

Gas substitution roadmap

Thank you for the opportunity to comment on the planned gas substitution roadmap and the role that gas or renewable energy will play in Victoria's energy future.

I'd first like to recognise that this is a very important initiative by the Victorian Government, and welcome the substantial budget allocation for a clean energy transition, and the commitment to gas substitution. This is a critical time for energy decision making in Victoria. Victoria is the only place in the world where fracking is banned in the Constitution. And yet this state has the highest household gas use in the country. What we need from the State Government is an ambitious timetable to accelerate this switch and support clean renewable energy, not polluting gas.

Just as Victoria's success in managing the coronavirus pandemic within its borders has been based solidly on science and listening to the views of the relevant experts, I submit that it is important that the clean energy transition is driven by science and not vested interests of those involved in the fossil fuel industries. The science is quite clear, we face extreme climate and ecological emergencies, urgent action over the coming decade is essential if we are to stand a chance of limiting global warming to 1.5 degrees C. The unprecedented fire season in Australia in 2019-2020 as well as the extreme weather events globally this year should serve as a clear warning.

Thus, it is very important that gas substitution should move as fast as possible towards the complete replacement of gas by renewables. The roadmap recently provided by the International Energy Agency¹ makes it quite clear that this requires **no** new fossil fuel projects be started. Thus there should be **no** further gas developments or expansions in Victoria.

Progress to complete gas substitution will be helped by setting strong targets for 2025 and 2030 and implementing a range of initiatives to reduce gas use immediately. These initiatives should include the following key measures which have been identified by experts as reducing gas use most quickly such as

- Best practice efficiency standards to reduce energy demand
- Prioritising solar thermal technology research and development for high process heat requirements and renewable energy and batteries for electrification
- incentives and planning measures to facilitate:
 - Replacement of ducted gas heating
 - Installing heat pump hot water
 - Switching to heat pump space heating in commercial buildings
 - Immediate planning law changes to prohibit gas to new buildings
- Ensure that strong support is provided for low income and vulnerable Victorians to shift to cheaper, less polluting alternatives than gas.

¹ <https://www.iea.org/reports/net-zero-by-2050>

It is also important **to rule out** technologies that compromise climate and biodiversity:

- biomass and biomethane technologies that are risky for the climate and for biodiversity.
- carbon capture and storage technology which has been tried and demonstrably failed as a means of abating carbon emissions at scale.
- so-called 'blue hydrogen' from methane gas which is a dirty fuel that has no future in a zero-carbon world.

For the sake of future generations, decisive action governed by science is required now. As the Climate Council identified in 2020² the move out of fossil fuels into renewables is one that can create jobs and support our economic recovery from the pandemic.

² <https://www.climatecouncil.org.au/resources/primed-for-action/>