

Renewable Gas

We're changing gas, for good.

Find out more

If you have any further questions about renewable gas, or would like to be kept informed, get in touch:



Go online and visit
agn.com.au/renewablegas




Email our project team at
communityengagement@agig.com.au



Call 1300 001 001 and press option 8
to speak to our friendly team

 **Australian Gas
Infrastructure Group**

 Hydrogen
Park

 Dampier Bunbury
Pipeline

 Multinet
Gas Networks

 Australian
Gas Networks

Australia's National Hydrogen Strategy sets a vision for a clean, innovative, safe and competitive hydrogen industry that benefits all Australians.

It aims to position our industry as a major global player by 2030.



A cleaner energy future

Australia's gas sector is on the pathway to a cleaner energy future.

Australia is committed to reducing carbon dioxide emissions to between 26% and 28% below 2005 levels by 2030 and each Australian state and territory is targeting net zero emissions by 2050 or earlier.

Natural gas is an important part of our energy mix. We use it in homes and businesses to heat our buildings, heat water and to cook. It is also used by many large industries and to generate electricity. Compared to other energy sources, it is already lower

carbon – providing 44% of Australian household energy but only 13% of household greenhouse gas emissions.* But we can do more.

Australia's gas sector is on the pathway to a cleaner energy future.

We can achieve this by using renewable or carbon neutral gas, such as hydrogen.

* www.energynetworks.com.au/projects/gas-vision-2050/

Kickstarting the Hydrogen Economy

The future of gas is bright. As a business we are taking active steps to contribute to a low carbon economy.

HyP SA is an Australian first project that will deliver renewable hydrogen gas to customers through our existing gas distribution network.

Located at Tonsley Innovation District, HyP SA produces renewable hydrogen through a process called electrolysis.

Hydrogen is a gas of the future, providing a safe, convenient zero emissions fuel for households and businesses.

Hydrogen is produced using a 1.25MW Siemens Proton Exchange Membrane electrolyser – currently the largest of its kind in Australia – which splits water into hydrogen and oxygen using renewable electricity.

Blending hydrogen with natural gas helps to achieve our emissions goals because, when burned, hydrogen does not release any carbon emissions (only water vapour and heat). That means if we blend renewable hydrogen with natural gas for domestic use, the blended gas will produce less carbon than 100% natural gas.

“Hydrogen’s time has come”

Dr Alan Finkel, Australian Chief Scientist

Our low carbon strategy

Gas is essential to our economy and modern lifestyles, providing nearly a quarter of Australia’s total energy supply. Overall in Australia natural gas is currently cleaner than electricity delivered by the grid, but there’s more we can do to deliver emissions reductions, while also contributing to energy security and ensuring costs remain as low as possible.

On our distribution networks, AGIG is targeting 10% renewable (carbon-free) gas by volume by 2030, and offering 100% renewable gas to new home estates by no later than 2025. Our aim is to fully decarbonise our distribution networks by 2040 as a stretch target and by no later than 2050. This is consistent with Australian state and territory ambitions which collectively target being net zero carbon by 2050.

For our midstream and transmission assets we will continue to deliver for our customers. This means providing the infrastructure solutions required for their businesses, including by working with them to develop renewable gas solutions, such as blended and pure renewable gas products - enabling customers to transition towards net zero consistent with their preferred timing.

We will also work to reduce the direct scope one and two emissions from our transmission and midstream assets, including the Dampier to Bunbury Natural Gas Pipeline.

Hydrogen Fast Facts

Hydrogen is the simplest and most abundant molecule in the universe

Hydrogen is colourless, odourless, non-toxic and an excellent carrier of energy

When burned, hydrogen produces only heat and water vapour – no carbon emissions

Like natural gas, hydrogen can be used to heat buildings and power vehicles

Research indicates that net zero emissions from gas networks can be reached with hydrogen at half the cost of electrification*

Hydrogen production through electrolysis brings together gas and electricity networks, using the gas network like a giant battery to store excess renewable electricity

A hydrogen economy will deliver economic benefits by harnessing its strengths as an excellent energy carrier to deliver wind and sun energy to new and existing industries, including export

* Frontier Economics, 2020.

Benefits of a Hydrogen Economy



Jobs
Building a new industry and jobs for Australians



Economic benefit
Enhanced fuel security with potential to supply the world through export



CO₂ savings
Lowest cost decarbonisation for customers



New industry
Decarbonisation of industry through tube trailer



Sector coupling
Coupling gas and electricity networks to allow efficient use of renewable electricity

Gas customer benefits



Safe
Approvals by government and regulators



Easy for customers
No difference to gas service



Billing
Customers in the network area of our demonstration project, HyP SA, are paying no more for the 5% hydrogen blend than natural gas

How is it made?

The hydrogen we plan to deliver to your home is produced by an electrolyser from water.

