



EP STRASBOURG – 11 February 2025

# Biomethane in the EU: advancing the Energy Union through existing gas infrastructure

In cooperation with the EEF Associate Members



Chatham House Rule

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## Advancing the Energy Union through existing gas infrastructure

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Strasbourg, 11 February 2025

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# About GIE

## A well connected infrastructure

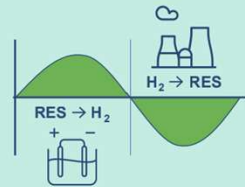
### Europe's operators of:

- Transmission pipelines
- Underground storages
- Terminals

### Different gases:

- Natural Gas
- Biomethane
- Hydrogen
- CO2
- Synthetic gases

Through sector coupling  
**gas and electricity  
infrastructure can...**



**...work together** for a  
reliable and affordable  
energy supply





# **Biomethane A “Today’s Solution”**

# Biomethane: A “Today’s Solution”

## Why biomethane?

1

**Green** & renewable

2

**Local** production  
in Europe

3

Fit for **today’s**  
gas infrastructure: can  
be injected into the  
existing gas grid, either  
at the transmission or  
distribution level

4

Can help  
industries & citizens to  
**decarbonise fast** and  
**cost-effectively**  
while avoiding  
stranded assets

► “Building on biomethane and existing natural gas’ synergies infrastructures is the way forward to enable this renewable fuel ramp-up as of today.”

# - GIE Study - Using Gas Infrastructure for Biomethane

# Future use of pipelines and gas storages for biomethane

## Pipeline use

**Large existing pipelines** will be needed for biomethane:

- Biomethane **demand**: often **concentrated** in industrial and urban areas; biomethane **production** is more **distributed**
- Mismatch between variable demand and continuous supply.

### Need for transport:

1. To and from **storages**
2. To and from **other regions**

## Storage use

**Storage** will be crucial to enable the **use of biomethane in valuable sectors**

like heating (seasonal storage need) and power production (rapid withdrawal needed):

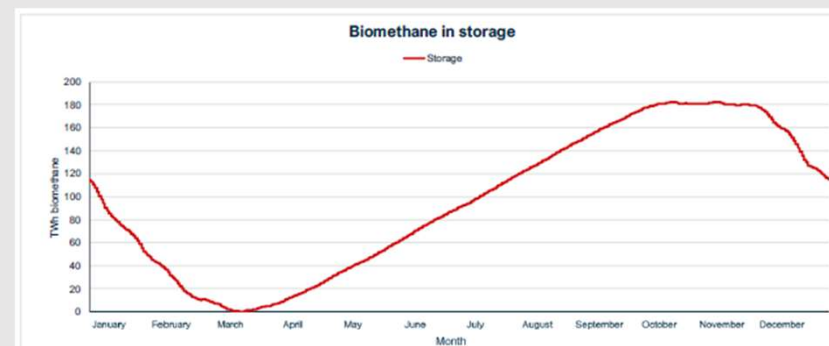


Figure 2. The amount of biomethane in underground gas storage throughout the 2040 year

# Facilitating a cost-effective & efficient kickstart

Efficiently **integrating intermittent energy** from wind and sun into different sectors is crucial in terms of existing infrastructure utilisation.



Connection to **transmission pipelines** necessary to realize full biomethane potential: demand served by national networks, their links with **storages** & possibility of **cross-border flows**.



Biomethane is a working example of how the circular economy supplies **secure and clean energy production**.

Biomethane contributes to a **sustainable** and **safe** energy supply in Europe as it is mainly based on **domestic production** of Member States.



# GIE Recommendations

## GIE Recommendations

1

Establishing a **level playing field** across renewable energy sources

2

Creating an **EU-wide certification scheme** for cross-border trade in renewable gas

3

Developing a **fair regulatory framework** for renewable gas technologies and connections

4

Eliminating cross-border inhibitors by **promoting quality and standards review**

5

Raising awareness of the necessity & **benefits of renewable gas**



# Thank you for your attention.

Stay tuned to decarbonisation & security of supply news  
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**natran**

Le cœur de  
vos énergies

# **Biomethane in the EU: Advancing the Energy Union through existing gas infrastructure**

**Network Operators: Key Players in Advancing  
Renewable Gases - Focus on the French  
Framework**

**Strasbourg, 11 February 2025**

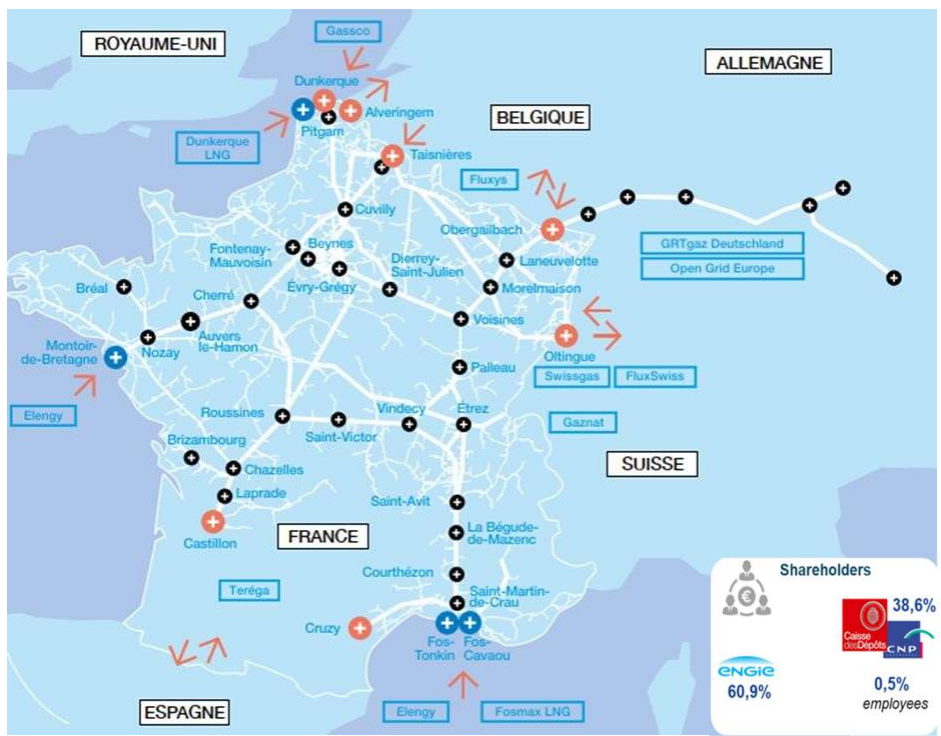
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# NaTran – gas transport operator in France and Germany. Committed to a carbon-neutral future

## A network at the heart of Europe



### Gas transmission in France



32,641 km of pipelines

625 TWh transported

### Interconnections

- 5 TSOs
- 5 LNG terminals
- 2 storage operators

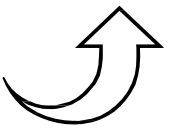
- 80 biomethane producers
- 726 industrial consumers
- 1G distribution network operators

### People

3 225 employees



# The French National Low-Carbon Strategy is currently being revised with an ambitious 44 TWh production target in 2030



X 5 biomethane production (vs 2023)

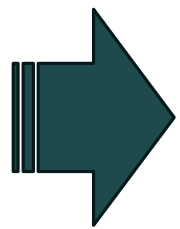
## A great challenge to overcome

New ways to do (local) network planning

New equipment to be built (gas stations and reverse flow compressors)

New stakeholders (farmers, waste industry...)

New way to run the network (pressures and flows)



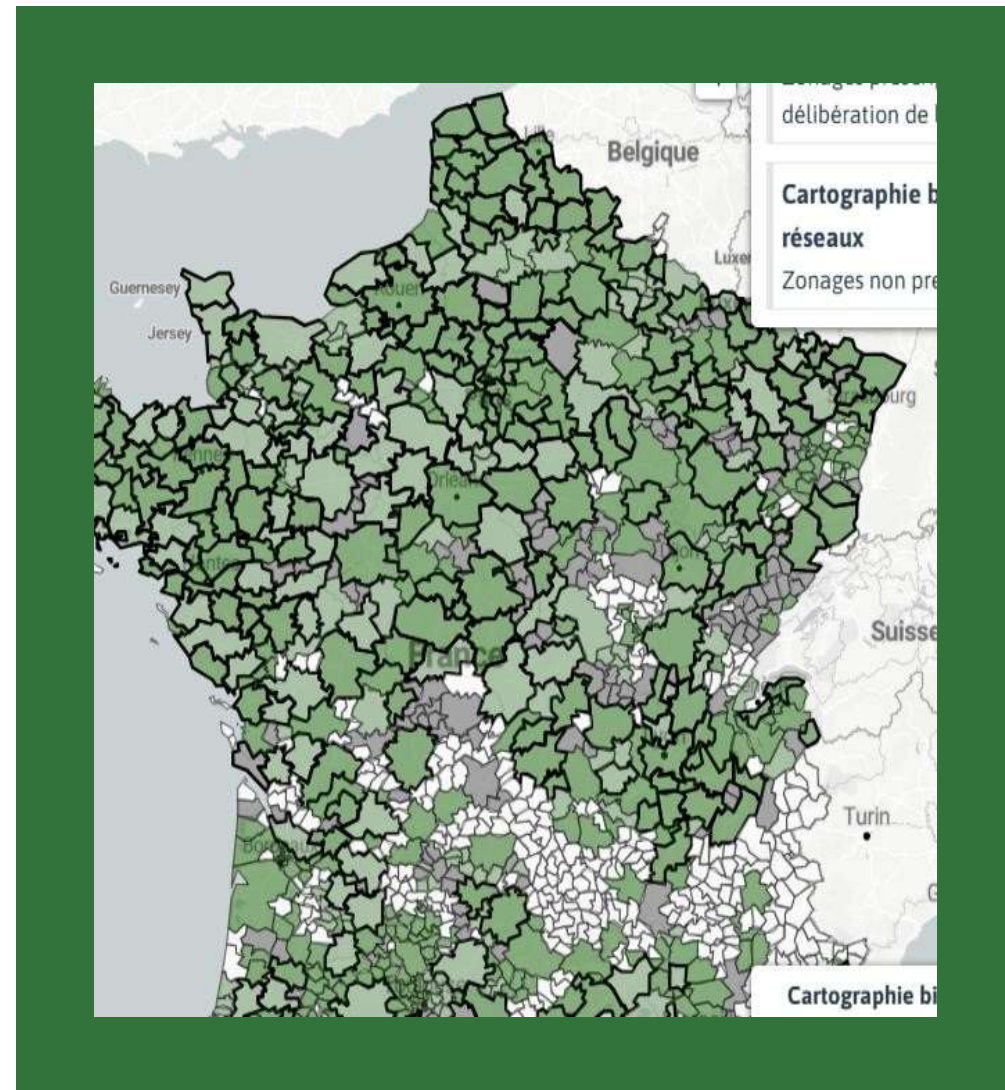
A change of scale and a change of pace

## Right to inject

### A set of good practices enabling network adaptation

#### A stable framework since 2019 has enabled an optimal network adaptation

- Coordination between TSO & DSO
- Optimal network design determined at the local level
- Economic test to incorporate reinforcement costs into the RAB (Regulatory Asset Base)
- Supervision by the regulator



# NaTran, a leading European operator in renewable gas transmission

Reverse flow stations : the key asset for the development of biomethane in France



27

Reverse flow stations  
under operation



11

Reverse flow stations  
under Engineering Design



1G

Reverse flow stations  
under construction



25

Reverse flow stations  
under feasibility studies





# NaTran, a leading European operator in renewable gas transmission

27 reverse flow stations currently in operation

Lamballe



Saint Aubin des Châteaux



Bressuire



Orval



Montluçon



Ceton



Châteaudun



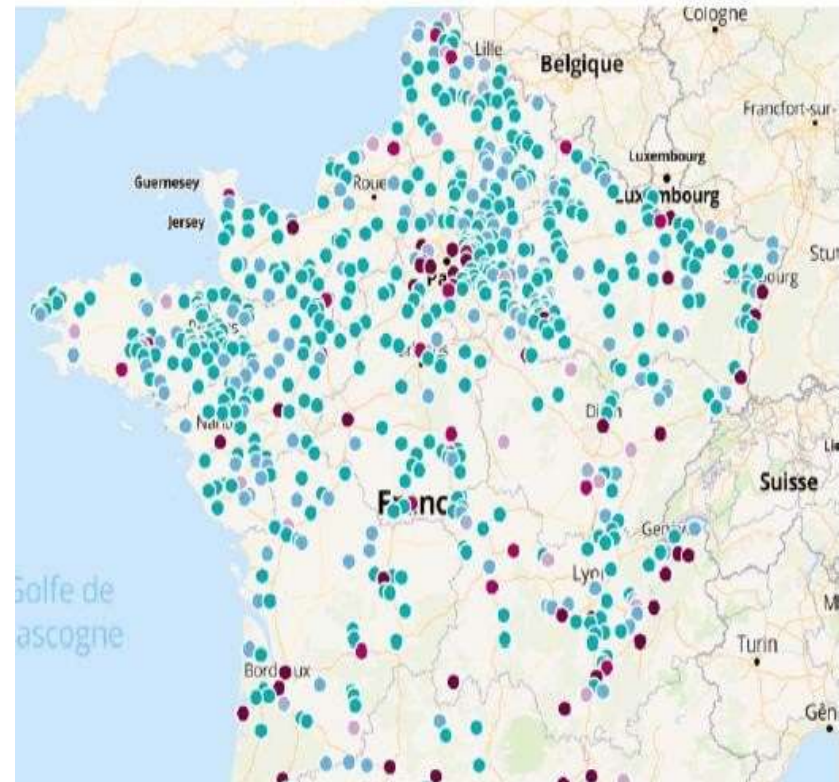
Chatillon-sur-Seine



# Right to inject framework has enabled a steady growth of biomethane production

## A 14 TWh/y capacity by end of 2024

- 4% of overall gas consumption
- 730+ sites injecting in networks. 20% of capacities injecting on the TSO grid
- Significant growth potential
- Emergence of innovative gasification projects





Thank you for your attention.

**natran**

**Siège social**

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## DSO / TSO coordination at local scale to define optimal network adaptation schemes

### Focus on network adaptation schemes

- Masterplanning exercise carried out in each zone of the map
- Identification of reinforcement needs such as reverse flow or meshing.
- 400+ schemes approved by the regulator
- Visibility given to market players on the ability of the networks to accept injection facilities
- Transparency: Upadted map published on our open data platform

