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

To whom it may concern

# **Tasmanian Renewable Energy Action Plan**

Tas Gas would like to commend the Tasmanian Government for setting renewable energy targets and developing a renewable energy road map for Tasmania. Tas Gas is aligned to the Tasmanian Government's view that renewable energy will be a key economic driver for Tasmania and has an important alliance with the brand of Tasmania, however we note that the TREAP is very much focused on the development of the Tasmanian renewable electricity industry.

Tas Gas finds it challenging that its main competition is electricity and therefore is in competition with the Tasmanian Government through its vertically integrated electricity supply chain. Tas Gas would like to see the TREAP giving equal weight to other forms of renewable energy which are necessary to be visionary in achieving decarbonisation of all energy sources including heat and transport in Tasmania. Tas Gas recommends that the TREAP set targets and a roadmap showing support for the decarbonisation of natural gas and reduced petroleum use in Tasmania.

The Tasmanian natural gas sector has potential for decarbonisation by leveraging local Tasmanian renewable hydrogen and biomethane production capabilities to continue to supply reliable and efficient energy to the state. The inclusion of additional targets considering the decarbonisation of fossil fuels aligns with the state's goals of achieving emissions reductions, increasing renewable energy uptake and supporting the growth of industry and low carbon heavy transport sectors.

Having a more balanced TREAP that includes clear objectives around the decarbonisation of fossil fuels but particularly natural gas in Tasmania will assist in investor confidence in expanding gas infrastructure in Tasmania. This includes both networks to convey renewable gas and in green gas generation infrastructure. To maximise the level of investment activity there is a need for a clear government agenda and commitment to supporting Tasmania's transition to renewable gas.

## About Tas Gas

Tas Gas comprises Tas Gas Networks, Tasmania's natural gas distributor and Tas Gas Retail, Tasmania's largest specialist natural gas retailer. Tas Gas is wholly owned by Infrastructure Capital Group (ICG), an Australian energy infrastructure investment company. ICG acquired Tas Gas in November 2019. ICG have a high appetite for continued energy infrastructure investment in Tasmania which includes investing in existing gas infrastructure and an appetite for investing in decarbonisation of our gas networks. ICG have a long-term view for Tas Gas and are keen to drive growth in the value that Tas Gas contributes to the Tasmanian community.

Tas Gas is a strong contributor to the Tasmanian economy providing a fuel of choice for Tasmanian industry, businesses and homes. We have approximately \$250 million invested in natural gas infrastructure across the State with over 14,000 connections to the gas network. We employ approximately 70 staff, spending over \$3 million in salaries and wages per annum. We employ a considerable number of subcontractors and make a significant contribution to the Tasmanian economy with strong indirect contribution to several Tasmanian businesses including: construction companies, gas mains, engineering consulting firms, plumbers across the state, energy

consultants, appliance retailers, home building industry to name a few.

### Overview

As a significant investor in Tasmania with \$250m of natural gas infrastructure and an appetite for continued investment, Tas Gas wants to work closely with the Tasmanian Government, Australian Government, local governments, Tasmanian business community and the broader community of Tasmania to transition from being a conveyer of fossil fuel based gas to homes, business and industry to a conveyer of renewable gas. This is to align to increased customer interest in receiving renewable gas, to contribute towards Tasmania's carbon emissions reduction and to align our aspirations with those of the State Government and the people of Tasmania that Tasmania to be leading in sustainability.

Gas is an important energy source in Tasmania providing Tasmania's largest industries with significant heating load capability that is not able to be replicated economically and with the same control qualities with electricity. Gas is a fuel of choice for Tasmanian's in their homes and in their businesses as a heating source and to create ambience in replacement of wood fires. Gas, during its introduction into Tasmania was a significant contributor to the reduction in the States emissions by replacing coal in a number of large industrial applications.

Tasmania is unique in comparison to other Australian energy jurisdictions in that the vertically integrated electricity utilities remain fully owned by the State. As such, the State and Tas Gas find themselves in competition with each other on several energy fronts. Whilst the provisions around "competitive neutrality" apply, Tas Gas as a significant investor in Tasmania, is concerned that the Tasmanian Government may unwittingly use its position to favour its own business ventures to its detriment. For Tasmania to be leading in renewable energy it needs to be visionary in setting aggressive targets across all energy sources and ensure that all parties are treated equitably.

To this end it is noted that the Tasmanian Renewable Action Plan (TERAP) appears to be predominantly focused on Electricity. It does little to recognise the other forms of energy such as petroleum (oil) based products such as petrol, diesel, aviation fuel, LPG and the role that coal still plays in the state.

According to the Australian Energy Update 2019 which uses data from 2017-18, renewable energy represented 42% of Tasmanian's primary energy consumption with oil comprising 34%, gas 12% and coal 10%<sup>1</sup>. This data shows that if Tasmania is to be leading in renewable energy, it needs to provide support to companies such as Tas Gas and other fossil fuel providers to decarbonise. Only then will Tasmania be truly leading in renewable energy, not just renewable electricity.

The TREAP is silent on the growing roles of home solar, home batteries, electric and hydrogen vehicles etc and the continual merging and interplay between these developing technologies. Whilst the future of these is unknown the plan should recognise the necessity to create an environment to allow alternative commercially driven outcomes to thrive. Tasmania with its high levels of renewables could be an international test bed and adopter of world leading innovation in a range of renewable energy initiatives.

## **Renewable/Green Gaseous Fuels**

From the Tasmanian Climate Change Office's Tasmanian's Greenhouse Gas Emissions 2017 Fact Sheet<sup>2</sup>, most of Tasmania's emissions come from agriculture, industrial processes, direct combustion and transport. With the right policies, support and initiatives, Tas Gas is well positioned to be an enabler of emissions reduction in Tasmania via:

• the capture of fugitive emissions from wastewater, industry, agriculture and general waste through anaerobic digestion where the collection of organic matter is centralised and processed to capture gas that would otherwise go to atmosphere. This gas could be injected into our gas networks as a substitute for natural gas to be used by Tasmanian's in their homes and by Tasmanian business and industry; and, or

<sup>&</sup>lt;sup>1</sup> https://www.energy.gov.au/publications/australian-energy-update-2019

<sup>&</sup>lt;sup>2</sup> <u>http://www.dpac.tas.gov.au/ data/assets/pdf file/0010/473761/TCCO Fact Sheet -</u>

Greenhouse Gas Accounts 2017.pdf

 substitution of natural gas for locally produced renewable hydrogen which also supports State Growth's Tasmanian Renewable Hydrogen Action Plan and the funding commitment of \$50m towards a Tasmanian hydrogen economy.

These initiatives would have a significant impact in reducing Tasmania's overall greenhouse gas emissions and push Tasmania to the forefront of a renewable energy showcase state for the world.

Hydrogen generation would enable the substitution of a range of green house emitting fuel sources in Tasmania with the most significant impact being used as a replacement for diesel in heavy transportation (trucks, buses, ferries, ships) and as a diesel replacement in remote area power stations. With the planned growth in renewable electricity, the use of Tasmania's gas infrastructure provides significant opportunity for the capture of excess electricity for conversion into hydrogen, injected into our gas networks that is then used by Tasmanian industry. Hydrogen can also be stored and used in hydrogen battery fuel cells to provide load firming services.

## **Energy security**

Tas Gas would like to see the TREAP acknowledge the ongoing role of natural gas as significant energy source in Tasmania. Tasmania has witnessed the important role that gas played in keeping the lights on during the recent drought and Basslink outage. While the objectives of the TREAP are for Tasmania to be completely reliant on renewable electricity by 2022, from an energy security point of view and to attract diverse industries, it makes sense for Tasmania to ensure that it offers a range of renewable energy generation options.

Tasmania's largest industries are reliant on natural gas a fuel source. It is not economically or commercially viable for these industries to transition to electricity as a single energy source. From an energy security point, the availability of gas at the right price and on a firm basis is critically important to these industries. A gas shortage on the mainland that significantly increases the natural gas price, a significant issue with the Victorian Longford gas processing facility that limits the availability of gas or sub-sea rupture of the Tasmanian Gas Pipeline are all significant threats to the viability of Tasmania's largest industries. These risks can be mitigated through the development of onshore renewable gas.

Like most of Australia, Tasmania is reliant on imported gases and fuels that enable a range of economic deliverables (for example mining, manufacturing and processing) and provide Tasmanian's with freedom of movement (for example, fuel for transport). Disruption to these supply chains could severely impact Tasmania. The development of onshore energy capability in renewable gas would increase Tasmania's economic independence and overall economic security which may be a future competitive advantage.

## Benefit of co-existing gas and electricity infrastructure

Energy Networks Australia's Gas Vision 2050<sup>3</sup> identified that the electricity required to replace the energy provided by our gas networks will require vast upgrades to electricity transmission and distribution infrastructure. If this was to occur, it would be as an additional cost to all Tasmanian's. It makes economical sense to maximise the utilisation of existing infrastructure to serve the diverse needs of the Tasmanian community at the lowest price.

With the advent of hydrogen fuel cell batteries there is increased capacity for hydrogen generation to both service customers on our existing gas networks and to supply energy to remote area power stations and gas networks. For example, instead of extending electricity networks to remote areas, independent power stations can be created powered by renewable electricity (wind & solar) with hydrogen fuelled battery storage providing base load reliability. The creation of remote power stations may negate the need for powerlines to go through world heritage areas and forests which will decrease the risk of bushfires and significant community outages when electricity infrastructure is damaged. A reduction in electricity transmission lines will further decrease the cost of capital that is recovered from all Tasmanians.

In the same vein, biogas can be both generated in scale for injection into our gas networks as a substitute for natural gas as well as being generated in smaller quantities for specific use such as to power remote farm

<sup>&</sup>lt;sup>3</sup>https://www.energynetworks.com.au/assets/uploads/decarbonising australias gas networks december 2017.pdf

operations such as dairy sheds, feed lots, and as a fuel for biogas tractors. The creation of a vibrant biogas industry in Tasmania can create more opportunities for Tasmanian communities and businesses operating in remote areas and further decrease the burden on electricity networks and therefore reduce the cost of our electricity networks for all Tasmanians.

Tas Gas believes that the availability of a vibrant renewable gas industry will compliment renewable electricity in attracting new industries to Tasmania that need energy diversity and want to be credibly sustainable.

A commitment to renewable energy diversification could provide Tasmania with a stronger ability to attract thought leaders in the development of renewable energy technology, solutions, enterprises and related opportunities. It will be important for the TREAP to address talent attraction to Tasmania and the development of on island thought leadership across all renewable energy sources.

Need for clarity in the TREAP about the future of the Tamar Valley Power Station

The TREAP sets a target for 100 per cent self-sufficiency in renewables by 2022. At present the Tamar Valley Power Station (TVPS) is a critical piece of energy security infrastructure for the state. Tas Gas finds the TREAP vague in its intent for the future operation of the TVPS. It is important that the Tasmania Government be as open and transparent as possible regarding the future of this asset as it has direct implications for the cost of transporting gas from Victoria to Tasmania for all other Tasmanian gas users. If there is an intent to change the operations of the TVPS once 100% self-sufficiency is achieved, this should be made clear to enable industry to understand the ramifications.

### **Our recommendations for TREAP**

Tas Gas recommends the following inclusions and or amendment to the TREAP:

- Give energy a definition. In the context that energy is used within the TREAP, it appears to mean electricity. For clarity, energy should be defined and the TREAP should be reformatted to focus on each energy source and initiatives specific to transitioning or increasing the renewable potential of that source.
- Give biomass a definition so it is clear what it is referring too. Biomass in Tasmanian parlance is often a surrogate for "Wood-chips". The TREAP should be explicit that biomass has a broader context incorporating waste from a number of sources including manufacturing, on farm waste, sewerage and waste-water/sewerage.
- Recognise the importance of gas as a fuel of choice for Tasmanian industry, business and residents.
- Recognise the new industries that may be attracted to Tasmania if renewable gas was available both that use gas and that are interested in developing new products and services off the back of green gas.
- Recognise the significant investment in natural gas infrastructure that exists and its linkages to Tasmania's largest industries.
- Recognise that a vibrant renewable gas industry in Tasmania would be complimentary to Tasmania's growing renewable electricity generation capability, including the role it could play in underpinning remote area renewable energy generation.
- Commit to setting a decarbonisation goal for natural gas by 2030 to increase Tas Gas's confidence for ongoing investment in infrastructure and development, both to increase the availability of gas supply through increased investment in infrastructure roll out in Tasmania as well as in initiatives to decarbonise.
- Commit to resourcing in State Growth for the development of a renewable gas industry plan that has buy in from the most senior levels.
- As part of a renewable gas industry plan, commit to attracting thought leadership talent to Tasmania that specialise in renewable gas generation to support the development of onshore renewable gas technology development and associated research and development activities that will provide Tasmania with a competitive advantage.

- Recognise the opportunity that Tasmania has with its agriculture, industry and environment to be leading in waste management, specifically in capturing fugitive emissions from organic waste for reuse as a substitute for natural gas.
- Set heavy vehicle emissions reduction targets for Tasmania and develop associated initiatives to support transition. This will help investor confidence in developing hydrogen generation onshore.
- Be specific on the future of the TVPS and likely implications. While Tas Gas is supportive of the introduction of renewable gas targets in Tasmania, we do note that the energy companies cannot feasibly bear all costs associated with the low carbon transition. Additionally, we cannot expect to pass on such costs to customers. For this reason, a broader renewable energy action plan will require support from the Government to assist with infrastructure investment associated with the decarbonisation of natural gas and transport fuels.

Tas Gas is a member of Bioenergy Australia and has directly contributed to and supports Bioenergy Australia's separate submission to the TREAP consultation process. The Bioenergy Australia submission makes several practical recommendations on actions that can be taken as part of a broader decarbonisation action plan for Tasmania. Tas Gas recommends that the Tasmanian Government refer to Bioenergy Australia's submission for recommendations of infrastructure investment support and provides examples of successful international initiatives.

Again, Tas Gas thank you and congratulations to the Tasmanian government on its initiative in developing the Tasmania Renewable Energy Action Plan and in seeking industry comment and participation from the community. As a significant contributor to the State energy sector, Tas Gas would welcome the opportunity to increase its level of engagement with the Tasmanian Government, its Departments and business enterprises in delivering on renewable gas targets for Tasmania.

Should you wish to discuss any of the issues raised in this submission contact Kate Daley at <u>Kate.Daley@tasgas.com.au</u> or via phone on 0408 329 394.

Yours sincerely

Alan

Cameron Evans Chief Executive Officer