

# Gas blending: the bridge to a decarbonised network

Gas blending means lower-carbon gases can be combined with natural gas in the network. This can benefit the UK's energy transition by:

- Using existing gas network infrastructure, minimising upfront costs
- Enabling a controlled, gradual transition that can overcome safety and practical challenges
- Giving time for low-carbon gases to securely meet demand capacity
- Supporting energy-intensive and hard-to-transition sectors to reduce emissions
- Creating a baseline demand for hydrogen from which the market can develop

## Which gases are being blended?

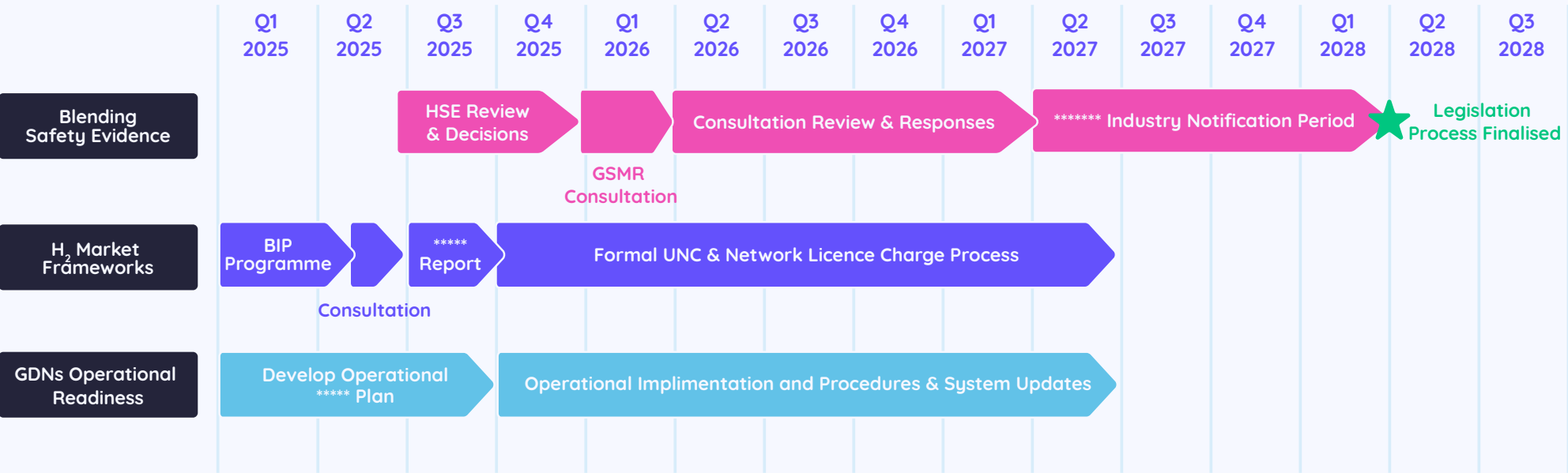
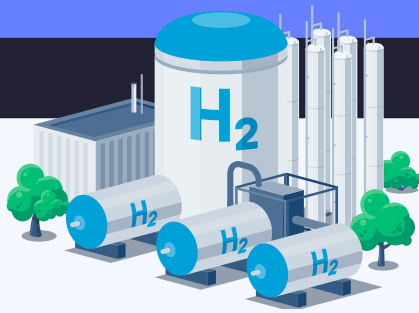


The UK Government aims to produce 10GW of low-carbon hydrogen by 2030, and 50GW of capacity by 2050.



The UK Biomass Strategy sets out that 11TWh of biomethane is currently being produced, with the potential to exceed 100TWh.

## What's the UK's gas blending plan?



Up to 20%

hydrogen blending into the gas distribution network supported by the UK Government.\*

6.8 TWh

of biomethane domestically produced and injected into the grid in 2022.\*\*

The UK Government is supporting gas blending as part of its decarbonisation strategy.

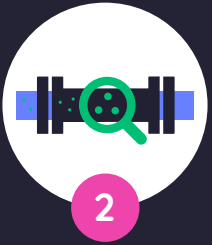
- Safety trials led by the Health and Safety Executive and further research and assessment decisions are underway.
- The UK Hydrogen Strategy was last updated in December 2024.
- A call for evidence into biomethane production closed in April 2024, the strategy is outstanding.

## Step-by-step: how gas blending works



### Production:

blending facilities carefully mix gases to precise, safe proportions using advanced sensors, real-time monitoring and control systems.



### Transportation:

the gas blend is transported through existing or new pipelines, with its quality being closely monitored.



### End Use:

blended gas is then delivered and used in homes and industrial processes.

## Benefits of using gas blending to decarbonise

Gas blends can be supplied via existing gas networks, meaning **no costly, disruptive infrastructure upgrades are required.**

Gas blends maintain a **reliable supply** while the production capacity of low-carbon alternatives scales up.

The composition of gas can be **flexed to ensure a reliable, robust supply**, even in times of peak demand.

\* Hydrogen blending in GB distribution networks: strategic decision

\*\* Future Policy Framework for Biomethane Production