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To The Secretary
Senate Select Committee on Climate Policy
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Summary

Australia's emissions target: The government's proposed range of a 5–15% reduction at 2020 represents significant effort relative to a business-as-usual scenario. However it is not enough of a contribution for Australia if a truly ambitious international agreement could be struck. Hence, the 25% reduction recommended by the Garnaut Review should be on the table.

Free permits: The formula assistance for trade-exposed emissions-intensive industries in the government's CPRS White Paper is highly problematic. It would give too large a share of permits for free and risks locking in potentially inefficient industrial structures, at a cost to the rest of the economy. Instead, the best approach would be to provide assistance on the basis of the uplift in product prices that would occur if all competitors faced a similar regime. A second-best would be to cap the total share of permits to be given out for free. In any event, a greater share of revenue from auctioning should be channelled to support low-emissions technology.

Voluntary action: Recent arguments that the CPRS makes individual voluntary greenhouse gas action futile, are misleading. There is no design fault in that regard. Individual action is an integral part of achieving a national emissions reduction target, and vital for political support for more stringent targets down the track.

International markets: In line with Australia's open trading and investment regime that has helped bring economic prosperity, Australian climate policy should facilitate future international carbon market linkages. International links are crucial but have so far been little discussed with regard to the CPRS. Australia is likely to buy emissions credits or permits from developing countries, which can support mitigation efforts there and limit the aggregate cost of reductions. Australia should support trading of permits that derive from national or sectoral emissions caps, not offset mechanisms like the CDM.

Passing the CPRS: If the objective is to get underway the transition towards a low-carbon economy, and for Australia to help advance meaningful climate policy internationally, then the legislation should be passed. The flaws should be rectified as far as possible, but the scheme overall should not be held up. Rejecting the legislation would send a negative signal about Australia's resolve internationally and would prolong domestic investment uncertainty.

Bionote

Some biographical background to put my submission in context. I am an environmental economist specializing in climate change economics and policy, including emissions trading design, the Kyoto Protocol mechanisms and options for a post-2012 international climate policy. I have worked on these issues since 1998.

I am currently a Research Fellow at the Australian National University's College of Asia and the Pacific, and a deputy director of the ANU Climate Change Institute. In 2008 I worked as economic advisor for the Garnaut Climate Change Review.

I previously worked for the Australian Bureau of Agricultural and Resource Economics, and have collaborated with and consulted for a variety of national and international organisations and government agencies. I hold a PhD and Masters degree from ANU, and an honours degree from Humboldt University Berlin, in the fields of economics and resource management.

Australia's emissions target

There is a perception in the public debate that the proposed range of a 5–15% reduction at 2020 is weak. However, it represents a significant effort relative to a business-as-usual scenario. It must be seen in comparison to the Kyoto target which is an 8% increase over 1990 levels (roughly similar to 2000 levels when factoring in land-use change), and against continued underlying growth in emissions, in particular from fossil fuel combustion.

However, the 5-15% range is outside of the 25-40% range that is in the UNFCCC negotiations, and it is not enough of a contribution if a truly ambitious international agreement could be struck.

The Garnaut (2008) Review established that Australia's proportionate contribution in an ambitious post-Kyoto international climate agreement would be in the order of a 25% reduction in emissions at 2020 compared to 2000. The 25% target option should be on the table, as a vital part of Australia's support for meaningful international action on climate change.

In this context, it is important to note that any comparison of emissions targets between countries that relies on per capita measures must take into account both the rate of population growth, and the level of per capita emissions. Both measures are combined in the 'contraction and convergence' approach advocated in the Garnaut Review. In terms of per capita emissions levels, Australia would need to reduce faster above-average rates to get to a common global per capita average. On the other hand, Australia's relatively high population growth rates would moderate the effect on reduction rates in absolute emissions entitlements. Both aspects need to be factored in, if a proposed emissions target is to be seen as fair by other countries.

In assessing the likely effects of particular target settings on Australia's economy, it is important to note that Australia's carbon permit price will in large measure *not* depend on the target chosen, because of the open trading regime proposed. Australia will be a small player in international carbon markets and will affect the international carbon price only marginally. Contrary to what is sometimes claimed, a more ambitious target would not impose unmanageable burdens on Australia's greenhouse gas emitting industries.

This is reflected in the Treasury's modelling, which shows only modest differences on Australia's aggregate economic cost of mitigation between different national targets of different stringency (Australian Treasury 2008). The primary effect of a more stringent national emissions targets would be that Australia would buy more permits or credits

overseas, in particular from developing countries, and thereby do more to support mitigation efforts in developing countries.

Free permits

As laid out in the Garnaut Review, there is no economic case to allocate free permits to electricity generators. These firms typically can pass on much of their increased production costs to their customers. Regarding any remaining reductions in profitability, there is no public policy justification for compensation. The introduction of carbon constraints is a business risk that would have been evident to investors for at least one, possibly two decades.

There is however a case to provide some assistance for trade-exposed emissions-intensive industries, but the formula in the government's White Paper is highly problematic. It would give out a fixed share of permits (90% or 60%) solely on the basis of an activity being emissions intensive and the products being exported or subject to import competition. And it links the free permits directly to production. Key problems associated with this approach are the following.

- A substantial share of the total permits will be allocated for free, and that share is likely to rise over time, without an upper bound, if output in the respective activities rises faster than the 1.3%p.a. rate of 'carbon productivity contribution' under the CPRS. The share will be greater if the target is tighter, as the magnitude of free permits would be independent of the overall national cap. Over time and with tighter scheme caps, relatively less revenue from permit auctions will be available for assisting low-income households, or for supporting low-emissions technology development and deployment.
- The proposed scheme largely eliminates incentives to reduce output of emissions intensive activities. As a result, over time the rest of the economy will have to do more and more to achieve declining national emissions targets. The extra effort may comprise additional and more stringent policies outside of the CPRS, a higher permit price under the CPRS (to the extent that the price diverges from international prices), and the purchase of overseas permits. Permit purchases may even need to be financed through the budget.
- The scheme encourages the continuation or indeed expansion of high-emissions activities in Australia that will not be competitive in a world with comprehensive carbon pricing.

An example is the aluminium industry, which in Australia to a large extent relies on coal-fired electricity. The main alternatives elsewhere in the world are hydroelectricity with very low carbon emissions, or gas fired electricity with much lower greenhouse gas intensity than coal. Under an efficient global climate change mitigation regime, aluminium smelting would invariably move to locations where low-emissions electricity options are available. The uplift in aluminium prices would then likely be only moderate, making smelters relying on coal uneconomical.

The CPRS model would prevent efficient adjustment away from activities and technologies that in the long run would not be economical in Australia.

The best alternative approach would be to provide assistance on the basis of the uplift in product prices that would occur if all competitors faced a similar regime. This was proposed out in the Garnaut Review (p.345), and also described in the White Paper (p.12-6). This approach would provide full assistance for activities that would experience significant price uplift and that would efficiently remain in Australia, but less support for other activities. It would be an efficient way of dealing with the problem of trade-exposed emissions-intensive industries during the transition to comprehensive international carbon pricing.

Concerns about difficulty of implementation and contestability of such a principled approach are unfounded. The assessment could be carried out by an international body such as the International Energy Agency, using standard methods of market analysis and projections. The assessments would then be above domestic lobbying pressures, and a single set of parameters could be adopted by any country for the purposes of their domestic carbon policies.

A second-best approach would be to cap the total share of free permits, as envisaged in the Green Paper. Assistance to emitters in the form of free permits could then be made pro-rata as a share of their claim under an unlimited formula such as proposed in the White Paper. Depending on the parameters chosen, this approach could lessen the problems of an overly high share of permits given freely. But it would not solve the in-principle problem of lack of differentiation between activities that would and would not be economical in Australia under global carbon constraints.

Regarding the use of revenue from auctioning of emissions permits, more money should be earmarked for support of low-emissions technology. There is a role for governments to invest in R&D and deployment of advanced low-emissions technology, alongside market and pricing instruments as the primary instruments (Pezzey, Jotzo and Quiggin 2008). The CPRS in its current form allocates only a very small share of revenue from the sale of emissions permits to support technology, after assistance to industries and households. A greater share of auctioning would allow more revenue to be channelled to support low-emissions technology.

Voluntary action

Recent arguments have been made in the public debate that the CPRS makes individual 'voluntary' greenhouse gas action futile. The argument, in a nutshell, is that the CPRS defines national emissions through its quantity target. So if a person decides to cycle to work rather than drive, or installs some solar panels, it simply means that someone else, say an industrial polluter, can emit more, paying a lower permit price.

Such arguments are misleading, and in my view unnecessarily feed into rising public frustration about climate policy (Jotzo 2009). The argument ignores that a national target necessarily determines Australia's contribution to the global effort to reduce emissions. There is no design fault in the CPRS in that regard.

Different domestic policy instruments can be used to meet the national target: emissions trading would do the bulk of the work, plus the renewable energy target, subsidies for new technologies and energy efficiency, regulations for industrial processes or agriculture, and so forth. If Australia still overshoots the national target then emissions offsets credits or permits will be bought from other countries.

Individual action is an integral part of achieving a national emissions reduction target at least cost, and it will be encouraged by rising energy prices. The more individuals do to reduce their greenhouse gas footprint, the easier it will be for Australia collectively to meet any national emissions target. That in turn will make it possible to go for more ambitious national targets down the track.

That of course requires flexibility in being able to ratchet down targets in the future, and the political preparedness to do so.

The international dimension

As shown by Treasury's modelling of the CPRS (Australian Treasury 2009), it is likely that any ambitious national emissions targets will be met in part by buying emissions credits or permits from international markets. As observed above, this would mean that Australia's domestic carbon price is to a large degree determined by supply and demand for permits in international markets.

It is worth noting that the CPRS precludes the use of Australian permits in overseas schemes, effectively preventing sales of Australian Assigned Amount Units to other countries. This in turn means that there could be a lower permit price in the Australian market than in international carbon markets. While this would 'protect' domestic emitters from higher carbon prices, it would mean that abatement action in Australia would remain inefficiently low. Some relatively low-cost opportunities to reduce emissions, and to sell the freed-up permits in overseas markets, would be foregone.

Precluding permit exports is in many ways akin to banning any other exports from Australia – if goods that would have been exported are not allowed to be exported, this reduces demand for them and thereby reduces their domestic price. But governments, with good reason, rarely ever ban exports because exporting goods bring many economic benefits, even if domestic prices of export commodities are higher than they would be under autarky.

Integration in international carbon markets is a logical step to take in line with Australia's open trading and investment regime. Openness to international market is a proven recipe for economic success, and has helped bring Australia economic prosperity in the past. The same principles apply to climate policy. Australia should look to establish full linkages with emissions trading schemes in other countries, to the extent that the schemes are compatible in their rules and have mutually acceptable levels of ambition (Jotzo and Betz 2009).

As a first step in the direction of international linking, the CPRS foresees private purchases of offset credits under the Clean Development Mechanism (CDM). The CDM relies on estimation of reductions against counterfactual baselines, is restricted in its scope, and implies no net reductions but merely a shifting of the location of abatement action. Hence, it is highly problematic to rely on this, or indeed other offset mechanisms, to play a large role in a future international mitigation regime. The CDM has been useful in getting climate change funding to developing countries but now needs to be supplanted by more comprehensive mechanisms and commitments for developing countries.

Australia has an important role to play in the current international climate negotiations, to help design new mechanisms to encourage, support and finance comprehensive mitigation efforts in developing countries. Australian climate policy should be designed to support private capital flows for mitigation in developing countries. Australian policy should facilitate trading of permits that derive from national or sectoral emissions caps, and limit the use of offset mechanisms like the CDM. This will help in the critical task of getting developing countries comprehensively involved in reducing greenhouse gas emissions, and in reducing the overall cost of reductions in Australia – which in turn to facilitate more ambitious future reduction commitments.

In terms of the CPRS, what is required is for legislation to allow for Australian engagement in future international mitigation mechanisms, and for future governments' determinations on these issues to be predisposed towards international engagement.

Passing the CPRS

With Australia's economy going into recession, and against the backdrop of the global financial crisis, some have argued that climate policies should be postponed. But that would mean prolonging the period of policy uncertainty. It thus would lead to further delays in investment in lower-carbon technologies, and would in fact be an obstacle to any kind of investment that may be affected by future climate policies. Delaying the scheme would thus hinder the objectives of limiting greenhouse gas emissions, and also run counter the nearer-term objectives of supporting economic growth through the downturn.

Others have argued that the proposed scheme should be ditched because it is too weak or too flawed. But rejecting the proposed CPRS would risk a prolonged period of delay and uncertainty, and send a deeply negative signal internationally about Australia's resolve to tackle climate change.

The best path to get underway a transition towards a low-carbon economy, and for Australia to help advance meaningful climate policy internationally, is to improve on the CPRS as far as possible and get it in place soon. Key flaws in the proposed legislation should be fixed now, in particular the issue of free permit allocation, and provision should be made for more ambitious near and medium-term target commitments.

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