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MEDIA RELEASE

SA company to play leading role in Australian renewable energy pilot plant "first"

South Australian company, Australian Gas Networks - the country's largest gas distribution business - today announced it will play a crucial role in the establishment of an Australian first pilot plant to produce hydrogen from water for injection into gas networks. This is the first step on the journey to a zero emissions gas network.

The company will partner with Wollongong-based AquaHydrex, which will design and build an electrolyser pilot plant at Kidman Park, in Adelaide's western suburbs.

This follows an announcement by the Federal Government's Australian Renewable Energy Agency (ARENA) that it has provided \$5 million in funding to AquaHydrex to commercially develop a prototype electrolyser to produce hydrogen from water.

The pilot plant will trial injecting a small portion of hydrogen into the South Australian natural gas grid - in a process known as "power-to-gas".

Power-to-gas involves using electricity to produce hydrogen by splitting water, then injecting this into the gas grid, providing long-term energy storage and stabilisation of intermittent solar and wind power, as well as making use of excess and unwanted wind power.

The trial of the innovative new type of electrolyser could see excess renewable energy stored in the gas grid and used to decarbonise Australia's gas supply.

"We are delighted that South Australia will lead the way with this pioneering technology," Australian Gas Networks (AGN) Chief Customer Officer, Mr Andrew Staniford, said today.

"AGN has been proactively seeking innovative projects to partner with, and AquaHydrex's revolutionary IP meets that criteria and has untapped potential.

"In the trial, we will use the hydrogen in our natural gas network, where it will be blended with natural gas to decrease carbon content and thereby reduce emissions.

"Producing hydrogen from water using renewable energy and electrolysis technology has enormous potential in the global energy market.

"The pilot plant will show how the natural gas networks can be decarbonised and how renewable energy can be used efficiently.

"The volumetric capacity of renewable energy stored in Australian gas infrastructure is equivalent to as much as 6 billion household Li-ion batteries

"This provides what is for all intents and purposes a 'bottomless battery' that is already in place and capable of storing and transporting vast amounts of time-shifted renewable energy."

This project demonstrates our commitment to implementing Gas Vision 2050's plan of decarbonising the natural gas networks and delivering affordable, reliable and low emission energy to our customers.



Maiden hydrogen production is due late next year.

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About Australian Gas Networks (AGN)

AGN is Australia's largest distribution company serving over 1.2 million consumers in South Australia, Victoria, Queensland, New South Wales and the Northern Territory.

It owns approximately 25,000 kilometres of natural gas distribution networks and 1100 kilometres of transmission pipelines.

AGN operates natural gas networks in South Australia (mostly Adelaide), Victoria (mostly Melbourne) and Queensland (mostly Brisbane), as well as in smaller centres in New South Wales (Albury & Wagga Wagga) and the Northern Territory (Alice Springs).

Each year, it invests around \$250 million in its networks to reach new areas, improve supply and replace old gas mains.

About Gas Vision 2050

Gas Vision 2050 is a comprehensive collaboration between key industry organisations - Energy Networks Australia, the Australian Petroleum & Exploration Association (APPEA), Australian Pipeline and Gas Association (APGA), Gas Energy Australia (GEA) and the Gas Appliance Manufacturers Association of Australia (GAMAA). It describes an aspirational and attainable future for gas across Australia's economy, highlighting how gas and renewables can support each other to achieve a near zero carbon energy sector by 2050 across homes, cities, industry and power generation. More information about Gas Vision 2050 can be found on www.australiangasnetworks.com.au