

JANET WINIFRED BARLOW

6th April 2009

The Secretary
Senate Select Committee on Climate Policy
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Sir,

RE: Senate Select Committee on Climate Policy

Introduction

I wish to emphasise how important it is that the Senators get down to the nitty gritty of the enormous changes they are contemplating. Failure to fully grasp the detail and complexity of the changes could be catastrophic. The logical conclusions of decisions taken must be examined in full. Senators must not rely on economic and climate models to forecast the future and tell them what to do. Models cannot see into the future because the future is too complex. Before Senators vote for these enormous changes and put into place measures to trade carbon dioxide they must speak to practical people such as electrical engineers in charge of the grid, engineers who run power stations, chemists who measure CO₂ emissions, international bodies who monitor cross border money laundering and fraud, and IT people who will have to put the systems in place.

Senators should not be tempted to believe that science can be done by consensus. The motto of the Royal Society is to take no one's word for it. In my view a society will only be able to benefit from science if it can sustain a sceptical outlook as part of its inherent cultural fabric. There are some issues on which one can say that there is broad scientific agreement such as Newton's laws of gravity and the fundamental laws of chemistry. However, this cannot be said in the case of climate change. In fact it is where people feel the need to emphasise that the scientific debate is over that one should be most worried.

Please refer to the "Information about the Enquiry" form downloaded from the Senate website. I have not rewritten the points but am responding to them.

(a) The choice of emissions trading as the central policy to reduce Australia's carbon pollution

(1) in order to reduce "carbon pollution" (i.e. carbon dioxide and other emissions) at the lowest economic cost the Senators have no choice but to recommend that Australia go nuclear in order to ensure a reliable base load source of power. This will be very expensive. If you are not convinced that carbon dioxide is such a problem you should recommend that we stay with fossil fuel power generation.

(11) Here you need to define "clean energy" very carefully. You must acknowledge, for example, that the pollution in Beijing that we heard so much about leading up to the Olympics was not caused by modern coal fired power stations transmitting clean energy over wires. It was caused by such things as old fashioned open fires. When talking about coal fired power generation you must rank the various types of emissions which include particulates, sulphurous oxides, oxides of nitrogen, carbon monoxide, carbon dioxide, and heavy metals associated with particulates. The technology already exists to capture many of these things.

You must address with an open mind and without spurious computer models the harm or otherwise of carbon dioxide. Is carbon dioxide a pollutant? Is it a toxin? In order to avoid confusion I suggest that you use the words "carbon dioxide" rather than "carbon". Carbon is diamonds, graphite, soot.

Before recommending incentives to switch from cheaper forms of energy to more expensive in the hope of curtailing emissions you must be sure that the switch will in fact reduce emissions significantly.

If you are tempted to conclude that alternative energy sources such as wind power, solar power, fuel cells and nuclear are viable options then you must assess the emissions which are generated in the production of the facilities. For example, all facilities of this nature use large amounts of concrete. You must assess the fuels which will be used in the kilns that will produce the clinker. In addition, all of these means of energy production use large amounts of metal which will inevitably require a smelting process in their manufacture. You must assess the fuels used to smelt the metal.

(111) the best global solution to climate change is adaptation and constant monitoring of changes to the earth and solar system. In my view we do not know the cause of the world's ever evolving climate change. In the absence of knowledge it is foolish to blame ourselves for the global climate and then offer to transfer money overseas to pay for our per capita emissions. Where could this lead? Once we can no longer afford to pay for our emissions we might be asked to implement measures such as one child per family.

Although many of our politicians present a linear causal relationship between rising manmade CO₂ and global warming the IPCC does not agree. In its 2001 report the IPCC admitted, "In climate research and modelling, we should recognise that we are dealing with a coupled non-linear chaotic system, and therefore that the long-term prediction of future climate states is not possible." Ref. 1 [IPCC-TAR 2001, p.774] If you disagree with the IPCC's words and still seriously believe that there is a linear causal relationship between CO₂ and global warming such that every extra molecule of CO₂ does harm on the road to catastrophic climate change then you will need to advocate a global dictator prepared to

kill millions of people and animals in order to greatly decrease emissions. If you think that the relationship between CO₂ and global warming is logarithmic then you must believe that the future impact of an increase of CO₂ in the atmosphere will be insignificant. Therefore there is no need to do anything more than look after the environment without putting exaggerated emphasis on the destructive nature of man made carbon dioxide. Doing nothing to increase our energy costs should be considered as the first option.

Some people believe that it would be good for Australia to set an example by increasing its cost of energy in order to encourage lower emissions even though the lower emissions would be nothing more than a symbolic gesture. Such an example would not be attractive as a model for other countries to follow if it resulted in economic decline without lowering emissions. Even if it did lower our emissions from approximately 1.4% (Ref. 2) of the world's total they are too insignificant to make a difference.

An officer of AGL recently told me that Australia has had it too good for too long with cheap energy resulting in high per capital emissions. He said that the Australian government wanted to rid the country of all coal fired power and replace it with gas and renewables. Ref. 3 The Senators will have to work out where all this gas is coming from and whether it is the best use of our gas reserves. How much would companies in Sydney pay for gas in dollars per GJ if Clover Moore's proposal was implemented for small gas fired power stations throughout the city?

Exxon Mobil in its April 1st 2008 submission said that it expects global energy demand for wind and solar to reach 1% of total demand by 2030. Ref. 4 This seems a very small percentage. The Senators need to be clear on the cost of conversion to wind and solar and the increase in the cost of base load power when energy from renewables such as wind and solar is added to the grid. Without nuclear how is it possible to reduce our emissions dramatically?

The main renewables are still things like wood, charcoal and dung. When people burnt more home fires the air in cities was far worse than it is today. It will be unfortunate if we light more home fires as the cost of energy down the wires rises. Our cities would become more polluted.

(b) It is no use talking about energy efficiency without talking about the cost of energy and the return on investment. For example, senators should get accurate information about the return on investment of stand alone wind farms and how they add to the cost of base load power which has to be there as a backup. I recently asked AGL for the return on investment of its latest wind farm purchase. An officer of the company informed me that the company does not reveal return on investment of standalone wind power. It reveals only the total return on the combined energy of its gas, hydro and wind. This is a serious issue which shareholders of the company should address, but also an indication that wind is being subsidised by other forms of generation. Ref. 5 It is not in the interests of the country to have companies making investments which do not stand up on their own merits.

When assessing alternatives Senators may be surprised at how few emissions are ultimately saved by the use of alternatives such as wind power. It is crucial to remember

that wind generation must have conventional power stations (in our case fossil fired) ticking over in the background and ready to come on stream a) when the wind drops, or b) when the wind blows too strongly for the turbines. The wind power is already expensive but the overall costs of electricity are further increased by having the fossil fired generation operating at low efficiency. Ref. 6

Senators need to understand the derivative market and such products as credit default swaps and the possible effects of carbon dioxide and methane regulation on the economy. They should be wary of financial engineering surrounding carbon based derivatives. One of the problems in the financial crisis has been lack of transparency and ineffectual regulation. Too much or too little regulation and different regulation in different countries encourages financial engineering which is very complex to unwind.

Senators must be clear on exactly how carbon dioxide emissions are to be measured and why some emissions such as those from wood fires, motor vehicles and animals are to be excluded. Any such exclusion calls into questions the belief in the urgency of action and the magnitude of the problem. If one really believes in the simple causality of emissions and temperature then one cannot be half pregnant on the issue and do a little bit here and there with flow on effects to every corner of the economy.

Senators must be aware of the possibility of fraud and the cost in money and emissions of surveillance. If a Senator pays to have a tree planted to offset his holiday travel how can the Senator be sure that the tree has been planted, that it is still growing and that it is really helping to keep the climate from changing as it grows over time? What is the cost of this tree, how can its value be measured as it grows and what is the cost in money and emissions of its surveillance?

Senators should make sure they understand the consequences of lobbying and vested interest. It should be noted that those associated with coal and oil companies are not the only ones with vested interests. It is not uncommon to find climate alarmists on the boards of coal companies and sceptics amongst those who will benefit from cap and trade schemes. It is a matter of belief.

The Senators should look at inconsistencies such as the fact that a large percentage of methane emissions in Australia comes from termites. Methane is a much stronger greenhouse gas than carbon dioxide. Ref. 7

(c) why prefix "climate change" with the word "dangerous". If Senators are going to label climate change as dangerous they must have a standard whereby they measure what is a dangerous climate change and what is a benign climate change. For example, if climate change results in more rainfall and higher temperatures in parts of the world such that the food production and lives of people and animals improve is this "dangerous"?

To have targets way in the future such as 2050 is meaningless and irresponsible. We do not know what is likely to change between now and then including political parties. In 1900 the main pollution problem was mud. We don't know what is going to be invented from mini nuclear reactors to carbon dioxide eating things. We cannot predict the future. All we

know is that it will surprise us and not be what governments expect. The industries that thrive in the future are unlikely to be those that governments have picked as winners. If governments try to guess which green industries to subsidise and which so called polluting industries to exempt they will inevitably waste money.

(d) By saying "what is fair" means that you accept that there is a danger. This acceptance is dangerous. Over 31478 scientists (including over 9029 PH Ds) globally have now signed a petition (<http://www.petitionproject.org/>) saying that "a review of the research literature concerning the environmental consequences of increased levels of atmospheric carbon dioxide leads to the conclusion that increases during the 20th and early 21st centuries have produced no deleterious effects upon Earth's weather and climate. Increased carbon dioxide has, however, markedly increased plant growth. Predictions of harmful climatic effects due to future increases in hydrocarbon use and minor greenhouse gases like CO2 do not conform to current experimental knowledge." Ref. 8. Whatever mechanism you use must be based on scientific certainty and firm agreement from all countries about the scientific certainty.

You will feel guilty if your decision to encourage Australia to lead the world in climate control measures results in human misery and a world less able to afford and less willing to care for the environment. Your guilt will be greater if the models predict warming and the world unexpectedly cools while emissions continue to rise.

(e) The banking, finance, legal, accounting and other service industries are already preparing to make money out of new financial engineering, regulation and compliance. These industries thrive on complexity at the expense of the rest of the economy. The Greens have suggested in the media that millions of green jobs could be created. Government funded green job schemes are a waste of money. We the tax payers have to fund these jobs. Would some of these jobs be administrators rushing around in imported taxpayer funded cars inspecting things?

Remember that Germany, a country that burns more brown coal (the most polluting kind) than we do has at least got nuclear France next door. Ref.9. Australia does not have such a neighbour so if we run down our coal fired power we might regret the result. China and India too are building more coal fired and nuclear power plants. We should not let our energy infrastructure run down because we are too frightened to make decisions. The Australian public, particularly school children, have been misled into believing that our cities can run on free green of power such as the wind and sun provide.

The Senators must look carefully at the much touted European trading scheme and admit that it has been a failure. Ref. 10

(f) Governments should look at Australia's defence. Security of energy supply is very important. Australia will lose its competitive advantage as it inflicts itself with higher energy prices and lower levels of energy security. A modern city becomes very vulnerable when it has continuous blackouts. Our standard of living will drop if our cost of energy increases and we will be less able to care for our wonderful environment.

If the government concentrates the public mind too much on the evils of carbon dioxide the public may be less inclined to support other environmental initiatives. People will equate all pollution with carbon dioxide and think that they have done their duty for the environment by paying higher energy prices.

Senators should be very sceptical of models such as Garnaut's that say we need to suffer for 100 years so that the following 100 will be all right should not be taken seriously. What if these models were looking at the future lives of new born babies rather than the climate would we believe them? Are the systems of the earth and solar system, past and present, less complex than a human being?

Insurance at any price for an ill defined risk is not good policy especially when a country has to borrow money for it. The Senators need to be very clear about why they are backing expensive insurance in the form of targets or cap and trade (tax) schemes even when Australia's contribution to global emissions is insignificant. The Senators justification for any action in support of measures that increase our cost of energy and reduce our liberty must relate to science and not to fashion or religion. Finally, Senators must consider whether we are seeing the birth of a new religion and not recognising it as such.

Yours sincerely,

Janet Barlow

Ref:

1. IPCC-TAR 2001, p.774
2. Garnaut Climate Change Review Discussion Paper on Emissions Trading Submission by ExxonMobil Australia Pty Ltd.
3. Conversation with officer of AGL in early April 2009
4. Garnaut Climate Change Review Discussion Paper on Emissions Trading Submission by ExxonMobil Australia Pty Ltd.
5. Conversation with officer of AGL in early April 2009
6. Cost and Quantity of Green House Gas Emissions Avoided by Wind Generation by Peter Lang
7. <http://www.csiro.au/news/features/termites.html>
8. <http://www.petitionproject.org/>
9. Coalportal.com and IEA
10. Reuters, 14 November 2008