

14 April 2011

The Secretary  
Senate Select Committee  
on the Scrutiny of New Taxes  
PO Box 6100  
Parliament House  
Canberra ACT 2600

**Submission to: Senate Inquiry on “a carbon tax, or any other mechanism for putting a price on carbon”**

Exigency was established in 2003. It is an independent energy and carbon market advisory firm, serving clients on Energy and Greenhouse Strategy as well as providing advice and project support in the delivery of sustainable and low carbon intensity infrastructure ([www.exigency.com.au](http://www.exigency.com.au)).

Exigency has made a number of submissions on climate policy in its own right including on Renewable Energy legislation and the Carbon Pollution Reduction Scheme. These submissions have a consistent theme: the integrity and effectiveness of climate policies require the application of sound market principles, coupled with well-considered market regulation.

In summary, market-based climate policies can be classified into two broad categories:

- Penalty-based, in which a price or a ceiling is applied to anthropogenic greenhouse gases (AGGs) with the intent of initiating an economic response to reduce emissions (these are typically “permit-based” schemes - an example being the European Emissions Trading Scheme); and
- Incentive-based, in which an economic reward is provided in return for a reduction in AGGs (these are typically “credit-based” schemes, an example being the NSW Greenhouse Gas Abatement Scheme)

Both types of arrangement “price” carbon.

A carbon policy needs to be designed so that it achieves the requisite reduction of carbon as cost-effectively and efficiently as possible, requiring as little bureaucracy and redistribution of proceeds as possible. However, it is not immediately apparent to us that a penalty-based carbon policy would be efficient or effective when applied to the Australian economy:

1. To be effective, Cap and Trade requires high competitive intensity at the producer level and/or the capacity to substitute or reduce at the consumer level.
2. The Sandbag Report (August 2010) concluded that the European Cap and Trade scheme (the European ETS) will deliver emissions reductions of 0.3% (approximately 30 million tonnes) relative to 1990 levels by 2012.
3. The proceeds of European permit sales raised by individual member nation states will be applied, at best, “up to” 50% on climate mitigation measures in the period to 2020.
4. Nearly half of Australia’s AGGs come from electricity generation.
5. The National Electricity Market which accounts for the majority of electricity generation is designed to pass on the short run marginal cost of the marginal generator, which will be increased by the cost of carbon permits.
6. In Australia, carbon prices of over \$60 per tonne on electricity would be passed on to consumers with no change in the generation “merit order”.
7. At ca. \$25 per tonne, new build power switches from coal to gas. However, the loss of appetite amongst banks for funding coal-fired generation indicates that there is a de facto moratorium on new coal generation, absent any carbon price.

8. The requirement to obtain permit cover over the long term to make a project bankable will inhibit new entrant power generators and favour incumbents.
9. Vertical integration and concentration of Retailers limit the ability of consumers to substitute supply. This is compounded to some extent by prevailing renewables legislation.
10. Regulatory failures limit consumer capacity to initiate demand side measures such as low-intensity distributed generation or real-time consumption data.
11. The price elasticity of demand for electricity makes penalty based schemes in which the cost is passed to consumers a very blunt instrument for change.
12. The behavioural response to climate policies and the impact on voluntary actions have been almost completely ignored to date. A penalty price signal that is felt by consumers is likely to decrease voluntary action.
13. Cap and Trade and Carbon Tax could be “tuned” to apply to marginal AGGs above an efficient benchmark, rather than all AGGs by sector, which would also limit permit sale proceeds and the potentially distortionary effects of redistribution.
14. Redistribution is an inherent feature of Cap and Trade and Carbon Tax schemes and should be factored into an holistic assessment of overall scheme efficiency and effectiveness

The above suggests to us that Cap and Trade (and by inference, Carbon Producer Tax) might not be the best means of reducing the level of AGGs in the Australian economy.

On the other hand, there are prima facie arguments in favour of incentive-based market schemes:

1. It is much clearer how much abatement has been achieved, by whom and at what cost compared with Cap and Trade or Producer Carbon Tax.
2. Failure to deliver committed carbon savings can be “penalized” at the marginal market determined price.
3. By focusing on the savings “delta” rather than the totality of AGGs the amount of “carbon dollars” flowing through the economy is smaller and potentially less distortionary.
4. They align more readily with voluntary action and the behavioural response to climate change.
5. Subject to an ex-ante budget allocation of a total amount for carbon reduction, the market will determine both the price at which carbon reductions will occur and the volumes of carbon reduction that will ensue (“Government-set total cost, market determined volume and price). In that sense, properly designed incentive schemes provide a more efficient market than Cap and Trade (Government-set quantity, variable price) or Tax (Government-set price, variable quantity).

Exigency has undertaken considerable work on incentive based schemes. Our intention is not to provide a detailed discussion of that in this document. Our objective is simply to urge the Parliament to ensure that incentive-based mechanisms are properly considered alongside penalty based systems, from a whole of economy perspective, in the interests of maximizing economic efficiency and environmental effectiveness.

Exigency would be pleased to address Senate Members in person if appropriate, to expand on the matters raised here.

Yours Sincerely

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