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CLIMATE TASMANIA
Independence, knowledge and commitment to climate action

Submission in response to the Tasmanian Draft Future Gas Strategy

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Climate Tasmania is a group of concerned professionals who have a diverse range of expertise, spanning scientific, economic, health, energy, social and policy aspects of climate change. Our aim is to provide timely, independent and authoritative advice to business, government and community leaders on climate change and appropriate policy responses. Details of the members of the Climate Tasmania board and expert advisers are available at www.climatetasmania.org/members/

Climate Tasmania welcomes the opportunity to comment on the Draft Future Gas Strategy and welcomes the extensive consultation the Tasmanian Government has already done in this area. We made a detailed submission to the Discussion Paper on this topic, and will return to the seven recommendations we made in that submission.

1. Background.

Climate Tasmania's positions are based on the following understandings:

1. Climate change is an urgent threat, which needs to be responded to as quickly as possible. As Alex Steffen said: "winning slowly is the same as losing". Extreme weather is increasing; just in the last few weeks we have seen downstream flooding in the Murray-Darling basin, unprecedented flooding in the North West of Western Australia, and a record warm spell in the current European winter. We are seeing increasing extreme weather damage and destruction at current atmospheric greenhouse gas concentrations, and those levels are still increasing.
2. While phasing out fossil fuels is both necessary and central to our response to the threat of climate change, it is not sufficient, and will be slow to make a difference. Controlling methane emissions has been identified by the International Energy Agency and others as being an essential near-term strategy. As we said in our previous submission:

   The International Energy Agency's 2021 World Energy Outlook said that reducing methane emissions was a key priority if global heating is to be kept below 1.5 °C[1].

   > "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. The energy sector is one of the largest sources of methane emissions today: we estimate that fossil fuel operations emitted around 120 Mt of methane globally in 2020, equivalent to around 3.5 gigatonnes of carbon dioxide equivalent (Gt CO2-eq)[2]."

   The IEA devotes considerable space in the 2021 edition of its World Energy Outlook to the importance of reducing methane emissions, particularly from the oil and gas industry, and has produced a series of reports on reducing methane emissions.

[1] IEA (2021), World Energy Outlook Figure 1.7. IEA, Paris.
[2] IEA (2021), World Energy Outlook page 41. IEA Paris.

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The seven recommendations from our earlier submission in response to the Discussion Paper were:

R.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.

R.2 The Tasmanian Government should commit to the objectives of the Global Methane Pledge.

R.3 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.

R.4 Subsidies should be available to residential users of LPG to invest in electric alternatives.

R.5 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.

R.6 The Future Gas Strategy should explore the benefits of localised solutions to the generation and use of non fossil fuel gas.

R.7 The Tasmanian Government should adopt the GWP_{20} value for methane for all its State level greenhouse gas reporting and policy considerations.

2. Overview.

Positives. We are pleased to see that the Draft Strategy has adopted some of our recommendations. Recommendations 1 and 3 appear to have been satisfied, and recommendations 4 and 5 seem to be close to what is proposed in the draft strategy. Recommendation 6 may be covered by the Bioenergy Vision. The proposals for transitioning the government's own use of gas away to a renewable alternative are welcome, and it is possible that the Emissions Reduction and Resilience Plans will move further on recommendations 4 and 5.

Negatives. Climate Tasmania's view of the outcome of the recent amendments to the Climate Change (State Actions) Act is that while the changes made were positive, they were timid and lacked urgency. Our view of the draft future gas strategy is also that while it has many positive features, it is timid, lacks urgency, and has one glaring weakness. The "no mandates or moratoriums" policy is timid and ignores the urgency for change, for example.

3. Major weakness: methane as a greenhouse gas.

The biggest problem we have with the draft future gas strategy is that it ignores the role of methane as a significant greenhouse gas (GHG), regardless of the source of the methane. Our previous submission drew the government's attention to a seminal paper by Dr Emily Grubert. Our full discussion of this matter was:

> "Methane's Global Warming Potential is independent of the source of the methane – whether fossil methane, methane from anerobic decomposition, or methane from livestock. Thus, while the Discussion Paper's recognition of the need to phase out fossil fuels is very welcome, all leaks of methane into the atmosphere are of concern, regardless of the source of the methane. If, for example, Tasmania was able to replace all the fossil methane it currently uses with renewable biomethane but made no efforts to reduce leaks or venting, then the adverse climate impacts of the leaks and venting would not change.
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> "While the previous sentence is correct, the situation is more nuanced than it suggests. Consider the situation in which all the biomethane which replaces fossil methane comes from sources which would otherwise have been released to atmosphere. If all the biomethane which would otherwise have been released is instead collected and transported to its end use, it is converted to carbon dioxide before entering the atmosphere – a significant relative improvement over the counterfactual situation. A 2020 paper by Dr Emily Grubert[3] explores such scenarios in detail. Dr Grubert notes, for example, that biomethane which is currently flared at source would need to be collected, transported, and used with no more leakage than associated with flaring for the change to be greenhouse neutral; if the collection and use involves additional leakage, then the change produces a worse outcome."

[3] Emily Grubert 2020 *Environ. Res. Lett.* **15** 084041

Two of our previous recommendations applied to methane, and with some updates, we regard them as still being essential to Tasmania's Future Gas Strategy. Indeed, we contend that Tasmania's claim to be a global climate leader is no more than greenwashing if it continues to ignore methane as a GHG in its development and implementation of its gas strategy.

R.1 The Tasmanian Government should adopt the GWP_{20} value for methane for all its State level greenhouse gas reporting and policy considerations.

Climate Tasmania recognises that the Tasmanian Government has to use standardised methodology when reporting beyond Tasmania, and that might require the use of the 100 year Global Warming Potential value for methane. However, the urgency of the climate emergency is such that great progress needs to be made in the next one or two decades, and the use of the 20 year value for methane is consistent with that urgency and the use of the 100 year value is not. We propose that all within Tasmania GHG reporting uses the 20 year value throughout; if the government thinks it necessary to also report using the 100 year value, then those results should be in footnotes or in accompanying tables. We would like to remind the government that doing what everyone else does is not leadership.

Our previous submission referred to the Global Methane Pledge. Since then the Federal Government have announced their support for the pledge – which is very welcome – but have not yet indicated how they will implement the pledge. This is an opportunity for Tasmania to obtain funding from the Federal Government for our next recommendation.

R.2 As its contribution to Australia's accession to the Global Methane Pledge, the Tasmanian Government should control methane emissions from sources other than livestock by using the standard tools and approaches of air pollution control.

What this recommendation means in detail is to:

- Review the regulatory tools (regulations, air pollution policy documents, etc) available to the Tasmanian EPA to ensure it is properly equipped to control methane emissions from all sources other than livestock. This should include the ability to levy per kilogram or per day fines for excessive methane emissions.
- Purchase additional equipment and hire additional scientific and technical staff to the EPA so that it can measure methane emissions. The IEA has made it clear in its guidance documents on methane that control must be measurement based; there is an extensive history of physical measurement surveys of methane emissions giving greater emissions than assumed prior to measurements being made.

Returning to Dr Grubert's work: she demonstrated that changes to current arrangements for the production, use, and disposal of biogenic methane might or might not reduce emissions, depending on the arrangements prior to the change, and the details – including associated fugitive emissions – of the arrangements after the change.

R.3 The Tasmanian Government should develop a formal methane change assessment process to be applied to all policy decisions applying to the gas system and to waste management. The process should consider the path dependencies highlighted by Dr Grubert, and the assessments done under the process should be done by an expert group independent of the proponents of the change. The personnel hired by the EPA in response to recommendation 2 would be a suitable independent expert group.