



**MINISTÈRE
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**SESSION : REGULATORY FRAMEWORK, OBJECTIVES AND SUPPORT
MECHANISMS FOR THE DEVELOPMENT OF BIOMETHANE IN FRANCE**

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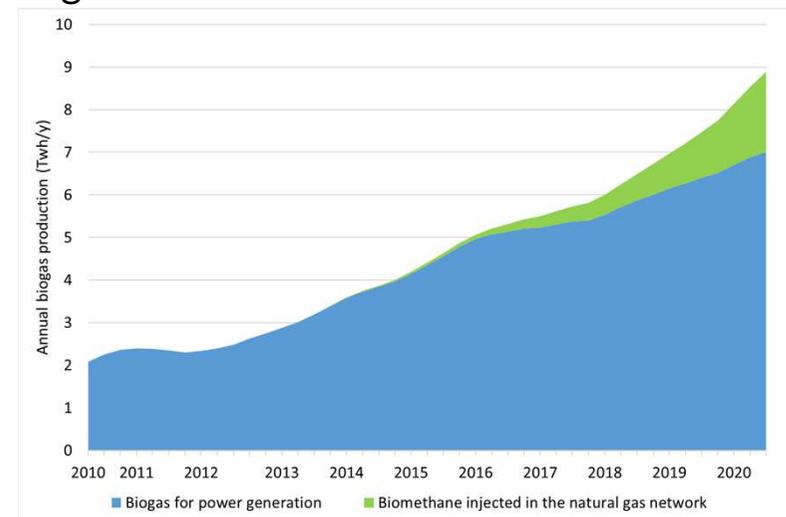
Current situation of the development of biogas

Biogas production is rapidly changing in France.

In 2021, 1310 facilities were producing biogas and valorizing it by injecting it into natural gas networks (365) or producing electricity (945), representing 232 new facilities commissioned in one year.

Regarding biogas production :

- 2,7 TWh of electricity generated in 2021 from 7 TWh of biogas
- 4,3 TWh of biogas injected into the natural gas network after upgrading
- 11,3 TWh of biogas produced in 2021, representing 2,5 % of gas consumption



Priority is given in France to biogas injection into the natural gas grids

- **Direct use of upgraded biogas** (biomethane) is more energy efficient than electricity generation.
- **Restricted support for electricity generation from biogas** : Biogas plants with a power capacity of 300 MW or higher located in an area served by a natural gas network are requested to inject their biogas production into the natural gas network.
- Since 2012, upgraded biogas has been injected in the gas network.

Biogas production target

- The **Multi-Annual Energy Plan for biogas** set a target **7% of gas consumption** in 2030 if the lower costs targeted in the baseline trajectory indeed come about, **and up to 10%** if there is an even greater drop in costs.
- It will allow increase the volume of biogas injected to 14 to 22 TWh in 2028, compared to 0.4 TWh in 2017.
- Biogas (injected or directly used) will account for 6 to 8% of gas consumption in 2028.

2016	2023	2028
5.4 TWh HHV (Higher Heating Value) Including 0.4 TWh injected	14 TWh HHV Including 6 TWh injected	24 to 32 TWh HHV Including 14 to 22TWh injected

Support mechanisms for the development of biogas

The cost of producing biomethane is significantly higher than the price of natural gas.

- In 2021, the average purchase price of injected biomethane was 104 €/MWh PCS, compared to an average natural gas price on the French markets of 22 €/MWh PCS over the past 10 years.

The development of biogas production therefore requires public support.

Biomethane feed-in tariffs are the main support mechanisms since 2011

- 15 year contracts
- Purchase guarantee by a natural gas supplier
- Average tariff in 2021 : 104 €/MWh
- Funded from the national budget

Ongoing evolution of biomethane support scheme

1 - New feed-in tariffs are allocated to small biomethane plants only since november 2020.

- Feed-in tariffs is restricted to facilities < 25 GWh per year
- The feed-in tariff for small biomethane plants will be adjusted downwards if the contracted biogas production capacity is higher than the annual target of 800 GWh per year.

2- Biogas production certificates (Green certificates)- First decree published in 2022

- This mechanism under development consists to impose to suppliers of natural gas an obligation to return biogas certificates to the State. Suppliers can fulfill this obligation, either by direct production of biogas injected in the natural gas network, or by purchasing certificates from producers.

3-New support scheme (Feed-in-premium) for biomethane not injected in the natural gas networks will be implemented

- Targeting in particular biomethane used directly for NGV vehicles
- Income for the producer comes from direct commercialization of bioNGV and from a feed-in-premium

Ongoing evolution of biomethane support scheme

Due to reduction of Russian gas import to the European Union and tensions on the European gas market, new measures have been announced :

- A new support scheme by call for tenders to support the construction and operation of medium and large biomethane plants was launched in april 2022

- Divided into 3 periods : the first one runs until december 2022 for a cumulative production capacity of 500 GWh PCS/year. The two other periods with bid submission dates in June and December 2023 will each involve the contracting of a cumulative production capacity of 550 GWh PCS/year.
- Tender scheme will be open to all projects, especially for facilities > 25 GWh per year

- Exceptional lengthening of 18 months to put biomethane plants into operation

- Reassessment of the biomethane feed-in-tariff by indexing on the inflation observed when signing the purchase agreement

Thank you for your attention