

Climate Change Authority GPO Box 1944 Melbourne, VIC 3001

29 February 2016

Submitted by email/online to: <u>submissions@climatechangeauthority.gov.au</u>

### Special Review Second Draft Report

The Australian Energy Council welcomes the opportunity to make a submission to the Climate Change Authority's Special Review Second Draft Report ("the Report").

The Australian Energy Council ("the Council") is the industry body representing 22 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. In its role as the provider of gas and electricity to Australian homes and businesses, our industry produces a large share of Australia's greenhouse gas emissions. Any policy framework to reduce emissions will have an impact on the sector.

The Report is a valuable contribution to the greenhouse gas emissions reduction policy debate in Australia. Its snapshot of other countries' actions and announced intentions is a useful reference point. It would be worthwhile for the Authority to continue to monitor international developments to understand whether these commitments are maintained over time, whether announced policies are implemented, whether policies endure and whether they appear to be efficient and effective instruments for reducing emissions.

The Council recognizes the importance of Australia having policies in place that enable an orderly transition to a much lower emissions profile. Keeping the rise in global temperatures within 2 degrees is likely to require Australia and other developed countries to reach net zero greenhouse gas emissions over the next few decades. The magnitude of the transformation required to achieve this goal should not be underestimated. This makes it critical that sound policy is applied to facilitate this transformation.

The Council has a preference for greenhouse gas reduction policies that are, efficient, effective and equitable. These in turn are best achieved via a stable, nationally consistent policy framework that accounts for both the distributional impact of policies and accounts for the impact of the policy on the reliability and security of our energy systems. Typically, market-based policies are best-placed to uncover the sources of lowest cost abatement, and we consider that the main policy instrument or instruments should leverage the power of markets to exploit distributed information. There may still be a role for complementary polices that entail modest regulation in such a framework, but these require careful consideration. We expand on these points further below.

P +61 3 9205 3100 E info@energycouncil.com.au W energycouncil.com.au

# Least cost emissions reduction requires integrated emissions reduction and energy policies

The Council supports the Report's focus on least cost policies. This will assist in supporting Australian businesses' competitiveness and Australian households' cost of living. In the stationary energy sector, the relative cost-effectiveness of different options has become more complex with the advent of affordable distributed energy. As the electricity sector decarbonizes, opportunities for fuel switching, especially from the transport sector are likely to arise, as plug-in electric vehicles become more cost-competitive. There is a range of policies that could support the uptake of such vehicles<sup>1</sup>.Accordingly, least cost emissions reduction will only occur if it is integrated with energy policy that signals to consumers the true relative costs between distributed and centralized options.

This is especially true of future renewable energy schemes. While modest targets have modest impacts, the further growth of renewable energy and the shift to a low emissions energy sector require significant change to Australia's current energy system, not least because in practice the current suite of energy policies led by renewables policy is resulting in new intermittent generation substituting for dispatchable generation. These systems impacts need to be understood and managed if an efficient transition of the energy sector is to be achieved. Further work may need to consider:

- the development of markets or other payment mechanisms for services such as system inertia that were previously taken as given;
- the development of new financial instruments for managing the risk of wholesale price volatility;
- improving the cost-reflectivity of network tariffs and other price signals;
- the development of new tools for voltage regulation at various levels, and;
- An understanding of other issues as they arise.

Such issues do not typically show up in conventional electricity sector modelling. Nor do they get addressed in arbitrary target setting. Analysis of the South Australia region of the NEM by Deloitte illustrate the sorts of challenges that are likely to be faced in other regions as decarbonisation progresses<sup>2</sup>.

## Access to appropriate international permits

Since climate change is a global issue, it requires a global solution. While policies will be set nationally, least cost emissions reduction can come from anywhere. Accordingly, access to appropriate international permits that represent genuine abatement is a valid component of policy design and one that can play an important role in managing the costs of emissions reduction. Many of the more significant changes required to transition Australia to a very low or "net zero" emissions profile are currently quite costly. This includes many of the changes that will be required in the electricity sector. In this respect it is curious that the Report claims on p11 that "Some low-cost opportunities involve investment in long-lived assets, like electricity generation plants." Most attempts to construct a marginal abatement curve have the major electricity generation changes at the

<sup>&</sup>lt;sup>1</sup> See, for example, <u>http://energeia.com.au/wp-content/uploads/2016/03/Energeia-Report-for-ESAA -Optimal-</u> <u>AFV-Policy-Targets-and-Settings-for-Australia.compressed.pdf</u>

<sup>&</sup>lt;sup>2</sup> <u>http://www2.deloitte.com/au/en/pages/economics/articles/energy-markets-implications-renewables-sa-</u> <u>case-study.html</u>

more expensive end of the curve<sup>3</sup>. This does not mean that policy settings should not seek low cost abatement from the sector, simply that it should not be presumed that significant low cost abatement is available in the near term. International permits can provide a low cost way to achieve abatement as new generation technologies come down the cost curve and we learn how to integrate them into the system in the most efficient way.

With most nations now taking on targets under the Paris Agreement, the nature of CDM or successor policies will have to change. We s support the Australian Government in encouraging the development of new international units.

## Distributional impacts

The Council agrees with the Authority that it is also important to take account of distributional impacts as well as choosing efficient policy settings. As the Authority notes, this particularly includes the impacts on the less well-off and trade exposed industries. It also includes the impact on communities in regions where there is currently a concentration of high-emissions activity, such as (but not only) the Latrobe and Hunter Valleys. Thoughtful approaches to complementary regional, social, education and employment policies will be required to mitigate the impacts on these communities.

A further distributional consideration, in the context of ensuring least cost, is to be mindful of the impact of unpredictable policy changes on the cost of capital of future investment. This could be particularly apparent if policies lead to the aggressive stranding of existing assets. Contrary to some popular rhetoric, it is largely the same pools of capital and even the same corporate entities that both own existing emissions-intensive assets and will build the new lower or zero-emissions assets. Accordingly, investor confidence is applicable to existing assets as well as to new assets built under the policy settings.

Distributional impacts are also relevant to the funding source of various policy options. Recent policies have seen a tendency to require users of grid electricity or reticulated gas to provide funding for schemes. Given that the less well-off typically spend a greater proportion of their income on energy, this is arguably regressive, as compared to funding from general taxation. It also distorts the signals for consumers as to the value of distributed energy options, which can avoid their share of such costs.

## Balancing stability with flexibility

Many of the investments required to transition to a lower emissions economy are long-lasting, especially in the stationary energy sector. As such, stability in policy is critical to ensuring investors have the confidence to underwrote such assets, which ultimately requires bipartisanship at the political level. Conversely, some flexibility is needed to adjust the detail of policies from time to time in response to evolving circumstances and as information unfolds about the costs and other impacts of policy. This flexibility is most usefully considered in the initial design of polices. Automatic stabilizers such as international permits can play a useful role in balancing stability with flexibility, too.

## Scheme coverage

Whether climate policy evolves as a single economy-wide instrument such as a carbon price or a series of individual instruments covering different activities, it is important that as many sectors of the economy as possible are covered by broadly comparable schemes. Narrow coverage or obvious disparity in the strength of different policies will lead to unnecessarily costly abatement and economic distortions. For example, electricity

Phone +61392053100 Email info@energycouncil.com.au Website

<sup>&</sup>lt;sup>3</sup> See for example, Reputex estimates at <u>https://www.dpmc.gov.au/sites/default/files/unfccc-public-</u> <u>submissions/RepuTexSubmission\_The%20Lost%20Years\_Australian%20MAC%20for%202020%20and%20203</u> <u>0%200422.pdf</u>

is a (partial) substitute for direct combustion in a number of circumstances from household heating and hot water to transport to industrial scale activities. If electricity was subject to an emissions reduction policy but direct combustion was not, or vice versa, then inefficient fuel-switching may take place, which would lead to higher costs overall for the same level of abatement.

Phone +61392053100 Email info@energycouncil.com.au Website

Any questions about our submission should be addressed to me, by email to <u>kieran.donoghue@energycouncil.com.au</u> or by telephone on (03) 9205 3116.

Yours sincerely,

Vien Dowy C

**Kieran Donoghue** General Manager, Policy & Research Australian Energy Council

Phone +61392053100 Email info@energycouncil.com.au Website