

Draft Tasmanian Future Gas Strategy Submission

from the Tasmanian Climate Collective

Members of the Tasmanian Climate Collective (TCC) welcome this opportunity to make a submission on the Draft Tasmanian Future Gas Strategy (TFGS).

As a collective of community climate action groups and individuals, we strongly support the adoption of the recommendations of scientists and scientific organisations. We further have a role in publicising such recommendations across the broader community, as well as government responses to them.

'Climate Tasmania' is Tasmania's peak climate change body who "provide timely, independent and authoritative advice to Tasmanian business, government and community leaders on climate change and appropriate policy responses". The TCC supports the key recommendations in the Climate Tasmania response¹ to the Tasmanian Future Gas Strategy Discussion paper. Their recommendations are:

1. *The Future Gas Strategy should send an unambiguous message that the state government's intention is that the use of fossil natural gas should be phased out.*
2. *The Tasmanian Government should commit to the objectives of the Global Methane Pledge.*
3. *The Tasmanian Government should adopt the GWP₂₀ value for methane for all its State level greenhouse gas reporting and policy considerations.*
4. *A pilot program should be initiated as soon as possible to subsidise electrification for the replacement of gas infrastructure in residential and small commercial and industrial uses.*
5. *Subsidies should be available to residential users of LPG to invest in electric alternatives.*
6. *Grants should be available to commercial and industrial gas users to explore the business case for renewable alternatives to fossil gas where electrification is not practical.*
7. *The Future Gas Strategy should explore the benefits of localised solutions to the generation and use of non-fossil fuel gas.*

ABOUT THE TASMANIAN CLIMATE COLLECTIVE

The Tasmanian Climate Collective is a group of passionate and committed organisations and individuals from across Tasmania who advocate for strong action on climate change. The Collective is made up of climate change, social, health and environmental groups and grassroots organisations. The Tasmanian Climate Collective has no political affiliation and is composed of scientists, farmers, doctors, teachers, nurses and other concerned citizens calling for more action on climate change.

OUR VISION lutruwita Tasmania is a world leader on climate action, prioritising environment, health and people.

OUR PURPOSE The Tasmanian Climate Collective connects groups and individuals to encourage, promote and initiate climate action across lutruwita Tasmania through cooperation, influence and knowledge sharing.

In particular, the TCC expects the Tasmanian Government to set out a timeline for the phasing out of the use of fossil fuel gas and methane and to prioritise this over other considerations. The current and ongoing prioritisation of economic considerations, over and above climate, environment and health, delays meaningful greenhouse gas emissions reduction. Given the climate disasters in recent years, Tasmanians expect stronger climate action from our Government.

The other specific concerns of the Tasmanian Climate Collective are outlined below.

No mention of the negative health impacts of using Gas

We were disappointed to see the omission of consideration of health despite it being importantly included in the Climate Change (State Action) Amendment Bill 2021. Fossil fuel related harms are the biggest threat to health, and go beyond climate change and recurrent disasters. Research around the world has established the direct threat to health posed by domestic use of gas for cooking - likely to be the most prevalent use of domestic gas in Tasmania, and used by many more households beyond those connected to the reticulated system, given the ready availability of bottled gas.

Gas stoves produce several hazardous pollutants, notably nitrogen dioxide and carbon monoxide, with concentrations of nitrogen dioxide at concentrations 50-400% higher than homes with electric stoves. Exposure to nitrogen dioxide, even in the short term and at low levels, can cause respiratory effects. Children are at increased risk from this air pollution, often well above accepted external levels, with the risk of having asthma increased by 42%².

Lower income households may be at higher risk of exposure with older, cheaper appliances and inadequate extraction fans - though extraction fans cannot be relied on as a sole mitigation strategy.

Unflued gas heaters are also in use in Tasmania, with the production of both hazardous air pollutants and water vapour causing an increase in mould and dust mites and further illness potential, particularly for asthma and allergic disease.

Of further concern is the recent research into emissions from domestic gas cooking which shows that three quarters of the methane emissions are occurring while the device is off³.

In the baseline emissions inventory assessment (Draft TFGS, p22) the Government has committed to, it is important that these domestic fugitive emissions, amongst the others, are accounted for, as fugitive emissions are a substantial contributor to total greenhouse gas production. The best way to manage them is to not have to manage them because gas is not being used at all.

Electrification opportunities for Tasmania

It is clear from the Draft TFGS, the Oakley Greenwood Report⁴ and the Climate Tasmania discussion paper¹, that electrification provides the best solutions for the transition away from gas use for households and the vast majority of businesses. In Tasmania, our access to a variety of renewable energy sources provides both financial and reliability benefits.

Electrification should be the first option considered for current gas customers and the TFGS should set out plans to support this for households, commercial and industrial users. This could include expansion of the current no-interest loan scheme and incentives to switch from gas to electric

appliances. Based on the established science, there would be no new domestic sales of gas appliances for heating or cooking. As well as greenhouse implications, these will inevitably become more expensive to run, present a known health hazard and eventually become stranded assets.

Other solutions should only be considered for customers with a high degree of gas-reliance.

The TCC are pleased to see that the Draft TFGS includes plans that support low income households to transition to more cost-effective electric appliances. Ideally, there would be an incentive for every switch from a domestic gas appliance to an electrical one. This should include incentives for landlords to allow renters to benefit from the healthier and more cost-effective electric options.

It is important that gas customers are not maintained to keep a critical mass of customers (under the guise of “consumer choice”) for the benefit of the few gas-reliant users.

One of the major advantages of electrification for Tasmanian businesses is the market advantage of renewable energy products. As local, national and global markets are increasingly prepared to pay a premium for genuine low emissions products and services, Tasmania is well placed to take advantage of this trend.

Stop further expansion of gas use in the domestic and commercial sector

Since gas use in Tasmania is a relatively recent inclusion in our energy mix (August, 2004), the most efficient way to decarbonise is to prevent further expansion. It would be quite ridiculous to implement a strategy to wind back gas use, while allowing new gas connections to the most easily electrified sector – domestic and commercial developments.

Of the 60,000 potential natural gas customers, only 14,700 premises have connected to the reticulated gas network (Draft TFGS, p7). It is crucial that the TFGS protects new customers from this expensive, vulnerable and hazardous energy supply, while assisting existing customers to electrify where possible. It is disappointing that the draft TFGS does not include this protection for energy consumers. At the very least the TFGS should include a requirement for the Government to fully disclose all potential risks associated with gas for energy users when they “*choose the fuel that best meets their needs*”. The free market will not decarbonise fast enough. Incentives and other supports must be provided.

Any growth in the use of natural gas, LPG, biogas and biomethane is inconsistent with the Tasmanian “*clear policy agenda to reduce greenhouse gas emissions, promote renewable energy and transition away from fossil fuels.*”

The sale of new gas appliances should be discouraged while providing incentives for electric equivalents.

The TCC support the Tasmanian Government leading by example through replacing its own gas use with electric or lower emissions alternatives.

Energy insecurity associated with gas in Tasmania

As pointed out in the Draft TFGS, the gas market in Tasmania is vulnerable and subject to uncertainties for the following reasons:

- The small Tasmanian gas market lacks economies of scale
- Tasmania has no local gas reserves
- Tasmania depends entirely on imported natural gas, including the single pipeline from Victoria
- LPG is imported into Tasmania by sea transport and is vulnerable to supply and price variation
- The current high global gas prices are outside Tasmanian control
- Forecasts of potential future gas shortages in south eastern Australia
- Tasmania's gas prices are the most expensive in Australia and are likely to increase (Draft TFGS, p8)
- As Tasmania transitions away from fossil gas use, the shrinking customer base will be increasingly burdened by fixed costs.
- The Tasmanian gas pipeline operators are not subject to pricing regulation

It is unconscionable to allow energy consumers to continue to rely on gas, given these circumstances. In combination with the damage to the climate crisis from gas use, it is clear that the rapid transition away from gas is the best outcome for the vast majority of Tasmanian households and businesses.

The problem of gas-reliant industries

It is clear in the Draft TFGS that the Tasmanian Government greatly fears the loss of industrial gas users and is committed to keeping gas supplies available at an affordable price for these powerful interests (p15). The question remains regarding the extent to which the Tasmanian Government will compromise other commitments (emissions reductions, energy affordability for customers and other households, costs of maintaining gas infrastructure) to satisfy these industrial users.

It is also questionable whether the Tasmanian Government can control the risks associated with gas supply and price for the state's gas-reliant industries. Such industries would be better served by Government support to be less reliant on greenhouse gases as soon as possible.

The TCC are pleased that *"the Government will not seek to prolong the use of natural gas and LPG beyond the point that renewable alternatives become widely available and commercially viable"*. However, we would like to see clearer definitions of "widely available" and "commercially viable" to provide some comfort that these vague terms will not be used to delay the transition away from these climate damaging energy sources.

Bioenergy, biogas and renewable methane – proceed with caution

The assertion in the Draft TFGS that *"biogas, biomethane and renewable methane may have some potential to reduce fossil gas use in some industrial and commercial processes that are difficult to electrify"*, must be viewed with the utmost caution. There are significant risks of these technologies not contributing to the immediate reduction greenhouse gas emissions, instead promising a future reduction as bioenergy sources are slowly replenished over many years by botanical regeneration. Allowing CO₂ to be released at all, and the postponement of carbon sequestration belies the urgency to act to prevent the catastrophic effects of climate change. The focus must remain on reducing all greenhouse gas emissions as rapidly as possible. When methane sourced from industrial by-products

can be utilised to generate energy and be converted to CO₂ in the process, then this is a valid application of bioenergy.

These non-fossil gases are primarily methane that has a 20-year global warming potential 85 times greater than CO₂ – regardless of its source. The International Energy Agency discusses the importance of methane in the climate crisis. In 2021 the IEA reported that *“Methane has contributed around 30% of the global rise in temperature today and the IPCC 6th Assessment Report highlights that rapid and sustained reductions in methane emissions are key to limit near-term warming and improve air quality”*⁵. The TFGS must include clear plans to minimise leakage of all greenhouse gases, regardless of source.

Methane in the form of biogas, renewable methane or fossil natural gas has serious implications for climate and human health. Fugitive emissions from biogas and renewable methane are a significant challenge for these developing technologies⁶. This alone makes these alternative gases a poor choice compared to electrification.

Some of the appeal of biogas is that it is currently considered to be a “net zero energy source” under the Australian National Greenhouse Gas Accounting Framework (Draft TFGS, p12). This could change in the future. Just as the Australian Federal Government recently excluded native forest biomass as a renewable energy source⁷, controversial energy sources like biogas and renewable methane are vulnerable to future policy changes that better reflect the best scientific advice. The Tasmanian Government should be ‘future-proofing’ its investments rather than gambling public funds by investing in contentious, expensive technologies and will almost certainly be subject to changes in carbon accounting frameworks.

These alternative gases could also be accused of “greenwashing” that damages brand Tasmania and the market advantage for Tasmanian businesses.

The Draft TFGS does not define the amount of gas currently used by gas-reliant industries in Tasmania. Since figure 4 Phases in the Gas Transition (Draft TFGS, p17) does not include units on either axis, we can only guess the amount of renewable gas expected to be in the energy mix at the end of stage 4 – seemingly approximately 80% of the fossil gas use in stage 2. It is not clear how much of this will be green hydrogen and how much will be biogas. If it includes a substantial amount of biogas, the problems outlined above will be significant and leave a legacy of challenges for future generations.

TCC RESPONSES TO GOVERNMENT ACTIONS IN THE DRAFT TASMANIAN FUTURE GAS STRATEGY

1. Supporting consumer choice: no mandates or moratoriums against new natural gas connections.

The TCC does not support this. Permitting new gas connections under the guise of consumer choice will commit those new customers to vulnerable, expensive, carbon intensive energy. This ‘support’ raises the suspicion that this is a cynical attempt to maintain a critical mass of customers for the benefit of the few gas-reliant industries.

2. Continuing to support the development of green hydrogen

The TCC support this action with the caveat that these projects and the energy generation projects that feed them consider environmental, health, palawa and other community

concerns. The TCC is a signatory to the *Recommendations for 'Rewiring the Nation' from Environmental and Climate NGOs*⁸ paper that was presented to Minister Bowen and state and territory energy ministers in 2022. This paper outlines best practice for the energy transition that we expect the Tasmanian Government to adopt.

We are aware that green hydrogen is less efficient and more expensive than electrification for consumers⁹ while it does provide opportunities for business to profit from the energy transition.

3. Supporting the development of Tasmania's domestic bioenergy and biogas industries

The TCC have serious concerns about focus of the Draft TFGS on these potential greenhouse gas emitting technologies. Our members and other community groups take a keen interest in this area with many groups being strongly opposed.

We note that the list of stakeholders does not include community representation.

We expect that the transition away from the use of fossil fuels will focus on electrification, rather than the ability of industries to profit from higher emissions energy sources. It is concerning to see transport fuels included as a use for biogas when the electrification of the Tasmanian transport sector should be the higher priority. The term 'woody biomass' may be a euphemism for another destination for Tasmania's forests, which would be doubly concerning, and there should be a detail provided on exactly where these bioenergy and biogas feedstocks will come from.

4. National gas reform agenda

It is disappointing to see that *"The Government will continue to act to help improve the supply of gas to Tasmanian customers at lowest cost"*. If the Government was committed to emissions reduction and the rapid transition away from gas, it would make the use of gas less appealing, not more so. The use of fossil fuels is already costing humanity dearly and the science is quite clear. Our survival depends on abstaining from all new greenhouse gas use and stepping away from all existing use. The TCC supports the development of green hydrogen industries in Tasmania, while acknowledging that the higher costs compared with electrification will keep this a smaller part of Tasmania's energy mix.

5. Tasmania's hydrogen regulatory review

The TCC supports the reform of hydrogen industry regulatory frameworks and expect this process to be transparent and include consideration of community concerns.

6. Supporting Energy Efficiency

The TCC strongly support this Government action and see this as a powerful way to reduce emissions from gas use in Tasmania.

7. Help low-income and vulnerable consumers to transition

The TCC strongly support this Government action and any future expansion of this initiative. We are committed to a just transition for all sectors of society to a low emissions future. We particularly support energy efficiency improvements to public housing that includes rooftop solar and community batteries with conversion to electric appliances. Lower income households are more likely to have unflued gas heaters and older gas cookers with higher levels of indoor pollution and higher levels of asthma and aggravation of other respiratory conditions. Fugitive emissions are not routinely assessed in Australia.

8. Emissions Reduction and Resilience Plans

The TCC is disappointed that the Tasmanian Climate Change (State Action) Amendment Bill failed to legislate sector-based emissions reduction targets. We now look to the promised

Emissions Reduction and Resilience Plans to bring about real changes in each sector. Again it is disappointing to see that these plans “*will be developed in partnership with business and industry*” without any mention of Tasmanian community groups or the broader community. Business and industry are the major emitters of greenhouse gases, while the Tasmanian people suffer the consequences – including the devastating floods earlier this summer and fires in other years. Developing plans with only vested interests leads to community distrust of this process.

9. The adoption of renewable gases by Government

As detailed above, the TCC supports Government investment in alternative energy sources for highly gas-reliant industries as long as this public money is spent for public good by achieving the greatest GHG emissions reduction. The baseline emissions inventory is an important start for further plans.

10. Working with Industry

The TCC expects Government to work with industry with an intention to work for the best outcomes for the Tasmanian community. We are concerned by the focus on industry benefit and the omission of references to community stakeholders throughout the Draft TFGS. Community perceptions of opaque government deal-making over recent years have led to increased public scrutiny of relationships between powerful industries with vested interests and all levels of government. For example, the over-representation of members with links to the Australian gas industry on the federal Post-COVID recovery committee that recommended a “Gas-led recovery” has made many Australians wary of industry and government relationships.

The final TFGS could benefit from stated commitments to transparency (where appropriate) and genuine community input. The health impacts of the use of domestic gas have not been mentioned although they are substantial, and reducing use may be the cheapest way of decreasing the costs of managing asthma and other respiratory conditions by removing a significant contributing factor.

11. Reviewing the Tasmanian Future Gas Strategy within five years

The TCC supports this action as the Tasmanian energy system transitions to a low carbon future.

References

1. Climate Tasmania (21 January, 2021) *Climate Tasmania response to the Tasmanian Future Gas Strategy Discussion paper*.
2. Rocky Mountain Institute Report (2020) [Gas Stoves: Health and Air Quality, Impacts and Solutions](#).
3. Lebel *et al* (2020) *Methane and NO_x Emissions from Natural Gas Stoves, Cooktops and Ovens in Residential Homes*. *Environ. Sci. Technol.* 56, 4, 2529–2539
4. Oakley Greenwood (15 Oct 2021) *Tasmanian Gas Strategy: Background research, analysis and suggested next steps - Final Report*.
5. International Energy Agency (2021) *World Energy Outlook*

6. Grubert, E. (2020) *At scale, renewable natural gas systems could be climate intensive: the influence of methane feedstock and leakage rates*. Environ. Res. Lett., 15, 084041
7. Iowa Climate Science Education (2022) [Australia Rejects Forest Biomass](#).
8. The Sunrise Project (2022) [Recommendations for 'Rewiring the Nation' from Environmental and Climate NGOs](#)
9. Saul Griffith (2022) *The Big Switch*.

This submission is specifically endorsed by the following organisations:

Australian Conservation Foundation, Tasmania South

Australian Youth Climate Coalition, Tasmania

Clarence Climate Action

Climate Action Hobart

Climate Action Northwest

Climate Resilience Network

Doctors for the Environment

Environment Tasmania

Extinction Rebellion Tasmania Grey Power

Friends of the Great Western Tiers kooparoono naira

Grandparents for Climate Action

nipaluna Climate Collective

North West Environment Centre

Renew Tasmania South (branch of the Alternative Technology Association Inc.)

School Strike for Climate Tasmania

Solar Citizens

South East Climate Action

Surfrider Foundation Australia

Other members of the TCC were unable to participate at this time (Christmas, new year holidays).