



Bringing Hydrogen to the Gas Network

Cadent
Your Gas Network

Who We Are

- 6000 colleagues working across four gas networks across the UK.
- We ensure the constant flow of gas, provide emergency response and repair services, and conduct asset replacement work 365 days a year.
- We have an uncompromising commitment to safety, reliability and keeping our customers safe and warm 24/7.
- We have a track record of exceeding expectations.
- 11 Million Connections.



What We Do

Gas Distribution

In the UK, gas leaves the transmission system and enters the distribution networks at high pressure.

It is then transported through a number of reducing pressure tiers until it is finally delivered to consumers.

There are eight regional distribution networks in the UK, four of which Cadent own.

Cadent distribution networks use over **130,000km of pipeline** to deliver gas to around **10.9 million customers**.

Cadent also **manage the gas emergency number** for all the gas distribution networks and other UK transporters. **Cadent are the first point of contact** for anyone in the UK that **needs help** with their gas supply.

The national gas distribution network is not simply a commercial resource, but a national asset that our people safeguard for future generations.



Net Zero

A future for gas

- **Net Zero target** – significant change from 80%
- **Major progress in decarbonising electricity**
- **But heating and transport?**
- **A whole systems approach** that makes the best use of existing infrastructure
- Ensuring storage capacity and peak demand



Hydrogen HyDeploy

- **20% Hydrogen Blend**
- **No impact** on customers
- **Key step** on journey towards Net Zero
- Generate hydrogen through **electrolysis**
- HSE approved Phase One trial – hydrogen blend being delivered as we speak at Keele
- HyDeploy is being delivered by the HyDeploy consortium – led by Cadent and Northern Gas Networks, alongside Progressive Energy Ltd, Keele University, HSE – Science Division and ITM Power

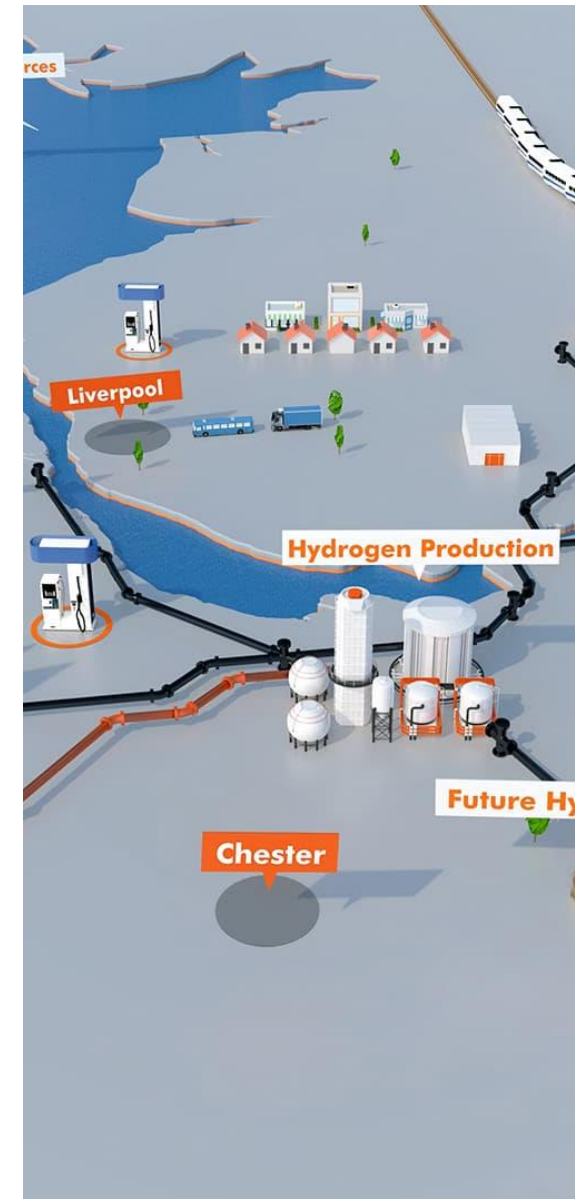
Hydrogen

HyDeploy - Impact

- If a 20% blend were to be rolled out across Britain, it would **reduce emissions of CO2 by six million tonnes** - equivalent to taking 2.5 million cars off the road
- Phase 2 – public trial in the North East
- Phase 3 – public trial in the North West

Hydrogen HyNet

- **HyNet North West is a hydrogen energy and Carbon Capture, Usage and Storage (CCUS) project**
- HyNet is based on the production of hydrogen from natural gas. It includes the development of a new hydrogen pipeline; and the creation of the UK's first CCUS infrastructure
- Phase 1 of HyNet is underway. It will provide detailed delivery and costs evidence to inform the full engineering design work expected in the early 2020s



Q & A

**Further information
available at:**

www.cadentgas.com