



**BIOGAS:
READILY AVAILABLE, RENEWABLE, GRIDS-GREENING**

GEG, 21.03.2024, Geneve

Giulia Cancian, EBA Secretary General

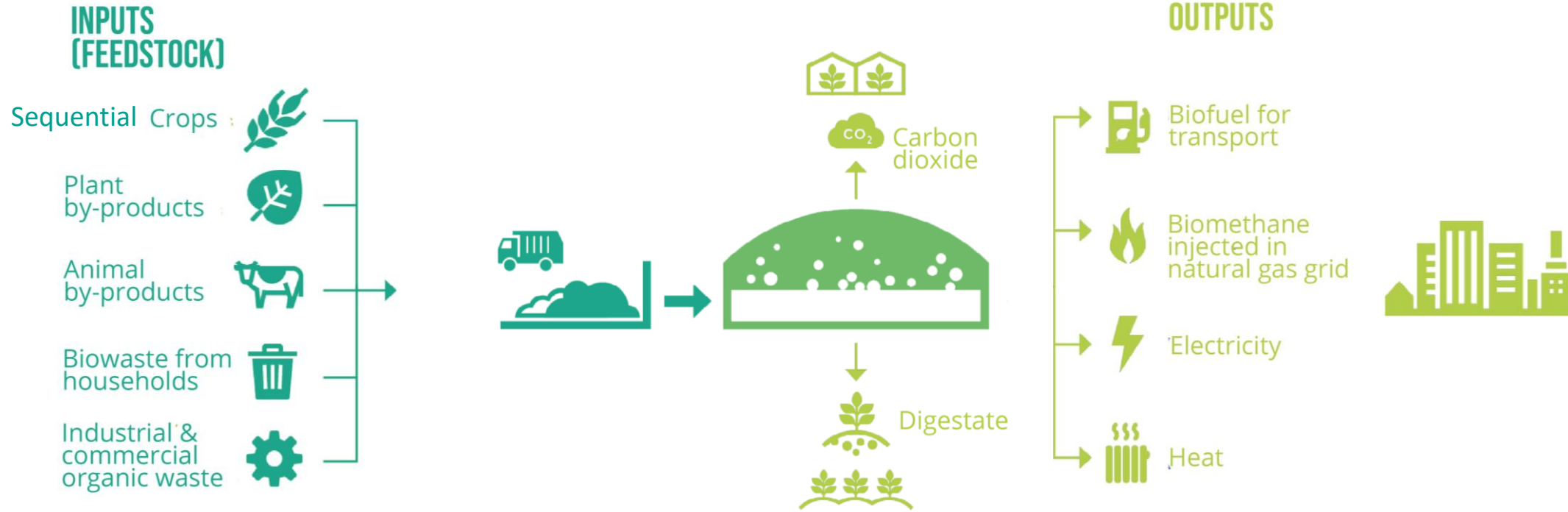
A butterfly with yellow and black patterned wings is perched on a purple flower in a field. The background is a soft-focus landscape with a teal overlay. A white box in the top left corner contains the text '1. BEYOND ENERGY'.

**1.
BEYOND
ENERGY**

**2.
BIOGAS
TODAY**

**3.
THE
FUTURE**

RE-THINKING OUR ECONOMIC MODEL: A CIRCULAR ECONOMY



Input
(i.e. food waste,
agricultural waste)

60% Biomethane
40% Carbon Dioxide

Digestate + bio-CO2
as co-products

Biogas upgrading
Biomethane <99%


=
Natural gas

SOCIO-ECONOMIC IMPACT OF BIOGASES VALUE-CHAIN

2022:
220,000 jobs


2030:
460,000 jobs

2050:
1 Million jobs





The grid consists of 220 worker icons in 2022, 460 in 2030, and 1,000 in 2050. The icons are arranged in rows: 35 rows of 6 icons for 2022, 35 rows of 6 icons for 2030, and 16 rows of 6 icons for 2050. The icons represent different types of workers: some with hard hats, some with forklifts, and some in business suits.


 **20,000 Companies**

 **18,000 Plants**

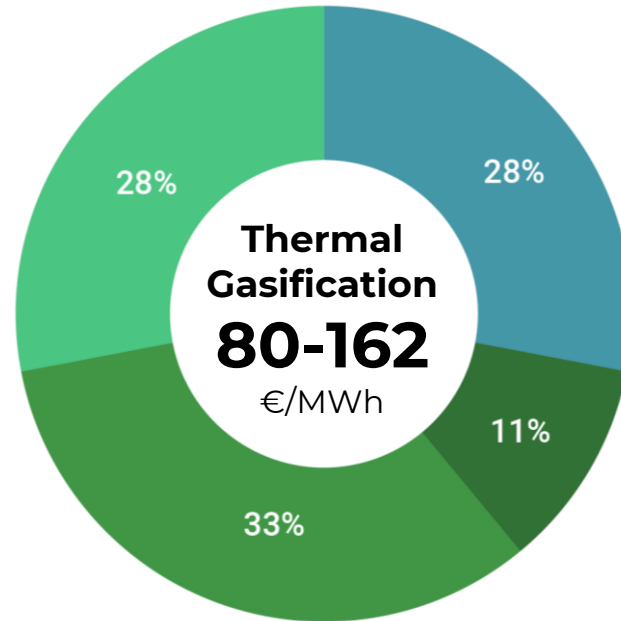
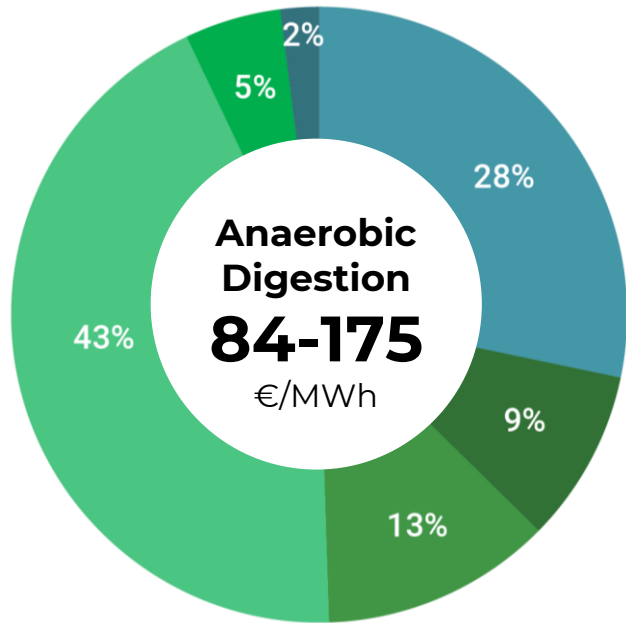
 **5.75 bn € Turnover**

 A solid **European** value chain

 **Leadership** in Manufacturing tech


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

FACTORING-IN BIOMETHANE WHOLE-SYSTEM BENEFITS



- Job creation
- Greenhouse gas impact
- Provision of biogenic CO₂
- Energy security
- Organic waste processing
- Replacement of synthetic fertilisers

- 1 Environmental, economic and social benefits beyond renewable energy provision
- 2 Value to European economy could be up to **€78 billion in 2030** increasing to **€283 billion in 2050** (EU + UK)
- 3 Energy security, job creation and biogenic CO₂ provide the greatest benefit with > 80% share of total

A butterfly with yellow and black wings is perched on a purple flower in a field. In the background, there is a large industrial building and a clear blue sky. The image has a green tint and a white border around the central text.

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BIOGAS AND BIOMETHANE TODAY



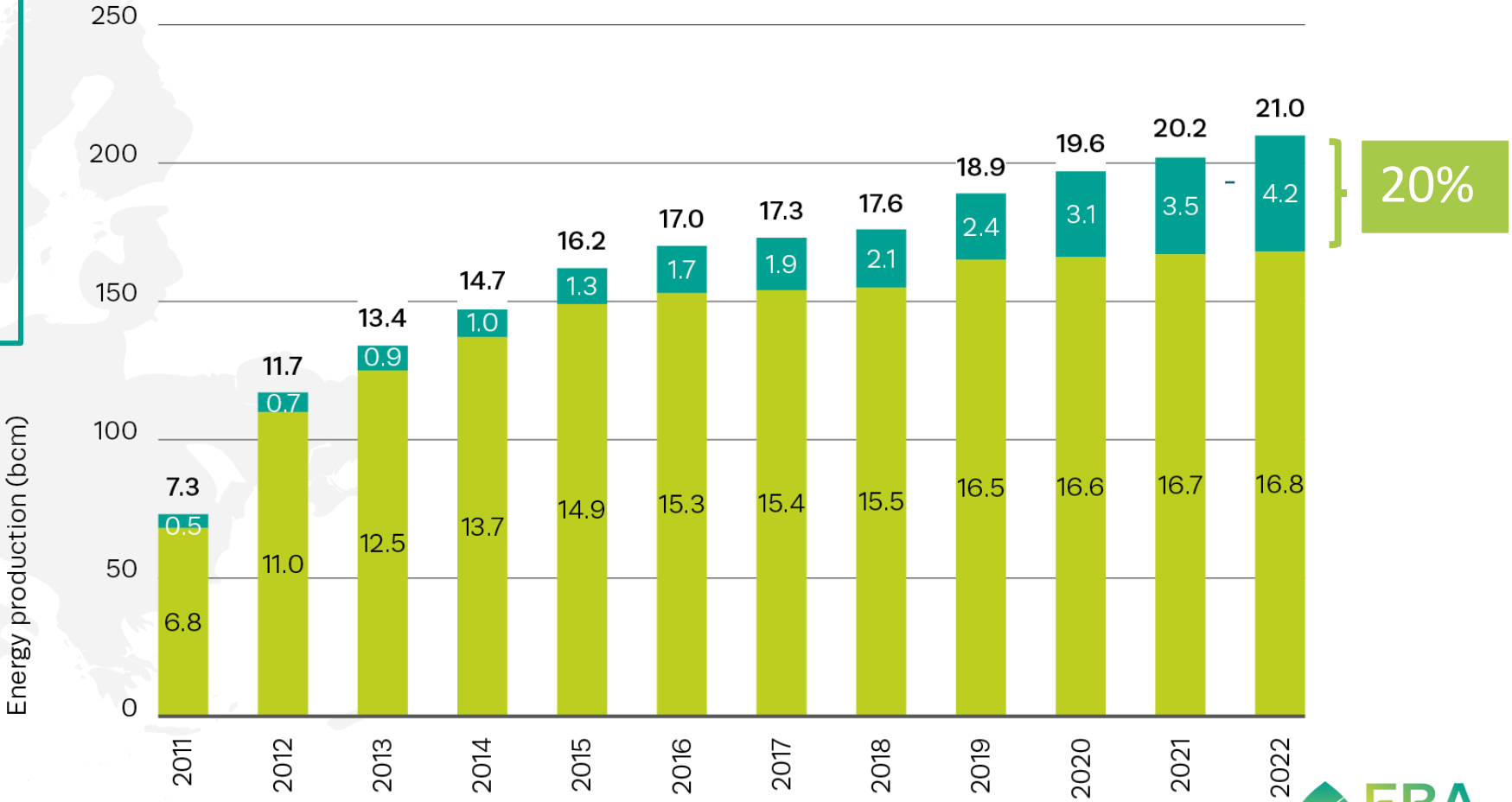
> gas demand of Poland

= 6% EU gas consumption



20% biogases upgraded

18 bcm produced in EU-27



■ Energy from biogas (bcm)
 ■ Energy from biomethane (bcm)

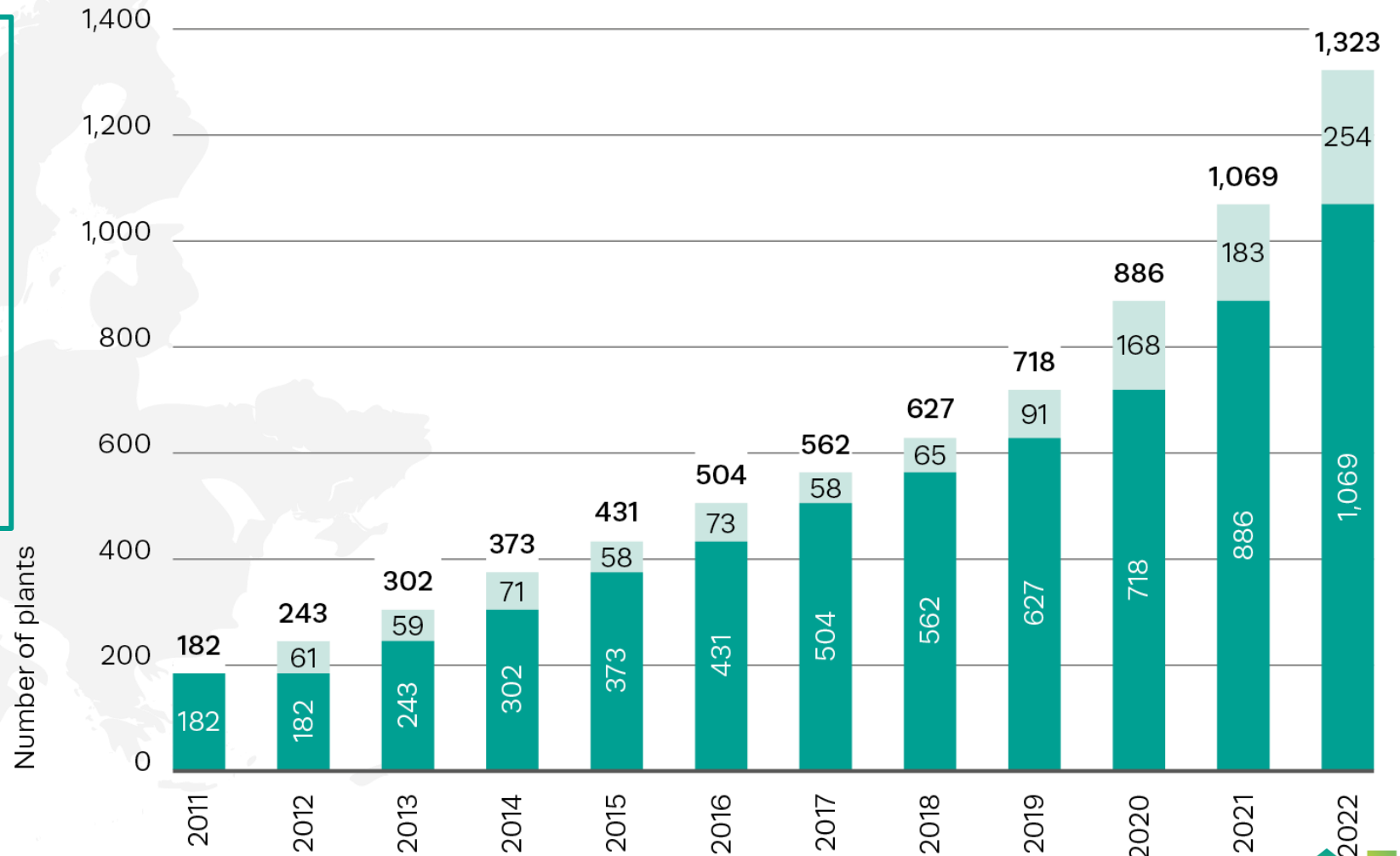
* Combined biomethane and biogas production in Europe

SECURING GREEN TRANSITION OF THE GAS SYSTEM AND SECURITY OF SUPPLY: BIOMETHANE IN 2022

> 250 new plants
> 1,300 in Europe
(1,124 in EU-27)

24 producing countries

>75% plants **grid connected**, most to distribution grid

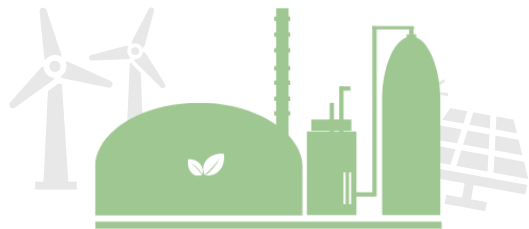


Existing plants
New plants

POLICY DRIVERS AT EU LEVEL

EU RENEWABLE ENERGY

TARGET 2030:
42.5 % of energy
consumption



**RENEWABLE
ENERGY
DIRECTIVE**

INDICATIVE BIOMETHANE TARGET

2030:
35 bcm/year by 2030



REPowerEU PLAN

RIGHT TO ACCESS THE GAS GRID

Solutions to technical
barriers
Tariffs discounts



**HYDROGEN AND
DECARBONISED
GAS MKT
PACKAGE**

A butterfly with yellow and black patterned wings is perched on a purple flower. In the background, there is an industrial facility with a large cylindrical tank and a building. The scene is overlaid with a green gradient and a white box containing text.

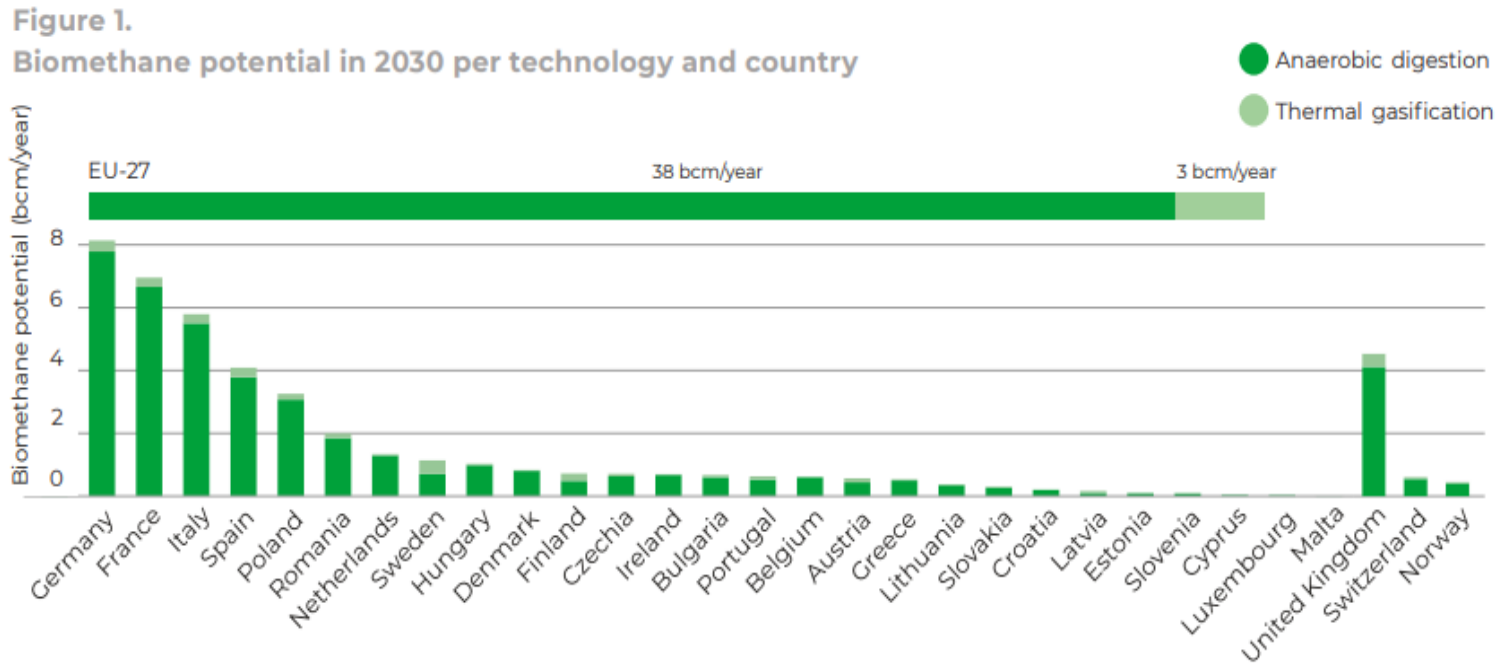
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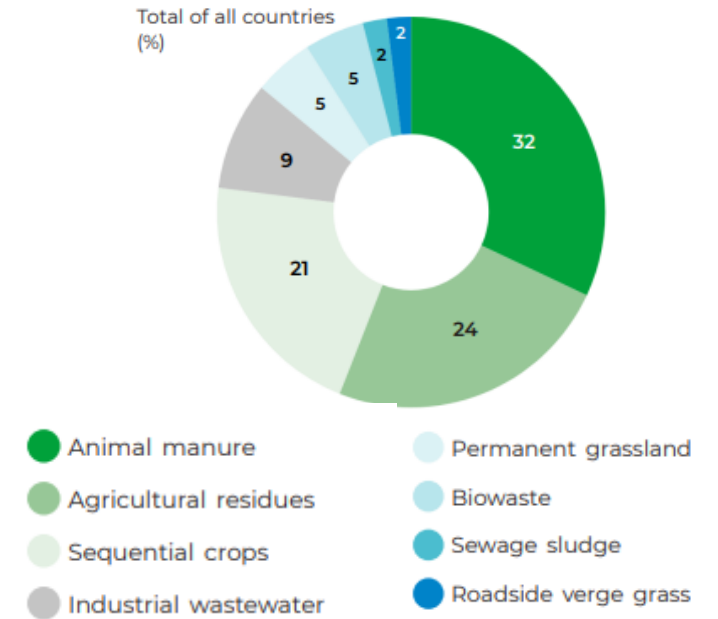
THE SECTOR HAS THE POTENTIAL TO DELIVER 35 BCM BY 2030

2030 National Biomethane Potentials: *Gas for Climate 2022*



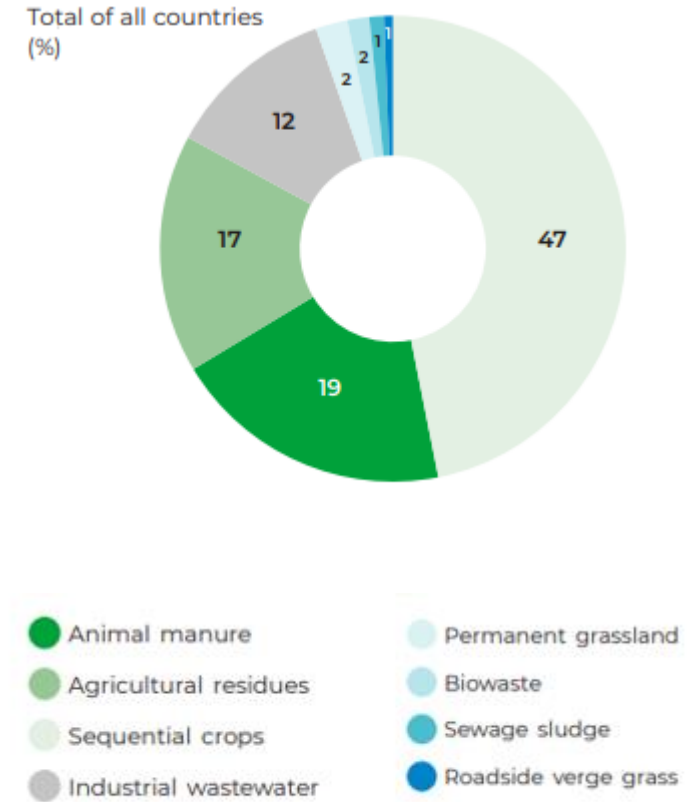
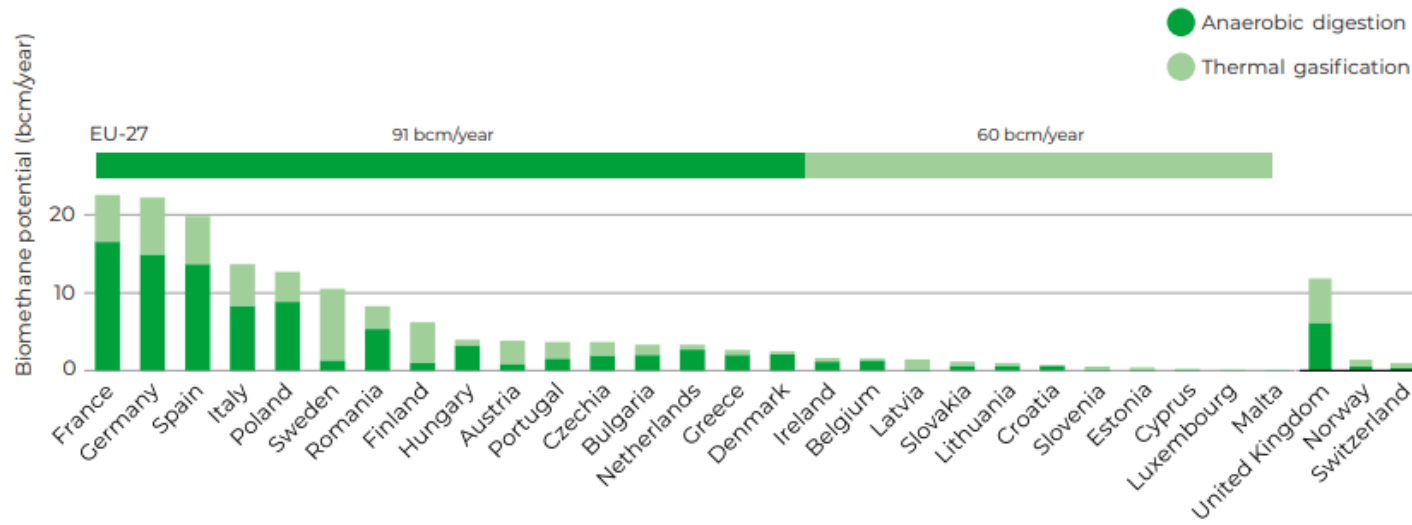
41.8 bcm in 2030 (38.1 bcm for EU-27)

Feedstock potential (all countries)



AND TO PROVIDE 151 bcm BY MIDCENTURY

Figure 2.
Biomethane potential in 2050 per technology and country



151 bcm in 2050



EBA

European Biogas
Association

THANK YOU

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Giulia Cancian, EBA Secretary General