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Submitted by email to climate.change@delwp.vic.gov.au

1 May 2018

Victorian Interim Emissions Targets Issues Paper

The Australian Energy Council (the Energy Council) welcomes the opportunity to make a submission to the Issues Paper on Victorian Emissions Targets.

The Energy Council is the industry body representing 21 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia and sell gas and electricity to over 10 million homes and businesses.

National Context

The Energy Council has a long-standing policy of supporting a technology and geographically neutral market-based approach to addressing emissions. In that regard we prefer approaches that are taken at the national level rather than sub-national. In the case of stationary energy emissions, as Victoria is a part of a National Electricity Market (NEM) and the eastern Australian gas grid, state-based actions can be distortionary and lead to carbon leakage as emissions in other states increase in response to Victorian actions.

With respect to electricity we note the development of the National Energy Guarantee will create a framework for a NEM-wide emissions target to be applied in a least-cost, technology and geographically neutral manner. Similarly the Emissions Safeguard Mechanism is a national scheme with the ability to constrain the emissions of large natural gas processors and consumers.

The Energy Council accepts that the level of emissions abatement presently targeted by these schemes are lower than the Victorian Government's ambitions. However, they are likely to lead to superior outcomes in the presence of stronger targets than any sub-national action. In the case of electricity and gas, we encourage the Victorian Government to look towards leveraging these national schemes to achieve its climate ambitions rather than institute new state-based mechanisms.

Target Setting

The Energy Council supports the Independent Panel approach to setting interim Victorian targets. In particular we see value in laying out a long-term emissions pathway combined with periodic interim targets. This provides a good balance between industry certainty and flexibility with respect to developments in the economy, climate science and international negotiations. We consider the expert panel's approach to be most valuable applied in the following ways:

- As a model to be promoted to the Commonwealth for setting national targets to apply to national schemes;

- As a guide for developing the Victorian Government's position with respect to the development of national emissions policy negotiated through the Council of Australian Governments (CoAG).

Transport sector

Whilst stationary energy emissions are best addressed nationally, there are likely to be significant benefits in state-based action in the land transport sector. This is because:

- Land transport infrastructure and regulation is almost entirely the responsibility of sub-national jurisdictions;
- Unlike stationary energy, Victorian transport emissions are on a consistently strong growth path and show no sign of peaking in a business-as-usual future;
- The transport sector is likely to be more responsive to direct state and local government actions, through its existing regulatory role, such as vehicle registration and parking controls. These roles are likely to be more effective in encouraging improved consumer choices than the Commonwealth's more indirect role in fuel excise and vehicle standards. Furthermore, local actions are unlikely to have the distortionary effects in the transport sector that a state-based action might have on the National Electricity Market;
- Government actions in the land transport sector to reduce liquid fuel consumption are frequently shown to have negative costs to users, by overcoming informational and other barriers¹.

The Energy Council agrees with the transport emissions reduction opportunities listed in the paper². To this list could be added:

- Further electrification of public transport such as commuter VLine services and (battery) electric buses;
- Electrification of municipal service vehicles, such as rubbish collection.

With respect to vehicle electrification, the panel should not resist this path for fear that it will shift liquid fuel emissions into electricity emissions, because:

- Electric vehicles are considerably more energy-efficient in an urban setting than conventional vehicles and therefore less emissive even if supplied with fossil-fuelled electricity;
- Victorian electricity generation emissions intensity has already fallen considerably from its historical level, and this improvement will continue under any scenario;
- New demand from electric vehicles will be met by *marginal* electricity generation over time. Coal plants are presently being retired at their ends of life and not being replaced. It can therefore be reasonably assumed that all additional marginal demand will be met by new renewable and low-emissions gas-fired generation.

Non-carbon based benefits

The Energy Council considers the Issues Paper to be generally well presented, and the approach proposed for determining interim targets is a valuable one, especially if used as a model for national action. We wish however to correct some inappropriate references made in the final page of the Issues Paper in reference to the water consumption and non-carbon emissions of Victorian coal-fired generation.

¹https://www.mckinsey.com/~media/mckinsey/dotcom/client_service/sustainability/cost%20curve%20pdfs/pathways_lowcarbon_economy_version2.ashx Exhibit 8.6.4

² Issues paper page 25

The use of “\$2.6 billion per year” in relation to health costs is inappropriate and misleading³. This figure is sourced from the Australian Academy of Technological Sciences and Engineering (ATSE) report from 2009. The figure is presented without context and is misleading for a number of reasons:

- The methodology used is a European study extrapolated to Australian populations;
- The report itself states that “these figures should be verified by Australian location-specific studies as health effects and costs may differ from Europe”;⁴
- No Australian emissions data was used in coming up with the figure, for example the lower Sulphur content of Australian coal;
- It is not clear that all the claimed costs in the figure were health related;
- The report was intended to prompt further research and not to be used as a result in itself for policy making.

It should also be noted that the Environmental Protection Authority’s ambient air monitoring in the Latrobe Valley for the quoted pollutants does not support extrapolation of European circumstances to Victoria. Indeed action on the transport sector or domestic wood-burning is more likely to have a more material impact on these pollutants in the Victorian context.

The Issues Paper discusses that “Coal-fired power stations use more water per gigawatt hour than any other form of electricity generation except for hydroelectricity”⁵ and that “Melbourne’s metropolitan water industry estimates that demand in Melbourne could outstrip supply as early as 2028.”

This paragraph misleads the reader by linking power station water consumption to adequacy of potable water. It fails to differentiate between water consumed and water used as in-stream use and it fails to point out that water supplied for Latrobe Valley electricity generation is sourced separately from water sourced for metropolitan Melbourne’s consumption and for Victoria’s principal irrigation areas.

In 2008-9 water consumption in Victoria was 2,991 gigalitres (GL), whilst the electricity and gas supply industry consumed only 123 GL or 4.1%. By comparison agricultural activities consumed 1,593 GL or 53% of total water consumption. Electricity generation accounts for a very small amount of Victoria’s overall water consumption.

Furthermore, the Latrobe Valley Generators rely predominantly on water sourced from the high rainfall Latrobe catchment and the Latrobe aquifer – outside the urban water supply system.⁶ Note also there are few competing large water users in the relevant catchment that would be likely to use any relinquished water rights.

While we accept the purpose of the consultation paper is to prompt discussion, we would caution against presenting particular figures out of their due context. It is misrepresentative, but also lowers the overall standard of the paper, which is otherwise based on sound reasoning and careful presentation of data.

Response to specific questions

1a. Should Victoria’s interim emissions reduction targets relate to a national reference point?

1b. If yes, what is the most relevant reference point?

³ Issues paper p.31

⁴ Australian Academy of Technological Sciences and Engineering (2009), The Hidden Costs of Electricity: Externalities of Power Generation in Australia (www.atse.org.au/Documents/Publications/Reports/Energy/ATSE%20Hidden%20Costs%20Electricity%202009.pdf), p.ii and p.49

⁵ Issues paper page 31

⁶ https://www.water.vic.gov.au/_data/assets/pdf_file/0026/52883/DSE_GRWS_accessible_linked.pdf p. 80

Consistent with its preference for a national approach, the Energy Council believes any state targets should relate to national reference points, and these should preferably be consistent with Australia's existing international legal commitments. The Issues Paper has listed Australia's present Nationally Determined Contribution (NDC) under the Paris Agreement along with the Climate Change Authority's (CCA) recommended stronger targets. At this time the NDC is the only committed target and so the Victorian approach should be guided by that. The NDC has a ratchet mechanism that allows Australia to progressively commit to a stronger ambition. If the Victorian Government's view is more aligned with the CCA recommendation than the current NDC, then it should encourage, through CoAG, Australia ratcheting towards that value. With respect to its own actions however, it should attempt to align with Australia's official commitment.

2. What would you recommend Victoria's targets be for 2021-25 and 2026-30, and why?

Consistent with this national approach, Victoria's target trajectory should attempt to match the national trajectory. However also as discussed above, the Energy Council does not consider unilateral state-based action should be taken in the Victorian electricity and gas markets that are interconnected to other states. Instead Victoria should endeavour to advocate, via CoAG, national targets for those industries consistent with Victoria's preferences.

3a. Do you think a Victorian emissions budget should be used as a tool in the Panel's analysis?

3b. If yes, what global temperature outcome should a Victorian emissions budget be consistent with (e.g. 2°C above pre-industrial levels)?

3c. If yes, how should Victoria's share of a global or Australian emissions budget be calculated?

As a general principle, the concept of applying a long-term emission budget and then subdividing into interim targets is a sound one. Ideally this approach could be recommended as a model to be followed at the Commonwealth level.

The Energy Council considers it is beyond the reasonable scope of a sub-national jurisdiction to target emissions level for a global climate outcome. The identification of a desired climate outcome and relevant emissions targets can only be achieved through international negotiation and treaties, for which the Commonwealth has constitutional responsibility.

6. What are the most significant opportunities and technologies for reducing emissions in Victoria during the period 2021-2030 and to reach net zero emissions by 2050?

7. What are the key barriers to reducing Victoria's emissions by 2025 and 2030?

The Energy Council's view is that whilst governments, preferably national, should set emissions targets, market forces should be leveraged to find the most economic manner in which these targets can be met, across as many economic sectors as possible. Whilst the proposed National Energy Guarantee is limited to the electricity sector (with some possible linking to credited offsets), it is an example of a national market mechanism which should deliver credible, efficient results. In contrast, unilateral state action taken in the electricity sector will be less successful, for example:

- If a specific volume of new low or zero emissions electricity generation is pulled into the Victorian market beyond national market incentives, it may:
 - Reduce the amount of low or zero emissions generation built in other states, therefore not achieving broader climate goals;
 - Reduce the dispatch of relatively low emissions generation such as gas-fired generation, and therefore not achieve the expected emissions reduction;
 - Due to differences in marginal cost, be more likely to reduce the dispatch of black coal in other states rather than brown coal in Victoria, and therefore not achieve an emissions reduction directly measurable within Victoria.

- If action is taken to reduce high emissions generation within Victoria it may result in the increase of coal-fired generation elsewhere.

Furthermore such actions may create risks for market-facing participants in the Victorian electricity sector which may lead to barriers to efficient investment and poorly managed generator withdrawals, with adverse effects on Victorian prices and the security and reliability of the Victorian electricity grid.

The Energy Council does see a role for state and local governments in reducing emissions from the land transport sector through the encouragement of electrification.

6. What lessons can be learned about reducing emissions in Victoria from actions taken in other states and countries to reduce emissions?

13. Should international and interstate offsets be used to meet Victoria's interim targets?

The Californian and Australian Capital Territory targets rely heavily on electricity sector actions physically taken outside the borders of each jurisdiction. Both approaches employ careful accounting practices to achieve confidence in the verification and additionality of those actions. Whilst the Energy Council prefers a national approach, if state targets are employed, activities to meet them should not be limited to the state itself, particularly where a national market exists, such as in electricity and gas.

Any questions about our submission should be addressed to me by email to ben.skinner@energycouncil.com.au or by telephone on (03) 9205 3116.

Yours sincerely,



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