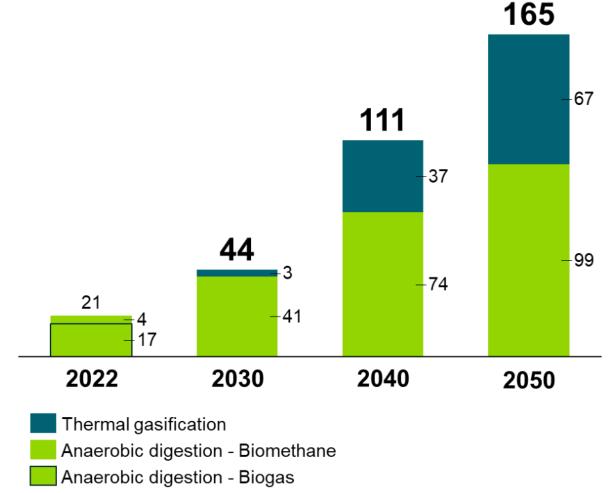
TOTAL 3.4 bcm



## Significant potential to scale-up biomethane production to 2040 and beyond (Guidehouse study)

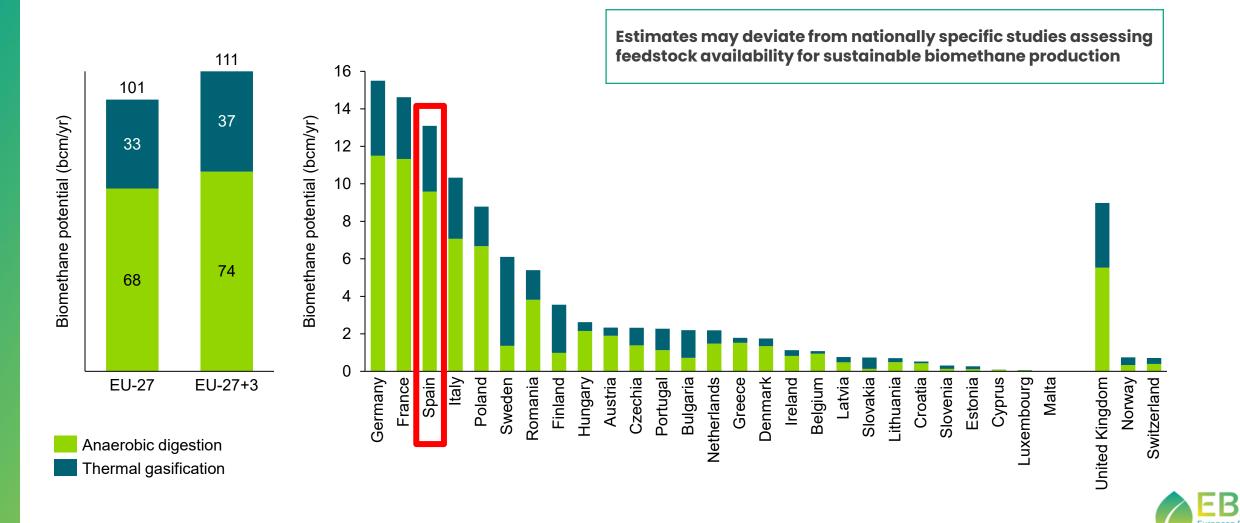
### Biomethane production potential in Europe

- 44 bcm by 2030
- 111 bcm by 2040
- 165 bcm by 2050





## Biomethane potential of 111 bcm/yr in Europe in 2040 - dominated by anaerobic digestion



## Role of biogases in the European Commission's 2040 Climate Target Plan

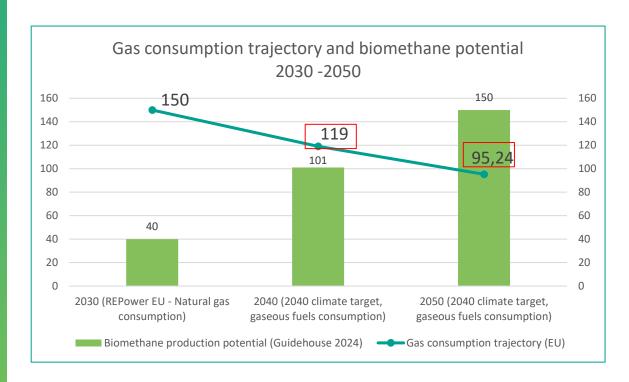
- European Commission's Communication "Europe's 2040 climate target and path to climate neutrality by 2050 building a sustainable, just and prosperous society" was presented on 6 February 2024.
- A projection of the evolution of the EU energy mix and related GHG emissions with climate neutrality in 2050 as ultimate goal.
- Suggests the EU's GHG reduction target for 2040 as an interim target towards climate neutrality by 2050 → reduction of 90% compared to 1990.
- No binding value intended to be the political legacy of the Commission.



## Role of biogases in the European Commission's 2040 Climate Target Plan

The Target Plan foresees a reduction in gridinjected gaseous fuels to 119 bcm by 2040

(Natural gas, e-methane, biomethane)



Biomethane's role is focused on maritime transport, industry and agriculture



- 8% of transport fuels in 2040. 16% in 2050
- EC projected 19 TWh biomethane in maritime transport in 2030. Focus on maritime likely to continue



- "Bioenergy" = approx. 465-580 TWh in 2040
- This includes solid biomass, biogases, biofuels and organic solid waste



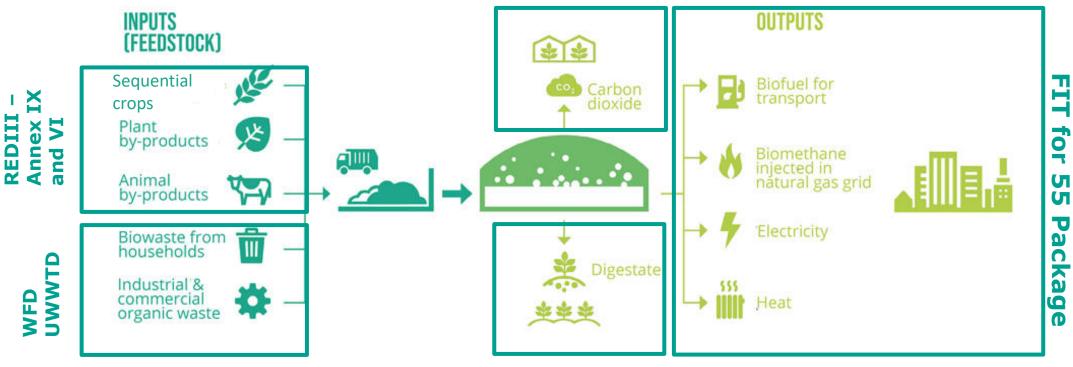
- Anaerobic digection to migitate emissions from manure
- Nutrient loss prevention (digestate)





### AN EXTRAORDINARILY REGULATED SECTOR

### CRCF RFNBOs DAs



FPR
Nitrates Directive
Soil Health Law

Source EBA Statistical Report 2021





### **EUROPE'S CHOICE**

POLITICAL GUIDELINES FOR THE NEXT EUROPEAN COMMISSION 2024–2029

Ursula von der Leyen

Candidate for the European Commission President



### **Uvl II**

**PROSPERITY** 

**SIMPLIFICATION** 

DEFENCE

**SOCIETY** 

QUALITY OF LIFE (FOOD + ENVIRONMENT)

**LEADERSHIP** 

18 July 2025



# The future of European competitiveness

Part A | A competitiveness strategy for Europe





### **DRAGHI's REPORT**



3 Action Areas:

Europe must refocus its collective efforts in closing the innovation gap with US and PRC

Joint plan for decarbonisation and competitiveness

Increasing security and reducing dependencies



### WHAT IS STANDING IN THE WAY?







### **Europe is lacking focus.**

Common objectives, but not backed by setting clear priorities or following up with joined-up policy actions.

### **Europe is wasting its common resources.**

Large collective spending power, diluted across multiple different national and EU instruments Europe does not coordinate where it matters.





## THE NEW EC TEAM:

# « It's the economy, stupid! »

Competitiveness Industry Many overlaps





### **THREE POLICIES TO WATCH FOR in 2024-2029**



#### **COMMON AGRICULTURAL POLICY**

Largest single EU spending in the EU budget

Feedstock

**Machinery and Capital Costs** 

On-farm



#### **ENERGY AND CLIMATE TARGET 2040**

Revision of EU energy governance

Target settings for 2040 for:

Renewables Energy Efficiency Infrastructure GHG emissions savings



#### INDUSTRIAL CARBON MANAGEMENT

Ensuring Uptake of NETs

EC already evaluating potential of BioCO2 production

Unlocking value of BioCO2 market

### AGRICULTURE AND MARITIME POLICY

EUR 385.77 billion

+8.07 from NGEU

European Agricultural Guarantee Fund

291.09

European Agricultural Fund for Rural Development 87,44 +8.07 from NGEU

European Maritime, Fisheries and Aquaculture Fund

6.11



## THANK YOU!

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