HYDROGEN BLENDING FACTSHEET

Community Blending Project

Hydrogen

With its ability to provide <u>energy without carbon</u>, hydrogen presents an exciting opportunity for ATCO, Australia, and the world, and is becoming <u>central</u> to decarbonisation plans around the globe. Blending hydrogen into natural gas networks is <u>safe</u> and already happening in Australia, as well as Canada, Europe and Hawaii.

For the hydrogen blending project, ATCO will be producing hydrogen from renewable energy through electrolysis. Electrolysis is a process that splits water into its basic elements – hydrogen and oxygen-using an electric current. The electricity used in the process comes from renewables such a wind, hydro power and solar energy.

Is Hydrogen Safe?

Yes! As with natural gas, hydrogen can be produced, transported, stored and used safely. Just like natural gas, it must be treated with respect, proper care and handling.

- Hydrogen is a colourless, odourless, tasteless, non-toxic and non-poisonous gas.
- When burned, it produces only heat and water vapour with no carbon emissions.

ATCO Hydrogen Blending Project

Overview

- Starting in Q4 2022, ATCO will inject a small amount of hydrogen (2–5%) into a portion of the natural gas distribution network around Calleya Estate, Treeby Estate and Glen Iris within the City of Cockburn.
- Supported by the Western Australian (WA) Government, this project will be one of the largest of its kind in Australia, at around 2,700 customers. These customers will be the first in Western Australia to use blended hydrogen.
- The blending of hydrogen into the natural gas network, will help achieve the WA Government's goal of distributing renewable hydrogen in the WA gas network by 2022 and take steps towards the longer-term goal of blending up to 10% network-wide by 2030.
- Renewable hydrogen will be produced via electrolysis at ATCO's nearby Jandakot Operations Centre Clean Energy Innovation Hub, where ATCO will monitor and blend hydrogen by volume, then deliver it to customers through our existing pipeline.

H₂ Possibilities Hydrogen has the potential to play an important role in a clean energy future.













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Blended Gas Areas

Calleya Estate, Treeby Estate and Glen Iris within the City of Cockburn





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How will this impact my Home or Business?

- Extensive testing has found that hydrogen blended into natural gas systems at ratios up to 20% does not impact modern appliances¹.
- There will be no interruption to your gas supply as we transition from non-blended to blended gas
- Residents will not notice any change in your gas supply at up to 5% blended gas. The look, sound and smell of the gas will remain consistent.
- There will be a minor increase in the volume of gas needed throughout the network in order to provide the same amount of heat to homes and businesses. However, because customers pay for energy consumed, not volume, there will be no change to your monthly bills.

Home and Business Inspections

- ATCO is available to visit homes and businesses within the blended gas area to inspect your gas appliances and current natural gas supply prior to the commencement of the blending project.
- Appliance inspections will be completed by a qualified ATCO Gas Inspector and will take one hour to complete.
- Inspections will check and collect information on your current natural gas appliances and the integrity of the natural gas pipe supplying your home or business.
- If you would like to arrange an inspection of your natural gas appliances, please contact ATCO on 13 13 56.

ATCO

For More Information

- If you would like to speak to our friendly team please phone 13 13 56 and select option 1 for Hydrogen
- Email your questions to h2australia@atco.com



ATCO, Gas Division

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¹Data sourced from various studies and www.energynetworks.com.au/ news/energy-insider/2022-energy-insider/hydrogen-in-the-home-gasnetworks-is-closer-than-you-think/