

## **Submission: Towards 2050: Gas infrastructure in a zero emissions economy**

**Michael Whelan**

Thank you for the opportunity to comment on the report.

**Transition from Gas:** The world is moving on the transition to renewable energy and a rational decision suggests that we accept the opportunity to move to the most cost-effective approach that lowers the cost base of industry and community. There will also be an imperative to sequester carbon to seek to address the pent up warming that is already in our atmosphere. Fossil fuel reserves amount to sequestered carbon.

Brown hydrogen that relies on Carbon Capture and Storage is not a solution. CCS remains unreliable<sup>1</sup> and after decades of research would still require much greater investment to prove it whilst facing the ongoing CO<sub>2</sub> storage problems and limited supply. It is a concession to established coal interests that would institutionalise higher costs into Victoria's energy supply by including brown and Blue hydrogen and impact our competitiveness into the future. As well the foregone opportunity to leave that carbon sequestered in situ in the coal field is lost – this simply does not make sense in a rapidly decarbonising world.

Regardless of the actions taken today it is acknowledged that further warming is already in train but that it will be much worse if we do not stop carbon emissions and indeed find ways to draw down carbon from the atmosphere.

There is a strong view that the IPCC predictions are conservative, scientists are inherently cautious with the forecasts and predictions. Current events the floods in Germany, the heat cap events in Canada and the USA and the forest fires burning in the USA along with the experience of the bushfires along the eastern coast in Australia in 2019 – 20 season seem to be qualitatively different to past disasters. The eastern seaboard bushfires stunned observers for their extent and severity. These are the results that are occurring already in a world that has not yet reached 1.5 degrees of warming.

Planning for decarbonisation initiatives should allow for the likely pressure that will come to bear for rapid decarbonisation. Decisions that seek to maximise the continued use of resources such as coal and gas are founded in sentiment and politics rather than the aim of minimising global warming. Green hydrogen should be pursued however the State Government money spent on the project in the Latrobe Valley is an expensive exercise in creating a few Latrobe valley jobs that could be better spent in renewable energy technology and roll out.

**Housing Efficiency:** The 'no regrets policy' has advantages from several perspectives. Firstly, improved efficiency in housing performance is inherently desirable as it reduces household costs in the first instance and ultimately reduces reliance on an undesirable product i.e. natural gas. The report notes the improved efficiency of new houses and importantly refers to retrofitting of existing housing stock.

This is where the aims of multiple government objectives come together. To reduce gas consumption especially in a declining production phase of the industry but also to address other threats from climate change. Predictions of climate scenarios identify heat events (such as is occurring in Canada and the US)

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<sup>1</sup> [Another Carbon Capture and Storage Failure | Climate Council](#)

as key threats. Retrofitting of existing housing stock to improve insulation etc will need to be a key strategy to ameliorate this threat. In respect to the improved efficiency of new houses the report card approach places too much emphasis on solar installation rather than efficiency criteria such as temperature retention and overall liveability.

It is also important to note that lower income people are likely to be more impacted by the heat threat as they will often be in older rented accommodation. So demand reduction programs will require a strong subsidy component for this cohort.

Regulatory reform, as identified in the report, recognising that gas is no longer the suitable back up for solar hot water services is urgently required and should include mandating electrical back up upon replacement of the unit.

**Role for Natural Gas to 2050:** There are certainly transitional issues that require a phase out of gas over some years, but this should be achieved within the decade i.e. by 2030.

Too much emphasis is given to gas as firming power. The batteries installed such as Hornsby have proved to be far more responsive to grid stabilisation issues than gas and certainly more so than coal spinning power. Battery technology continues to improve providing longer peak coverage and the rapidity of the roll out of batteries was not even forecast 5 years ago.

The renewable energy sources need a judicious mix of solar and wind, whilst pursuing other renewable or clean sources e.g., geothermal. The national grid provides more insurance for renewable down time in any one location.

The move to offshore wind projects such as the Star of the South offer great opportunity for smoothing the supply curve. This combined with better and more pervasive storage will ensure that gas is not a part of the mix into the medium-term future.