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European Biogas Association

Biogas as a key enabler to meet the biowaste challenge

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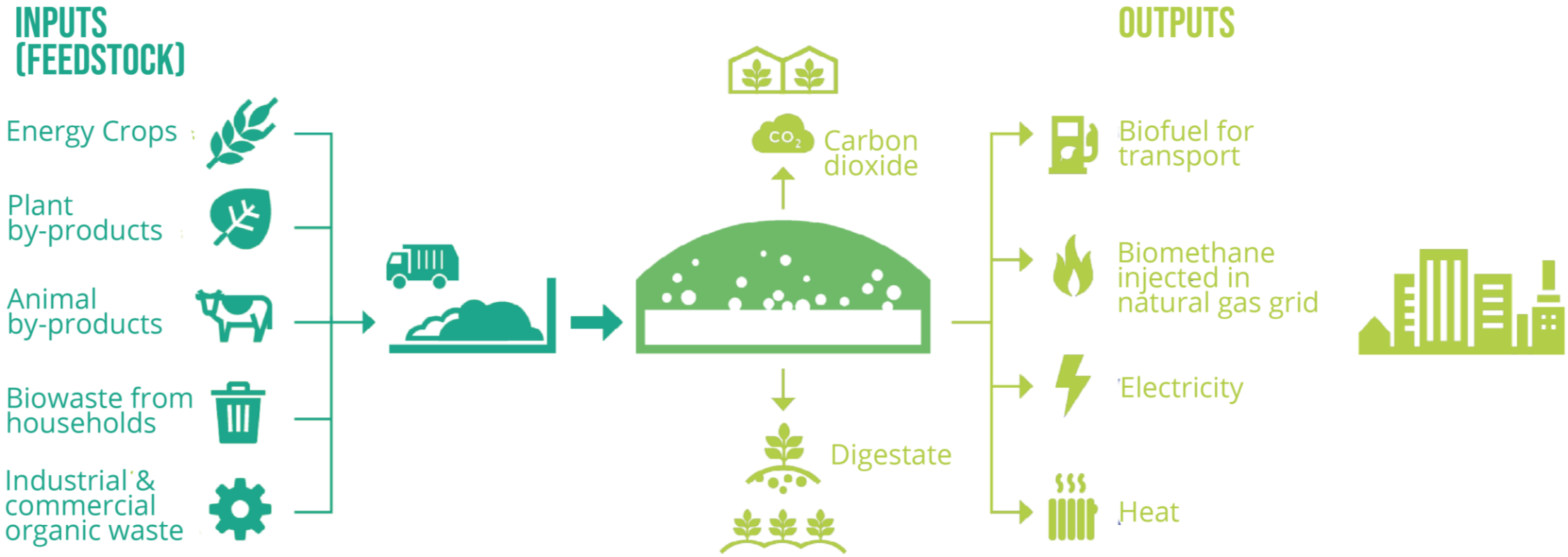
BIOGAS FROM BIOWASTE



INCREASING BIOGAS POTENTIAL FROM BIOWASTE

Improved waste management and **collection programmes** will **increase the supply of food waste**.

This will in turn reduce the availability of landfill gas.

Biogas production is an opportunity for composting facilities, to invest in AD as pretreatment of the biowaste.

INCREASING BIOGAS POTENTIAL FROM BIOWASTE

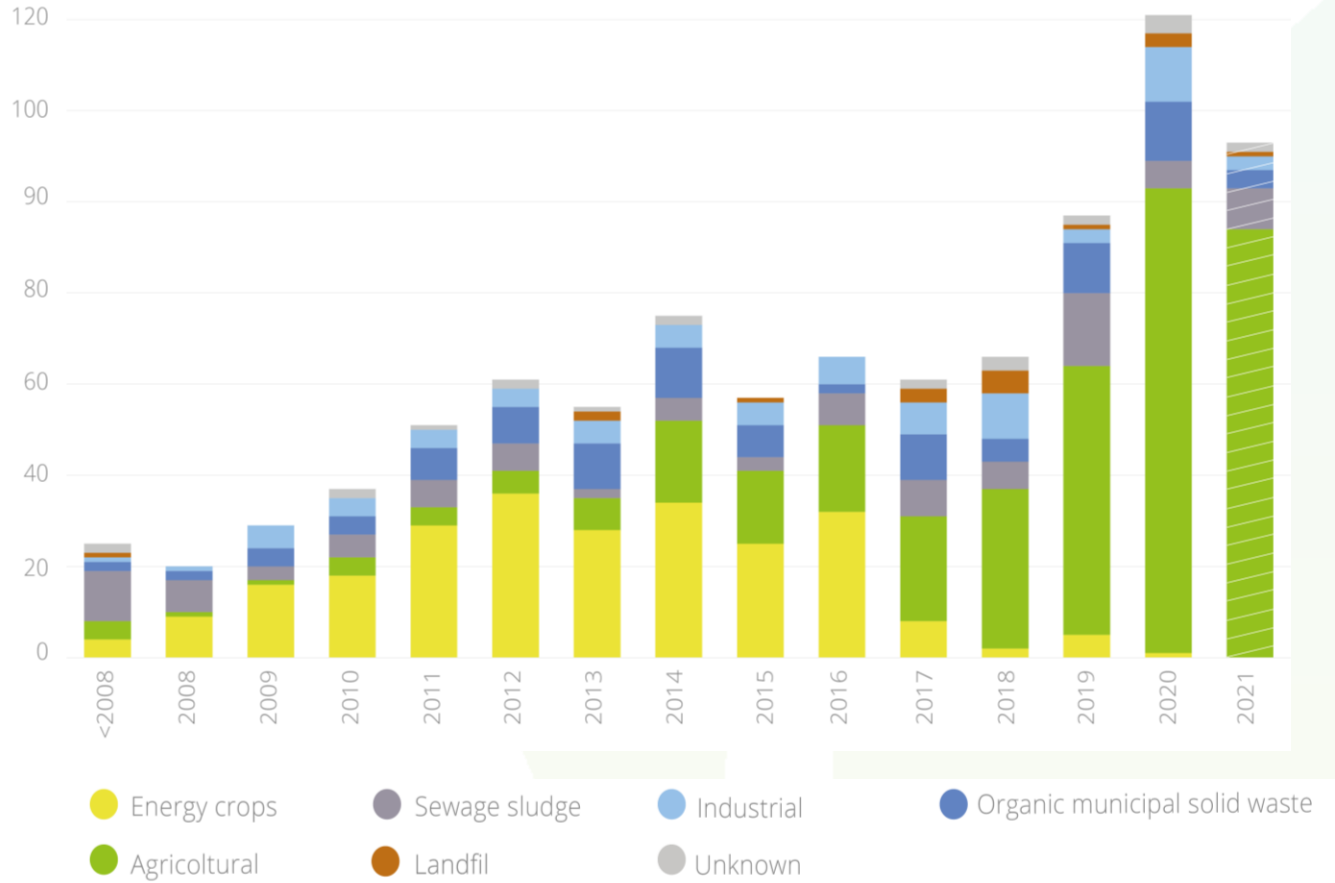
There are relatively **more biomethane plants using biowaste than biogas plants** without ugprading.

One reason is **the reduced need for digestate drying** after digestion of food waste compared to other feedstocks.

NEWLY INSTALLED BIOMETHANE PLANTS ON BIOWASTE

This figure shows the number of newly installed biomethane plants each year.

The **instalments of new plants on biowaste is a constant over the years**.

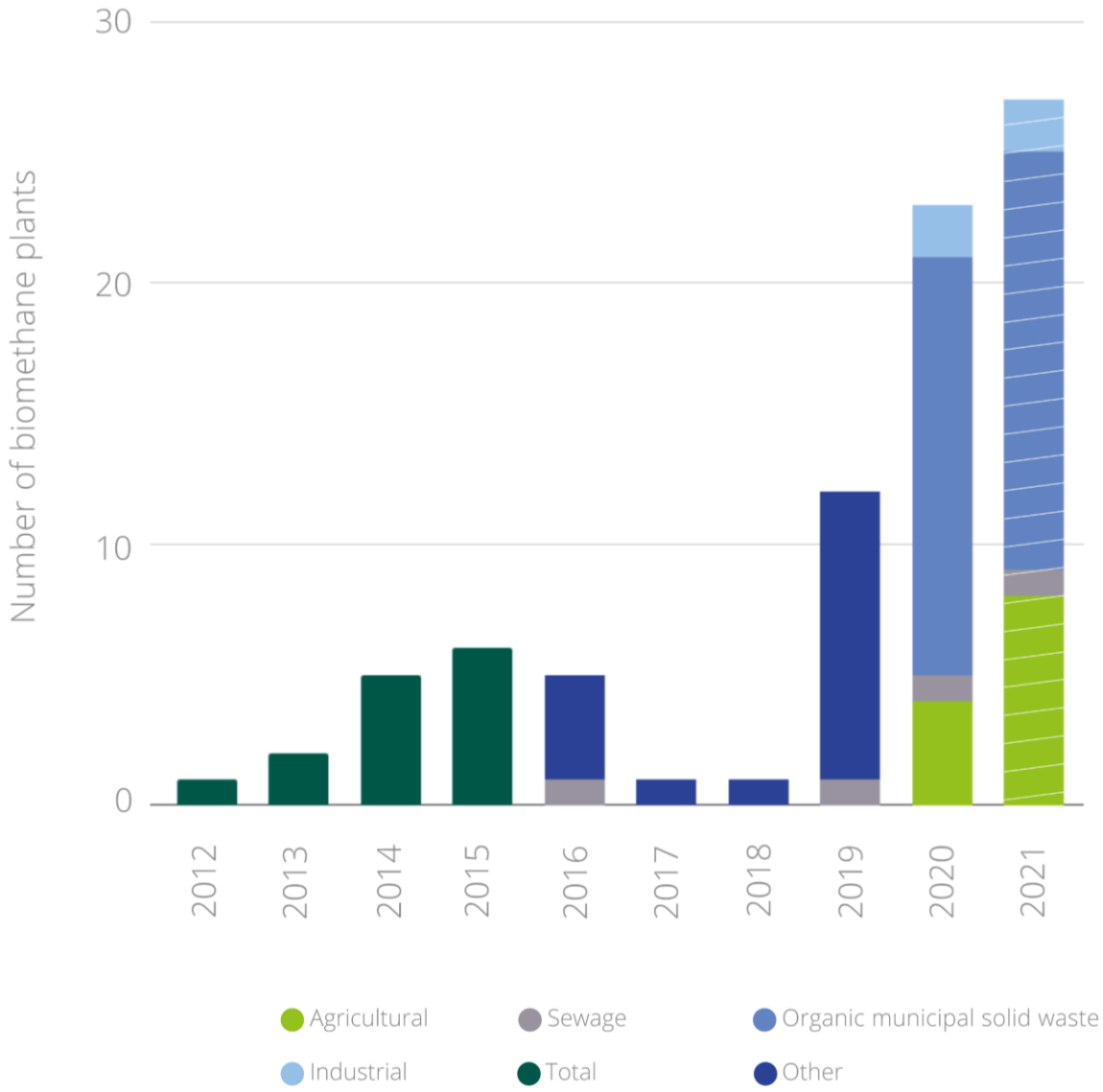


LEADING COUNTRIES IN MEETING THE BIOWASTE CHALLENGE

Several European countries have **clear direction to produce biogas from biowaste**.

Italy has built **almost 30 new biomethane** plants in the last years, of which the **majority runs on biowaste**.

Biomethane production in Italy is **encouraged via the Italian biomethane decree**, with many more plants to be expected in the years ahead.



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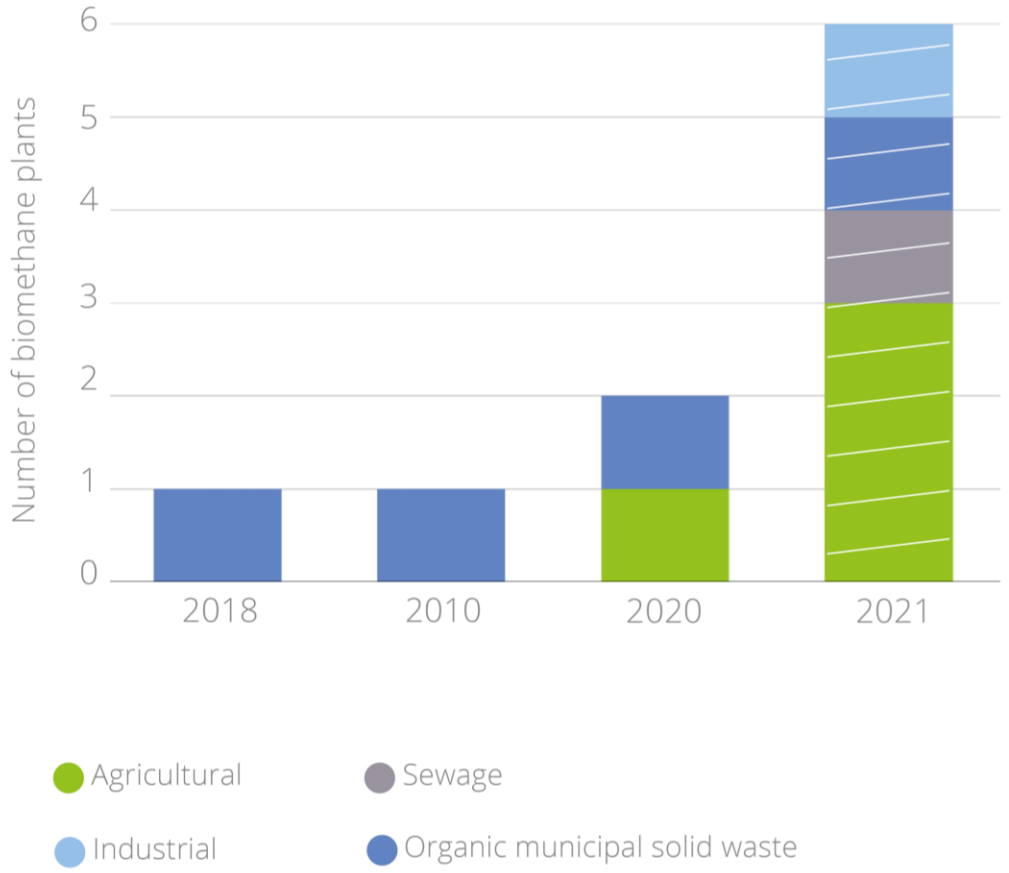
LEADING COUNTRIES IN MEETING THE BIOWASTE CHALLENGE

In **Belgium**, biomethane production only started recently.

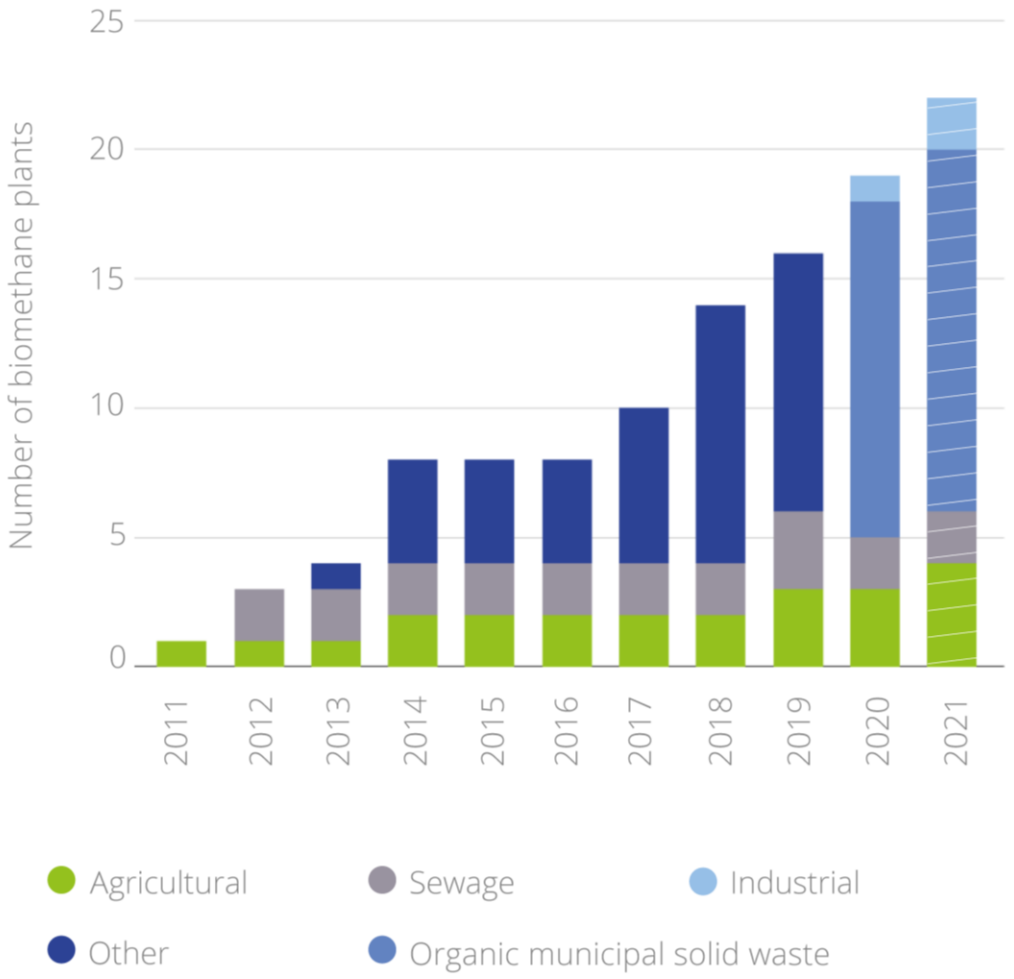
The **first biomethane plant in Belgium runs on biowaste from households** and has been extensively used a demonstration plant.

In Flanders, **composting facilities** have been increasingly keen to **invest in a digester as a pre-treatment step** in the composting process. Two such plants are under development.



LEADING COUNTRIES IN MEETING THE BIOWASTE CHALLENGE

In **Finland**, the **majority** and an **increasing share of the biomethane plants run on biowaste** from households.



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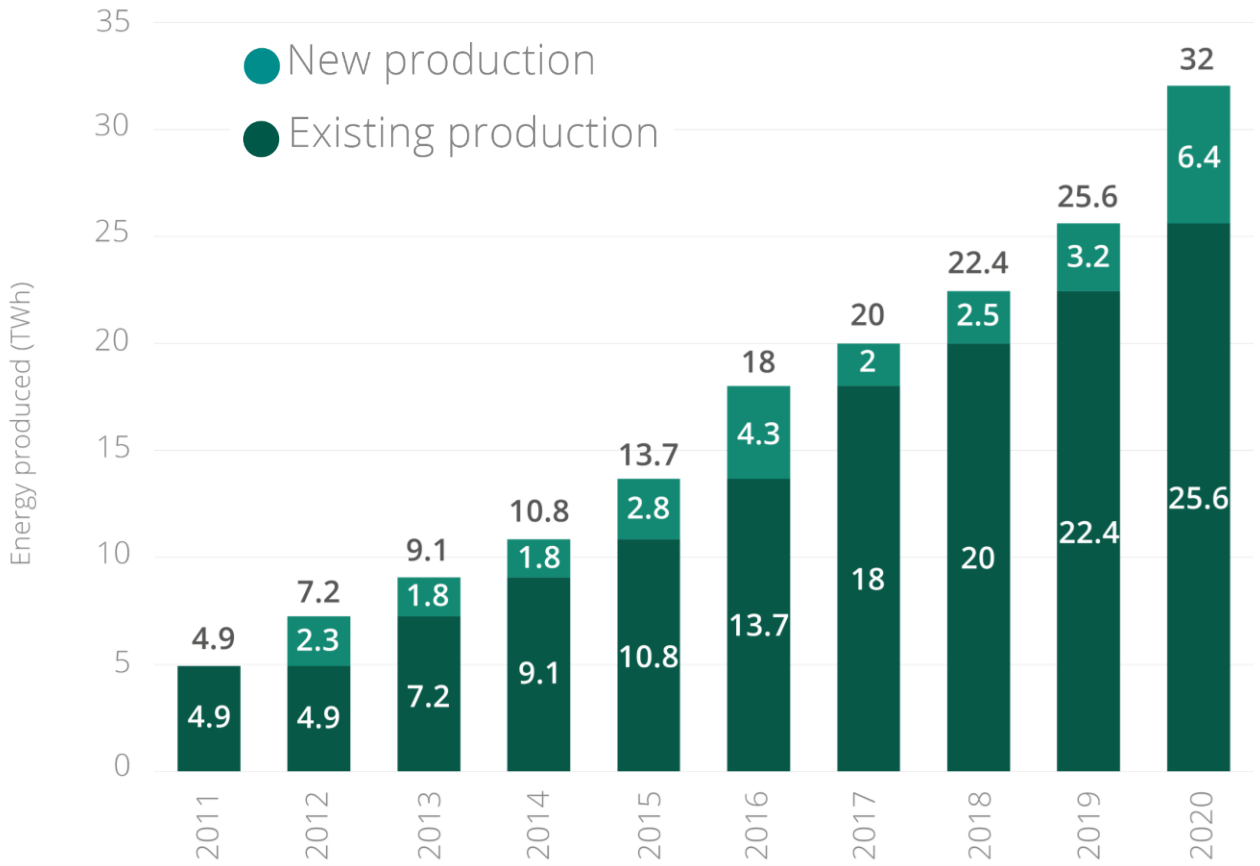
GROWTH IN BIOMETHANE PRODUCTION

Biomethane production enjoyed remarkable growth in the last decade, and **2020 saw the biggest year on year increase so far**.

The **rate of increase** in production in 2020 was **double** that of the previous year.

An **even bigger increase is expected in 2021**, as a record number of new biomethane plants started production in 2020.



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BIOGAS AND BIOMETHNANE POTENTIAL

4.6% in 2020

- The combined biogas and biomethane production can cover today **4.6% of EU gas demand**.
- This is already higher to the natural gas consumption of **Belgium**.

11% in 2030

- The gas for climate consortium calls for a **binding target of 11% renewable gas by 2030 with an 8% subtarget for biomethane**.
- This is confirmed to be feasible by EBA calculations.

30 – 40% in 2050

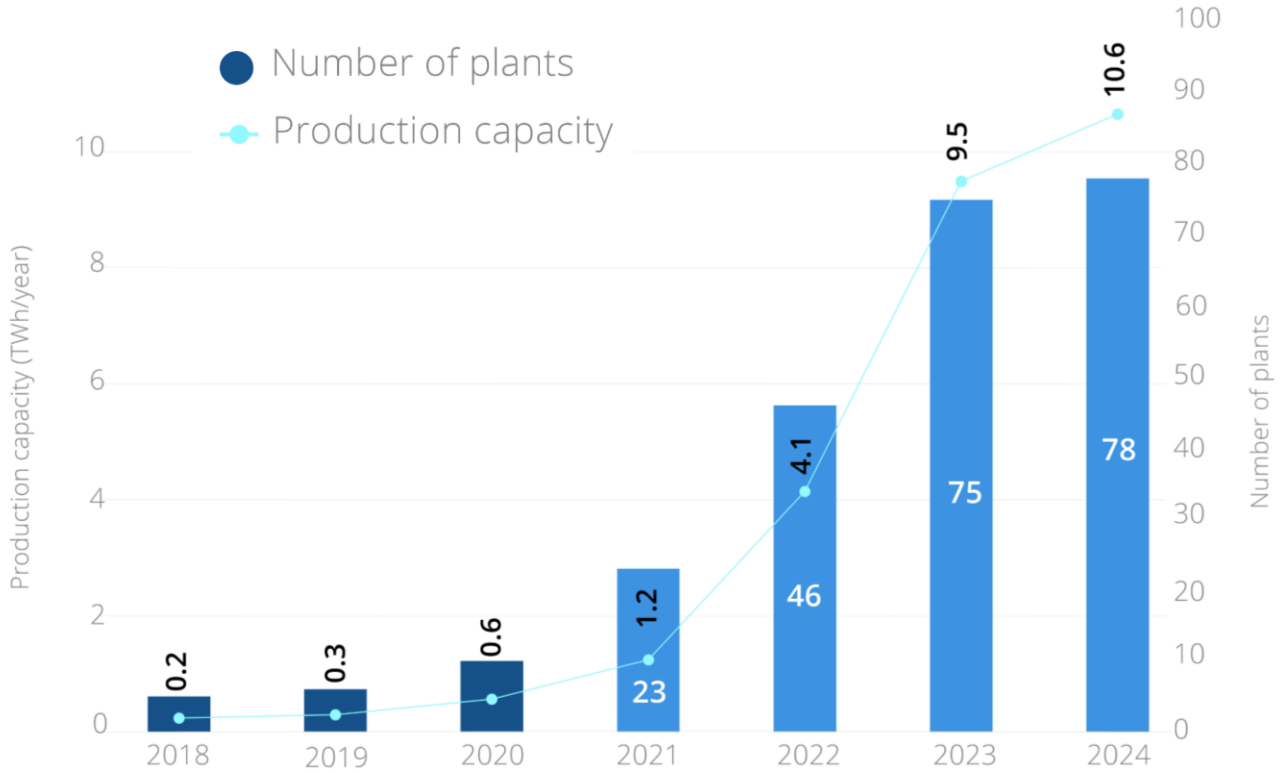
- Taking into account **decreasing gas demand**, renewable gases can cover **30 – 40% of the gas demand** by 2050.

BIOMETHANE FOR TRANSPORT

Biomethane can be used as **transport fuel** in the form of **Bio-CNG and Bio-LNG**.

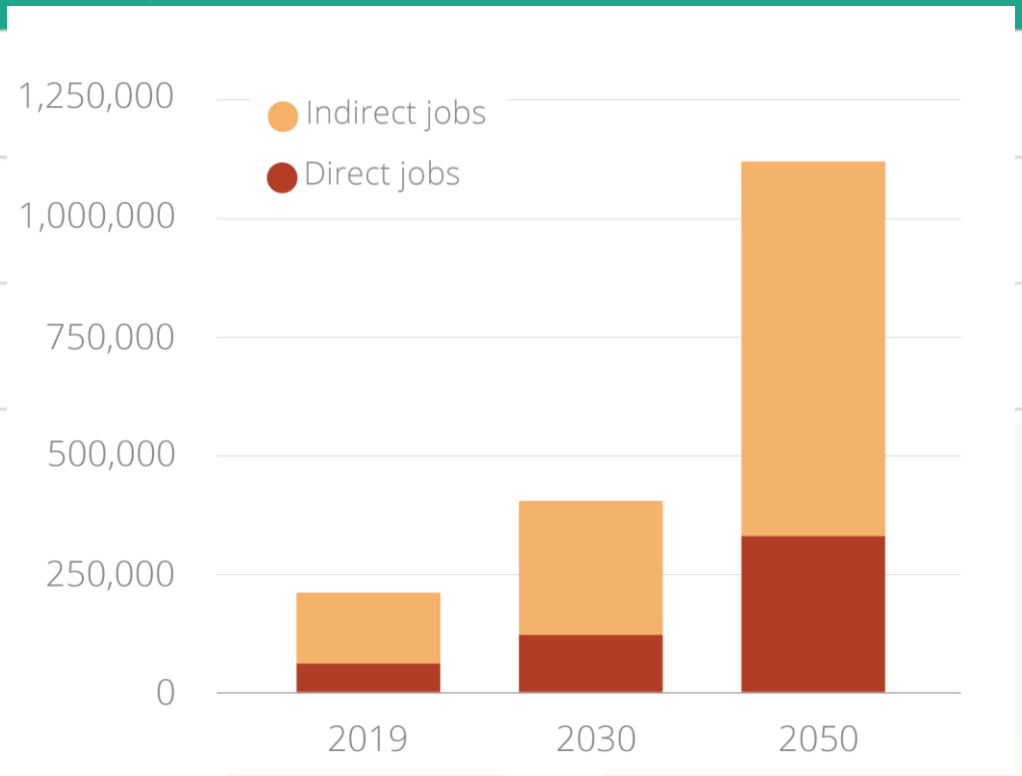
The Bio-LNG production capacity by **2024**, considering only confirmed plants, adds up to **10.6 TWh per year**.

With this volume, almost **25,000 LNG trucks** can be fueled year-round.



	Biogas and biomethane production (GWh)	Direct jobs	In
2020	190,891		14
2030	370,000		28
2050	1,020,000		78

Taking the weighted average from different studies and estimates it is calculated that our sector is expected to create **420,000 jobs by 2030** and **over one million jobs by 2050**.



EBA STATISTICAL REPORT 2021

EBA statistical report 2021

- Free for EBA members
  (download via the EBANET)
- For sale for non-members
  (Sales contact: Vinciane Perot perot@europeanbiogas.eu)