

Submission on Victoria's Gas Substitution Roadmap Consultation Paper

By Kathryn Hannan

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I am a Victorian home owner who has been keen to get off gas for some time as I am aware of the urgent need to stop using fossil fuels. However the path to get off gas is not an easy one.

It is great to see the Victorian Government has been investing in renewable energy and is looking at how to move away from gas.

1. Date for Net Zero should be much sooner than 2050

I am pleased that the Victorian Government has set a target for Victoria being net zero (namely 2050), however, that target needs to be brought forward. I am aware that this consultation does not relate to the target date, however I believe it is important to question this basic premise and in the development of a gas substitution roadmap to at least give some thought to "What if Victoria brings the net zero date forward?"

2. My concerns about substituting Natural Gas with Hydrogen

I don't think we should be using waste water as a fuel source, especially when other options are available. Hydrogen is made from water, but water is a precious resource in Australia. Australia is a dry continent that is getting drier with climate change. We need to be conserving water any way that we can (including moving to treating waste water to drinking water quality).

I am worried that if our waste water is needed to make hydrogen to fuel our homes, businesses, industries (and to export!) then the message to conserve water, to be efficient with our use of water, will fall away. This will put pressure on the water systems, resulting in less water for nature, which is already has not been left with enough.

If hydrogen is to be produced from desalinated sea water, I wonder

- a) Is there much energy benefit? Doesn't desalination use lots of electricity?
- b) What would be the impacts on the environments (sea and land) of desalinating lots of water?

Blending hydrogen with natural gas, to power gas appliances (e.g. home heating), is a crazy idea. We need to stop using natural gas as soon as possible.

3. My concerns about substituting Natural Gas with Biogas

The report states that "Using waste to make biogas also aligns with Victoria's commitment to achieving a more circular economy".

I disagree that using waste to make energy can in any way be described as "circular". Our need for energy is endless and one directional; the use of the energy does not result in the growing of the crops that result in the waste. Making our power from waste creates a need for the waste, therefore any messages of resource efficiency would become irrelevant.

I certainly agree that we should be capturing any methane resulting from the anaerobic breakdown of our waste (e.g. as currently happens at our waste water treatment plants). But I do not think we

should be putting systems in place that require the constant production of large amounts of 'bio waste'.

Recently there was a report about how sea level rise will affect Victorian infrastructure in low lying areas. I think I read that the Werribee treatment plant will be affected. I wonder if this consultation is overlapping with that kind of consideration. Perhaps more localized treatment of waste water in future could lead to some small scale, localized power production. I am obviously no expert in any of this, just hoping that the various parts of government are talking to each other.

4. Improving Energy Efficiency and Electrification

Given the sun and wind are endless, I think we should be focusing on converting to electricity to make the most of these forms of power. They have the obvious benefit of not using fossil fuels. Improving the energy efficiency of our homes, businesses and industry is a must.

I would like to see

- a) No new gas connections – if Victoria is to move to net zero, it makes no sense to allow new homes/ businesses to have a gas connection. We need to be getting off gas as fast as possible, not locking in gas usage into the future.
- b) Education of plumbers and builders – They need to know that gas is bad for the environment and be encouraging their customers to choose efficient electric options.
- c) Victorian grants taken away from any gas appliances – this sends completely the wrong message to the public. Why encourage the uptake of gas appliances when they will be in use for a couple of decades and we need to get off gas ASAP.
- d) A Victorian government community awareness raising campaign that encourages energy efficiency and a move to all electric. A website (I know that ACT has something encouraging a move away from gas) and perhaps an advice line. It is hard to know what to do first (what actions have the biggest impact, what order to do things given a limited budget) and who to trust. I think Victoria needs a re-education campaign to reverse the effects of the 'cooking with gas' campaign from decades. People think of gas as an environmentally friendly source of power.

5. An example – my efforts to get off gas

I recently asked my very experienced plumber about getting off gas - he asked me why I would want to do that. He thought that gas was good for the environment as the government gives rebates to swap old electric hot water services for instantaneous gas ones. I asked him what it would cost me to swap my instantaneous gas hot water system to a heat pump and he told me I'd be the only one in Melbourne to have one and that they don't work any further south than Echuca. I know this is not correct, but the fact that an experienced plumber has these views, I found worrying.

6. A couple of concerns/ questions

I do have some concerns about moving to all electric. Hopefully, when moving towards all electric, the government will be across these too:

- a) Solar panels – what is the plan for recycling them when they come to the end of their life?
- b) Gases used in split systems and heat pumps have huge GWP – I understand that the gases used in split system air cons and heat pumps have a huge global warming potential. Are we creating a bigger problem by moving to this form of technology? How do we ensure that the

gases don't escape and are captured at the end of the life of the appliance? I understand that some appliances use carbon dioxide instead and hence are much safer. Is it desirable and possible to encourage the use of these devices?

Thank you for the opportunity to provide some input to this consultation

Kind Regards

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