

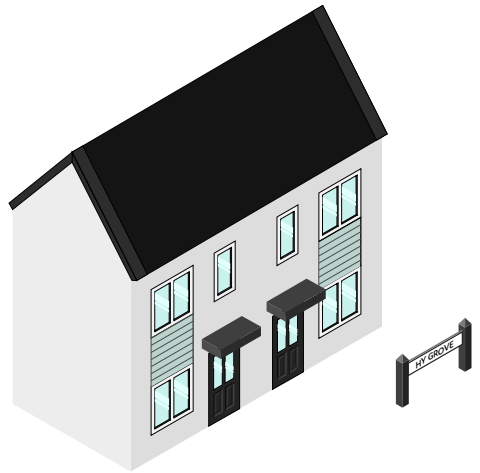


About the project

Hydrogen Homes were officially opened to the public in July 2021 by the Energy Minister. Hydrogen Homes will remain open for 3 years, and will be used to showcase all the hydrogen appliances and educated everyone about hydrogen being used as a fuel.

The two semi-detached, modular built houses are located near Winlaton, Gateshead.

They were built by Northern Gas Networks in partnership with Cadent and the Government's Department for Business, Energy and Industrial Strategy (BEIS)



With the exception of the meters, the appliances installed in the Hydrogen Homes have been developed and manufactured in the UK.

Unlike the natural gas we use today, hydrogen doesn't create any carbon emissions when it is used. The homes demonstrate how we can continue to heat our homes and cook our food as we do today, by using hydrogen appliances.



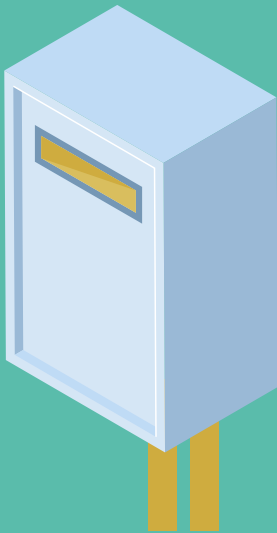
Fun Facts

Hydrogen burns with a less luminous flame than other fuels which can make it appear invisible.

The flames on the hydrogen cooker at the homes are **orange**.

The flame starts less luminous but as it warms up and interacts with the atmosphere it becomes orange.

We call this the **sunflower flame**, because of its appearance.



We have hydrogen boilers developed by Worcester Bosch and Baxi installed at the houses.

Both boilers installed and commissioned at Hydrogen Homes are 'Hydrogen Ready'.

This means they can be installed to use the natural gas we use today and converted to hydrogen when the gas supply is changed.

The boilers are the same size and work in the same way as today's gas boilers.

They heat up your hot water and central heating in the same way as the gas boilers used today so you can't tell the difference.



We have two meters installed and working at Hydrogen Homes.

The meters have been manufactured in Italy and developed by Pietro Fiorentini and MeterSit. The meters are designed to fit in the same meter box that you currently have at home. They provide a reading, just like today's natural gas meters and can be used in the same way.

The clever design of the meter developed by Pietro Fiorentini means that the meter can be used for natural gas or a blend of up to 20% hydrogen, and can be converted to Hydrogen with a remote software update.

STEM and Careers

A switch to hydrogen would bring lots of new jobs and opportunities. The Government estimates that in 2030 the UK hydrogen economy could be worth £900m and support over 9,000 jobs. By 2050 the hydrogen economy could be worth up to £13 billion and support up to 100,000 jobs. The jobs will mainly be in science, engineering, manufacturing, transport and a huge range of roles in the supply chain, including IT, construction, and training.

The UK could become a leader in green energy and the skills that people develop would be in demand around the world, enabling low-carbon hydrogen to contribute to the global transition to net zero.



If you have any questions or if you would like to come along to see the Hydrogen Homes, please email hydrogenhome@northerngas.co.uk and we will look to get you booked in for a visit!