AOC Submission to the Climate Change Authority on the

Draft Report – "Reducing Australia's Greenhouse Gas Emissions – Targets and Progress Review"

The draft report is a magnificent product of some clearly extremely dedicated and hard work by an extraordinary well-qualified group of people to whom I humbly submit these few meagre comments. I apologise that I have not been able to spend more time on this critical issue.

1. The modelling:-

- 1.1. The models used are CGE models which reflect the move from what is hopefully one equilibrium to another. These are long-run equilibria and hence it is very hard to tie the results down to a specific year, 2020, 2030 or 2050. Particularly if you are talking over a period of 37 years, the Lucas Critique would be very strong. With technological change the structure of the economy and how it works is likely to be very different. Hence, though I value and praise economic modelling, the predictions over this period should be taken with a pinch of salt. In particular, it is hard to provide good standard errors to estimates from these models. Given the standard errors are likely to be quite high (especially 37 years out) relative to some very small effects noted, one might be inclined to say that some of these effects are not significantly different from zero.
- 1.2. A minor point is that these straight line graphs going down raise an image of growing percentage changes. Surely this is misleading. Or is it? From experience to date, are you able to say whether certain measures have an increasing effect as they take hold, or do they have a decreasing effect. Some measures may work one way while others in the other. Are you able to consider this?
- 1.3. This raises the possibility that as the years go by, we might be able to estimate with more and more accuracy the effect of CO_2 emissions-reduction on the economy and then alter policies accordingly. This might mean that we should possibly consider an adaptive policy approach which requires flexibility.
- 1.4. One of the effects of economic modelling as it stands, is a tendency to fixate on GDP growth as supposed to increasing "well-being". Climate change will bring many other problems for people that will reduce their quality of life, most of all uncertainty and fear of dangerous floods, fires and other social disasters. Just think of the huge security costs brought on by 9/11. Climate change will no doubt require much greater expenditures on emergency services. However this will not reduce GDP, it might increase employment but it will also reduce expenditure on other things like poverty, health and education. We should not just be looking at GDP but thinking of all things affecting the quality of life.

- 2. Lessons from CFCs and the Montreal Protocol.
 - 2.1. It is astonishing how well the world worked together when it came to CFCs with the Montreal Protocol starting in 1987, which was based on acting according to the "precautionary principle" behind the climate change debate. The report could make more of this.
 - 2.2. The CFC negotiations were handled in a way that did not lead to a huge power struggle between vested interests. Admittedly there was an Alliance for Responsible CFC Policy that argued that the scientific evidence was not strong enough to justify action, but on the whole CFC reduction was not highly politicised. Regrettably we have the opposite with climate change. The Review could talk about this politicisation and how vested interests have worked. Reproducing the scientific evidence is not going to stop the denialists.
 - 2.3. The panel may take a look at the history of the Montreal Protocol to see what lessons could possibly learnt from that success as to how countries came together. Was it just that CFC reduction was not seen as having such a big impact on GDP and wealth or was there something different, that explains the harmonious response. Can this be applied with respect to climate policy?
 - 2.4. It may also be worth looking at how the levels of change were determined. The Montreal Protocol is aimed at a full recovery in the ozone layer by 2050. We are not half way along the road yet since 1987. Are there any lessons to be learnt as to how well the protocol has worked overall and in particular areas? How is the monitoring working and can we set up something similar for greenhouse gases? This will all affect people's attitudes to targets and their value.
 - 2.5. Australia acted very responsibly with respect to CFCs and hopefully can do so again with CO2.
- 3. What would be the Consequences of ignoring Climate Change?
 - 3.1. The draft report assumes that many leading countries in the world will be taking action and considers the effect of Australia acting as a free rider. One of the great shames is that there has been little depiction anywhere of the "doomsday" scenario if the world did nothing. Talking of average temperatures rising 0.8, 2 or 5 degrees means very little to most people; some might argue that it will reduce winter morbidity. Thus it might help if the Review paper provided a much strong depiction of what could happen to the Australian way of life if the world does nothing. This might help people take ownership of the issue.
 - 3.2. Section 2.2 does discuss this but in a way that would turn off many people including MPs. One of the great successes of the CFC debate were the graphic images (not graphs) presented to the international delegates. It would be good if the report used some good images to describe the effects.

- 3.3. We know that SE Australia (where there is most of the population) is a hot spot for serious climate change effects. The CSIRO Australian Climate Change Science Program under Paul Holper (paul.holper@csiro.au) already has estimates of the effects in different regions and is currently working out the best way to present these. Some of the map graphics showing differing temperature effects across Australia really draw people in as they want to know what is going to be the effect in their own area. It makes people really identify with the issue. The current publication date is possibly as late as July next year but hopefully you might be able to contact them and be able to use some of their insights in their comparison of the over 40 climate change models.
- 3.4. Just an editorial note, but on page 27 there is a graph which the sub-text says is adapted from "CSIRO, 2012". This is the reference given but when you go to the reference list and go down alphabetically, there is nothing under the heading CSIRO. This applies also to a number of references to CSIRO publications elsewhere.

4. Uncertainty versus Certainty

- 4.1. Economists constantly argue that uncertainty creates loss and we need certainty. Above (1.3), it was said that we might need a flexible approach but this could mean uncertainty if not laid out well.
- 4.2. Irrespective of our international obligations, more certainty would possibly be created by going for the larger target rather than the smaller one. If the government aims too low, people will always be worrying whether it will need to change policy down the track in a negative way for them. If we now, right-a-way, aim high, everyone could settle on what is required and then optimise behaviour accordingly. Then if we find we can reduce the pressure, this will be a positive effect for everyone.
- 4.3. Thus it might be argued that greater certainty and a more positive attitude to the future would be created by taking on the higher target.

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