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21 February 2018

MEDIA RELEASE

Australian-first, $11.4 million hydrogen demonstration plant to be built in Adelaide

An Australian-first, $11.4 million demonstration plant that will produce hydrogen from renewable energy will be built in Adelaide.

Adelaide-based Australian Gas Infrastructure Group (AGIG) – the country's largest gas distribution business – will construct and operate the state-of-the-art plant at Tonsley Innovation District, in Adelaide's southern suburbs.

This follows a $4.9 million grant from the South Australian Government through its $150 million Renewable Technology Fund.

The power-to-gas demonstration plant – to be called Hydrogen Park SA (HyP SA) – will produce hydrogen from renewable electricity, which will then be injected into the local gas distribution network at the Tonsley Innovation District south of Adelaide to provide low-carbon gas to homes and businesses.

"We are delighted that South Australia will lead the way with this pioneering technology," AGIG Chief Customer Officer, Mr Andrew Staniford, said today.

"The aim of the demonstration plant is to reflect how energy will be provided to businesses and homes in the future," he said.

"It will also illustrate the complementary nature of gas and electricity in meeting the decarbonisation challenge – a key in balancing the energy trilemma.

"The project is expected to be the first in Australia where renewable electricity is stored and distributed in the gas network as hydrogen, providing an additional market for fluctuating renewable electricity and thereby also improving the economics of renewable electricity.

"And importantly, it propels South Australia's status as a leader in renewable technology and a first mover in hydrogen.

"AGIG is committed to leadership in the decarbonisation of Australia's energy supply.

"This project will provide an opportunity to develop an Australian-first integrated hydrogen project which paves the way for the commercial deployment of a hydrogen economy."

The ground-breaking project will involve the construction of a hydrogen production and distribution facility using a 1.25MW PEM electrolyser to produce hydrogen utilising electricity from the grid and potentially on-site solar.

The produced hydrogen will then be injected into AGIG's local gas network to power the Tonsley Innovation District– but with the ability to be expanded to supply a proposed residential development in the area and other remote customers through tube and trailer facilities.

Mr Staniford said key features of the pilot plant include it;

- being one of the largest PEM-electrolysers in Australia;

- is expected to be Australia's first integrated hydrogen-electricity-gas project;
- involves SA-based energy leaders working together;
- decarbonises gas supply including to a green-gas residential development;
- provides for a hydrogen Centre of Excellence facilitating education, training, research and engagement, and;
- expediting research and development which will inform and accelerate a commercial hydrogen economy.

The project is the first step on the journey to a zero emission gas network.

This project also demonstrates AGIG's 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 in mid-2020.

AGIG's project partners are Siemens, SA Power Networks and KPMG.

Siemens Australia Chairman and CEO, Mr Jeff Connolly, said: "Hydrogen holds exciting potential for Australia, and it's great to be partnering with the South Australian government and Australian Gas Infrastructure Group delivering proven and world leading hydrogen technology.

"It's pleasing to see hydrogen become reality since we began driving this conversation in Australia only a few short years ago," he said.

"By reticulating hydrogen into the gas network it supports de-carbonisation of the state. It also supports the development of a domestic market for hydrogen which I believe can lead to Australia becoming a world energy superpower if we harness the untapped renewable assets of the country."

SA Power Networks Manager Network Strategy, Mark Vincent, said: "As renewable generation continues to grow in South Australia, technologies that can convert and store energy at times of surplus will become an increasingly important part of the energy mix.

"SA Power Networks is pleased to support this exciting project which will explore the potential for hydrogen electrolysis to help balance electricity supply and demand, maximise the benefit from renewable energy, and contribute to stability of the electricity grid."

Mr Staniford said: "Hydrogen is an emerging industry, with real potential to develop into a global commodity utilised by homes, business, industry and vehicles.

"Given the early nature of the technology, it is key to bring together government, industry and researchers in one facility to work together to ensure these opportunities are realised and to educate and train our community," he said.

"Our hydrogen Centre of Excellence (CoE) will capture and report on the learnings across the Hydrogen Park-SA project.

"An example of these research opportunities includes the interaction of electrolysers with the national electricity grid, the ability of electrolysers and the gas grid to assist in maintaining electricity grid stability and operation of a hydrogen house."

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About Australian Gas Infrastructure Group (AGIG)

Adelaide-based Australian Gas Infrastructure Group (AGIG) came together following the acquisition of the DUET Group by the CK Infrastructure Holdings led consortium, combining the operations of Australian Gas Networks (AGN), the Dampier Bunbury Pipeline (DBP) and Multinet.

Its origins date back almost 150 years to the gas distribution networks of the former South Australian and Brisbane Gas Companies, and the Gas and Fuel Corporation of Victoria.

The Group has a long history of gas pipeline ownership with about 34,000km of natural gas distribution networks and over 3500km of transmission pipelines across South Australia, Victoria, Queensland, New South Wales, Western Australia and the Northern Territory.

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