

Hydrogen Village Factsheet:

1 Why is the Hydrogen Village programme important?

We all have a part to play in fighting climate change. In Whitby, the Hydrogen Village programme could lead the way in demonstrating how the rest of the UK can become more environmentally-friendly when it comes to heating and cooking with gas.

This factsheet is designed to give you more information about the programme, who's involved in delivering it, and why it's so important.

What is the Hydrogen Village programme?

Most UK homes and businesses rely on natural gas, a fossil fuel, for heating and cooking. This accounts for about 23% of the UK's carbon dioxide emissions. Moving to low-carbon hydrogen gas for heating and cooking is one of the ways to help solve this issue.

The Hydrogen Village programme is one of the key commitments of the Government's **Ten Point Plan for a Green Industrial Revolution**. It could help to demonstrate how a low-carbon alternative to natural gas could be used in the country's homes and businesses, by converting around 2,000 properties to run on hydrogen for a period of two years.

Who is running the Hydrogen Village programme?

Cadent – the North West's Gas Distribution Network (GDN) – has put forward a proposal to Ofgem (the energy regulator for Great Britain) and the Government to deliver the Hydrogen Village in Whitby. Together with our partners at British Gas, we're now engaging with local residents and businesses to understand their needs and gather feedback.

As part of the programme, we are also working with Cheshire West & Chester Council, energy regulator Ofgem and the Health & Safety Executive.

Is this the only programme of its kind?

Whitby won't be the first place to see homes and businesses heated with 100% hydrogen. In the UK, a Hydrogen Neighbourhood programme will take place first, involving around 300 homes in Fife.

The Government plans to deliver a larger Hydrogen Town programme by 2030. There are also other Hydrogen Village projects taking place in Europe.

Did you know?

The Hydrogen Village will help inform a key decision from Government in 2026 on the future plan for heating in the UK.

Got any further questions?

Call us on 0800 035 3371 (Freephone), send us an email at enquiries@hydrogenvillage.com or pop in to see us at the Hydrogen Experience Centre, McGarva Way, Whitby CH65 9AB

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Why is hydrogen good for net zero?

The UK Government has committed, in law, to reach net zero carbon emissions by 2050. It is also proposing to ban the installation of natural gas boilers in homes from 2035. This means that environmentally-friendly alternatives to natural gas need to be fully explored.

The UK Government has already established that electric heat pumps will be a key solution for heating. They are also exploring heat networks and hydrogen because there are some difficulties with electrifying everything. This includes the cost of the technology, the suitability in some homes, the ability of the electricity network to cope and the costs of achieving this. Exploring the potential for hydrogen to help fill the gap is why Government wants this programme to happen.

Hydrogen offers a low carbon alternative to natural gas because, when it's burned as a fuel, it doesn't produce harmful CO₂ emissions. It can be made in the UK and also works in a very similar way to natural gas, meaning only limited changes are needed to gas pipes and homes, for hydrogen to be used for heating, hot water, and cooking.

The benefits of hydrogen

- ✓ **Home grown energy:** Low carbon hydrogen can be made in the UK.
- ✓ **Removing carbon emissions from heating:** Unlike natural gas, when hydrogen is burned as a fuel, it doesn't produce CO₂ emissions.
- ✓ **Boosting jobs and growth:** Developing a UK hydrogen economy could support over 12,000 jobs by 2030, according to analysis by the Department for Business, Energy & Industrial Strategy (BEIS).
- ✓ **Using existing infrastructure:** Lots of work is already underway to make the North West's gas pipes hydrogen-ready.
- ✓ **A simple change:** Most of the UK's homes already use gas boilers. These can be replaced with similar versions that run on hydrogen.
- ✓ **Diverse energy system:** Like today, it's important that we don't rely on just one source of energy to heat our homes. A diverse, low carbon energy system is vital to reaching net zero, whilst ensuring our energy supply is resilient.

Further information

Please visit hydrogenvillage.com/information-hub where you'll find our handy information library on all things hydrogen.