## *Submission to the Senate Select Committee on Climate Policy*

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## *Executive Summary*

The principle of an Emissions Trading Scheme is a beneficial market-based scheme for addressing the existing market failure. In addition the Governments unconditional commitment to an emissions reduction of 5% on 2000 levels by 2020 is undoubtedly a significant change to the current no-mitigation emissions projection. However, the Carbon Pollution Reduction Scheme as it stands has a number of significant flaws which must be addressed. These are as follows:

- Commitment to emissions reduction is still too small to avert dangerous climate change, commitments in the context of a global agreement should be at a minimum 25% - 30% on 2000 levels by 2020
- Unreasonably long duration of commitments (5-15 years) leading to lower long-term emissions reductions and an inability to change commitments according to the changing will of the public
- Voluntary residential reductions will not decrease the total emissions, instead will simply allow companies to pollute more
- Lack of any proposal for reducing agriculture sector emissions
- Lack of commitment to public transport improvements
- Subsidization of fuel prices leading to no incentive to reduce consumption
- No commitment to remove subsidies to EITE industries in the context of carbon leakage becoming a non-issue due to popular international agreement to charge for carbon pollution
- Unjustifiable subsidization of non trade exposed high emissions-intensity coal fired generators

It is also true however that the failure of an ETS to pass through senate may send the wrong signal internationally and at the Copenhagen summit. This further exacerbates the imperative to correct the flaws in the CPRS.

## *Low commitment to emissions reduction*

In September 2008 the Government commissioned Garnaut review recommended that Australia commit to emissions reductions aimed at achieving a global 450ppm carbon dioxide concentration (Garnuat, 2008, p278). The review noted that in order to achieve this Australia would need to make a "reduction of 25 per cent in emissions […] from 2000 levels" by 2020 (Garnuat, 2008, p277), the Review recommended that such a commitment should be made conditional to a global agreement aimed at achieving 450ppm, this reductions target is in line with the IPCC recommendations for achieving 450ppm [IPCC summary for policy makers, 2007, p20]. The Review also recommended that Australia should commit unconditionally to a 5% reduction in emissions from 2000 levels by 2020 (Garnuat, 2008, p279.

A week after the Garnaut review, sixteen of Australia's leading climate scientists including a number of authors and editors with the Intergovernmental Panel on Climate Change wrote an open letter to the Prime Minister stating that "Garnaut's most severe target -- the 25 per cent option" was the "minimum requirement for Australia's contribution to an effective global agreement." Further noting that a 450ppm scenario would include Greenland melting, the Antarctic ice sheet destabilizing and would "would sacrifice the Murray Darling and the Great Barrier Reef"
http://www.theaustralian.news.com.au/story/0,25197,24461879-11949,00.html

The Carbon Pollution Reduction Scheme white paper, released in December 2008 committed to an unconditional reduction of 5% below 2000 levels by 2020, as recommended by Garnaut. It also accepted that "is in Australia's national interest to achieve a comprehensive global agreement to stabilise atmospheric concentrations of greenhouse gases at around 450 parts per million of carbon dioxide equivalent."[cprs1 P21] but nonetheless only committed to a reduction of 15% below 2000 levels by 2020 in the context of such a global agreement. CPRSv1 p5
Although noting that it could establish its post 2020 goals towards achieving a 450ppm target. [cprs1 P21]

The Australian Greens Party and the Australian Conservation Society have both made statements that they believe the CPRS targets are too low.

http://www.theaustralian.news.com.au/story/0,25197,25191733-2702,00.html

http://www.abc.net.au/news/stories/2009/03/10/2512568.htm

In April 2008 the United States released draft legislation of a similar cap-and-trade scheme which would lead cuts of approximately 31% below 2000 levels by 2020.

http://www.theage.com.au/environment/global-warming/us-to-go-further-than-rudd-over-emissions-20090401-9jso.html

**Critique of Australian Government's justification**

In comparison, the European Union has "has committed to reducing emissions by 20 per cent in aggregate by 2020 compared with 1990 emissions, or 30 per cent in the context of strong commitments by other developed countries." [CPRS1 p21]
The Australian government rationalizes its comparatively lower targets on the basis that Australia's population is predicted to grow at much higher rate than that of the EU, and thus on a per capita basis the commitment is similar. [CPRS1 p21] This neglects two important points; firstly a significant proportion of Australias emissions are created by agriculture and commercial electricity consumption (Garnaut, 200, p155) (including production for export), and these sources are not directly dependant on population.
Secondly, though an increase in population may make it harder to curb total emissions, it is certainly not going to reduce climate change, in fact a growing population makes the impacts of unmitigated climate change in Australia all the more significant by virtue of it affecting a larger number of people.

The CPRS white paper also notes that a 5% reduction target is "likely to produce a one- off rise in the consumer price level of around 1 per cent" and that 15% target would create 1.5% rise. Extrapolating the trend line, on the (very rough) assumption of a linear relationship indicates that the 25% reduction recommended by the Garnaut review would only lead to a 2% rise in consumer price level ($y=mx+c$, $m=20$, $c= -15$). This suggests that concern for increased cost of living was not a significant factor in the decision to commit to only 5 to 15% reductions.

## *Long duration of commitment*

The CPRS scheme proposes to specify the caps "at least five years in advance" the CPRS scheme would similarly create range limitations for the following 10 years. Cprs1p32 (ie - at any given time the Australian people would not be able to modify emissions for the next five years and only within limits up until 15 years in the future).

One rationale for this is that "Economies can respond more efficiently to new circumstances when businesses and individuals have certainty about long term direction." Cprs1p22 and Garnaut p305

As noted previously the proposed targets are considered seriously inadequate by numerous climate experts.

Before the scheme is implemented "economic models are likely to underestimate the benefits or overestimate the costs of changes in economic conditions" Garnaut p305 this problem is exacerbated by "lack of data about the full costs of climate change impacts and a corresponding downward bias in the estimated benefits of avoided climate change" Garnaut p305.

However within 1-3 years after the scheme has been initiated it is likely that there will be even greater public will to make deep emissions reductions than at present. This is because:

- After the scheme is implemented participants will have a clearer idea of the real costs, most likely leading to lower estimates of the costs of reductions than previously

- Based on the trend over the last few years, the next few years will bring more scientific evidence on the imperative for action on climate change, and thereby more public concern about this issue

- More people will become aware of actual changes in climate occurring over the next few years (such as increasing hot weather and droughts in Australia)

- The worst affects of the Global Financial Crisis are likely to be over

Thus the 5 – 15 year commitment on reductions would be detrimental to the level of emissions reductions created and also limiting the ability of the Government to democratically respond to the will of its citizens.

In the event that this 5 – 15 year commitment must be made then the above argument strengthens the imperative that the commitments made must be adequate or even err on the side of excess, which is clearly not the case at the moment.

This leads to the question of whether the scheme should be allowed to pass the senate this June. On the plus side "passing even a flawed scheme would signal Australia was meeting its commitments and would help build momentum for a new deal at a UN meeting in Copenhagen in December" http://www.theage.com.au/environment/lock-in-trading-scheme-says-garnaut-20090323-97h9.html However a scheme with too little commitment on reductions may lock Australia in to a higher emissions future than its citizens actually want.

## *No provision for voluntary household reductions*

At present the scheme would cap the total national emissions regardless of which sector produces the actual emissions. This means that reductions made by one sector would make it cheaper for other sectors to pollute. The benefit of this market approach is to allow the cheapest emissions reductions to occur first.
However this is unfair in the case that emissions reductions made by households out of an altruistic concern for the environment then allow large industries to pollute more out of concern for more profit.

Under the assumption that companies act only for profit, then it is only residences that may act out of altruistic motives beyond saving money. Thus the challenge is to differentiate between commercial and residential emissions. Thereafter the scheme should ensure that if

the reduction in residential emissions is greater than the proportionate reduction required to achieve the scheme commitments, then the total cap (perhaps for the following year) must be reduced by that amount.

It is easy to measure total residential electricity and gas consumption and the changes of these with time, in Sydney EnergyAustralia collects this data.

The other major aspect of residential emissions is transport, perhaps companies should have to track their fuel consumption (similar to other emissions tracking), the remaining fuel consumed in Australia is therefore residential.

## *Gaps in the solution*

The CPRS white paper notes that "The Scheme will be Australia's primary policy tool to drive reductions in emissions of greenhouse gases." Cprs1 p26, Though it also refers to investments in Renewable energies, carbon capture and storage and action on efficiency. Cprs1 p24 As previously discussed the philosophy seems to be that by creating a cost to emissions, market forces will drive all other necessary means of reduction.

A higher cost of fuel may over the long term lead people to buy more efficient cars, but IMF figures show that despite rising fuel prices per capita car ownership in Australia has increased over the last 10 years [REF]. Thus it seems unlikely that a rise in fuel price alone will lead to a reduction in usage of cars.

The IPCC [IPCC Summary for Policymakers p17] states that "investment in attractive public transport facilities and non- motorised forms of transport" has been shown to be effective in reducing emissions.

Currently the Scheme does not cover emissions from agriculture, as this is said to be rather complex due to the large number of small emitters. Cprs1 p24. The white paper proposes to consider inclusion of Agriculture in 2015 instead. Agriculture amounts to approximately 23% of Australian carbon dioxide (equivalent) emissions [inventory 2006.pdf p4], although actual emissions have decreased by 40% over the last 15 years.

While it is valuable to not make the scheme unduly complex or creating high transaction costs, agriculture is a fairly significant emissions area that would be ignored under the scheme for the next five years. Currently there are only voluntary mechanisms in place for this [agriculture benchmarking.pdf p4], however the IPCC states that "financial incentives and regulations for improved land management; maintaining soil carbon content; efficient use of fertilisers and irrigation" are policies that have been shown to be environmentally effective, [IPCC sum for policy.pdf p17] and thus should be considered atleast in the five years before the CPRS covers this area. Note also this exclusion would mean that the burden of emissions reduction gets disproportionately carried by the other sectors. Garnaut p314

## *Fuel Subsidy*

The CPRS white paper stated that Government will provide a "cent for cent reduction in fuel tax for the first three years of the Scheme" Effectively nullifying the increase in fuel price that would result from putting a cost on the pollution. [CPRS1.pdf p6]
Furthermore this reduction in fuel tax will become permanent after three years.
[cprs1 p42]. The government estimated the total cost of this fuel tax subsidy at 2.4 billion in 2010- 11. [Cprsv1p42]

Subsidizing the fuel prices in this way will remove the emissions reduction purpose of having a pollution cost in the first place. Furthermore this method is providing the most subsidies to those people and companies who use the most fuel! It would be far better to take the gains from the pollution costing of fuel and equitably distribute this to all Australians. This would provide a significant incentive for people to reduce their fuel consumption in order to keep more of the money provided.

A rise in fuel prices may be viewed negatively by some Australians, incidentally this waiting period of 3 years would delay the price increase till just after the next election cycle.

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## *Subsidies to highly polluting industries*

**EITE industries**

The proposed scheme shall provide free carbon pollution permits to industries it defines as 'Emissions Intensive and Trade Exposed'. The rates of assistance proposed are 90 per cent for activities that had at least 2000 t CO2- e per million dollars of revenue, and 60 per cent for activities that had at least 1000 t CO2- e per million dollars of revenue Cprsv1p36. This is a very significant amount of assistance; the white paper accepts that this will in fact amount to "around 25 per cent of total carbon pollution permits" increasing to 45% by 2020 Cprsv1p37

This subsidy is justified as a way of avoiding 'carbon leakage', i.e. - the extra cost on industries could cause them to be uncompetitive in comparison to industries in countries without pollution costs, thus leading to the activities being moved out of Australia. Cprs1p34

However subsidizing the most emissions intensive industries by 90% will create little incentive for them to reduce emissions, and thus, from an environmental point of view is little better than moving the industry overseas.

Furthermore if carbon leakage (or even employment leakage) was the primary reason for the subsidies then the scheme should have a clause that if international agreement is reached to create pollution costs for EITE industries globally (thus removing the disadvantage to Australia and the EU) then the CPRS subsidies shall be terminated. At the moment there is no such clause. http://www.smh.com.au/environment/global-warming/garnauts-climate-change-agonising-20090416-a8wr.html

The CPRS white paper also notes that "work by the IEA suggests there has been little carbon leakage from Europe since the introduction of the EU ETS."

Garnaut notes that exempting some sectors or freely allocating permits leads to a disproportionate burden to the other sectors and to the community. Garnaut p314. Garnaut also stated that over compensation of national industries could lead to a "highly protectionist and damaging" form of global trade
http://www.abc.net.au/news/stories/2009/02/11/2489008.htm

**'Strongly Affected' Industries**

The CPRS will also provide $ 3.9 billion in pollution permits to the most emissions-intensive coal- fired generators (based on an initial carbon price of $ 25 per tonne) Cprsv1p39. This corresponds to 156 million tones of unrestricted carbon dioxide into the atmosphere. Note this subsidy is only to the *most* emissions-intensive of the electricity generators, generators which have a lower than average amount of emissions per unit of electricity will actually be disadvantaged in that they won't receive this subsidy.

There is clearly no carbon leakage problem here, but the Government justifies this subsidy by the fact that the most emissions- intensive coal- fired generators would be disadvantaged when competing with other generators and would therefore suffer loss of profit.

The white paper also notes that the subsidy is a significant mitigating factor in avoiding plant shut-down leading to threats to energy supply. Cprsv1p40

However, given the free market in which energy is traded in Australia, the above two justifications are contradictory. I.e. – If a supplier is under so much competition that an increase in its sales price would lead to a loss of sales then clearly the total potential supply of electricity must be higher than the demand. Therefore a shutdown of that supplier could not lead to a threat to the availability of electricity.

Comparing this $3.9 billion subsidy to the $500 million Renewable Energy Fund leads the author to wonder whether the difference reflects the priorities of the Government, or perhaps the political power of the well established coal-fired generation industry in comparison to the fledgling renewable energy industry.