Gas infrastructure advice submission – 96

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Name:

Stakeholder group/interest: Interest

Q1. Do you have any further information, evidence, or concerns that you wish to raise in relation to the scenario design and analysis?

Scenario design and analysis may need to evolve, rather than remaining as currently presented. There is no information in the scenarios about costs to consumers. Whilst some pathways may look good on paper, the picture changes when the cost to consumers is revealed. In some cases, vulnerable consumers would be best served by using efficient electrical appliances, but that is not apparent without costing revealed in each scenario.

The scenarios also fail to take into account the fact that households and industry may need slightly different pathways from each other.

Q2. Do you have any further information or evidence that can help identify an optimum scenario for a net zero emissions gas sector in 2050?

Renew's (previously called Alternative Technology Association) report Household Fuel of Choice showed that efficient electric appliances were already cheaper than gas. This gap is expected to grow as biogas and green hydrogen are expected to be more expensive than fossil gas and should be accounted for when identifying an optimum scenario for a net zero emissions gas sector in 2050.

Q3. What policies and/or regulations, if any, are needed to support the development of low carbon pathways such as biogas, green hydrogen, and carbon capture and storage?

The development of the low carbon pathways mentioned brings some longer term solutions to decarbonisation. We must not lose sight of the extreme urgency to decarbonise, whilst maintaining a long term focus on developing these technologies. We need a balance between using renewables which we already have (but which needs further development in terms of storage and of distribution infrastructure to meet the needs of the different points of energy transition), and developing the longer term solutions, all of which could create a great boost to our export markets.

Q4. What is your view on the best ways to maintain the reliability and affordability of Victoria's gas supply if natural gas use declines?

As natural gas use declines - which it must - there needs to be a managed transition which is orderly. Targeted retirement of sections of gas pipelines, with perhaps incentives to reduce gas appliances in the corresponding geographical locations would help reduce system and customer costs. Further and detailed research is needed to determine the scope, scale, speed and challenges of trying to manage gas distribution system costs though a gas phase out.

Q5. What else can you tell us about the implications of decarbonisation pathways for the electricity generation, transmission and distribution networks?

Decarbonisation pathways are bringing the need for change to the whole energy system. As electricity generation is becoming more geographically scattered, with rooftop solar, wind generation, dedicated solar farms etc., it is a matter of great urgency to develop appropriate infrastructure to deal with transmission and distribution of energy which is no longer confined to just a few major locations. The good news is, of course, that not only is renewable energy cheaper, clean and, funnily enough, renewable, but putting in place the required infrastructure will create many jobs.

Q6. How can the use of Victoria's existing gas infrastructure be optimised during the transition to net zero emissions, over the short (10 years), medium (20 years) and long-term (30+ years)? How can the Victorian Government assist in this?

Focusing on a managed transition could provide the best of both worlds by allowing for a fast transition while minimizing the costs on the system and users. This would also allow for optimising the use of existing gas infrastructure during the transition in zones where strategic gas consumption exist.

However, it is crucial that the importance of optimizing the use of existing gas infrastructure is not prioritised over ensuring a fair and rapid transition.

Q7. What principles should apply or what measures will be needed to manage the impacts of gas decarbonisation on households and businesses?

The transition must improve the position of vulnerable Victorians to reduce energy poverty in the state.

As always, education is an important component of the process. Victorians need to be educated about the impacts of gas on their budgets, health and on the environment, and the advantages of other sources of energy such as electrification.

Q8. What polices, programs and/or regulations should the Victorian Government consider or expand to encourage households, commercial buildings and small businesses to reduce their gas use?

Firstly, the Victorian government should update planning schemes and building codes as soon as possible. The regulatory framework for buildings is outdated and is locking Victorians into gas, an expensive and polluting fuel. Specifically:

Victoria's Planning Provisions and Plumbing regulations to be updated urgently so no new development is forced to connect to the gas network and no Victorian is forced to use gas appliances.

The Victorian government should commit to building all-electric social housing as it will yield the greatest benefits for residents, the energy system and for the development of the industry.

A plan to require new buildings to be all-electric, or at least strongly incentivise it, should be developed to ensure that virtually all, if not all, new buildings in Victoria are fully powered by electricity by 2023.

Secondly, programs such as the replacement of inefficient heaters for heat pumps could be expanded to target ducted gas heating.

Finally, the Victorian government should consider launching a new version of the Environment and Resource Efficiency Plans Program which was administered by the EPA until 2013. This program was compulsory for our 200 largest users of gas, electricity and water. A key measure of this program was the mandatory implementation of efficiency measures that have a payback period of 3 years of less.

Q9. What policies, regulations or other support, if any, do you think are needed to support industrial users to switch from natural gas to lower emissions energy sources or chemical feedstocks?

Clear emissions regulations - and enforcement thereof; education centred around the lower costs of renewables vs gas; education about the hidden costs of increasing global temperatures vs

decarbonisation; maybe some sort of incentive/assistance, depending on the industry and difficulty of transition.

How would you like your submission treated?

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