

Hon Dan van Holst Pellekaan MP Minister for Energy and Mining

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Australia's largest electrolyser arrives at Hydrogen Park SA

The installation of Australia's largest hydrogen electrolyser at Tonsley Innovation District marks a significant milestone in the Marshall Government's plans to deliver cleaner, more affordable energy to South Australian households and businesses.

"Hydrogen is a fuel with tremendous potential and the Marshall Government is getting in on the ground floor to ensure we can service local, national and international demand for zero carbon hydrogen," Minister for Energy and Mining Dan van Holst Pellekaan said.

"The 1.25-megawatt Siemens Proton Exchange Membrane electrolyser will remove carbon from South Australia's gas supply by using renewable electricity and water to create zero carbon hydrogen gas.

"Once operational, the electrolyser at HyP SA will be capable of producing up to 480kg of hydrogen per day that will supply more than 700 properties in nearby Mitchell Park with a blend of up to 5 per cent renewable hydrogen delivered through the existing gas network.

"HyP SA is an \$11.4 million demonstration project delivered and funded by Adelaide-based Australian Gas Networks, part of the Australian Gas Infrastructure Group (AGIG) and supported by a \$4.9 million grant from the South Australian Government's Renewable Technology Fund.

"This exciting renewable hydrogen generation project showcases to the world how electrolysers can integrate gas and electricity networks to support whole of system energy stability, particularly as more renewable electricity generation capacity comes onto the grid.

"It will additionally demonstrate the feasibility of blending hydrogen into the broader South Australian gas network and inform the South Australian Government's planning on how we transition to a low-carbon gas distribution network."

Minister van Holst Pellekaan added that the innovation taking place at HyP SA is an example of the Government delivering on its plan to facilitate investment in hydrogen infrastructure and integrate hydrogen into our energy system, as set out in South Australia's Hydrogen Action Plan.

"The learnings from HyP SA will be shared with the \$4.15 million state and federally co-funded Australian Hydrogen Centre to deliver a range of studies from blending small amounts of hydrogen to the full conversion of South Australia and producing energy in cleaner, smarter ways.

"The outcomes of this project are part of the State Government's ambition to blend up to 10 per cent renewable hydrogen in South Australia, with the ultimate goal of 100 per cent hydrogen conversion in towns, cities and states across Australia.

"Importantly, there is no additional cost to customers who will receive the blended 5 per cent renewable gas as part of this project, and the change will not impact any arrangements they have with their existing natural gas retailer.

“So, not only will customers taking part in this project play a part in a clean energy future, they will not notice any disruption or difference in the supply of their gas needs,” he said.

AGIG’s Chief Executive Officer, Mr Ben Wilson, said that the delivery of Australia’s largest electrolyser to site at HyP SA was a significant milestone.

“This project demonstrates Australia’s gas networks are hydrogen ready. HyP SA will be an Australian first to deliver renewable hydrogen made from water, sunshine and wind, to homes and businesses through our existing gas network.

“Importantly, it meets widening community recognition of hydrogen’s benefits, and underlines South Australia’s status as a leader in this emerging industry with real potential to deliver jobs and growth for residential, commercial, industrial and export applications,” he said.

Mr Wilson added that innovative renewable hydrogen projects such HyP SA illustrate the ability of the nation’s gas networks to meet the decarbonisation challenge – a key in balancing the energy trilemma.

“At AGIG, we are investing in the long term interests of our customers and the environment.

“This project paves the way for the commercial deployment of a hydrogen economy as we seek to deploy 10 per cent renewable gas in our networks before shifting to the potential conversion of entire networks”.