



REPORT ON ANNUAL RENEWABLE GAS INJECTIONS INTO GAS NETWORKS

2026



Renewable gases like biomethane make an indispensable contribution to the energy transition. They can be easily injected into natural gas grids. In this way sustainable and secure molecules can be transported to industry and households without significant infrastructure investments.

In this yearly report mandated by Regulation 2024/1789, ENTSOG shows that such renewable gas injections have increased from 38.1 TWh to 43.2 TWh (approximately 4.3 bcm) over the last two gas years, meaning an annual increase of 12%. The reasons for this increase are new biomethane plants coming online, while in other cases already operational biomethane plants reached their nominal capacity over time, producing and injecting more biomethane into the EU's gas grids.

Concerning the EU's 35 bcm biomethane REPowerEU target for 2030, more support is clearly needed for biomethane as it will be key to enabling the energy transition. Gas TSOs will continue to contribute their part to integrating such gases by providing the necessary infrastructure for biomethane market growth.



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INTRODUCTION

Current gas infrastructure is not only able to transport natural gas, but also biomethane and hydrogen (in smaller quantities), without needing significant infrastructure investments. This added benefit of existing gas infrastructure and its compatibility with renewable gases allows gas offtakers to access decarbonised molecules with existing infrastructure.

Gas Regulation 2024/1789 mandates ENTSOG to publish a yearly overview on injections of renewable and low-carbon gases into the natural gas network.¹ The first report was included in ENTSOG's 2024 Annual Report with data for gas year 2023–2024. With this edition, a separate report has been created. ENTSOG assesses biomethane and renewable hydrogen injections into TSO and DSO grids for the period of 1 October 2023 to 30 September 2025, allowing for a first analysis of changes of such injections.²

DATA SOURCE

For this report, all relevant ENTSOG members were requested to supply data on injections of biomethane and renewable hydrogen into their Member States' gas networks for the given period. This includes data from both relevant DSO and TSO grid injections. ENTSOG received data for all relevant Member States. For Member States with multiple TSOs, ENTSOG requested TSOs to align or to designate one TSO to send the overall data for the Member State.

As a clear definition of low-carbon gases was not available for the relevant gas year, such gases are

excluded from this report until data becomes relevant to this yearly report.³ Flows of e.g. biomethane which take place outside of TSO and DSO grids, for instance on-site consumption, are also outside of the scope of this report.

Concerning comparability with similar reports for biomethane specifically, the approach, sources and time period used are different to – what amongst others – the European Biogas Association publishes in its annual statistics report regarding annual biomethane volumes (e.g. production versus injections, as in this report).

BIOMETHANE INJECTIONS

TSOs are directly involved in providing various types of infrastructure to accommodate biomethane flows:

- ▲ Direct pipeline connections of biomethane plants to TSO grids. This exploits the significant linepack opportunities of TSOs, connections to storages and cross-border connections, allowing for the cross-border trade in biomethane.
- ▲ "Gathering" pipelines owned and operated by TSOs which allow biomethane to be collected and then transported to a high-pressure grid. Such low-pressure pipelines can either be based on existing pipelines or are new builds.
- ▲ Reverse flow installations to allow residual DSO injections to be pumped into TSO grids. Biomethane is produced at a pressure of around 8 bar and can be injected into DSO grids, however the capacity of these grids is limited and they are also mostly not linked to storage assets. When these grids are full, i.e. local demand is not able to fully absorb the biomethane production, reverse flow installations allow the biomethane to be brought to a higher pressure to allow flows into the TSO grid (around 60 bar).

1 Article 26(3i), [Regulation 2024/1789](#): "The ENTSO for Gas shall adopt: ... (i) an annual report including the quantity of renewable gas and low-carbon gas injected into the natural gas network".

2 A gas year is the period 1 October until 30 September of the following year since the winter officially starts on 1 October.

3 [Delegated Act \(EU\) 2025/2359](#) on Low-Carbon Fuels had not been published.

Volumes of biomethane injections in the EU vary strongly between Member States. Therefore, in this report we distinguish between the Member States with injections in larger terawatt-hour ranges and the remaining Member States with gigawatt-hour ranges. This helps to more easily observe changes over time. It should be noted that some Member States do not report any injections – as for instance some have on-site consumption without the need for grid injections, while others have a nascent biomethane sector.

In figure 1, the five largest biomethane Member States saw significant increases of injections in TSO and DSO grids in the last gas year compared to the previous gas year.

France saw a 2 TWh rise in injections, reaching 13 TWh in the last gas year (approximately 1.3 bcm) owing to the ongoing addition of new injection points, and existing production sites reaching their nominal operating levels, as it often takes some time for a site to achieve full output following its initial commissioning.

Germany's volumes increased by more than 1 TWh, to end up at 12 TWh (1.2 bcm), partly due to incentives being introduced to increase renewable energy sources for heating and cooling⁴. Also, some biogas plants supplying to the electricity sector have switched to biomethane injections as their 20-year subsidies have come to an end, thus making it more economical to feed-in biomethane into the gas network rather than burning it to generate power.

Denmark saw a 0.2 TWh increase to 8.3 TWh, while **Italy** underwent strong growth of 0.7 TWh, reaching 4.2 TWh, mainly owing to new incentives schemes introduced⁵ and existing plants more easily being connected to the grid. **The Netherlands** also saw a 0.5 TWh increase between the two gas years, reaching 3.3 TWh, as more biomethane plants were connected to the grid to increase biomethane injections.

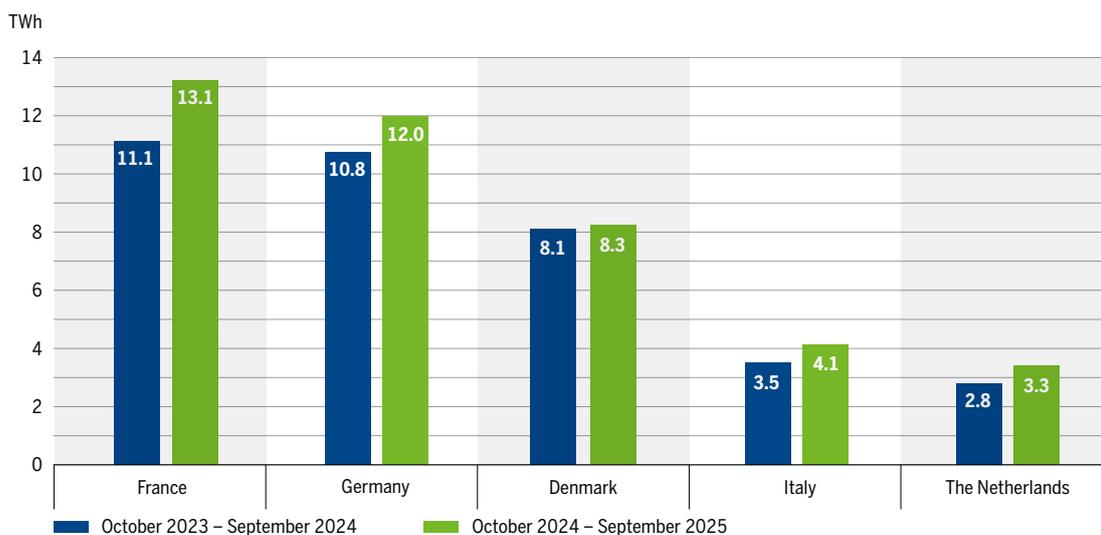


Figure 1: Large volume biomethane countries (injections in TWh)

4 Act on Energy Conservation and the Use of Renewable Energies for Heating and Cooling in Buildings

5 https://www.gse.it/documenti_site/Documenti%20GSE/Servizi%20per%20te/Attuazione%20misura%20PNRR/PRODUZIONE%20DI%20BIOMETANO/Normativa%20Servizi/Decreto%20Ministeriale_Biometano_15-9-2022.pdf

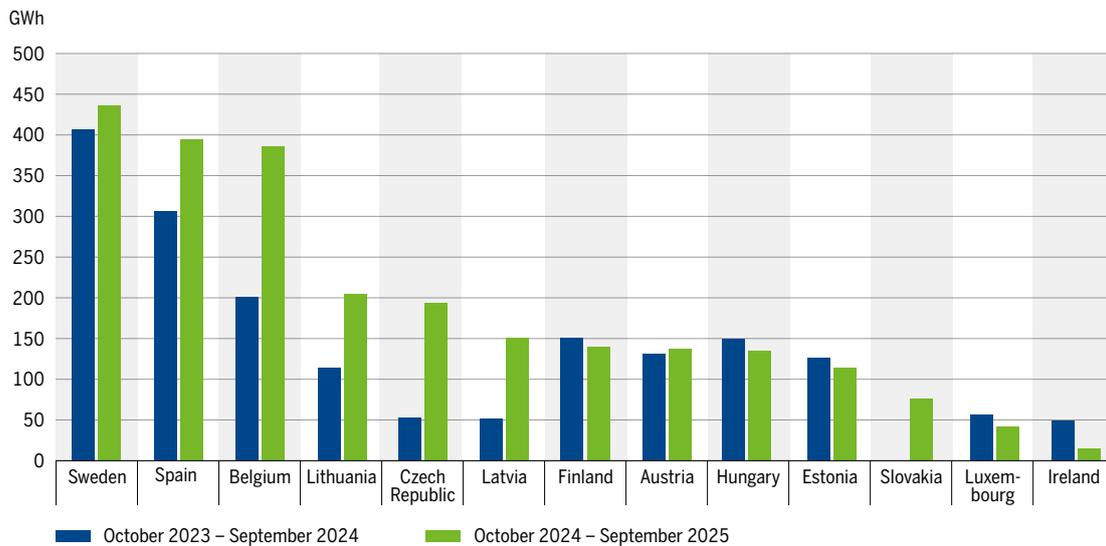


Figure 2: Remaining biomethane countries (injections in GWh)

In the remaining countries (see figure 2), volumes are measured in GWh. **Sweden** saw a 7% increase year-on-year reaching 435 GWh, while **Spain's** injections grew by 30% to 394 GWh. **Belgium's** injections doubled relative to the previous gas year, reaching almost 400 GWh owing to a significant increase in the number of active production sites and plant size. The **Czech Republic's** injections rose four-fold to 200 GWh, as the number of facilities rose from 2 in 2019 to eleven in 2024, and the modernisation of existing biogas stations meant that some of these could start injecting pure biomethane into the gas network.

In **Lithuania**, biomethane volumes nearly doubled due to the expansion of injection infrastructure. Two additional biomethane injection points were connected to the transmission system – one in May 2025 and another in July 2025 – increasing biomethane supplies for the last gas year.

Slovakia started injecting its first biomethane, reaching 75 GWh, a milestone for the country. Lastly, in **Poland** a new 45 MW biomethane plant has started injecting into the gas grid⁶, however these Polish volumes took place after September 2025 and are therefore not in this report's scope.

A table is presented in the annex with all the data shown in the above figures.

RENEWABLE HYDROGEN INJECTIONS

As in the previous gas year, renewable hydrogen was only injected into the German system. Volumes decreased from 3 GWh to 1 GWh.

CONCLUSION

Overall, we see that renewable gases injections (almost entirely biomethane) have mostly increased across the relevant Member States. In total, 43.2 TWh was injected into TSO and DSO grids across the EU, up from 38.1 TWh in the previous gas year, equating to a growth of 12%. Overall,

more biomethane plants came online, while in other cases already operational plants reached their nominal capacity over time, producing and injecting more biomethane.

The five largest Member States accounted for 94% of the total renewable gas injections.

6 <https://www.europeanbiogas.eu/news/conversation-with-michal-tarka-polish-biomethane-organization/>

ANNEX I

In the below table the volumes of biomethane injections (GWh) for gas years 2023–2025 can be found for Member States which injected biomethane in their gas networks.

	October 2023 – September 2024 (GWh)	October 2024 – September 2025 (GWh)
France	11,094	13,053
Germany	10,813	12,007
Denmark	8,084	8,266
Italy	3,487	4,148
The Netherlands	2,789	3,279
Sweden	407	435
Spain	305	394
Belgium	201	385
Lithuania	116	204
Czech Republic	52	194
Latvia	53	151
Finland	150	139
Austria	129	138
Hungary	150	135
Estonia	127	115
Slovakia	0	75
Luxembourg	57	43
Ireland	48	15
Total	38,061	43,176



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