

QUADRANT
online

Emissions Trading Scheme
Forum

edited by Bob Carter





“Today’s debate about global warming is essentially a debate about freedom. The environmentalists would like to mastermind each and every possible (and impossible) aspect of our lives.”

***Vaclav Klaus
Blue Planet in Green Shackles***

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The Most Important Vote Since Federation *by Bob Carter*

The government's emissions trading legislation is to be considered again by the Senate on 13 August. The vote that Senators deliver then, and again later should the bill be defeated and resubmitted, is the biggest decision that they will make in their political careers. For the passage or not of this bill will determine the fate of the Australian economy, and the standard of living of average Australians, for decades to come.

The matter is, or should be, one of simple cost:benefit analysis, though you would never know that from the hysterical nonsense that is propagated about global warming by green propaganda organisations and their media sycophants – with ABC, SBS and the Fairfax press leading the charge.

Depending upon the level of carbon dioxide taxation imposed at the start of an emissions trading scheme, the handed-down direct cost to an Australian family of four will be about an extra \$1,000-3,000 per year. These costs will also engender additional indirect costs, and will rise rapidly as the carbon dioxide levy is successively increased in subsequent years.

What then is the benefit? Because carbon dioxide is a greenhouse gas, if less is emitted (which is unlikely: the experience of early mover countries like Norway being that emissions have continued to increase despite a tax of \$20-30/tonne of carbon dioxide) then some future warming will be averted.

How much? No-one knows accurately because it depends upon the details of the computer model that is used. But estimates are that if Australia reduces its emissions significantly, then about 0.0001 deg. C of warming might be averted by 2100 - that is an unmeasurable one ten-thousandth of one degree in one hundred years.

In other words, the introduction of emissions trading in Australia will have no measurable effect on future climate at all. You might as well stand under the shower and tear up billion dollar notes for all the good that emissions trading legislation will do.

This issue is now of such public importance that *Quadrant Online* has invited a group of respected and well qualified Australian commentators to share with you their views about it. Their essays are linked below, and I commend them for reading.

Having absorbed the various messages of these commentators – who cover topics across the spectrum of the science, economics, sociology and politics of global warming and emissions trading - you will probably come to the same conclusion as I have. Which is that the grotesquely named “Carbon Pollution Reduction Scheme”, aka carbon dioxide taxation, will cause major economic and sociological damage to Australian society for absolutely no environmental benefit in return.

That agreed, Senators from all political parties are surely duty bound to reject this futile and ill-conceived legislation; for future generations are depending upon them to do so.



It's the Sun, silly by David Archibald

Carbon dioxide is not the major influence on climate

The government's intention to introduce an emissions trading system in Australia rests upon their belief that human carbon-dioxide emissions are a cause of dangerous global warming. That belief is incorrect. Though carbon dioxide is indeed a minor greenhouse gas, the major control on earth's climate has always been, and remains, the Sun.

The correlation between solar activity and climate was first noticed in ancient Greece in 400 BC (Hoyt and Schatten, 1997). The Sun's solar cycles are normally 11 years long, and can vary from nine years to 16 years. There is a correlation between solar cycle length and amplitude, with the shorter the cycle the higher the amplitude. High amplitude cycles produce a stronger solar wind, changing the level of galactic cosmic rays impinging on the Earth's atmosphere. This is measured as neutron counts at several stations around the planet. That in turn alters the Earth's albedo by changing cloud formation, as increased galactic cosmic rays enhance cloud formation.

Variation in the Earth's albedo due to changing cloud cover is sufficient to have caused the warming of the 20th century (Svensmark and Friis-Christensen, 1997). This is borne out by the relationship between Be^{10} levels in the Dye 3 ice core from Greenland and major climatic periods. Be^{10} is formed by cosmic ray spallation of oxygen and nitrogen. Spikes in Be^{10} levels in the Dye 3 core are associated with all the major cold periods of the Little Ice Age, including the un-named cold period at the end of the 19th century.

Friis-Christensen and Lassen (1991) found a correlation between solar cycle length and the Earth's temperature over the following cycle. That relationship was confirmed for Armagh, Northern Ireland data by Butler and Johnson (1996) and for De Bilt, Netherlands data by Archibald (2006). A strong correlation of 0.7° per year of solar cycle length is also found in North American data (Archibald, 2009). Near term climate can be predicted from solar cycle length.

We are currently near the end of Solar Cycle 23, which became 13 years old in May 2009. At 13 years, it is 3.4 years longer than Solar Cycle 22. The demonstrated relationship between solar cycle length and temperature for the mid-latitudes of the North American continent will result in a temperature that averages at least 2.2°C colder over Solar Cycle 24 than what it was over Solar Cycle 23.

This will have the effect of shifting climatic zones 300 km towards the equator and reducing agricultural productivity. If Solar Cycles 24 and 25 both have low amplitudes, a climatic period similar to the Dalton Minimum would ensue. The Dalton Minimum, from 1798 to 1822, was a period of cool climate caused by the low amplitudes of Solar Cycles 5 and 6.

At the time of writing of this paper, the current progression of the Solar Cycle 23/24 transition points to Solar Cycle 24 having a low amplitude. Geomagnetic indices at solar minimum can be used to predict the maximum amplitude of the following solar cycle. The Ap Index suggests that Solar Cycle 24 will have an amplitude of less than 40.

NASA's chief solar scientist, Dr David Hathaway, was recently quoted as saying, with respect to the coming two solar cycles, that, "*something like the Dalton Minimum — two solar cycles in the early 1800s that peaked at about an average of 50 sunspots — lies in the realm of the possible.*"

Ocean heat content and atmospheric temperature both started declining after the peak in solar proton flare and geomagnetic activity in 2003. This established cooling trend is expected to accelerate. The current cooling has already has an effect on agricultural production, with the 2009 Canadian wheat crop down 20% due to a cold spring.

Introduction of an Australian emissions trading scheme based upon a presumption of dangerous global warming just as Earth enters a likely twenty year period of cooling is a misguided, and potentially disastrous, climate policy choice to make.

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David Archibald is a Perth-based scientist operating in the fields of climate, cancer and oil exploration.

A tax would be better *by James Allan*

Capping off Dissensus and Trading in Disaster

A series of cascading questions need to be considered in order to answer the question “Are emissions trading systems a good or bad idea?”.

Firstly, we need to consider whether the globe is warming. Secondly, and if the answer to that is ‘yes’, we need to decide if humans are a major contributing factor. If that too receives a positive response then we should consider, thirdly, what can be done about it. Next, having put some sort of rough price tag on what has some plausible hope of being spent on the issue, we can ask whether the money could be better spent elsewhere. But if we do decide that that money should be spent on reducing carbon dioxide emissions, then we have to ask about the comparative costs of the main options on the table. Is cap-and-trade a better option than a carbon tax, given the obvious dangers the former poses of restricting new entrants, encouraging rent-seeking behaviour and generally just distorting the market -- not to mention the comparative ease of unwinding a carbon tax compared to a carbon emissions scheme if it turns out down the road that we bungled at question two?

I’m just a lawyer who gets his main weekly dose of science from the pages of *The Economist*. I do have an interest in this issue though. And as a paid-up member of the *Australian Skeptics* (think of a group that demands evidence before believing and revels in mocking morons who believe in untested alternative medicine) I regularly read in their journal, *The Skeptic*, exchanges between far better qualified scientists than I on this issue. Plus I like to look on *Climate Debate Daily*, the sister website to Denis Dutton’s *Arts & Letters Daily*, where one gets fed a steady diet of both sides of the story by highly qualified scientists.

Given that reading background, I have no idea what to think on the second issue, though on the first one it seems pretty well agreed that the world has cooled of late, though opinions differ on whether that is just a blip in the upwards trend, or foreshadows cooling or a levelling off. From my point of view what this issue appears to boil down to (no pun intended) is an issue of risk management. What is one’s appetite for risk? Will any potential risk cause you to undermine economic growth, or does it have to be, say, a one-in-four risk, or better than evens, or a demonstrably high danger?

Some proponents in this debate seem to me to be saying that if there is any risk at all of human caused global warming, any at all (no doubt dressed up in the obfuscating term ‘precautionary principle’), then any price at all is worth paying.

Such persons and I part company at that stage.

But let’s say one thinks the risk is a moderate to severe one, no one (to repeat) knowing for sure and all of us trying to decide in a sea of uncertainty and conflicting opinions. We then have to decide if we can do anything in present circumstances or whether our efforts on behalf of the vulnerable part of the world are better devoted to spending on fresh water or anti-malaria programs or what have you. The more you are convinced the world’s Chinas and Indias have no intention of doing anything – and given their extremely low carbon output per head that is an understandable point-of-view – the more the Bjorn Lomborg line about spending your money elsewhere becomes attractive.

But no doubt lots of smart, reasonable, well-informed people will still figure that carbon dioxide reduction, as part of a risk management plan in a world where limited biological creatures can’t be sure about all sorts of things (not least the weather next year), needs to be attempted.

Assuming you get to that stage, it seems to me that cap-and-trade is a far, far, far worse choice than a straight up carbon dioxide tax, together with an all-out shift towards nuclear power. The problem with cap-and-trade is not just that it will restrict new entrants, encourage rent-seeking behaviour, distort the market (which, I concede, won't bother Mr. Rudd), and be far harder to unwind than a carbon tax should it turn out our precautions were unnecessary. No, the main problem is that we know going in that cap-and-trade won't work, or rather that any program that manages to get passed will be so shot full of holes that it won't achieve anything much in the way of reducing carbon dioxide emissions. (I grant that it will create a big bureaucracy and kill jobs.)

In the United States even the Director of their Environmental Protection Agency has conceded that their present cap-and-trade Bill will have no effect on future climate and will not reduce carbon dioxide use. And it's a safe bet that whatever gets through Parliament here (given the job losses of a stringent program) will be similarly enervated.

So forget about the oddness of a small minnow of a country like Australia thinking it ought to lead the way on this global warming issue. And forget the real-life prospects, at least at present, of developing countries like China and India sacrificing economic growth for carbon reduction. Instead, ask yourself why people purporting to be serious about global warming as a risk management issue aren't bending over backwards to move towards nuclear power accompanied by a straightforward carbon tax.

Presumably it can't be because opting for a direct tax on carbon will make evident that jobs will be lost – any thinking person knows jobs will be lost, at least in the short-term.

I'm against cap-and-trade and Australia enacting its own such Bill for all of the above reasons, and because I think some people in favour of it are hypocrites. If global warming is such a big risk that it demands action, then it demands a carbon tax and nuclear power.

James Allan is Garrick Professor of Law at the University of Queensland.

Global targets won't work *by Ian Castle*

Why Global Targets to Reduce Emissions Won't Work

In November 2005 the Australian Academy of Science (AAS) invited me to a “President’s Soiree” to discuss the topic “Integrative climate science, economics and sociology.” According to the invitation sent to the Academy’s Canberra Fellows, “*The choice of topic has been stimulated in part by the [recently-released] House of Lords report [on “[The Economics of Climate Change](#)”].* Attached to the Academy’s invitation was the Abstract of the Report, the conclusion of which read:

We are concerned that the international negotiations on climate change reduction will be ineffective because of the preoccupation with setting emissions targets ... We urge the [UK] Government to take a lead in exploring alternative ‘architectures’ for future Protocols, based perhaps on agreements on technology and its diffusion.

As the only non-scientist present at the gathering, I was grateful to President Jim Peacock for allowing me to try and explain the reasoning underlying the unanimous recommendations of the all-Party Lords Committee Report.

I was also able to draw the expert audience’s attention to a recent Policy Paper that had been published by the Academy of the Social Sciences in Australia (ASSA) under the title “[Uncertainty and Climate Change: The Challenge for Policy](#)”. In this Paper three leading scholars (meteorologist John Zillman, economist Warwick McKibbin and political scientist Aynsley Kellow) explained why “*An in-depth understanding of the nature and significance of ... uncertainties is essential for the formulation of properly informed national and international action on the greenhouse issue.*”

In the course of a friendly discussion, Dr Peacock contested my view that experts had a duty to try to convey this understanding to governments, interest groups and the wider community. He argued that governments wanted clear and simple statements about the need for action, and that the admission of the inherent uncertainty blunted the capacity to win support for urgent implementation of mitigation policies.

The evidence suggests that Jim Peacock was right. Although the ASSA Policy Paper was widely circulated - including to members of Federal Parliament, Government departments, educational institutions, NGOs nationally and internationally, libraries and the media – it attracted virtually no attention. The Lords Committee Report suffered a similar fate, being dismissed by the UK Government and ignored in the Stern Report.

By contrast, the prevailing scientific opinion on climate change tends to take the form of strongly worded assertions about the urgency of the problem and, at least by implication, the self-evident character of solutions.

For example, in an op-ed published in *The Australian* on 7 February 2007 under the stark headline “On the Edge of Global Calamity”, Dr Peacock’s successor as President of the AAS, Professor Kurt Lambeck, asserted that the “basic facts” underpinning the just-released [Fourth Assessment Report of the IPCC](#) (AR4) were “*undeniable, indisputable and confirmed by the best minds the world can bring to bear on the subject*”.

It is true that some basic facts about climate science are undeniable and indisputable, but there is no need for an intergovernmental Panel of 200 governments and hundreds of lead authors and expert reviewers to establish those.

Interestingly, however, none of the AAS’s four most senior Fellows in climate-related disciplines (Dr Garth

Paltridge, elected 1980; Dr Angus McEwan, elected 1982; Professor Graham Farquhar, elected 1988; and Dr Graeme Pearman, elected 1989) had roles either as lead authors or reviewers of the report that was the subject of Professor Lambeck's op-ed. Yet these same four were the only Fellows of AAS who were members of the interdisciplinary Study Team which produced the valuable Joint Academies report *Climate Change Science: Current Understanding and Uncertainties* in 1995. It can no longer be assumed, if it were ever true, that all of the 'best minds' in climate change science are participating in the IPCC process.

I hesitate to correct the President of the AAS on a point of fact, but his statement that "*the fraction of annually emitted CO₂ absorbed by the oceans is ... now down to 37 per cent*" does not square with the estimates from the standard source: the [Global Carbon Project](#) (GCP). The GCP proportion shows marked annual fluctuations but it has been continuously below 37 per cent for the entire 50-year period of the series, with the exception of the three years 1964 to 1966.

Of course the GCP's estimates of oceanic absorption of CO₂ expressed as a fraction of the same year's emissions may be substantially astray: they depend in part upon the denominator – global CO₂ emissions. And even the more reliable component of anthropogenic CO₂ emissions (those arising from the combustion of fossil fuels) is subject to large uncertainties.

In one of the media releases supporting the most recent GCP update, one principal of the Project was quoted as saying that the uncertainty of the estimate for China could be as much as 20%, which is equivalent to more than the *total* fossil fuel emissions of all but three other countries (the US, Russia and India). At the same time, in a different media release, another GCP principal was quoted as saying that "Forests and oceans - the Earth's natural sinks – absorbed 54% of the CO₂ emissions since 2000, down by 3% compared to 1959-2000." The truth is that the large uncertainties in both numerator and denominator preclude firm conclusions, even about the direction of change.

There are formidable measurement, verification and enforcement issues that stand in the way of any internationally-agreed scheme of binding emissions reduction targets. That is why the Lords Committee advocated "wholly different, and more promising, approaches based on a careful analysis of the incentives that countries have to agree to any measures adopted." In the meantime, Australia should not commit itself to the large costs and inefficiencies of an emissions trading scheme of the kind that is currently before the Parliament.

Ian Castles is a Visiting Fellow at the Crawford School of Economics and Government at the Australian National University. He is a former Secretary of the Australian Department of Finance, Head of the Australian Bureau of Statistics and Executive Director of the Academy of the Social Sciences in Australia.

Green jobs subtract value *by Sinclair Davidson*

Green Jobs or Green unemployment?

One justification being given for the government's emissions trading bill is that it will provide tens of thousands of new "green jobs". Our politicians, together with their colleagues across the western world, have discovered marketable new cliché.

The problem is that we voters have heard this type of argument before. The idea that government can create viable and sustainable jobs has failed every test ever posed. Yet these kinds of promises remain remarkably popular with the electorate. Bryan Caplan has argued that the general public suffers from four economic biases; an anti-market bias, an anti-foreign bias, a make-work bias and a pessimism bias. The modern environmental movement suffers from all of these biases, while green jobs appeal to two of those biases – anti-market bias and make-work bias.

The federal Treasury "guesstimates" of the cost of the government's climate change policy was published in December 2008. In that analysis Treasury evaluated the impact of five policy options on the Australian economy. The modelling, however, had an important omission. It calculated deviations from expected GDP growth and the impact on investment and the like, but it did not include a separate labour market analysis. Given the government keeps promising green jobs, and that Australians are not interested in GDP growth *per se* but rather on future employment for themselves and their children, one would think a labour market analysis should be the centre piece of any evaluation.

The modelling *assumes* that there might be some unemployment in the short –run (up to ten years) but there is no unemployment in the long-run. *This is an assumption of the modelling technique.* The Treasury have to *assume* that real wages will fall ensuring that labour markets clear and there is no involuntary unemployment. The modelling indicates that by 2020 real wages will have fallen by between 2.5 percent to 5 percent relative to a do-nothing business as usual type base case. In other words, the government doesn't know what will happen to employment, they simply assume that it won't be a problem.

An alternative explanation is that the government has other modelling results that carry an unhappy message regarding future unemployment, but has decided not to release the results to the public.

While the government has given no credible information, or at least no public information, as to what will happen to existing employment within the economy, they clearly recognise that the electorate may have some misgivings, and so 'green jobs' are conjured to fill the vacuum. But there are problems with the claimed green jobs that are already appearing in public debate; for example, 'what is a green job?' And how does it differ from the work-for-the-dole scheme? More importantly, what is the cost of these green jobs?

It has quickly become apparent that green jobs will require massive government subsidies to sustain them. They do not create additional value and so cannot become self-sustaining. The biggest question, of course, is to what extent will green jobs crowd out existing jobs? In short what is the opportunity cost of a green job?

Professor Gabriel Calzada Alvarez of King Juan Carlos University has investigated the Spanish experience where substantial government subsidies were provided for renewable energy. He calculates two measures of the opportunity cost of green jobs. The first measure is the ratio of the renewable subsidy per worker to the average stock of private sector capital per worker. This ratio measures how many private sector jobs could have been created if the government spending on renewable energy had not been taxed away from the private sector, and had rather been left in the private stock of capital. The second measure looks at the subsidy per worker relative to the average productivity per worker. This measure calculates the productivity

lost by investing in green jobs as opposed to leaving the money in the private sector. Both measures suggest that the opportunity cost per green job is 2.2 non-green jobs.

Alvarez' point is very simple; relative to existing jobs, green jobs are expensive. Consequently new green jobs cannot replace old lost jobs. Furthermore, the resources used to create new green jobs will crowd out existing jobs.

This study has been severely criticised as being 'simplistic' or just simply wrong. Part of the issue is that Professor Alvarez is not a native English speaker, and has not expressed himself clearly. The second point to consider is that he has calculated an opportunity cost; many of his detractors simply do not understand that opportunity costs are not easily seen or observed. It is not enough to respond his analysis that Spanish unemployment is lower now than before – unemployment could have been lower still but for the green jobs program.

The important thing to remember is this; climate change policies are deliberately changing the structure of the economy away from efficient production techniques to less efficient production techniques. That means that many existing jobs will no longer add value in future. Those jobs will be lost.

It is a leap of faith to suggest that the government can create jobs that add as much value as those that will be lost. If they could do so, why have they not done so already? That is the fundamental difference between the current policies being proposed and previous economic reforms. Previous Australian governments had proposed to make the economy more efficient. This government proposes policies that will make the economy less efficient.

Sinclair Davidson is professor in the School of Economics, Finance and Marketing at RMIT University and senior fellow at the Institute of Public Affairs.

Domestic solar power is a con *by Terry Dwyer*

Will your carbon Dioxide quota drive you into solar power generation?

The major purpose of an emissions trading scheme is to impose a quota on emissions of carbon dioxide, in much the same fashion as Australia used to impose quotas on clothing imports. The normal effect of a quota is to reduce the supply of what is subject to the quota and drive up prices as a result. That is why clothing prices dropped in Australia when quotas were removed.

Another result is that those who are given quotas (or emission permits) obtain a valuable licence and can sell it (rather like taxi licences). If the holders of quotas have not paid for them, they obtain a windfall, which is what the major European energy producers received when emissions trading was introduced there. There is no guarantee that those who are given free quotas will use them to supply consumers more cheaply. On the contrary, there is every reason to expect a commercial entity to revalue its licence as an asset and demand a rate of return on it. Some electricity generating companies under financial pressure may simply sell their quotas to help pay off debts and go out of business, much like hard-pressed farmers who sell off water rights to pay off banks and then exit the industry.

From a consumer point of view the key things to understand about quotas or emissions permits are –

1. The fewer emissions permits allocated by government, the greater the upward pressure on prices; and
2. The checks on upward pressures can only come from falling demand or cheaper substitutes.

For example an import quota on red sweaters, but not on other clothing, would likely not cause a great price rise for all sweaters, as many people might switch to other colours. But with essential commodities like electricity it is not so easy to find alternatives.

Whatever one thinks about the theory that human emissions of carbon dioxide may cause catastrophic global warming, the question would not matter much if electricity could be cheaply produced without producing carbon dioxide and if electricity could be stored easily for future use. Limiting the use of coal burning for “24 hour a day” electricity would not matter if solar energy could be used as cheaply to produce electricity on demand.

So it is natural to ask the question “*Can solar electricity cheaply replace electricity produced from burning coal?*”

As a consumer with a very sunny North-facing flat roof, I had often wondered about whether I could use solar electricity to cut my electricity bills. My interest sharpened when the ACT introduced a feed-in electricity tariff which would guarantee me nearly 4 times the normal cost of electricity for the gross amount of solar electricity I could produce from my roof. Surely, I thought, with a Federal subsidy and a guaranteed 4-times price per kilowatt hour, I can make a decent profit.

Accordingly, I started doing my sums on a spreadsheet. To check them, I made inquiries of a colleague at the University who is a keen advocate of solar energy, and was kind enough to send me his own similar spreadsheet.

Unfortunately, even with the Federal subsidy and the ACT feed-in tariff of 4 times the normal price, the return on investment seemed to be only about 8% after depreciation and subsidies, Without any subsidies, it seems the rate of return on investment is negative (that is, you would be paying for the privilege of losing

money). The most interesting result from the spreadsheet was that to earn a 10% rate of return without any subsidies, the price per kilowatt hour would have to rise from around 15 cents per kilowatt hour to around \$1 per kilowatt hour.

To put that in perspective, it would mean our household electricity bills would have to rise from around an already high \$3,500 per annum to something like \$22,000 a year for unsubsidized solar electricity to become economic. Obviously, an economist must wonder how Australian industry and workers are going to survive an electricity price of \$1 per kilowatt hour, while still having to maintain a base-load coal powered electricity system to provide power at night and on cloudy days.

Of course, no Australian Federal or State Government could contemplate overtly pushing electricity prices and household bills up to such levels. For one thing, Australia's exports would collapse under such costs of production. Nor would consumers contemplate paying them. Houses would be triple glazed and burning wood or gas long before prices got to such a level.

However, the basic question remains. How much would it cost to shift the Australian community off coal-fired electricity and onto other sources? Who is to bear these costs? Subsidies for solar electricity do not come like manna from heaven: they come from taxpayers' or consumers' pockets.

From this point of view, an emissions trading system, unlike a straight carbon tax, has merit for governments. For it makes it harder for industry and consumers to see the costs that are being imposed upon them. But if my excursion into trying to work out the economics of solar electricity contains any general lesson moral, it is that the costs of implementing an emissions trading system are going to turn out to be rather larger than most people have been told, or are anticipating.

Dr Terry Dwyer is an economist and lawyer in private practice, and a Visiting Fellow at the Crawford School of Economics and Government at the Australian National University.

Economic stupicide *by David Evans*

Don't Commit Economic Stupicide Over a Bad Assumption

We independent scientists can tell you exactly which part of the IPCC climate calculation is wrong, and show you three different sets of empirical evidence that prove it so. Air and ocean temperatures have been dropping for the last few years, contradicting the climate model predictions made in 2001 of soaring temperatures. Yet the world won't listen to us, and seems determined to commit economic stupicide. How did it come to this?

Alarmist climate theory was complete by 1984. The first stage is to compute forcings due to extra carbon dioxide and other factors—these calculations are sound, except that they omit important natural factors (more below). The second stage is to calculate the temperature rise directly due to those forcings—basic physics, and everyone agrees that if carbon dioxide levels doubled then the consequent temperature rise will be about 1.1°C. The third stage is to apply the various “feedbacks”. Most of the feedbacks are small and their values are known roughly from observations.

But the last feedback, the water vapor feedback, is difficult to measure because water can be a gas or a liquid and moves quickly around the atmosphere. On 1984 data, its value could be anything.

So the alarmists *assumed* that almost all the temperature rise since pre-industrial 1750 to recent times was due to rising carbon dioxide levels, then worked out how big the water vapor feedback needed to be in order to get the observed temperature rise. The result was that it needed to be large and amplifying—the feedbacks (essentially just the water vapor feedback) multiply the pre-feedbacks temperature rise by about 3.0, so the final temperature rise if carbon dioxide doubles (which we expect by 2100) is about 3.3°C.

Notice two problems: some natural factors are left out of the forcings, and the value of the water vapor feedback is based on an assumption. However, the theory looked pretty good, so the IPCC was formed in 1988, the Kyoto Protocol was adopted in 1997, and lots of bureaucratic and science jobs were created. The theory had “momentum”!

Then new evidence destroyed the theory. The theory says that if the pre-feedback temperature rises, such as from extra carbon dioxide, then extra water vapor will accumulate at the top of the lower troposphere, thereby warming the planet further because water vapor is a greenhouse gas. That extra water vapor would be relatively warm—creating a hotspot in the pattern of atmospheric warming during a global warming episode. But weather balloons that radio back the temperature as they ascend have been measuring atmospheric temperatures. By 1999 it was clear there was no hotspot at all—so there is no amplifying water feedback!

Further, observations of clouds (Spencer 2008) and satellite observations of outgoing radiation (Lindzen and Choi, 2009) both show that the feedback multiplier is low and dampening, about 0.5. So the effect of doubling carbon dioxide from 1750 to 2100 will be a rise of only 0.6°C, which is of little concern.

The Medieval Warm Period, around 1000-1300 AD, was warmer than now. Something then plunged the earth into the Little Ice Age of 1400 to 1800, but since 1750 the world has been warming at a steady trend rate of 0.5°C per century as it recovers. On top of that trend are oscillations of alternating warming and cooling that last about thirty years each. If the pattern persists, then the last warming ended recently and we are in for mild cooling to 2030.

Whatever factor caused the Little Ice Age, and whose passing has warmed the world for the last 250 years, is not in the climate models. Nor is whatever caused the cooling of the last few years, or the oscillations.

Alarmist climate theory exaggerates the effect of carbon dioxide about five-fold, due to the assumption that nearly all the warming since 1750 is due to rising carbon dioxide. This assumption is especially brave because human emissions of carbon dioxide were virtually non-existent before 1850, and were insignificant compared to current levels until after 1945.

But alarmist climate theory has political momentum. That very momentum prevents the alarmist scientists just turning down the water vapor feedback in the models—because then there would be no cause for alarm. They are locked in politically.

In other areas of science, theories change when contradicted by data, and opposing scientists are not denigrated as “deniers” or demonized by smear websites run by PR agencies. Climate “science” has become corrupt and politicized.

How long before the alarmists start fudging the temperature records, because there is so much money, political control, and science funding riding on the outcome? Bad news—it’s already started. How long before opposition to official climate science is made a crime? Let’s hope it doesn’t come to that, but some are already talking about it.

Decisions with huge financial implications are normally subject to intense scrutiny and an examination of vested interests. Do our politicians really want to rearrange the energy sector, and cast economically marginal people into energy poverty, on the basis of reports from an unaudited organization with obvious self interests? Well yes, apparently. And the cheerleading media think it’s pretty cool too.

Dr David Evans was a consultant to the Australian Greenhouse Office from 1999 to 2005, developing Australia’s carbon accounting model for measuring compliance with the Kyoto Protocol in the land use change and forestry sector.

Get ready for power cuts *by Ray Evans*

The economic consequences of decarbonisation

A common observation in the cowboy movies of Hollywood of a bygone era was “*White man - him speak with forked tongue.*”

That line would today more accurately read “*Green man - him speak with forked tongue.*”

The forked tongue is most brazenly manifest in the economic forecasts which the carbophobes put forward as the consequences of decarbonisation. When Ross Garnaut, sometime prophet of climate doom, was prescribing his remedies for preventing climate catastrophe, he was predicting only marginal reductions in our GDP, reductions which in his eyes were more than compensated for by the assurance that climate catastrophe would be averted.

The Commonwealth Treasury, under the watchful gaze of Ken Henry, came to similar conclusions, justifying them on the basis of what their economic models were forecasting. These models failed to predict the global economic crisis, but more seriously had previously been unable to get within a bull’s roar of predicting the economic outcome for 11 of the previous 13 budget years. Thus these assurances did not soothe anyone who remembered these facts.

Debate has been focussed on the employment consequences of the Rudd Government’s “Carbon Pollution Reduction Scheme” (CPRS) legislation. For example, the PM himself, speaking to the ALP’s federal conference on July 31, said:

The climate change sceptics constantly scaremonger about the possible loss of jobs through the transition to a lower carbon economy.

But they constantly fail to talk about the new clean energy jobs of the future which will arise from the introduction of the carbon pollution reduction scheme, the renewable energy target and energy efficiency measures in the future.

The debate about employment is really beside the point. In the 19th century, the world which the Greens wish to recreate, unemployment was generally low. When economic crises came, as they did in Victoria in the 1890s, bread winners sailed over to the goldfields of Western Australia and sent home remittances to keep their families going in the suburbs of Richmond and Collingwood.

The Green’s real ambition was described by Peter Shergold, John Howard’s head of PM&C, in a speech he gave on 14 June, 2007, two weeks later after the release of the report which Howard had commissioned in December 2006. This report recommended the introduction of an Emissions Trading Scheme very like the scheme now before the Senate under the CPRS legislation. Shergold said:

This is the one thing on which I think we are pretty clear: that we are not necessarily sure on what the government should do, but we are bloody certain what the government shouldn't do. And what the government shouldn't do is simply use the revenue to subsidise the power bills of individual households. In case that sounds a bit mean, think about what we are trying to do here. We are trying to change the behaviour of industry and households.

There we have it. We [i.e. the chattering classes] are trying to change the behaviour of households.

You bet we are. We want to shut down the coal burning power stations of the Latrobe Valley and the black coal fields of NSW and Queensland, because they are polluting the planet. They are, in religious terms, unclean, and must be abjured. People will just have to get used to doing without electricity.

When it is argued that cities like Brisbane, Melbourne and Sydney cannot survive without electricity, the answer is that renewables - wind and solar will take their place. Ross Garnaut, in his first report, famously used the economists' tin-opener approach. An economist is cast adrift on a desert island, and finds a tin of bully-beef that had drifted ashore. But no tin opener is to hand, so the economist solves his problem with the words "Let's assume a tin-opener." In similar fashion, Ross Garnaut blithely assumed the existence of new, unknown forms of electricity generation to take the place of coal-based power stations at roughly the same cost.

Wind and solar are fantasies in the Green mind. Where they have been seriously tried, as in Spain, the costs have been prodigious and the impacts on employment calamitous.

The political consequences of cities suddenly finding themselves without electricity, a very real prospect in Melbourne as the Latrobe Valley generators are facing bankruptcy next year, are serious. My prediction is that not a single Labor seat in Melbourne will survive the next election should this happen.

Kevin Rudd is now facing the sorcerer's apprentice dilemma. The apprentice has used the magic words "climate change" to achieve a political end, but now the broom keeps on bringing the water, and the house is flooding. Only by blocking the CPRS Bill in the Senate can the Liberal Party play the role of the sorcerer who returned just in time to prevent disaster.

Ray Evans is secretary of the Lavoisier Group and has written a number of tracts, articles and speeches on the Global Warming movement, its doctrines and strategies.

Agriculture is a carbon zero sum game *by Viv Forbes*

Emissions Trading and Agriculture

“Only a foolish horse fights with his feed bag”
Genghis Khan

Most of human history has been a struggle for food and energy.

The abundance of food in the western world during the last century or so is not the normal human condition. Snow and ice, drought and famine have been regular and persistent visitors to mankind.

We are lucky to live in a time of recent natural global warming. Warmth increases plant growth rate, lengthens the growing season, expands plant habitat and makes more land arable. As the oceans warm, they expel some of their vast reserves of carbon dioxide, the essential atmospheric plant food. Warm oceans also produce more evaporation, and thus more precipitation for adjacent land masses. Man's recent production of carbon dioxide from burning coal and oil and calcining limestone has also helped to unlock buried carbon and restore valuable carbon dioxide (CO₂) to the biosphere.

Warmth, water and more abundant carbon dioxide were the main causes of the Green Revolution of the 20th century, which has enabled farmers to feed the growing millions on earth.

All these beneficial developments are threatened by two things – the distinct possibility of a return to natural global cooling, and silly government policies all over the western world that will slash food production.

If an Emissions Trading Scheme (ETS) is introduced in Australia, it is inevitable that Agriculture will be sucked into it, some operations immediately, others later. Most Australian farmers understand these threats and are becoming increasingly hostile to all ETS proposals.

Australian farmers produce a copious harvest of wool, cereals, beef, lamb, pork, chicken, dairy products, eggs, sugar, cotton, fruit, vegetables and nuts.

Not one of these products can be put on the market without producing so-called greenhouse gases (GHG) such as water vapour, carbon dioxide and methane. Water and carbon dioxide are produced by every truck, tractor, dozer, road train, helicopter, plane, ute, car, quad bike, diesel engine, generator, pump and chain saw used by farmers, and their electricity is largely produced by burning coal, gas or diesel, all of which produce water and carbon dioxide as well. Farm animals (and all the people who look after them) emit various quantities of GHG from both ends.

There is no technology on the horizon to replace any of these farming activities with ones that do not produce GHG (even if that was a good idea).

The aim of carbon dioxide taxation is to forcibly reduce Australia's production of GHG, and to levy a tax on all GHG produced. This will be achieved by requiring all but specially favoured businesses to buy increasingly rationed emission permits.

The ETS will also increase farm input costs for electricity, transport, steel, cement, fuel, fertiliser, building materials and stock feed. And unlike the GST, there is no refund of carbon taxes paid on input costs.

Therefore the ultimate effect of carbon dioxide taxation on agriculture must be to reduce our production of essential food and fibre, and to increase the costs on those activities that remain. This means less production of food, reduced export income, fewer agricultural jobs and higher prices for every item of food.

Much ado is made of the fact that ruminant animals produce methane, another common natural gas, as well as CO₂. Where is the surprise? ALL animals, including humans, emit GHG. So do forests, bacteria, swamps and rotting organic matter – methane is the harmless “Will o’ the Wisp”, or swamp gas. It seeps from the Black Sea and exists in prodigious quantities in ocean sediments. In energy generation, it is the “clean green natural gas”, but in cows it is the “deadly greenhouse gas”. Let’s have some consistent logic here.

And where does the carbon in all animal emissions come from? Cows cannot manufacture carbon from nothing, nor do they run on diesel fuel – every carbon atom emitted from either end of the cow must have come from what she ate – mainly grasses, grains and legumes.

Where do the plants get their carbon from? It comes from the dreaded carbon dioxide in the atmosphere or from the humus in the soil. Humus comes from decaying organic matter which got its carbon from the atmosphere.

So every atom of carbon in methane emitted by farm animals came originally from the atmosphere. It goes back to the atmosphere, oxidises to carbon dioxide, is absorbed by plants and moves once more around the cycle of life.

Taken over their life cycle, farm animals do not add one atom of GHG to the atmosphere. The cycle of life is a closed circle, and if emissions are taxed, then extractions must be credited. Cows and sheep are the same as forests – they extract carbon from the atmosphere, store increasing quantities in their growing bodies, and return it to the earth if they are buried, or to the atmosphere if their bodies are left to decompose. All effort spent measuring, taxing or researching animal emissions is a negative benefits game.

Agriculture, forestry, soils and animals are all zero carbon sum games. They should all be totally exempt from the silly Emissions Trading Game. Including them will achieve NOTHING except food shortages, fraudulent accounting games, profits for speculators, jobs for regulators and high food costs - a pointless game played at great cost to farmers and all who rely on them.

The Carbon Pollution Reduction Scheme (the Australian ETS) cannot have any beneficial effects on climate, but it and its associated policies will certainly increase farm costs, decrease farm employment and reduce food production.

Farmers will be satisfied with just three amendments to the Carbon Pollution Reduction Scheme: “Reject, Reject, Reject”.

Full edition of this article is available <http://carbon-sense.com/2009/08/05/emissions-trading-agriculture/>

Viv Forbes, BScApp, grazier, soil scientist and mineral economist, Rosevale, Qld



The "Save Our Seats" strategy *by John Hyde*

The Effect of the Emissions Trading Policy on the Liberal Party

Some whose tendency is to predict the dramatic in public affairs see another right wing, conservative, even genuinely liberal political group, arising out of present divisions in Coalition ranks concerning emissions trading.

I don't think so. They forget the record.

Although the issue may be the final straw that costs Turnbull his leadership, the Liberal Party itself is remarkably resilient. It has survived, without actual division, the tariff debate, the silly Joh for Canberra push, Pauline Hanson, the Gorton-Fraser enmity, the rise within its ranks of the Dries, McMahon's inadequacy, the Vietnam war and several other notorious personal and policy disagreements.

If the Liberal Party were to divide, which I don't think likely in the foreseeable future, it would be for the more deep seated reason that it lacks guiding and inspiring philosophical underpinning.

With a few notable and worthy exceptions, for a long time now, most of the members of the Liberal Party have believed in little, and thought of little, beyond winning the next election. How they might equip themselves to govern well should they win it, has not troubled their minds or their consciences.

The Save Our Seats (SOS) brigade dominate the Coalition Party Room and it suits people in authority to find hobgoblins from which they will save us. Perhaps that has always been the case, perhaps it is in the very nature of all democratic politics; anyway, the Western World over, it is the situation that political trading on the public fear of global warming forms one such hobgoblin.

Don Chip did manage to form the Democrats around a soft liberal philosophy. Although not quite my preference, those early Democrats did believe in something and the underpinning of his party was not a policy but a philosophy.

Chip was, however, unable to control his party and his soft liberals became the 'fairies at the bottom of the garden' who did not even believe in arithmetic, a character attribute that today has been taken over by the Greens. If an equivalent of Don Chip exists today, he/she has had little media attention, and anyway forming a new political party is an extremely difficult task.

Nevertheless, every so often, not always in response to a crisis, people arise within existing political structures who offer effective leadership. As Max Weber observed, politics is a strong and slow boring of hard boards.

By persistent argument it is possible to change what people believe and, which is just as important in the parliaments, shame people who adopt positions they don't believe in.

Dennis Jensen has been doing just that from within the Liberal Party. I think his approach is tactically the correct one and, what is more, it is one protected by the traditions of his party and parliament; neither Turnbull nor the SOS dare be seen to silence him.

Outside of the Liberal Party, Barnaby Joyce, speaking on behalf of all the nationals, is trenchantly opposing the introduction of any emissions trading scheme, on the grounds that there will be no positive effect on the environment but definitely horrendous economic damage in both the cities and, especially, the bush.

Unarguably, however, the politician who has most effectively shown that Climate Minister Wong has no science clothes in which to dress her emissions trading legislation is independent Family First Senator, Steve Fielding. By asking three succinct questions regarding climate change, and exposing the Minister's inability to answer them, Fielding's actions have given many politicians within all parties cause for pause.

The emissions trading scheme can be stopped or made-less-damaging only by rational argument based upon the scientific evidence. My fear is, however, that it will not be halted until much unnecessary injury has been inflicted on the world economy. For Australia's part, if the Carbon Pollution Reduction Scheme becomes law it will inflict grave damage onto the Australian economy through loss of competitive advantage to nations that choose not to so hinder themselves.

It saddens me that, come that day, the Liberal Party will not be able to say that it opposed wrong-headed policy but instead sought to gain whatever political advantage it could.

As with nearly every policy debate, there is no short cut to victory in this one. The argument must be won - slow boring in hard boards!

John Hyde was the Federal Member for Moore from 1974 to 1983 and was said to lead that group of economically rational MPs on Fraser's back bench who became widely known as 'the Dries'.

Roll on climate rationalism *by John Izzard*

Keeping Your Head on Climate

If you are going to set up a new cult, which is what the emissions trading bill is all about, you really have to get in quickly and corner all of the best descriptive and emotive words; seize the moral high ground; then get out and kick hell out of any doubters.

The problem for those who question the scientific and ethical nature of the new Climate Cult, is that all the beautiful stuff has been snaffled by the New Age Weathermen, and, as a result we are battling to get a decent foothold on the mountainous terrain of public opinion. But all is not lost!

If Rudyard Kipling was still about, or still fashionable, he would have, no doubt, given us something like this to fall back on:

*If you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;
If you can wait and not be tired by waiting,
Or being lied about, don't deal in lies,
Or being hated, don't give way to hating,
And yet don't look too good nor talk too wise.*

The first difficulty those classified as “climate sceptics” face is the word ‘sceptic’. It has all sorts of various connotations, but a short version goes something like; “a person who habitually doubts generally accepted beliefs”. Ouch! No wonder the Climate Cult love the word ‘sceptic’.

So the first thing needed is to re-badge ourselves. The Pharaoh Akhenaten tried it around 3300 years ago when he attempted to change the way most Egyptians saw themselves, both in relation to the heavens and how they depicted themselves in art. It only lasted until his death. How will climate sceptics be remembered in the next 100 or 1000 years? Not that well, I fear— unless we re-badge.

The reality is that most of those who are badged as climate “sceptics” actually have no axe to grind about the science one way or the other – they are actually climate “agnostics”, and just want the facts of the matter to be allowed to fall where they may. But the word hasn't caught on, and another alternative – climate “realists” – has all the appeal of a wet fish. So, of the available terms, climate “rationalist” is probably the best, and perhaps we should stick to that.

The second problem that doubters of the current climate-mania face is that they are depicted almost exclusively for what they doubt rather than what they believe. It is an age old trick. “If you're not with us, you're against us.” Don't you just envy the warmaholics/carbonistas for their ignorance. The certainty of dogma.

In facing the above problem it seems that what is needed is a concerted effort by *Climate Rationalists* to continually expound their beliefs. Not a sort of Soviet style manifesto, or gormless, meaningless list of “save the planet” jingles or chants, but a substantial statement of belief and purpose.

Climate Rationalists certainly believe (or at least all the ones I know or have read about do) in fresh air, unpolluted seas and rivers, lush woods and the aroma of a distant wildebeest. Most dislike the wasteful use of resources, coal and oil included, or the slashing of forests and mountains of garbage, to say nothing of

awful rush-hour traffic and unpredictable weather. So any notion that *Climate Rationalists* are generally against the cut and thrust of sound economic and social management of both the planet, and its resources, is really a gross libel.

What Global Warming and Climate Change warriors believe in is very straight forward and clear. They believe that human activity is causing the planet's climate to change (warm dangerously). They believe that human-caused carbon dioxide emissions are bad, and should be controlled. They believe that just about any recently detected change to land, ocean or atmospheric activity is the result of accumulating, human-caused carbon dioxide emissions in the atmosphere. Anything that is changing in this world is being caused by irresponsible humans, not Sister Moon or Brother Sun.

So what do *Climate Rationalists* believe? Well this *Climate Rationalist*, for one, believes in the following:

1. Science based upon science, and in particular science which is rooted in empirical and experimental observation rather than unvalidated computer models.
2. Science, defended against the heavy hand of politics, religious fervour, and media manipulation.
3. Science based on the premise that all plants and creatures on this planet evolved because of the changing nature of this planet through time, that natural earthly events such as changes to atmosphere, ice-caps, land shifts, volcanic eruptions and non-earthly solar influences. And the natural ups and downs of carbon dioxide in the atmosphere.
4. That all these changes ebb and flow through time, and are natural, evolving and to a large degree, unpredictable and unpreventable.
5. Humans need to think deeply about the possible consequences of believing that they can interfere with the natural environment on a global scale by trying to stop evolution. Carbon dioxide today! What tomorrow?

As the Senate is voting this week on the future of Rudd's ETS there could not be a better time for readers on *Quadrant Online* to toss around the five notions listed above and add, subtract or demolish. We need a positive creed for our beliefs.

Perhaps Kipling would say:

*If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
And stoop and build 'em up with worn-out tools.*

The days when our lives were so much simpler.

John Izzard is a documentary film producer and director whose credits include "Bastards from the Bush" on Les Murray and Bob Ellis; "Conversations With a Dead Poet" on John Forbes; and "A Fine Body of Gentlemen" on 1868 Aboriginal Cricket tour of England. Regular contributor to Quadrant magazine, and Quadrant Online.

The models are wrong *by William Kininmonth*

In computer models we trust!

The coming Senate vote on the badly misnamed Carbon Pollution Reduction Scheme (CPRS) is the culmination of intense propaganda spanning more than three decades. The Senate Bill aims at restricting emissions of carbon dioxide, a colourless, odourless gas essential to life, and has nought to do with smokestack carbon particles and other pollutants that have been regulated since the 1950s. The basis of the Bill is an unsustainable hypothesis that dangerous global warming will be an outcome of continued burning of fossil fuels and the rising concentrations of carbon dioxide in the atmosphere.

It is nearly 20 years since the UN's Intergovernmental Panel on Climate Change (the IPCC) in 1990 gave its first assessment of the likelihood and potential magnitude of human-caused global warming. In their first report in 1990 they confirmed that humans would have an impact on global temperatures as carbon dioxide levels increased. Importantly, the magnitudes of impacts were considered conjectural and subject to large uncertainty, because computer models of the time were rudimentary in their ability to represent the complex processes in the climate system.

The IPCC's second report in 1995 was more confident, saying that the balance of evidence suggested a discernible human influence on global climate. By the time of the 2001 third report the IPCC was concluding that the ability of computer models to project future climate had increased and '*the warming over the past 100 years is very unlikely to be due to internal variability alone, as estimated by current [computer] models*'.

In its most recent 2007 report the IPCC has gone so far as to claim that most of the warming of the last half century was very likely due to human activities, especially the emissions of carbon dioxide. Moreover it was claimed that unconstrained emissions of carbon dioxide would lead to a dangerous global temperature rise of between 2°C and 6°C by the end of the century.

Unfortunately the more recent pattern of global temperature does not fit the IPCC scenario. Carbon dioxide levels have continued to rise but global temperatures have flat-lined since 1997.

In light of the recent global temperature record it is appropriate to ask the government – as indeed, Senator Fielding has - why 1998 remains the warmest year in the record and why global average temperatures have persisted at about the same value (0.4°C above the 1961-1990 average) since 1997. After all, given the carbon dioxide emissions that have occurred, even the most conservative IPCC predictions are that the temperature should have risen by at least 0.2°C over the decade, and up to 0.6°C rise could have been expected.

The recent temperature record exposes the logical inconsistency within the IPCC argument for 'dangerous' human-caused global warming.

If there is only limited internal variability in the climate system, as IPCC claimed in its 2001 assessment, then global temperature should respond to the increasing levels of carbon dioxide according to the computer model predictions. As the global temperature is not following the trend of increasing carbon dioxide levels, then we must conclude that IPCC and its computer models have got it wrong. Carbon dioxide is clearly not the climate bogey that it has been made out to be.

Those who have an understanding of the climate system recognise the reality of the last decade. Internal variability of the climate system gives rise to important fluctuations, such as the El Niño Southern

Oscillation. Subtle changes in the surface layer circulation of the equatorial Pacific Ocean have global impact on climate, including Australian rainfall.

There are other well-known multi-decadal variations in the ocean circulation that also impact on the global climate. These include the Pacific Decadal Oscillation (PDO) and the North Atlantic Oscillation (NAO).

The Rudd government plans to implement its Carbon Pollution Reduction Scheme (CPRS) on the basis that reducing carbon dioxide emissions to the atmosphere will avert dangerous climate change. Legislation giving effect to cap and trade permits is awaiting consideration by the Senate. Implementation of the scheme will impact on every Australian; the greater the government commitment to reduce carbon dioxide emissions, so the greater that impact will be.

It is clear that complex computer modelling of the climate and economic systems, both based on questionable assumptions, are respectively the reason and the justification for the cap and trade legislation. For most of us, computer models are synonymous with the magician's smoke and mirrors; in the experts we trust. Until recently there was no simple benchmark against which to assess the veracity of either the climate or economic computer projections.

However, we now have a decade of independent climate data and the 'dangerous' global warming predictions of the IPCC have proved to be a chimera, as global temperatures have not risen.

There is a serious risk that we will end up with the worst outcomes possible because of the frailties of computer modelling: carbon dioxide will prove to have little impact on climate but implementation of the Rudd government's cap and trade legislation will seriously raise energy costs and expand unemployment. Additionally, serious power outages have recently been foreshadowed because the cap and trade penalties discourage necessary investment and maintenance for conventional power generation infrastructure.

It is time to make a fundamental re-assessment of our knowledge of climate, especially giving emphasis to past change as a guide to the future. Rather than attempting to control climate through regulating carbon dioxide, the Rudd government would do better to invest in adaptation measures that improve community resilience to known climate hazards, both natural and potentially of human causation.

William Kininmonth is a meteorologist and former head of Australia's National Climate Centre. He was Australian delegate to the World Meteorological Organization's Commission for Climatology (1982-98), including two terms on its management board and is the author of [Climate Change: A Natural Hazard](#) (2004, Multi-science Publishing Co, UK).

Great, let's close the beef industry *by Jennifer Marohasy*

What will an ETS do for Australia's Environment?

Australia is a young country blessed with an abundance of natural resources. During the first hundred years of settlement we grew rich from agriculture, in particular from exporting wool to the homeland England. More recently Australia has developed a mining sector and some now refer to us as the quarry for Asia. But with global warming concerns, and the likely introduction of an emissions trading scheme (ETS), the Australian economy will undergo radical change.

The Carbon Pollution Reduction Bill is intended to reduce emissions of greenhouse gases, including carbon dioxide and methane. However, given that the big global polluters, including China and India, have no intention of signing up to such a scheme, it is also generally agreed that an Australian ETS will have no significant impact on global emissions or temperatures. Furthermore, there is nothing unique about the greenhouse gas intensive products currently exported from Australia. If we significantly add, for example, to the cost of producing milk and iron ore here, the same products can be sourced from other places including South America.

Australian livestock industries represent a significant percentage of agricultural emissions and will be impacted hardest by the introduction of an ETS. The wool industry is already in decline with numbers of sheep having declined from 170 odd million sheep in the industry's heyday to something now closer to 20 million and reducing. Australia's export dairy industry has also already undergone a major contraction and its further demise is unlikely to significantly impact except local regional economies in Victoria and perhaps Tasmania. However, very large tracts of Australia, perhaps 60 percent of our land area, currently support a growing beef industry and the end of this industry will change the ecology of our rangelands as well as impacting financially.

Ross Garnaut, a key advisor to the government on climate change, suggested in his final report on climate change that the end of the beef industry would be a good thing for the Australian environment and that a switch from beef cattle to kangaroo would have multiple environmental benefits additional to reducing emissions.

In moderate rainfall areas, landholders are more likely to plant trees, than harvest kangaroos, because of the financial incentives provided by the ETS through what is referred to as abatement. Where large tracts of cropping and grazing land have already been replaced by plantation forestry, for example in the Murrumbidgee Catchment, there have been significant changes in hydrology and ecology resulting in particular in reduced water runoff into rivers and streams. In drier areas there will not be the same opportunities to benefit financially from the ETS through tree plantings and the harvesting of native wildlife could be an option. But only if this plains country does not become more susceptible to native woody weeds intrusions. Woody weeds could be controlled though the reintroduction of fire – but again with implications for the nation's greenhouse gas emissions.

Mining has arguably a less diffuse impact on the landscape than either agriculture or forestry, but it never-the-less impacts. There is currently a battle between farmers and miners on the Liverpool Plains of northern central NSW, as farmers worry about the impact of proposed new coal mines particularly on their local aquifers. These types of disputes may become a thing of the past with the introduction of the ETS because both industries are likely to fall into decline as Australia is forced to develop an economy without exploiting its natural resources – a very new proposition for this once lucky country.

In conclusion, the introduction of an ETS will not significantly impact on global emissions of greenhouse gases but it is likely to place some key Australian primary industries, in particular livestock industries, at a

significant competitive disadvantage resulting in their eventual demise. Extractive mining industries are also likely to be significantly impacted in the longer term. Indeed the interventionist ETS and associated government policies will inevitably result in a restructuring of the Australian economy away from our traditional dependence on natural resources as a key source of wealth generation.

So, while the introduction of the ETS will not significantly reduce global emissions of carbon dioxide and other greenhouse gases, it may deliver a benefit to Australia's natural environment via the closure of Australia's beef and mining industries. Many will argue that this represents a potentially good outcome for our natural environment.

Jennifer Marohasy BSc PhD lives in the Blue Mountains. For over twenty years she worked for Australian agriculture industries, including wool, beef and sugar, and in 1991 was awarded the cattleman's union research medal.



The Great Climate Scam *by Des Moore*

Should We Believe (All) Scientists?

Some may say it ill behoves an economist to pass judgement on scientists: after all economists are obviously to blame for the current recession.

But reflecting on 28 years in Treasury (and subsequently), I conclude that many proposals by both economists and scientists do not warrant government intervention to “save” the economy and/or society. Modest expertise helped me, but my most important methodology is common sense questions – such as “*how exactly will society (rather than a particular group) benefit if this proposal is implemented?*”

I confess to having started with the belief that proposals by scientists should generally be accepted. After all, look at the improved living standards from the innumerable machines and medicines that scientific advances have allowed.

But when in 1972 I wrote a paper at the Royal College of Defence Studies in London on “Limits on the Supply of Resources”, I soon realised that even the best scientists need to be challenged. Worryingly, most pay little regard to either the continued upward trend in beneficial technology, or to the natural propensity for markets to encourage such developments through changes in prices. The combination of science and economics, I concluded, meant that we humans would not run out of resources even for the growing world population.

This, of course, contrasted starkly with the four Club of Rome scientists, who postulated in “The Limits to Growth” that a developing shortage of resources required population to be “stabilized”. A similar theme was advanced in “A Blueprint for Survival”, a 1972 document signed by many eminent scientists, including five Fellows of the Royal Society and sixteen holders of science chairs in British universities. This Blueprint was described as a “major contribution to the current debate” in a letter to The Times signed by another 150 scientists, including nine more fellows of the Royal Society and 20 more university science professors.

Such calls by “expert” scientists for government intervention to stop the world reaching some imagined tipping point, leading to poverty, famines and wars, have continued right up to today. They underlie the present political thesis that, unless governments adopt policies to limit greenhouse gas emissions, temperatures will rise to levels that, eventually, threaten survival.

Yet climatology is a relatively new science that relies importantly on the same kind of adjustment of modelling variables that economists use in making their oft incorrect predictions of economic growth; viz, regularly adjust the model to take account of the latest changes in the climate (economic) situation.

Worth referencing here, too, is the 1704 explanation by world renowned scientist Sir Isaac Newton of his reason for predicting the end of the world in 2060. This, he said, was “*not to assert when the time of the end shall be*” but “*to put a stop to the rash conjectures of fanciful men who are frequently predicting the time of the end, and by so doing bring the sacred prophecies into discredit as often as their predictions fail*”.

Today, fanciful scientists and economists offer different perspectives on global warming predictions. Modelling by the former puts the dangerous “tipping point” around 2050, when a further 2 degrees rise in temperatures is projected, while economists’ modelling suggests that even if no “remedial” action is taken GDP would be only slightly lower than otherwise in 2100 – some tipping point!

Given the enormous technological (and economic) developments that have occurred over time, such use of times beyond which “engines” cannot be reversed are not only extreme dubious but also absurd - reasoning

that humanity must act now because the future can confidently be predicted over a century ahead is nonsense that qualifies for a Newton award.

But there is a laundry list of other more specific reasons that question the validity of various analyses by the IPCC and its supporters. Space permits only brief references.

The main question is whether there is any credible relationship between emissions of carbon dioxide and temperature increases. The following suggests there is none and that IPCC specifics to the contrary have no credibility.

Since 1940 emissions of CO₂ have increased strongly but measured temperatures did not increase or fell for about 40 per cent of the time. Further, although satellite measurements used since 1978 have substantially improved global temperature coverage by including oceans, the IPCC erroneously concludes that urban heating effects have no effect on their preferred thermometer ground temperature record;

Temperatures were not infrequently higher than today in earlier past periods, when only limited emissions of greenhouse gases occurred. The IPCC's fallibility is shown by its failure to explain the withdrawal from recent reports of its earlier presentations acknowledging this for the Medieval Warming period; and of its "hockey stick" temperature analysis that shows (wrongly) no increases prior to industrialisation;

The IPCC projection of the "very likely" average temperature increase to 2100 has a range of uncertainty that is so wide (50-60 per cent) as to make it meaningless for policy decision-making;

Although IPCC reports acknowledge that the supposed warming effects from increased concentrations of carbon dioxide in the atmosphere diminish progressively as concentration levels grow, the IPCC's policy recommendations offset this diminishing effect by amplifying other dubious temperature influences;

Historical analyses of ice cores indicate that past periods of temperature increases occurred hundreds of years *before* their parallel carbon dioxide increases.

Examination of many other specifics relating to possible indirect evidence of "dangerous" warming confirm that, as of now, that the changes observed are all in line with natural planetary variations. These include data relating to sea levels (recently falling), Arctic sea-ice meltings (now reversed), and Antarctic sea-ice area (actually increased).

Recently, the Science director of the Heartland Institute, Dr Jay Lehr, described the IPCC's dangerous, human-caused warming thesis as a scam in his presentation in my conference room.

One of my guests then commented:

It makes one wonder how on earth greenhouse theory could have been so readily accepted by scientists, and thence by the public generally, at least in the developed world. The huge cost of abatement of the supposed problem is widely accepted nonchalantly, or in ignorance. As Lehr said, it is all about politics, power and money.

The German call for an independent, non-ideological audit of the IPCC science should be repeated here, as indeed Senator Fielding's scientific advisors have started to provide, and urge to be continued through the mechanism of a Royal Commission.

Enough said.

Des Moore is the Director of the [Institute for Private Enterprise](#).



Softly, softly *by Alan Moran*

An Australian ETS – the longer term perspective

The goal of international agreements being considered on climate change is to stabilise the world's human-caused carbon dioxide emissions. This ambition is barely conceivable. For the main gas, carbon dioxide, it would require emissions to be set at an average global level of about three tonnes per capita. At present, Australia emits 16 tonnes, the United States 20 tonnes and the EU nine tonnes. China, which is only one-third developed, is already at 4.5 tonnes, i.e., 50 per cent above the required level.

Australia, even if it closes down its entire coal industry, including the 85 per cent of electricity that is coal generated, will still not get close to any such target. If we replace coal with gas (adding 50 per cent to the price), it would still leave excessive emissions. Replacement by wind is not feasible, and wind energy is, in any event, three or four times the cost of that generated from coal.

The Rudd government is suggesting that a step in the right direction would be to reduce Australian emission levels by 20%. There are only two feasible means of achieving such a target. The first is to adopt nuclear power generation, at a cost in terms of plant that is similar to a year's national income and would still mean an electricity generation cost premium of over 70 per cent. The second is adopt poverty as our national life style, i.e. to go backwards in terms of present living standards.

If an ETS is to be implemented globally, and it makes no sense otherwise, it would require the elimination of coal as a source of energy, at least until some cheap form of carbon dioxide capture and storage is available. There is no prospect of that on the horizon.

Australia has got about 76 billion tonnes of coal reserves. If we wipe out coal for power generation, then even at a value as little as \$10 a tonne, it is a sacrifice of \$760 billion wealth; compounding that, we would have wealth shedding also from shale oil and gas and various other things.

An Australian ETS would not only stifle current business operations, but would also virtually eliminate new investment in power generation as well as other energy intensive processing. Leakage of important industries overseas would inevitably follow, despite the energy intensive allowances which are in place or intended.

These issues are compounded if Australia continues with its plan to take a very high, proactive position. If we move in advance of other countries we will lose an awful lot of industry, as well as the inherent value of the coal and all the other natural energy wealth that we have. But introducing a carbon dioxide tax will also have deleterious direct affects on electricity producers. Canberra's CPRS proposal leaves Australian generation businesses far more vulnerable than their counterparts in the US and Europe. That's because only 4 per cent of total allowable emissions free to existing electricity generation businesses. The US Waxman-Markey bill provides 35 per cent of total emissions free to generators.

As a coal based power generation economy and with coal and other fossil fuels forming one third of our exports, Australia is perhaps the world's most vulnerable economy to carbon taxes and similar restraints. We therefore need to take particular care to shape a constructive and economically viable policy. One of the key outcomes of the Treasury modelling offers a promising policy approach, which is its implicit estimate that the cost of doing nothing to 2020, and then catching up with the 2050 target thereafter if necessary, would cost only 0.3 per cent of GDP by 2050.

Even if this is not overstated, 0.3 per cent of GDP seems a reasonable insurance policy price to pay for keeping options open, rather than prematurely embarking on carbon dioxide taxation measures that will comprise, in the white paper's words, '*the most significant structural reform of the economy since the 1980s*'.

By 2020, the need for emissions reduction policies will be clearer, and presumably we will have access to all the technological advances that Treasury claim will be forthcoming by that time.

Preparing for action should it be needed, but meanwhile deferring the introduction of a tax that will wreak massive economic damage, could be an ideal solution for Australia to adopt.

Alan Moran is the Director Deregulation at the Institute of Public Affairs and has prepared a great many articles, submissions and research studies into the economics of suppressing greenhouse gas emissions.



Science bullies *by Joanne Nova*

Science is broken, and you don't need to be a scientist to see that.

Other industries call their critics “whistleblowers”, but in climate science they're known as “deniers”, or variously: conspiracy theorists, dinosaurs, oil shills, paid hacks, morons, traitors, inactivists and delayers. This is not science. Bullies need to be exposed. It has gone on far too long in the theatre that masquerades as “the scientific process”.

The term *skeptic*, once a title every scientist would aspire too, has become so polluted by misuse that even skeptics try to avoid it.

It seems so obvious with hindsight: Name calling is not science. If the bullies had evidence, they would just provide it. Wouldn't they? Instead they play an intimidating shell game to silence debate and distract attention from the non-answers.

Climate science is the first postmodern science to be corrupted en masse. It's the only science with paid attack-dog sites to personally vilify any scientist who asks for evidence. The attack-dogs have names like DeSmog, and groups, who pretend they are science based, seem blissfully happy to support the ad hominem attacks. DeSmog is funded by a PR company who work for David Suzuki. Exxon Secrets is funded by Greenpeace.

In the early 1990's Fred Singer was forced to use libel laws to stop Al Gore staffers from bullying him. He won the case, but how many scientists would be willing to face up to the uncertainty, the legal bills or the hassle, just to clear their name?

Recently Mitchell Taylor, the man who has caught more polar bears than anyone was ostracized from a professional meeting—purely because of his stance against climate change, and not because of anything to do with polar bear research.

The good news is that bullying is a brittle front, and once exposed it quickly collapses. We can see the first signs of this in the scientific in-house publications.

Scientists everywhere are starting to rebel against the unscientific bad behaviour. In the last few months 54 prominent scientists from the American Physical Society have written in protest to their own association; six professors from notable universities like UC Santa Barbara, MIT and Princeton have written an unprecedented open letter to congress: “[You are being deceived](#)”; Members of the largest scientific society in the world (The American Chemical Society) astonished their editor when many of them vehemently complained about the use of the word “denier” and the description of climate science as “settled” in a professional journal editorial. More than 700 names of eminent scientists have now been added to the list of public dissenters, and over 30,000 names are scientists signed a detailed petition against the theory of the crisis in carbon. It's been done by volunteers, and it's been done *twice*.

While the bullying is active people will keep their thoughts to themselves, but once word spreads, the tables will turn. A phase shift is coming.

I have spoken to many people in parliament across both sides of the field. Some have even donated money to my site (and not necessarily the ones you might expect). There are many silent skeptics

(whom I won't name in public until they make themselves known). If the ALP or the Coalition offered their members a silent ballot, they might be shocked at how few privately believe the dogma.

While the mainstream media has barely started to cover the gathering momentum, there is still time for some people to save face and get out ahead of the pack. But once this tipping point is reached, and everyone openly talks of bullying in science, no one will want to be seen as a follower who mindlessly believed an unelected, unaudited committee who supported their own junkets.

To be seen as brave, our leaders need to *be brave*. They must face the attack-dogs while the dogs still have teeth.

If the IPCC is in such a strong unassailable position why do they never speak out against the bullies?

This shell game and intimidation has gone on far too long. Many people are suspicious of the lectures, the censorship and the people who deny there is a debate, but they haven't got the words for the reasons why they smell a rat. I'm giving them the words. Bullying is not science. Name Calling is not reason. Climate models are not evidence.

Joanne Nova is the author of [The Skeptics Handbook](#)

It's all in the rocks *by Ian Plimer*

Here's the simple lesson in geology that all politicians need

Planet Earth is a warm wet greenhouse volcanic planet. The planet is dynamic, change is normal.

For less than 20% of its history Earth has had ice, five of the six major ice ages occurred when the atmospheric carbon dioxide (CO₂) content was up to 1,000 times higher than at present, and for half of Earth history CO₂ has been sequestered naturally into algal reefs, coral reefs, sediments, altered rocks, bacteria, plants, soils and oceans.

The Earth's atmospheric CO₂ initially derived from volcanic degassing. Much of it still does and the rest is recycled CO₂ from the oceans, rocks and life.

At present we enjoy a period of volcanic quiescence, but one big volcanic eruption can add as much CO₂ to the atmosphere in a day as humans do in a year. Submarine supervolcanoes constantly pump out heat and CO₂ into ocean waters, the effects of which are commonly not seen for thousands of years.

Significant oxygenation of the atmosphere took place when the planet was in middle age, after which the evolution of plants and the process of photosynthesis resulted in the recycling carbon out of the atmosphere and its sequestration into plants, soils and sedimentary rocks.

The atmosphere now contains 800 billion tonnes (Gt) of carbon as CO₂, soils vegetation and humus contain 2,000 Gt carbon in various compounds, the oceans contain 39,000 Gt and limestone, a rock that contains 44% CO₂, contains 65,000,000 Gt carbon. The atmosphere contains only 0.001% of all carbon at the surface of the Earth, and far greater quantities are present in the lower crust and mantle of the Earth.

Once fossil fuel is burned, the released CO₂ does not remain permanently in the atmosphere, but over a few years is sequestered into the oceans, living organisms and sediments. It is also a fact that if all of the world's fossil fuels were burned, atmospheric CO₂ would not even rise to twice the current level.

At present, the Earth's atmosphere is starved of CO₂, and should atmospheric CO₂ drop from the current 385 parts per million (ppm) to less than 200 ppm, plant life will cease. Over the last 250 years, CO₂ in the atmosphere has increased by one part in 10,000.

Ice core measurements show that temperature rises precede rises in CO₂ by 800 to 2,800 years. For the first decade of the 21st Century, all climate measuring data and methods show that temperature is decreasing yet CO₂ is increasing.

On all time scales, then, there is no correlation between temperature and CO₂. If there is no correlation, then there can be no causation.

Over geological history, rapid large climate changes have resulted from the changing position of the Solar System in the galaxy, solar activity, the Earth's changing orbit, tides, ocean currents, volcanoes, tectonics and the shape of the Earth.

Never in the past has climate change been driven primarily by CO₂.

Furthermore, just because we humans live on Earth does not mean that changes in our lifetime are due to human activity. A small amount of CO₂ (<100 ppm) in the atmosphere has an effect on atmospheric temperature, higher than 100 ppm its effect on temperature is minimal to negligible compared to the other influences that change our climate system.

If an extraordinary hypothesis is suggested - such as, that human emissions of CO₂ will lead to dangerous global warming - then extraordinary evidence needs to be presented in its support.

In fact, there is no direct, real world evidence for dangerous human-caused warming at all, and that despite the efforts of thousands of scientists and organisations since 1990, and the expenditure of approaching \$100 billion, looking for precisely such evidence. Instead, the global warming scare is built entirely around unvalidated computer climate models that are known to be wrong.

In voting on the “Carbon Pollution Reduction Scheme” (CPRS) bill, Australian senators are poised to determine the biggest financial and sociological decision since Federation. Yet their vote is being cast without either a transparent, independent scientific audit, or comprehensive financial due diligence.

Australia’s emissions constitute only 1.4% of global CO₂ emissions, so anything that Australia does to limit its emissions will be an exercise in complete futility regarding the prevention of global warming. On the other hand, if Australian emissions are reduced, then it is certain that the economy will contract, tens of thousands of persons will lose their jobs, and the price of power will ultimately double.

All emissions trading systems are based on the invalid hypothesis that human emissions of CO₂ drive global warming, and the Rudd government’s CPRS is no exception. Senators from all parties must vote it down.

***Ian Plimer** is Professor in the School of Earth and Environmental Sciences (University of Adelaide) and Emeritus Professor in the School of Earth Sciences (University of Melbourne).*

Why no cost:benefit analysis? *by Alex Robson*

Why the Government's Emissions Trading Scheme is Not a Good Idea

Responsible politicians and policymakers should balk at legislative proposals which are likely to have significant and widespread economic consequences, but whose net benefits they have not rigorously assessed or had carefully explained to them.

What are the expected net economic benefits to Australia of the Government's proposed emissions trading scheme? After numerous government reports comprising several thousand pages, the Government has yet to answer this question.

None of the official studies (including the Garnaut Report, Treasury's modelling, the Green Paper, the White Paper, or the Regulation Impact Statement that accompanies the CPRS legislation) have assessed the Government's actual policy, which aims for a minimum 5 per cent unilateral reduction in emissions on 2000 levels by 2020. This unilateral policy scenario was not even considered, let alone modelled in detail, in any of the aforementioned publications.

It is not as if the tools to undertake such an analysis do not exist. Cost benefit analysis is a collection of analytical methods that the economics profession has developed over a period of more than 70 years to examine precisely these kinds of policies. The Department of Finance's *Handbook of Cost-Benefit Analysis* provides a great deal of guidance on when and how those tools should be used, and the Office of Best Practice Regulation's *Best Practice Regulation Handbook* sets out an analytical framework for assessing regulations like the proposed emissions trading scheme.

These publications, together with many others, outline the basic methodology of cost benefit analysis: (i) set out the broad range of policy options; (ii) assess and set out, to the greatest extent possible, the present value of the full expected incremental economic costs and benefits of each policy option (that is, costs and benefits relative to a baseline of no policy change), (iii) examine the risks and sensitivities involved in these costs and benefits, and (iv) recommend the policy option that has the greatest expected net benefit in present value terms. None of the aforementioned studies followed this basic methodology, and thus none of them comply with basic standards of cost benefit analysis that are widely practiced throughout the economics profession.

So what are the incremental costs and benefits of the Government's policy? The incremental economic costs are likely to be non-trivial. For example, Treasury's modelling, which examined various scenarios including a 5 per cent cut (but only in the context of similar action taken by developed countries, with developing economies coming on board between 2015 and 2025), shows that Australian living standards (as measured by GDP) will be lower than they otherwise would be for every year that the emissions trading scheme is in place. That is, the incremental effect of the CPRS will be to reduce our living standards below what they would otherwise be for each and every year into the future.

If these future costs are discounted back to today's dollars and added up over all the years of the scheme, they represent a sizeable cost – they are of the order of the value of our entire current GDP. Table 1 below presents a range of discounted present values of the GDP costs, where the range varies according to the discount rate chosen (between 5 and 0 per cent in Table 1 –note the Garnaut Report uses discount rates of 1.35 and 2.65 per cent). The Government's planned unilateral emissions reductions (which Treasury has not costed) will likely have much greater incremental costs. Thus, the costs in Table 1 are likely to represent a lower bound on the incremental costs of the Government's proposed scheme.

Table 1: Ranges of present value of Australia's GDP loss (relative to baseline) under each mitigation scenario

	5 per cent emissions reduction	15 per cent emissions reduction
Range of Present Value of Economic Costs	\$0.5 trillion to \$1.9 trillion	\$0.67 trillion to \$2.47 trillion

Data Sources: Commonwealth of Australia (2008a) and Concept Economics (2009), Table 4, page 56.

Treasury's modelling also shows^[1] that if the rest of the world reduces its emissions whilst Australia does not, by 2050 our Gross National Product (GNP) will be only 0.6 per cent lower than the baseline scenario, which is far less than the estimated 3.2-5.2 per cent annual GNP costs under the Government's policies. In other words, Treasury's analysis shows that Australia will be better off not reducing emissions, even if the rest of the world does.

What about the other side of the cost-benefit ledger? Avoiding any costs of climate change that can be demonstrated would certainly count as an economic benefit to Australia, but the key point is that these benefits will not be achieved by the Government's emissions trading scheme. Australia's emissions reductions can have no significant impact on global emissions or global climate. Therefore, the incremental benefits to Australia of the Government's policy are zero.

The Government's policy will have large incremental costs and negligible incremental benefits for Australia. This means that the expected net incremental benefits of the Government's policy are negative, and from a cost-benefit point of view, the Government's policy should be rejected.

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Dr Alex Robson is a Senior Economist at Concept Economics in Canberra, and is a Visiting Fellow at the Crawford School of Economics and Government at the Australian National University. He holds a PhD in Economics from the University of California, Irvine.

^[1] See Commonwealth of Australia (2008a), page 154.

The Climate Craze *by Walter Starck*

Global Warming, a Mass Mania

Throughout history episodic eruptions of mass manias have swept societies. These outbreaks embody the dissatisfactions, fears and hopes of their times while offering a shining path to a bright new future. They are characterised by a millenarian nature, wherein threat of punishment for past sins is accompanied by promise of salvation through a new faith.

The power of mass manias is reinforced by severe disapproval of any questioning of their certain truth. Any doubt is seen not just as error needing correction but as conscious deliberate evil deserving expulsion or extermination. With adherents permitted only to support the established dogma, these movements tend to gather followers rapidly. But they also soon become afflicted with a growing disconnect from reality which they can neither acknowledge nor adjust for.

As no believer dares express anything other than certainty, social manias tend to persist for some time after their disconnect with reality has become obvious to all. In the face of such recalcitrant reality, leaders are forced to become ever more extreme in their proclamations. This then often leads to a zenith of zealotry and disconnect just before increasingly obvious reality finally forces them to make some small admission of error. The spell is then broken and the faith collapses.

Global Warming is the mania of our times. While there is good scientific evidence that atmospheric carbon dioxide is increasing from the burning of fossil fuels, and that carbon dioxide does indeed absorb infra-red heat radiation of certain frequencies, it is purely speculation that this will cause a climate catastrophe.

As Mark Twain wrote over a century ago: "There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact."

In the current instance there is also abundant scientific evidence to indicate that:

- The amount of warming from increased carbon dioxide emissions has been greatly overestimated.
- Most of the uncertain fraction of a degree of warming that has occurred over the past century is attributable to measurement bias and natural variability.
- Predictions of catastrophic consequences are entirely speculative and unlikely.
- The net result of a projected doubling of atmospheric CO₂ is most likely to be positive.
- Fossil fuels will run out well before any drastic effects on climate are possible.
- If man made global warming is indeed real, and it helps to prevent another ice age, this would be the most fortunate thing that has happened to our species since we barely escaped extinction from an especially cold period during the last ice age some 75,000 years ago.
- The ongoing political waffle over setting targets for differing percentages of emission reductions at various points decades in the future is about as useful as debating over how many angels can dance on the head of a pin.

The biggest problem we face in the foreseeable future is not some unquantifiable risk of climate change at some unknown future time. It is the real and immanent one of producing enough fossil fuel to maintain the healthy economy necessary for the long costly process of developing energy alternatives and implementing them on an adequate scale. At best this will take decades and will require abundant supplies of fossil fuels to achieve.

The entire Global Warming scenario is predicated on continued undiminished consumption of fossil fuel. However, the inability of conventional energy supplies to meet increasing global demand is already confronting us. No matter how much oil may still exist somewhere underground, new discoveries are not keeping pace with depletion of known reserves and current demand is pushing the limits of production capacity. New discoveries are also increasingly found in deep water or remote locations where costs are high.

With or without GW, alternative sources of energy must ultimately be developed. How successful this will be is far from certain. Renewable energy is diffuse. The notion of a future economy powered by sunbeams and summer breezes is a happy fantasy. The future offered by renewable energy alone is one of considerable energy constraint and decreased affluence.

Cheap abundant energy from fossil fuels is a vital element in virtually every product and service in our current economy. Without adequate supplies of affordable liquid hydrocarbon fuels for transportation and mobile machinery our existing economy cannot continue to function, nor will be able to even feed the population.

Our society doesn't run on hypotheticals. Aircraft, ships, trucks and heavy machinery are not going to be powered by batteries. Premature attempts to adopt immature, unproven technology fostered by ill-conceived subsidies and regulations entails a high risk of shortages and costly mistakes. The emerging bio-fuels and wind energy fiascos are already an example.

The economics of current renewable energy technologies is only even marginally viable because of subsidies and the availability of cheap abundant fossil fuel energy to implement and maintain them. Imagine the cost of metals, concrete, machinery, manufacturing transport and farming if all these things were also dependant on renewable energy.

Unfortunately, the academics, activists, politicians and bureaucrats leading the push for carbon dioxide taxation and use of renewable energy are non-producers who are woefully ignorant of both the economic reality of productive activity and the practical limits of technology. They are techno-economic-illiterates with a cargo cult understanding of production. Their prescriptions amount to a ritualistic belief that admitting sin (GW) and making an appropriate sacrifice (carbon dioxide taxes) will in some undefined (magical) way bring forth all the right changes, discoveries and implementations that are needed to effect a bright new world of clean endlessly renewable energy with minimal inconvenience to anyone.

The leading scientific prophets of this cult are overwhelmingly comprised of young researchers whose entire careers are based on climate alarmism. In contrast, the middleground, balanced ("sceptical") scientists are overwhelmingly researchers with well established expertise in other fields. The alarmists repeatedly refer to a catechism of highly selective evidence to support their claims. The sceptics cite voluminous other evidence from their own varied fields which contradicts the alarmist's claims.

Even when alarmist evidence is conclusively discredited (*e.g.* the hockey stick graph), the climate alarmists continue to use it, and to dismiss all conflicting evidence no matter how sound or voluminous it may be. When their own claims fail, they revise the evidence, not their hypothesis. Recent examples of this have involved the current global cooling trend, the absence of a signature tropical tropospheric hot spot, Antarctic cooling, oceanic cooling, unchanged rates of sea level rise, etc. All these phenomena have been subjected to dubious data manipulation trying to make a silk purse to suit GW out of a sow's ear of empirical data which refuses to conform to their hopes.

GW has become just another faith based belief, immune to all conflicting reason and evidence. Although it maintains a claim to being based on science, its relation to genuine, evidence based,

logically consistent, refutable science is not unlike that of Scientology, with which it shares a number of commonalities.

The amazing thing about all this is that people who claim to be scientists are so willing to become so profoundly and righteously committed to a belief in something that, at best, is highly uncertain, and the reality of which will inevitably become apparent in the not too distant future. It appears that such persons somehow think that their own unshakable faith will determine that reality. It also seems clear that what they claim to fear so greatly is, perversely, what they actually so desperately hope for.

Where GW departs from ordinary academic disputes and becomes a dangerous fundamentalist mania is in the righteous and fervency of its proselytizers. This is apparent in the anger and abuse directed at any who dare question their pronouncements. It has gone so far as leading warmers comparing scepticism of GW with holocaust denial, suggesting that GW dissent be made a criminal offence and even advocating Nuremburg style public trials for offenders.

Recently Jonathan Manthorpe, a writer for the Vancouver Sun newspaper, wrote an article expressing qualified agreement with some of the arguments against GW raised by Ian Plimer in his book *Heaven and Earth*. In a follow up article, on 5 August 2009, Manthorpe reported that he had received around 100 e-mails about his Plimer piece. About two-thirds were from ordinary people who agreed with Plimer. Another healthy portion was from scientists who agreed with Plimer's overall contention about natural variabilities in climate on which humans have little or no influence. However, they disputed various specific claims and details made by him.

Manthorpe also noted that, "...the disturbing letters were from the scientist believers in man-made global warming."

He then went on to say, "I have met a lot of unpleasant people in the course of my life, but I have never seen such a torrent of nasty, arrogant and downright stupid abuse as has been aimed at me this week by people who aggressively sign themselves "PhD" as though it were a mark of divine right that is beyond challenge or question."

The recent but largely unreported trend of global cooling has become increasingly hard for warmers to deny or explain away, and there is increasing evidence that various other core elements of the GW hypothesis are incorrect. In the face of failing claims and prophecies, the prophets of GW are becoming more and more strident and apocalyptic. The cooler it gets the shriller their cries of warning about warming become.

In addition to the true believers, GW has attracted a large contingent of self-interested fellow travellers. Politicians, bureaucrats, political activists and manifold financial interest have perceived advantages to be gained from climbing aboard the GW bandwagon. Large vested interests are now involved, and there is great pressure to lock in emission controls and subsidies before popular support weakens.

Despite all this, in the end the entire matter is only an empty irrelevant charade. The developing nations will not cease their development even if developed ones do. A modest increase in energy prices will not result in decreased emissions and large cost increases that will do so will result in recession and severe economic disruptions. This is not speculation. We have already had two clear instances. Any government which does not understand this will be replaced.

Australia's annual carbon dioxide emissions are only about 1.5 percent of the global total. This is barely equal to China's *increase* in emissions over 6 months. Whatever we do or don't do to reduce emissions will have negligible effect on the global total. In any event, estimates of natural uptake of CO₂ over our

land and EEZ area are greater than our emissions. By any reasonable accounting, we as a nation should be receiving carbon credits, not being forced to buy them.

The prospective Emissions Trading Scheme is set to become just another layer of bureaucracy loaded onto an already staggering productive sector, with negligible effect on emissions other than that resulting from economic decline. To verify the ineffectiveness of emissions trading one need only look at the result where it has been implemented in the EU or the global result of the Kyoto agreement. Since it was ratified global emissions have increased 18%. Those of signatory nations increased 21%. Those who did not sign up increased 10% and those for the U.S. grew by 6.6%.

Over the next few years economic recession will result in a much greater reduction in emissions than anything achievable from regulatory measures over the same period. Meanwhile, evidence is steadily accumulating that the amount and impacts of greenhouse warming have been greatly overestimated, and that a natural cooling cycle is now overriding any small increase in GH effect attributable to human emissions. There is no overwhelming urgency to hastily impose yet another ill conceived regulatory burden on the Australian economy, especially when it can least be afforded and any benefit is distant and uncertain.

In terms of climate, resources, geography population, politics, and development, Australia is better situated than any other nation to adapt to the difficult times ahead. This will, however, require making full and effective use of our natural advantages.

The most important thing government can do is not to deliver bailouts or handouts, but rather to get out of the way. Two highly effective things are eminently doable in this respect. The proliferation of unnecessary bureaucracy has become a major drain on, and impediment to, all productive activity. It requires serious pruning, and that which is retained must be made accountable for positive results. When management fails to perform it should be replaced.

The other is an initiative to ensure the reliability of ongoing energy supplies. The most certain and cost effective way of achieving this would be the implementation of an extended corporate tax exemption for earnings from energy production, and full immediate deduction against other income for investment in the sector.

The result would be an unprecedented boom in creative effort and investment in Australian energy. This would include an influx of foreign investment and skills. It is not unrealistic to expect that Australia could soon become the global leader in new energy, the Saudi Arabia of a post-petroleum world. Any loss to government revenue from such tax largesse could be expected to be made up many times over in increased revenues from payroll taxes and GST, plus the flow-on effect throughout the remainder of the economy.

The only real obstacle to success is our own ability to envision the potential and grasp the opportunity. This way forward presents a clear route down Easy Street. The route we are now taking involves a detour through Jonestown. Only experts using computer models could confuse these options and we have just seen what they did with the global economy. The choice is a no brainer.

Walter Starck is one of Australia's most senior and experienced marine biologists, with a professional career of studying coral reef and marine fishery ecosystems.

Emissions trading schemes are immoral *by Bob Carter*

Guilt about hypothetical global warming is a social pathology restricted largely to wealthy, middle class, western societies. Comfortably clad, fed and housed, and egged on to view themselves as original sinners, our chattering classes and their media flag-wavers have proved astonishingly susceptible to ecoevangelistic propaganda about dangerous human-caused climate change.

As for the DDT-ban imposed formerly by the United Nations - which caused tens of millions of unnecessary malarial deaths in third-world countries (memorably termed technological genocide by Art Robinson) - our middle classes choose not to contemplate the effect of their misguided beliefs about global warming on the prospects of those who live in undeveloped countries.

All routes out of poverty for third world nations traverse paths of development based upon a cheap and reliable energy supply. Yet the precise intention of emissions trading schemes (ETS) is to increase the cost of carbon-based energy sources, and an inevitable collateral development is an increase too in the unreliability of supply.

As expressed recently by Fiona Kobusingye, a Co-ordinator of the Congress of Racial Equality Uganda:

The real problem isn't questionable or fake science, hysterical claims and worthless computer models that predict global warming disasters. It's that they're being used to justify telling Africans that we shouldn't build coal or natural gas electrical power plants. It's that the almost total absence of electricity is keeping us from creating jobs and becoming modern societies. It's that these policies KILL.

Those anti-electricity policies are keeping us impoverished. Not having electricity also means disease and death. It means millions die from lung infections, because they have to cook and heat with open fires Telling Africans they can't have electricity and economic development – except what can be produced with some wind turbines or little solar panels – is immoral. It is a crime against humanity.

It is also the case that the effects of carbon dioxide taxation (which is what ETS represent) are regressive within our own Australian society, for it is the families of the less well off that will bear the brunt of the passed down costs. After all, an initial extra \$3,000 a year in extra charges is trivial for the Rudd or Turnbull families, but for those on or below the average wage such a cost will be swingeing. Adding insult to their injury, and even if imposed carbon dioxide charges did result in a reduction in Australian emissions, there will be no measurable effect on future climate.

The first of the two following recent letters exemplifies why it is that most young people are so attached to the ecosalvationism that drives the introduction of ETS; the second comprises a cry from the heart by one of the average Australian punters that are going to be hurt most by this scientifically indefensible legislation, should it mischance to be passed.

Letter 1. Signed by a “Generation Y-er”

Hi, Bob.

I was at the conference you spoke to last Saturday. I was most interested in your talk, mainly because I'm a Gen-Y'er who has never heard an argument mounted against "climate change".

I should clarify - when I say I'd never heard the other side, I probably meant I'd never heard it through the mainstream media. I'm a journalist, and among my peers almost everything is questionable these days, but I must confess that it's social suicide to question climate change - more than some other taboo topics, even abortion.

People can respect you for all manner of views, but no one has time for a climate change "denialist", as the label goes.

Letter 2. Signed by an “Ordinary citizen of Australia wanting answers”

I am a citizen of Australia, who for some reason has not been overly convinced by the government's assessment of climate change.

In particular, I do not see any evidence that suggests to me that man is responsible for climate change. I do believe that the earth's temperature is increasing, but I do not believe that it is because of human activity.

I am concerned for this legislation that the government is pushing through on emissions.

I am concerned for people like myself on a low income who cannot afford to keep the heater on at night time to warm my children, all because we can't afford the gas and electricity bills.

I wish there were a way I could stop and make people see that this is all a farce. I just want the evidence that suggests that man is responsible for changing the climate of the world in which we live.

The Australian Senate must reject the futile ETS bill (“Carbon Pollution Reduction Scheme”) that currently lies on the table. And if the bill is retabled later by the government, it should be rejected again.

For, whether looked at nationally or globally, emissions trading systems are acts of immorality.

Professor Bob Carter, a geologist and environmental scientist, was formerly chairman of the ARC's Funding Panel on Earth Sciences and the national Marine Science & Technologies Grant Scheme, and director of the Australian Secretariat of the Ocean Drilling Program.

