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Department of State Growth
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Via email: hydrogen@stategrowth.tas.gov.au

Energy Networks Australia's submission to the draft Tasmanian Renewable Hydrogen Action Plan

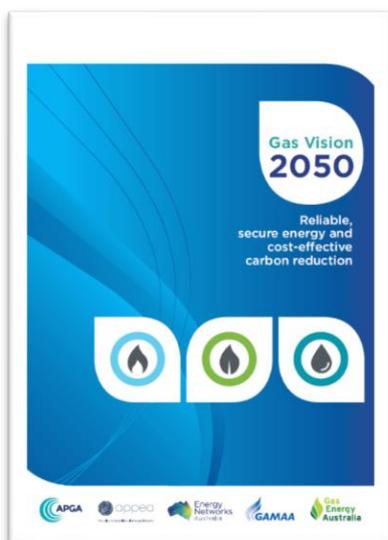
Energy Networks Australia welcomes the opportunity to comment on the draft Tasmanian Renewable Hydrogen Action Plan.

Energy Networks Australia is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

Our gas distribution businesses manage more than five million connections to Australian households and businesses. Connections have grown at about 100,000 new connections a year over the past decade. The gas supplied through these networks provides 44 per cent of the annual energy consumption of homes around the country.

To date, the focus of decarbonisation has been on the electricity sector, but gas networks are on their own decarbonisation journey. New fuels, such as biogas and hydrogen, have the potential to become mainstream and complementary energy solutions that will use existing energy infrastructure.

Gas Vision 2050 outlines industry's journey to decarbonise the use of natural gas in homes, businesses and industry. Since the launch of the document in March 2017, many hydrogen related activities have commenced. Energy Networks Australia believes that hydrogen represents cross sectoral opportunities, where existing infrastructure can be utilised to support domestic and export industries.



We support hydrogen development for export and domestic use, but as gas networks our focus is on hydrogen's use domestically for household heating and cooking and energy storage to back up renewable generation. Replacing natural gas with renewable gas will deliver a safe, reliable and zero-emissions fuel for customers.

We understand that the best way to develop a strong export market for hydrogen is to first develop a strong domestic market.

Energy Networks Australia has been heavily engaged in the development of hydrogen policy and innovation in Australia. Last October, we published a summary document identifying that since the launch of Gas Vision 2050, more than \$180 million has been allocated to hydrogen innovation projects led by our

members and industry partners around the country. Some of these are operational and others will start

this year. The next step in the transition is to deploy hydrogen at scale through blending at significant volumes within networks to complement natural gas, moving towards full decarbonisation of networks through replacing natural gas with 100 per cent renewable gas (which can be a blend of hydrogen, biogas or renewable methane).



The Hydrogen Park SA project aims to blend up to five per cent of hydrogen into the gas network, starting mid-2020. Increased blending levels may also be achieved once further safety assessments are completed on the use of hydrogen blending on natural gas appliances. It is expected that higher blends can be safely achieved as evidenced by projects in both France and the UK that are blending up to 20 per cent hydrogen in natural gas.

Energy Networks Australia also been involved in the development of the National Hydrogen Strategy and will continue to be involved in the next steps in relation to gas networks. To contribute to the National Hydrogen Strategy, we developed a policy scheme to support and facilitate the introduction of renewable gases into domestic gas networks. Work on this scheme is ongoing,

The Tasmanian Renewable Hydrogen Action Plan outlines a clear opportunity for Tasmania to contribute towards the global transition to hydrogen focussing on industrial use, mobility, green ammonia and blending in networks. This plan is closely aligned to the National Hydrogen Strategy and Energy Networks Australia supports the national coordination and development of the hydrogen economy, especially for issues such as regulation, hydrogen certification schemes and community education and awareness (actions 13, 14 and 15 of the plan).

In relation to the dedicated Tasmanian Renewable Hydrogen Development Unit (action 19), Energy Networks Australia recommends that this unit engages with the Future Fuels CRC and other like-minded organisations internationally. There is significant global momentum in hydrogen and many benefits to effective collaboration within Australia and internationally to accelerate the commercial deployment of hydrogen. Future Fuels CRC is Australia’s lead organisation on the impacts of future fuels on appliances, gas infrastructure and social research. It comprises three programs:

- » Future fuels technologies, systems and markets,
- » Social acceptance, security of supply and public safety, and
- » Network lifecycle management.

The Victorian and South Australian Governments are participants in the CRC and other state governments are also supportive of its work. There may be an opportunity for the Renewable Hydrogen Development Unit to work with FFCRC. Energy Networks Australia can facilitate an introduction, if required.

Our Head of Gas, Dr Dennis Van Puyvelde has also attended several study tours in Germany and the UK on hydrogen in the past year. These countries seem to be at the forefront of blending hydrogen into networks. If you have any questions or would like a briefing, please do not hesitate to contact Dr Van Puyvelde.

Yours sincerely,



Andrew Dillon

CEO