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Submissions  
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**RE: Special Review, Second Draft Report – Australia’s carbon policy options (November 2015)**

EnergyAustralia welcomes the opportunity to provide comment on the *Special Review, Second Draft Report – Australia’s carbon policy options (November 2015)*.

EnergyAustralia is one of Australia’s largest energy companies, providing gas and electricity to 2.6 million household and business accounts across the National Electricity Market (NEM) with a diverse generation portfolio of coal, gas and renewable assets.

EnergyAustralia supports the objective of the Authority in conducting this Review: “... to help identify effective policies and measures that Australia can use to reduce its emissions and support an effective global response”.

While Australia is on track to meet the 2020 emissions reduction target we agree with the Authority’s assessment that meeting the Government’s 2030 target will be challenging. Australia’s emissions are projected to grow 29 per cent between 2015 and 2030. This projected growth is dominated by electricity generation emissions given that electricity demand increases with growth in economic activity and coal-fired electricity generation retains a high share of total electricity generation (between 31 and 33 per cent over the period).<sup>1</sup>

EnergyAustralia supports the Authority’s proposed framework based on the principles of efficiency, effectiveness and equity to guide and compare different carbon policy options. In 2015 the Australian Climate Roundtable agreed a set of principles to guide the development of long term emissions reduction policy to address climate change.<sup>2</sup> These principles build on the Authority’s framework and ought to be considered as part of the Authority’s deliberations.

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<sup>1</sup> Department of the Environment emissions projections (various).

<sup>2</sup> <http://www.australianclimateroundtable.org/wp-content/uploads/2015/06/Climate-roundtable-joint-principles-June-29-2015-final-embargoed.pdf>

There are four crucial aspects of climate change policy that EnergyAustralia would like to comment on here:

1. *Political bipartisanship* – and its role in achieving policy outcomes;
2. *Balanced incentives* – for exit of high emission electricity generation capacity and investment in low emission and renewable energy capacity;
3. *The use of international permits* – and their potential impact on the cost of domestic carbon policy;
4. *The energy trilemma* – and the interdependence of environmental outcomes, cost and energy security.

### **Political bipartisanship**

Carbon price signals, irrespective of the mechanism that creates them, need to be perceived as credible by investors if they are to result in effective and efficient policy outcomes. A substantial reduction in emissions across the economy requires substantial reallocation of private investment capital toward low emission technology and activities, and away from higher emission alternatives. A clear and enduring price on (or cost of) carbon would provide the commercial rationale for this reallocation of investment resources to occur.

Even an astutely designed emissions reduction policy with a relatively high carbon price signal will struggle to catalyze this reallocation unless it is perceived by investors to be politically secure and robust at the outset. This is particularly acute in the case of investments with long time horizons such as those typically required in the energy sector. Between 2015 and 2030 hundreds of billions of dollars in new investment is estimated to be required to maintain and grow the stationary energy sector. According to the Energy White Paper 2012 satisfying Australia's future energy needs will require significant levels of investment out to 2030; in the order of \$240 billion for the domestic energy sector and \$290 billion for energy resource development projects.<sup>3</sup> According to Commonwealth Treasury energy-related activity could provide around 85 per cent of Australia's domestic abatement by 2035, increasing to around 89 per cent by 2050.<sup>4</sup>

This investment requires a credible carbon signal to guide it until 2030 and beyond. Unfortunately the history of carbon policy development in Australia has fostered a perception of instability and unreliability amongst the investment community.<sup>5</sup> Once debated appropriately, it is essential that there be common support across major political parties, not only for the emissions reduction target, but for the mechanism(s) to be used to reduce Australia's emissions.

Integrating emissions reduction policy within the existing energy policy architecture is a potential way to address perceptions of policy instability and unreliability going forward. The pros and cons of this approach, compared to using entirely separate emissions reduction policy architecture, would of course need to be carefully understood and considered.

### **Balanced incentives**

As discussed above the emissions performance of the electricity generation sector is critical to achieving Australia's 2030 emissions reduction target. However this performance is being inhibited by the substantial oversupply of generation capacity in the market. The oversupply has come about because of declining electricity demand growth in since 2009 which is projected to be generally stagnant going forward. AEMO estimates that new generation capacity is not needed before 2023–24.<sup>6</sup>

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<sup>3</sup> Australian Government (2012), *Energy White Paper 2012, Australia's Energy Transformation*.

<sup>4</sup> Treasury (2011), *Strong growth, low pollution: modelling a carbon price*, Treasury, Canberra.

<sup>5</sup> *January 2004*, First Ministers of State and Territory Governments establish the National Emissions Trading Taskforce; *December 2006*, the Commonwealth Government establishes the Joint Task Group on Emissions Trading. *May 2009*, the Commonwealth Government introduces emissions trading scheme legislation to commence 1 July 2010; *April 2010*, ETS legislation is withdrawn; *August 2010*, Government announces that it will not introduce a carbon tax; *February 2011*, the Government announces its intention to introduce carbon tax legislation; *July 2012* a carbon tax commences; *July 2014*, carbon tax legislation is repealed.

<sup>6</sup> Australian Energy Market Operator (2014) *Electricity statement of opportunities*.

Barriers to the closure of excess capacity include first-mover disadvantage, antitrust law, the cost of plant decommissioning, the option value of avoiding permanent closure (in case demand growth returns), and very low fuel costs in the case of brown coal. Unfortunately these factors conspire to keep the most emissions intensive generators operating in the market for longer than necessary for security of supply, effectively 'crowding out' new investment in low and renewable energy generation.

To be effective and efficient carbon policy needs to include explicit incentives for investment in new low emissions and renewable generation capacity and incentives for existing high emission generation capacity to exit the market. The orderly and timely exit of existing high emission generation capacity can create 'space' for investment in new lower emissions and renewable generation capacity.

The appropriate amount and timing of capacity withdrawal will be determined by a range of considerations including:

- energy security - the projected demand supply balance of the NEM including peak load requirements and inter-regional constraints;
- workforce and community impacts – the lead time required to signal capacity withdrawal in the effected region;
- wholesale electricity price effects – the phasing out of a plant's units over time to avoid unnecessary price spikes and provide sufficient time for new, replacement investment where required.

The alternative is to rely solely on market forces to eventually determine 'when', 'who' and 'how' generation assets exit the market. The risks and costs associated with this approach include:

- less emission intensive (even black coal generators) exiting before the most emission intensive brown coal generators;
- locking in higher emissions from the sector for decades to come (particularly if electricity demand growth returns);
- large amounts of capacity abruptly exiting to the detriment of customers in terms of avoidable reliability issues and price spikes; and
- community impacts for which there is insufficient preparation and planning.

The pros and cons of different options for Government facilitation of the orderly exit of high emission electricity generation ought to be evaluated as of part of the carbon policy development process.

### **The use of international permits**

The cost of a domestic emissions reduction policy is highly dependent on the extent to which international emissions reductions are eligible to be used to offset domestic emissions. Certified emission reduction units (CERs) created under the Clean Development Mechanism (CDM) represent emission reduction projects undertaken in developing countries. They grant developed countries access to low cost abatement while providing finance for this abatement to occur in developing countries. The demand for and supply of CERs determines the price of these units any given time, which in turn would be the cost of using these units to offset domestic emissions. The historical price of CERs has fluctuated markedly over time from as high as €15/CER during 2010 to virtually zero in 2015. Currently CERs are trading at less than \$1/CER in Australian dollar terms.

By way of comparison, the domestic cost of abatement, assuming anything other than a trivial domestic emissions constraint, would start at say \$10/tCO<sub>2</sub> for a relatively loose emissions constraint and increase to over a \$100/tCO<sub>2</sub> for relatively tight emissions constraints. Clearly using CERs to meet some proportion of Australia's emissions reduction target has the potential to dramatically lower the cost of domestic carbon policy (while CERs continue to trade at relatively low levels).

The appropriate limit for use of international units to offset domestic emissions ought to be evaluated as of part of the carbon policy development process. Policy-makers will need to balance the economic transformation benefits of domestic abatement on the one hand and the benefits of capping the cost to the domestic economy by effectively allowing the importation of lower cost abatement.

## **The energy trilemma**

With respect to the energy sector in particular, the pursuit of emissions reduction objectives need to be balanced against two additional and equally important objectives; energy security (or reliability) and economic growth (or the cost of energy).

A reduction in emissions in the order implied by the Government's 2030 target necessitates a transition from predominantly fossil fuel-based electricity generation (largely coal-fired) to predominantly gas-fired and renewable-based electricity generation. It would be imprudent for policy-makers to underestimate the challenge this represents for the sector.

The high levels of energy supply security traditionally enjoyed in Australia could be at risk if this transition is poorly managed as a result of inadequately designed emissions reduction policy:

- disorderly exit of highly emissions intensive plant provides unpredictable investment signals for replacement generation which increases the likelihood of shortfalls in capacity (temporarily at least); and
- forcing intermittent renewable generation capacity into a market in a way that is not responsive to changes in demand degrades the investment conditions for all types of generation, which again increases the likelihood of shortfalls in capacity.

The relatively low cost of energy supply enjoyed in Australia could also be at risk:

- the deployment of relatively high cost abatement, rather than the lowest available cost options could lead to an unnecessary deterioration in energy affordability and living standards (particularly for lower income households); and
- the competitiveness of energy intensive businesses competing globally will also suffer, with associated implications for employment and economic growth, particularly if major trading partners are pursuing the lowest available cost abatement options.

Explicit consideration of all three objectives and the inevitable trade-offs they entail is essential to achieving the best possible outcomes for the Australian community (and avoiding the worst). Simply considering environmental outcomes in isolation of the implications for energy security and economic growth, is also less likely to result in stable, enduring emissions reduction policy.

If you have any questions in relation to this submission please don't hesitate to contact me on (03) 8628 1514.

Regards

*[signed]*

**Ken Macpherson**

Head of Reputation