

210729 Submission re Gas Substitution

I thank the Victorian government for the opportunity to make this submission. This submission is not intended to be exhaustive but to provide encouragement for some of the measures which I believe are both feasible and necessary.

“Natural gas” is a mis-nomer: it should be termed methane.

All decisions regarding the use of methane must be based on recognition that anthropogenic climate change almost certainly is occurring, that it is due to the release of greenhouse gases, and that use of methane causes an increase in atmospheric greenhouse gas concentrations either as fugitive emissions or as carbon dioxide after the methane is burnt to generate energy.

Given the threat caused by climate change, use of methane must be minimised. I note and agree with the Victorian Government’s desire to balance impact on households, especially those with low income or that are disadvantaged, and to avoid disadvantaging Victorian workers and Victorian industry.

I recommend as follows:

- Provide intensive community education regarding the benefits of insulation, including the ability to retrofit it, and that electricity, including reverse cycle air conditioning and hot water heat pumps, is cheaper than methane-fuelled devices
- For all new dwellings and commercial buildings, ban the installation of any methane devices (including gas meters and pipelines).
- For all new buildings (whether for domestic, commercial or industrial use), lessen requirements for heating (and cooling) by implementing design standards which prioritise maximising the shape of the building and the use of sunlight and shade (from roofs, eaves and greenery) to utilise natural heating and cooling and natural airflows.
- For all new buildings (whether for domestic, commercial or industrial use), lessen requirements for heating (and cooling) by increasing the use of insulation – current building standards for insulation are too low.
- For all new buildings (whether for domestic, commercial or industrial use), amend design standards to lessen loss or gain of heat through windows – current building standards are inadequate.
- For all new buildings (whether for domestic, commercial or industrial use) require the installation of solar panels on rooftops.
- For all new buildings (whether for domestic, commercial or industrial use) exceeding a minimum size, say more than 10 occupants, require the installation of a battery; this would include where there are multiple owners on the same site such as apartments and multiple townhouses and smart meters would be used to record and allocate billing for the differing drawdown of the battery by the various users.
- Intensify programs providing retrofitting of insulation to all buildings by providing loans to be repaid from reduced energy bills.
- Intensify programs replacing gas (methane) heating and gas (methane) hot water services with electric devices/ heat pumps by providing loans to be repaid from reduced energy bills.
- All new major gas infrastructure e.g. pipelines to be compatible with using hydrogen as the gas.
- Where high temperatures are required for industrial use, promote industrial hubs centred around the production and use of biogas or hydrogen; this might include the government

owing the infrastructure for the gas or a private-public partnership. Large superannuation funds might be suitable partners.

- Discourage the use of methane by introducing an impost, after allowing a suitable period for users to switch away from gas (say 3 to 5 years), with the impost increasing annually. Revenue from the impost might be used to assist funding of programs which lessen the use of methane. This would be run in conjunction with providing low interest loans to householders and small businesses to purchase devices which do not use methane.