

Climate Change Policy in Australia

Isolating the Great Southern Land

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The debate about the implications of climate change is spreading to new areas. Most recently attention has focussed on the security implications of global climate change. Earlier this year *The Observer* newspaper in London reported a leaked report titled *An Abrupt Climate Change Scenario and Its Implications for United States National Security*. Surprisingly, it was commissioned by the Pentagon and painted a picture far scarier than even the most rabid environmentalist would dare.

The 'plausible' scenario outlined by the report's authors considers a world dramatically affected by climate change, with large changes in average temperatures, rainfall patterns, and the incidence of droughts and storms. It focuses particularly on food security and the implications for countries like Australia if crops persistently fail in developing countries leading to famine and mass migration.

The Pentagon report paints a bleak picture of a humanity reverting to constant warfare over diminishing resources. It canvasses the possibility of persistent conflict in Southeast Asia, India and China including border wars, nuclear brinkmanship and civil unrest. Instability in the region may lead Japan to re-arm and the USA to strengthen border protection to hold back waves of 'unwanted starving immigrants'.

For Australia, the most startling claim of the Pentagon Report is that we, along with the United States, may find ourselves building 'defensive fortresses' around our country to protect our resources from desperate outsiders and aggressive states created by rapid and unpredictable climate change.

Action on climate change has always been driven by scientific research and there is little doubt that the science will move in only one direction - making more refined, accurate and alarming warnings about the effects of human-induced climate change. The recent interest in abrupt climate change is particularly worrying.²

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² See, for example, the report from the US National Academies earlier this year titled *Abrupt Climate Change: Inevitable Surprises* (The National Academies, Washington, 2004).

On the policy and political front, there have been three big developments recently in the international climate change regime, each with profound implications for Australia. They are:

1. the imminent start-up of the European Emissions Trading System;
2. the near-success of the McCain-Lieberman Bill in the US Senate; and
3. the announcement that Russia will ratify the Kyoto Protocol.

Let me comment briefly on each of these.

European emissions trading system (ETS)

On January 1 2005 the European Union will implement a cap-and-trade emissions reduction program. It will be the biggest and boldest pollution trading scheme ever conceived and its success is critical to the future of international efforts to tackle climate change.

The first phase, applying to the new EU complement of 25 countries, will run until the end of 2007. This is known as the 'warm-up' phase. The second phase will begin in 2008 and end in 2012, i.e. the first commitment period of the Kyoto Protocol.

Under the Emissions Trading Directive, member states are required to set an emission cap for all installations covered by the scheme. Initially the ETS will cover carbon dioxide (CO₂) emissions from four broad sectors: energy (including electricity), iron and steel, minerals and pulp and paper. Each installation has been allocated allowances - permits to emit over a given period - by the relevant national government according to the National Allocation Plan. Each Plan must be approved by the European Commission.

It's estimated that more than 12,000 installations accounting for 46% of total EU CO₂ emissions will be covered. Each EU member has an overall emissions target determined by the burden-sharing arrangements the EU has adopted to implement the requirements of the Kyoto Protocol. A portion of each national target is allocated to the installations in the four sectors with the remainder available to cover emissions from sectors not covered (such as transport).

The plans must be approved by the European Commission to ensure that no nation gives any sector an easy ride that may allow it to undercut competitors in other countries, a sign that Australia ought to note of how seriously the EU is about ensuring that firms required to cut emissions do not face unfair competition. The initial allocation of emissions is largely free, although up to 5% may be held back and auctioned. In the first period (2005-07) the allocation will not impose any tough restrictions on emissions, because it is a trial period, and the Kyoto limits do not apply until 2008. Thus the price of permits valid in this period will be low.

There is a lot more detail to the scheme which need not detain us here, including provisions for banking and borrowing, and compliance provisions that impose a penalty of €40/ton CO₂ in the first period and €100 in the second. The expected price of a permit initially is around €10-15 per tonne of CO₂ i.e. around A\$16-25 per tonne of CO₂.

The McCain-Lieberman Bill

The Bush Administration remains in the grip of the more recalcitrant elements of the fossil fuel lobby and seems to have an ideological opposition to taking action. When asked in 2001 if the President would be urging Americans to restrain their energy use, Bush spokesman Ari Fleisher replied: ‘That’s a big “no”’. He went on to declare:

The President believes that it’s an American way of life, that it should be the goal of policy-makers to protect the American way of life. The American way of life is a blessed one ... The President considers that American’s heavy use of energy a reflection of the strength of our economy, of the way of life that the American people have come to enjoy.³

Fortunately, Bush’s fundamentalism is out of step with mainstream opinion in the USA, and that opinion is likely to be translated into serious domestic action to reduce emissions.

Last October, a group of powerful Republican and Democrat senators introduced the McCain-Lieberman Bill to the US Senate (as an amendment to the Climate Stewardship Act) that would have required major emitters in the USA to adhere to mandatory, economy-wide emission caps. The fact that it was introduced at all represents a radical break from the view that the US is irredeemably opposed to tackling the climate change problem

The Bill proposed to introduce a cap-and-trade system across the USA that would begin on January 1 2010 and apply in the first instance for the six years to 2016.⁴ It proposed capping emissions at year 2000 levels over the period 2010-2016, and in subsequent years they would be reduced to 1990 levels. The caps would apply to all major emitters of CO₂ (defined as those responsible for more than 10,000 metric tonnes of CO₂ per annum) and emitters of other industrial greenhouse gases. Transport emissions would be tackled by requiring refineries and importers of petroleum to hold allowances for each ton of carbon dioxide that would be emitted in the combustion of their products.

The proposed program would have covered more than 70% of all U.S. CO₂ and industrial greenhouse gas emissions. Under the scheme, the government would first distribute emission allowances on a grandfathered basis, that is, according to the historical emission levels of the entities affected. Emitters would then be required to submit to the Environmental Protection Agency (EPA) one allowances for each ton of CO₂, or the

³ Quoted by Odile Blanchard and James Perhaus, ‘Does the Bush Administration’s climate policy me an climate protection?’ *Energy Policy*, 32 (18), December 2004, p. 1993

⁴ <http://www.ecdel.org.au/pressandinformation/ClimateChange2.htm>

carbon dioxide equivalent of other greenhouse gases, they emit. The allowances could be traded freely by anyone. Carrying over surplus permits from one period to the next (banking) would be permitted.

The Senate vote on the McCain-Lieberman Bill was lost 43 to 55, so there were only 6 or 7 votes in it. All observers were astonished at how narrowly it was lost, and how close the US came to having a far-reaching bi-partisan mandatory program to cut greenhouse gas emissions. Some senators who voted against the Bill nevertheless spoke in favour of it. They made it very clear that they knew that the USA had to act soon and they did not want to go down in history as the law-makers who stopped action on this huge global problem.

The closeness of the vote reflected the sharp change in views on climate change in the USA, which shows that the Bush Administration's hostility is way out of step with the community. Washington observers believe that a similar Bill will be introduced again in the next year or two and there is every likelihood it will become law.

This does not mean that the US is likely to ratify the Kyoto Protocol soon- although a Kerry election victory on 2nd November would make it more likely that the US would want to re-open negotiations - but it does point strongly to serious emission reduction measures being implemented by the USA in the foreseeable future. Some analysts expect that a strong emission reduction regime in the USA would, over time, converge on the Kyoto regime of Europe and Japan.

Russian ratification

Russia's announcement that it will ratify the Kyoto Protocol injected a shot of adrenaline into the international process, but most observers are waiting for the vote in the Duma before they celebrate.

If Russia ratifies and the Protocol enters into force everything will shift. The world will change, the business environment will be transformed and the stakes will suddenly be much higher, especially for those who remain outside the international system. There is no way that Japanese and European firms are going to allow Australian and American firms that have a competitive advantage arising from the absence of any obligation to cut emissions to undercut them in markets at home or abroad.

So entry into force will increase the desire to find a way for the US and Australia to become part of the system. In fact, only the US matters; if the US ratified tomorrow, Australia would ratify the next day. And of course, if Labor wins the Federal election we would expect the Australian Parliament to ratify the Protocol at its first sitting.

Refusal to ratify the Kyoto Protocol means that when the negotiators sit down next year to begin discussions of the targets, compliance mechanism and rules for emissions trading to apply in the second commitment period, Australia will not have a seat at the table.

International Climate Change Taskforce

It is in this fluid international context that The Australia Institute has joined with two other think tanks - the Institute for Public Policy Research (IPPR) in London and the Center for American Progress (CAP) in Washington DC - to establish a high-level International Climate Change Taskforce. The Taskforce is comprised of eminent scientists, business leaders, policy advisers and political leaders drawn from around the world.⁵ Its purpose is to recommend to all governments a framework for managing climate change responses that is truly global, provides long-term direction, and is genuinely responsive to the scale of the problem.

The opportunity for the Taskforce arose because of the desire by Prime Minister Tony Blair to use his presidency of G8 in 2005 to make climate change a top priority. He has indicated that he wants to kick-start international action on climate change, and in particular to find a new way of engaging the USA, Australia and developing countries. With the presidencies of G8 and the EU in 2005, the UK will be uniquely positioned to leverage support for multilateral action on climate change just when the next stage of negotiations is set to begin.

Building on Kyoto

Outside of the climate change negotiating community it is little understood that the Kyoto Protocol was a remarkable achievement, one that took several years of extremely intense negotiations over an issue the complexity of which is unmatched. Those who argue that Kyoto should be ditched to be replaced by some other scheme (usually the pet scheme of the advocate) implicitly dismiss the extraordinary complexity and difficulty of reaching an agreement among some 200 highly diverse countries, each with its own definition of fairness, on the climate change issue.

It is often supposed outside of the climate negotiating community that, should the Kyoto Protocol lapse, the international slate will be wiped clean and, after a period of reassessment, negotiations will begin on a new framework. Some assume that, in this case, a wide range of possibilities for the 'next regime' will be on the table and the various parties will come to the negotiations with open minds.

But the assumption that the world community will discard the gains of the past and begin afresh is hard to sustain. It is more likely that most, if not all, of the main elements of the Kyoto architecture and its institutional infrastructure (the reporting, emission monitoring

⁵ The members are: Stephen Byers MP, UK (chair); Premier Bob Carr, Premier NSW, Australia; Professor John Holdren, Harvard University; Martin Khor, Director, Third World Network; Nathalie Kosciusko-Morizet, Member of the French National Assembly; Dr Claude Martin, Director General, WWF International; Professor Tony McMichael, Australian National University; Dr Jose Miguez, Interministerial Commission on Climate Change, Brazil; Dr Pachauri, Director, TERI, India; Jonathon Porritt, Forum for the Future, UK; Senator Olympia J. Snowe, USA; Adair Turner, Merrill Lynch Europe, UK; Professor Ni Weidou, Tsinghua University, Beijing; Dr E. von Weizsaecker, Member of German Bundestag; Tim Wirth, President, United Nations Foundation; and, Cathy Zoi, Group Executive Director, Bayard Capital, Australia.

and verification system) will remain in place in any new regime, or at least serve as the basis for developing new proposals.

These elements include binding targets for some nations, differentiated responsibilities (especially between developed and developing countries), phased reductions in emissions, some form of international emissions trading, and assistance to developing countries for their mitigation and adaptation activities. It is also likely that the structure of the negotiation process will remain largely the same.

Any future negotiations on climate change will take place under the auspices of the United Nations and in the context of the UN Framework Convention on Climate Change (UNFCCC). The Framework Convention sets out a number of important principles for addressing climate change, including

1. the need to limit anthropogenic emissions to prevent dangerous climate change, and
2. enshrining a global approach and recognising common but differentiated responsibilities.

Subsequent negotiations have built on and interpreted these principles. However, in developing the Kyoto framework, or considering any alternative to it, there are a few key structural issues that any feasible climate regime must consider.

Short and long-term targets

Driven by the climate science, the international community is increasingly concerned about the need to set a long-term emission reduction strategy so as to meet a target that will prevent dangerous climate change, or at least, as some dangerous climate change appears unavoidable, limiting the damage. Among the long-term targets being discussed is that of limiting emissions so that the global mean temperature does not increase by more than 2° C, and limiting the increase in CO₂ concentrations in the atmosphere to 450 or 550 ppm.⁶

It is sometimes argued that in the absence of a long-term framework, a series of short-term targets will add to the costs and uncertainties of reaching international agreements and make climate protection the variable that ‘gives’ when difficulties arise. Others argue that setting an agreement on a long-term target before setting short-term emission reduction goals could stand in the way of making progress.

Dealing with uncertainty

Any effective climate regime must accommodate the uncertainty associated with human-induced climate change. It must be sufficiently flexible to allow for changes in scientific

⁶ For a review see A. Torvanger, et al., ‘Climate Policy Beyond 2012: A survey of long-term targets and future frameworks’, CICERO (Center for International Climate and Environmental Research), Norway, May 2004

understanding and for sudden and unexpected changes in global weather. There is an increasingly strong case to build into any future regime the ability for an 'emergency' response to deal with catastrophic climate change, including the abrupt changes in climate now attracting the attention of scientists. The need for flexibility should not militate against the need to set long-term goals.

Fairness

Any regime must deal squarely with the most fundamental point of disagreement, that of fairness. The refusal of the US and Australian governments to ratify the Kyoto Protocol has been justified by arguments that the Protocol is 'unfair', although their arguments carry little force elsewhere in the world. Within the international debate various often-conflicting notions of fairness have dominated discussions. 'Fairness' in an international climate regime has been taken by various parties to reflect one or more of:

- historical responsibility for emissions;
- current emissions per person;
- perceptions of the right to development;
- the capacity to pay for emission reductions (national income);
- differential economic impact of emissions reductions (through economic structure, energy dependence and trade dependence);
- special national circumstances (such as a cold climate); and
- intergenerational equity.

The question of the distribution of impacts of climate change is also important in understanding fairness.

Realities of negotiations

It should be acknowledged that there are very wide differences in political influence among nations engaged in climate negotiations. Developing countries are particularly disadvantaged due to their weaker economic power and the difficulty many experience in providing the resources and expertise to participate fully in international negotiations of a highly complex and drawn out nature. This inevitably leads to the formation of blocs that are sometimes based on political expediency rather than common interests in pursuing a climate regime.

Australian Government responses

What does all this mean for Australia? The Australian Government speaks so much humbug about greenhouse policies and the Kyoto Protocol that one could be excused for thinking that it operates in a parallel universe in which the normal rules of logic and

evidence do not apply. Yet the humbug is repeated so often and with such apparent conviction that the Government seems to have left many uninformed observers confused what to think. Some adopt a default position of repeating the Government's fabrications.

The Government has said it will not ratify the Kyoto Protocol but that Australia will meet its target of limiting emissions to 108% of 1990 levels by 2012 anyway. As we will see, this is not due to effective policies, for the policies have been singularly ineffective. So let me consider the ten silly excuses the Government has put forward to justify its refusal to ratify. In doing so, we can get a clear picture of where greenhouse policy stands in Australia and the options we face.

Silly Excuse No. 1. Developing countries are 'exempted' from the Protocol and this is unfair to countries like Australia

"The problem with the Kyoto protocol as presently cast is that developing countries such as Russia and China would not be subject to the same strictures as developed countries such as Australia." Prime Minister John Howard, House of Representatives, 26 May 2004

The Prime Minister's mistake in lumping Russia (which has mandatory reduction targets under the Protocol) with China (which, as a developing country, does not) illustrates how poorly he has grasped this vital issue.⁷ But the contempt with which the Government appears to view the concerns of developing countries was made more transparent by Foreign Minister Alexander Downer, who declared:

"[I]t is no solution at all ... if China and India and Brazil can go ahead and pollute the environment to their heart's content because we're all feeling a bit sorry for them."⁸

Apart from the gratuitous insult to some of the world's poorest people, the Government's argument ignores some vital facts.

Fact 1: Climate change is caused by increased concentrations of greenhouse gases in the atmosphere and around 75% of the increased concentrations is due to the activities of developed countries in the process of growing rich. It will be 50 years or more before developing countries match the pollution of the rich countries over the last two centuries.

Fact 2: In per capita terms developing countries typically have one tenth to one twentieth of the emissions of the USA and Australia. Australia's annual per capita emissions are 27.2 tonnes of carbon dioxide equivalent (CO₂-e), the highest in the industrialised world.

⁷ He later returned to Parliament to correct the gaffe. "In answering the first question from the Leader of the Opposition, I grouped as countries not having emission commitments China and Russia. I should instead have said China, India, Indonesia and Brazil by way of example." Hansard, House of Representatives, 26 May 2004

⁸ *Australian Financial Review*, 26 March 2001

Australia's 19 million people produce more greenhouse pollution than Indonesia's 200 million.⁹

Fact 3: Although rich countries are overwhelmingly responsible for the problem, according to the IPCC poor countries will suffer most of the impacts of climate change, including decreased crop yields (leading to starvation), sea-level rise, and increased incidence of tropical diseases such as malaria, dengue and yellow fever.

Fact 4: The principles of polluter pays and ability to pay are accepted as fair by the international community including, in other contexts, the Australian Government. They mean that a wealthy country like Australia with high emissions should do much more than poor countries with low emissions.

Fact 5: Every international agreement on climate change – the 1992 Framework Convention, the 1995 Berlin Mandate and the 1997 Kyoto Protocol (agreed to and signed by the Howard Government, but not ratified) – explicitly recognises that developing countries will be required to cut their emissions, but only after rich countries have led the way.

Fact 6: US Energy Department analysis shows that between 1997 and 2000, China reduced its greenhouse gas emissions from fuel combustion by 6%. In the same period, Australia's emissions grew by 10%.

Silly Excuse No. 2. Our energy exports make us more vulnerable

“Unlike most developed countries, Australia is a net exporter of energy and that puts us in a very special position.” (Prime Minister Howard)

The greenhouse gas emissions from our energy exports have no bearing on Australia's obligations at all. The emissions from our exports of coal, gas and oil are counted in the country where they burned. Other countries may decide to import less fossil fuels, but there is nothing Australia can do about that, except perhaps to try to sabotage the Kyoto Protocol. This simple fact has been pointed out repeatedly yet senior ministers still do not appear to understand it.

The fact that other countries will begin to reduce their imports of Australian fossil fuels will impose economic costs on Australia. ABARE, whose modeling on climate change should never be taken at face value, has recently estimated that if Japan adopts a carbon tax, currently being discussed, it could reduce Australia's GDP by up to \$5 billion between 2005 and 2010.¹⁰ Exports of steaming coal are expected to decline by up to 26 per cent by 2010 compared to business-as-usual. Staying out of Kyoto cannot stop this; but entering the protocol would stimulate Australian firms to start investing in energy systems that we could eventually export to fill in the gap left by declining coal exports.

⁹ Per capita emissions are discussed below.

¹⁰ H Ahammad, R Curtotti & A Gurney, 'A possible Japanese carbon tax: Implications for the Australian energy sector', ABARE eReport 04.13, August 2004

Quite apart from the irrelevance of the excuse, it is simply wrong to claim that Australia is in a special position. Canada, Norway, the United Kingdom and Russia are also net exporters of energy, and all have either ratified the Kyoto Protocol or have indicated their intention to do so.

Silly Excuse No. 3. Australia's fossil-fuel dependence makes it harder for us to cut our emissions

The Australian Government consistently claims that our high level of fossil fuel dependence means that measures to cut emissions will be more costly for Australia than other industrialised countries. A little thought reveals that in fact the opposite is more likely to be the case. The cost of reducing emissions by, say, 10 per cent depends not on how much fossil fuel is burnt but how efficiently a country burns it. If it is used wastefully then it will cost less to reduce consumption.

As an economy reduces its emissions it will start with the cheapest abatement measures (energy savings) and then move to the more expensive measures by replacing energy-using equipment and switching from high-emission sources such as coal to low emission sources such as natural gas and nuclear power. Thus countries that have been reducing their reliance on fossil fuels for some time will probably have eliminated the least efficient uses of fossil fuels first. This was the case in Japan when faced with the oil shocks in the 1970s and early 1980s when oil prices doubled overnight. Similarly, countries that have built nuclear power plants have tended to replace the least efficient coal-fired plants.

As an analogy, it is sometimes said that in reducing emissions those responsible will first 'pick the low-hanging fruit'. If more fruit is wanted then more effort must be expended getting it from the higher branches. Compared to most other OECD countries, Australia has not yet picked the low-hanging fruit. This is because fossil fuels in Australia have been cheap and abundant.

This was the message of the OECD's International Energy Agency when it reviewed Australia's energy economy a few years ago.¹¹ It is also the message of the most comprehensive analysis of Australia's energy efficiency performance, carried out by the foremost expert in the area, Lee Schipper of the IEA and Lawrence Berkeley Laboratories.¹² The analysis concluded that, while the story varies from sector to sector, overall Australia's energy efficiency performance is poor compared to other OECD countries.

Because Australia has so much low-hanging fruit, we could easily meet our Kyoto target and go well below it. That would give us surplus emission permits to sell to countries like Japan and the UK which will struggle to meet their targets domestically. So with the right domestic policies signing up to Kyoto would actually be a net economic benefit to Australia.

¹¹ International Energy Agency, *Energy Policies of IEA Countries: Australia 1997 Review* International Energy Agency/Organisation for Economic Co-operation and Development, Paris 1997

¹² L. Schipper et al., 'Energy Use in Australia in an International Perspective', OECD/IEA Paris, 2001

Some commentators recycle vague notions about Australia being a wide brown land with long distances to transport goods and people and that this means that our greenhouse gas emissions must be higher than other, more compact countries. These beliefs are mistaken.

The share of transport emissions in total energy-related emissions Australia is around the OECD and European Union average, and is less than the percentage in Canada, New Zealand, the UK and the USA.

Australia is a large country, but around 62% of all fuel used for land travel is consumed in urban areas. Of the remainder, a proportion is used for travelling within and around towns not classified as urban. Relatively little is used on long-distance travel. Most of the fuel used in passenger cars is for travel in urban areas (around 72% with only 5.5 % for interstate travel).¹³

What about road freight? Around 60% of rigid truck and light commercial vehicle fuel use occurs in urban areas. On the other hand, road freight tonne-kilometres are about twice as high in Australia as in the EU; but this is due to more trips and heavier loads than to longer travel distances. In fact the average road freight distance is longer in Europe. Thus it is not so much geography but the materials-intensity of the economy and the lack of alternatives to road freight that distinguishes Australia from Europe.

If Australia's use of transport is large it is because of a dependence on passenger vehicles for urban travel. These passenger cars are also particularly inefficient. In the late 1990s the average Australian car was getting about the same number of kilometres per litre as the average car in 1971. The reality is that most Australians do not spend their time driving across the wide brown land, but sitting in traffic jams in the congested brown city.

Silly Excuse No. 4. Kyoto is not in our economic interests

The Government thinks that the national interest is the same as our economic interests, as if we have no national interest in being part of global attempts to tackle the most severe environmental threat facing the globe. So let's just stick to the economic effects.

After the negotiations to refine the Kyoto Protocol at Marrakech in November 2001, the Government commissioned new modelling of the expected economic impacts of Australian ratification. The modelling, conducted by ANU economist Warwick McKibbin (who has been very critical of the Kyoto Protocol) concluded that the economic cost of the Kyoto Protocol will be higher if Australia does *not* ratify the treaty than if it does.

It concluded that by 2010 Australia's GNP will decline by 0.40% if Australia stays out of the Kyoto Protocol, but will decline by only 0.33% if Australia ratifies. This is because

¹³ Hal Turton, *Greenhouse gas emissions in industrialized countries: Where does Australia stand?*, Discussion Paper No. 66, The Australia Institute, June 2004. p. 14. Data in the next paragraph are from the same source.

actions by other countries (such as Japan reducing its coal imports) will have a negative economic effect, which we could partially offset if we started to cut our emissions too.

No wonder the Government refused to release the results of the modelling for five months and then did so at 6 o'clock on a Friday night. If accurate, they demolish any remaining rationale for Australia's continued refusal to sign up to the treaty. In his media statement accompanying the release of the modelling, Environment Minister David Kemp distanced the Government from the new evidence, claiming the work it commissioned only addresses 'a limited set of the issues'.

I should note that, although the modelling concluded that we would be better off if we ratified over the period to 2010, it calculated that we would be economically worse off in 2020. By 2020 Australia's participation in the Kyoto Protocol is estimated to reduce real GNP by 0.51%. If Australia refuses to ratify then the effect of Kyoto would be to reduce real GNP by 0.30%, so ratification is responsible for a decline in real GDP in 2020 of 0.21%.

But how painful would it be to see our real GNP reduced by 0.21%? In fact, this is a tiny amount, one that will be swamped by the statistical error in measuring GNP. According to McKibbin's modelling results, under business as usual Australia's real GNP will almost exactly double on about 1st December 2020 (from US\$402 billion in 2000 to US\$806 billion at the end of 2020).¹⁴ If we ratify the Protocol then, with the existing policies, our GNP will not double until the end of January 2021, a delay of eight weeks. This eight week wait to become twice as rich is the basis for the repeated stories about the huge economic costs we will face.

In fact, even though they consistently exaggerate the economic costs of emission abatement, all of the economic models show that the economic impact of ratifying the Kyoto Protocol would be disappearingly small.

Silly Excuse No. 5. Ratifying the Kyoto Protocol will result in massive job losses

"It will cost jobs—it will cost the jobs of unionists and non-unionists alike—and it will do very great damage to the resource sector of Australia, which is not in the national interests of this country." Prime Minister Howard, House of Representatives, 26 May 2004

This has been the standard excuse wheeled out around the time of federal or state elections. During the last federal election there was blitz throughout regional Australia from the Government claiming Labor's decision to ratify would see regional economies gutted. It relied on a modelling study carried out by Allen Consulting and commissioned by the Minerals Council of Australia (i.e. the mining industry). "Cuts to greenhouse gases will hit GDP and jobs" and "Victoria facing huge job losses" were typical headlines.¹⁵

¹⁴ Warwick J. McKibbin, 'Modeling Results for the Kyoto protocol', Report to the Australian Greenhouse Office, 15 March 2002, revised April 5 2002, Tables A2.1, A2.2 and A2.3.

¹⁵ *Australian Financial Review* 12 October 2000; *The Age*, 12 October 2000. *The Age's* report was particularly uncritical, reproducing the most alarming numbers and containing no dissenting opinion.

“Kyoto ends 50,000 jobs” announced Rockhampton’s *Morning Bulletin*, going on to declare:

The Central Queensland mining industry would face massive job losses if a Labor government came into power and signed the Kyoto Greenhouse Agreement, a Queensland Mining Council representative has warned.¹⁶

The studies on which these sorts of claims are based range from the dubious to the ridiculous. For example, the Allen Consulting report which the Government seized upon suffered from several simple but vital errors the effect of which was to ramp up the estimates of job losses from policies to cut emissions.¹⁷

- The report attributed all claimed job losses to ‘Australian compliance’ with the Kyoto Protocol, yet most of its forecast job losses are due not to greenhouse measures in Australia but to decisions by governments overseas.
- In some regions the claimed job losses arise from a predicted sharp decline in agricultural output due to the imposition of a large tax on methane emissions (a ‘belch tax’), a policy response that is fanciful and unnecessary.
- The modelling completely ignored the two largest tranches of emission cuts in Australia that are available at no cost or very low cost, namely, accelerated energy efficiency and the end of land clearing.
- Allen Consulting used a ‘carbon tax’ policy which it knew from its previous work would be much more expensive than a ‘policy mix’. It had conceded that the ‘policy mix’ is ‘more realistic’ and would impose minimal costs on the economy, yet opted for a much more expensive economic instrument

Coincidentally, every one of the errors and misinterpretations in the Allen Consulting report had the effect of exaggerating the apparent costs to GDP and employment of meeting Australia’s Kyoto obligations. The biggest failing of the economic models that predict ruin is that they are unable to account for the industries that will, over time, grow to replace the fossil-fuel based industries. The structure of the models is too inflexible to allow for the rapid growth in renewable energy and energy efficiency industries. Yet these industries are more labour-intensive than the fossil fuel based industries they would replace.

More recently, Allen Consulting has been commissioned by the Victorian Labor Government to model the effect of greenhouse policies. The estimated economic costs are much lower, but we have not seen Allen Consulting repudiate their earlier results and apologise for the fear-mongering headlines.

¹⁶ *Morning Bulletin* (Rockhampton), 27 October 2001.

¹⁷ See C. Hamilton, A. Pears and P. Pollard, *Regional Employment and Greenhouse Policies*, Discussion Paper No. 41, Australia Institute, October 2001

The basic point here though is that the problem of climate change is not going to go away. Australia must, sooner or later, make the transition to a low-emissions economy and that will mean economic restructuring as we shift to the energy industries of the 21st century. Wild claims about job losses can only delay taking action, and everyone agrees that taking action sooner and making changes over a longer period will be less costly than the alternative.

Silly Excuse No. 6. Australian firms will shift off-shore if we ratify

The Government never says which industries it is talking about, because if they did in each case it could be challenged. In fact, requiring serious abatement measures would affect only three energy-intensive export industries - aluminium, steel and natural gas.

The industry that makes the loudest threats to move off-shore is the foreign-owned aluminium smelting industry. Aluminium smelting uses 16% of Australia's electricity and is responsible for 6% of total greenhouse gas emissions. The six aluminium smelters enjoy very cheap electricity from long-term contracts signed with State governments. They receive a subsidy of around \$250 million each year, and enjoy access to abundant raw materials, a skilled labour supply and political stability.¹⁸

Why would an aluminium company shift a smelter with a 30-40 year life span to a developing country to escape greenhouse restrictions in Australia, when everyone accepts that developing countries too will have to take on emission-reduction obligations within a decade? Are their CEOs so short-sighted?

The aluminium industry is so worried about the implications of Kyoto that a couple of years ago it committed \$3 billion to build a brand new smelter and refinery at Gladstone in Queensland with a 30-40 year lifespan.

While the Australian Aluminium Council has mobilized more anti-Kyoto lobbying power than any other industry group, in the USA the parent companies of the biggest smelters in Australia – including Alcoa and Rio Tinto – have signed up to the Pew Center on Climate Change's Business Environmental Leadership Council which favours implementing the Kyoto Protocol as a first step in addressing climate change.

While it is unlikely any firms will shift off-shore if we ratify, reports have appeared in the press of Australian firms with investment in clean energy in developing countries saying that, after the Prime Minister's announcement that Australia would not ratify, they are looking to move offshore in order to validate their Clean Development Mechanism credits. The companies include Advanced Energy Systems, Global Renewables and Envirostar, some of the most innovative in the country.

¹⁸ These facts are drawn from Hal Turton, *The aluminium smelting industry; structure, market power, subsidies and greenhouse gas emissions*, The Australia Institute, Discussion Paper 44, 2002

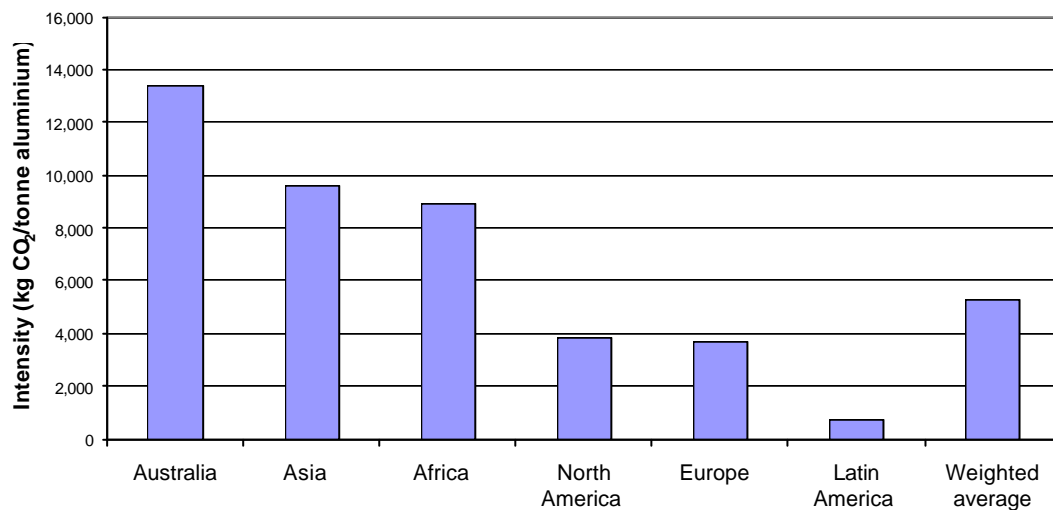
The Government also argues that any shift of industry off-shore would be worse for the environment.¹⁹ Apart from recycling the erroneous belief that all developing countries are dirty, polluted and inefficient, just which firms is the Government talking about? Vague ideas about aluminium smelters seem to float around the Government. But what are the facts?

Fact 1: Australian smelters produce more greenhouse gases per tonne of aluminium than smelters anywhere else in the world. Australian smelters' emissions from electricity consumption are 13.6 tonnes of CO₂ per tonne of aluminium, around 2.5 times the world average (see Figure 1). They are so high because Australian smelters rely almost wholly on electricity from coal burning.

Fact 2: According to the International Aluminium Institute, smelters in developing countries are cleaner than those in developed countries, producing lower direct greenhouse gas emissions per unit of output.

So if Australian smelters shifted anywhere else, global greenhouse gas emissions would fall. Besides, respectable corporations nowadays don't threaten to take their dirty factories to poor countries so they can exploit lax environmental laws. Yet that is how the Federal Government seems to view them.

Figure 1 Electricity-related greenhouse gas intensities of aluminium smelting, 1998



¹⁹ "Any shift of production off-shore would ... undoubtedly... increase global greenhouse gas emissions." (Foreign Minister Alexander Downer, Media release 15 August 2002).

Silly Excuse No. 7. Australia can still participate in international emissions trading even if we do not ratify the Kyoto Protocol

At best this is wishful thinking; at worst, the Government is wilfully misleading Australian businesses. The European Emission Trading System explicitly allows the scheme to be linked up with trading schemes in other countries, but only if they have ratified the Kyoto Protocol. This has been written into the system and the impossibility of Australian firms participating in the scheme if Australia refuses to ratify was recently confirmed to me by Dr Karsten Sach of the German Federal Ministry of the Environment.

With respect to the international trading scheme being established under the Protocol itself, the Federal Government has continued to maintain that Australian firms could participate in trading systems established under the Kyoto Protocol. Because of the misleading statements emanating from various Australian ministers, in 2002 the European Commission's Delegation to Australia issued an unambiguous denial.

On the question of carbon emissions trading, the Kyoto Protocol clearly states that carbon trading is allowed between those Parties who have ratified the Protocol. Countries that are not Parties to the Kyoto Protocol are not eligible to participate in emissions trading under it. Nor can emission reduction projects or carbon sequestration efforts taking place in its territory be rewarded under the Protocol.²⁰

This is obvious. Why would the rest of the world allow Australia to benefit from the Protocol's mechanisms when we refuse to accept our obligations? If Australia does not ratify there will be no obligation on Australian polluters to limit their emissions. In that case there would be no need for any firm in Australia to buy an emissions permit. Nor would they have any permits to sell as they would not have been allocated any. Australian firms would be unable to generate credits from investments in developing countries under the Clean Development Mechanism.

Silly Excuse No. 8. Cuts required by the Kyoto Protocol are too small to make a difference, so why bother?

"Kyoto is going to make barely 1 per cent difference to global greenhouse gas emissions." (Environment Minister Kemp, 'Lateline', ABC TV, 3 September 2002)

Former Environment Minister David Kemp endorsed the IPCC's estimate that global emissions will need to be cut by 60% or more to stabilize climate change and says the Government would not ratify the Protocol because it will result only in very small reductions.

One can only shake one's head in dismay that anyone would have the gall to make an argument like this. When former Environment Minister Robert Hill returned from Kyoto he reportedly received a standing ovation from Cabinet because he had secured such a

²⁰ Media Release, 12 March 2002. <http://www.ecdel.org.au/pressandinformation/ClimateChange2.htm>

lenient deal for Australia; at subsequent Conferences of the Parties Australia worked tirelessly to water down the Kyoto agreement by inserting various loopholes in it. Now they complain that Kyoto was not tough enough! The hypocrisy is breath-taking.

Everybody understands that the Kyoto Protocol is only a first, small step on the road to very large reductions in global greenhouse gas emissions. The second and subsequent commitment periods will require deeper cuts in emissions. A 60% cut in the longer term must begin with a 1% cut. Yet the Government will not implement any programs to begin the process, other than invest in pie-in-the-sky technologies like geosequestration that, even according to its own estimates, will not have an impact for 20 years. The Federal Government's alternative – the Australia-US Climate Action Partnership – does even less than Kyoto. Various analyses have shown that the President Bush's plan will see no reduction in US emissions at all.²¹

Silly Excuse No. 9. Australia will meet its Kyoto target anyway, so we don't need to ratify

The normal rules of logic would suggest that if we are going to meet the target anyway, then why not ratify and spare ourselves all of the international opprobrium. This is a question the Government refuses to answer. Let me explain why.

While the Howard Government has declared that Australia is on track to meet its Kyoto target the fact remains that emissions from the most important sectors - transport and stationary energy - continue to grow rapidly. It is possible for the Government to claim that Australia is on track only because we have been playing our special get-out-of-jail free card, the famous or notorious 'Australia clause' inserted into the Kyoto Protocol literally in the last minutes of the negotiations at 2 am on Thursday 11th December 1997.

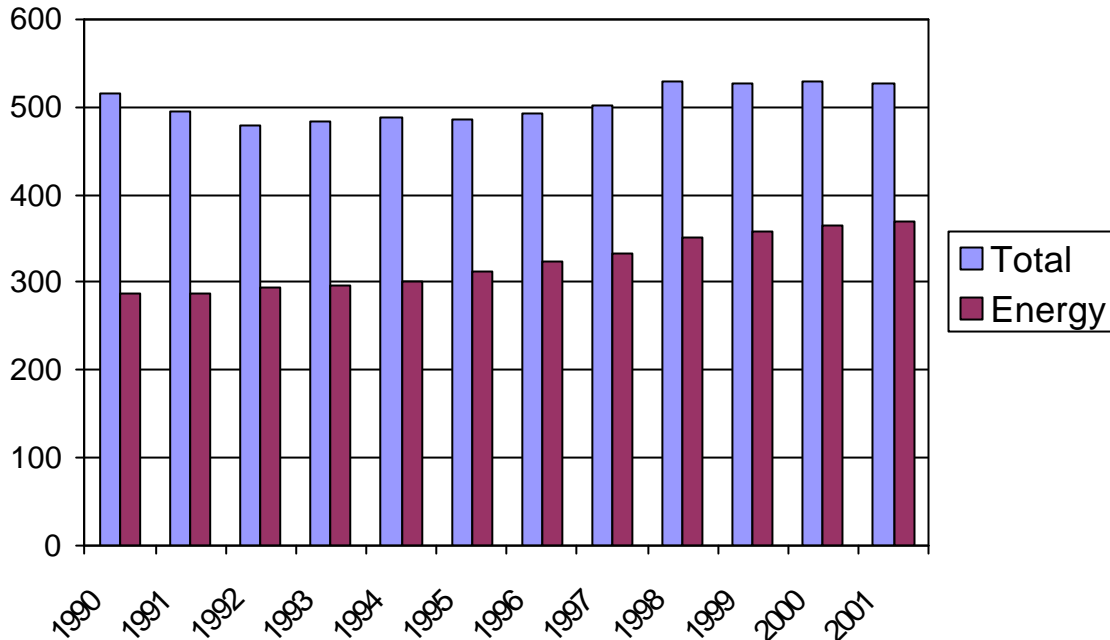
A month before the Kyoto Conference the Government was publishing greenhouse gas emission figures that excluded land clearing emissions in order to emphasise how rapidly Australia's emissions were growing. It did this so it could argue to the rest of the world that cutting emissions would be especially costly for Australia. The trick worked at Kyoto and Australia was given special concessions.

The decline in emissions from land clearing since 1990 has masked the rapid and relentless increase in emissions from all other sources, and especially the electricity and transport sectors. Figure 2 shows Australia's emissions between 1990 and 2001.²² Over the 11 year period emissions from energy have increased by 83 million tonnes of CO₂-e. In the same period, emissions from land use change have *fallen* by the same amount (in fact, by slightly more), thus completely offsetting the growth in energy emissions. So while energy emissions will continue to grow at around 2 per cent per annum for years to come, in a couple of years time the fall in emissions from land use change will stop. We will have exploited the Australia clause to the full.

²¹ See, for example, Odile Blanchard and James Perhaus, 'Does the Bush Administration's climate policy mean climate protection?' *Energy Policy*, 32 (18), December 2004, p. 1993

²² Data for 2002 have recently become available. The picture is unchanged.

Figure 2 Changes in Australia's GHG emissions, Mt CO₂-e, 1990-2001



Source: National Greenhouse Gas Inventory

At current trends, in the next 3-4 years we will have played our hand fully and it will no longer be possible to conceal the real problem of our escalating emissions. The Government itself has forecast that Australia's energy-related emissions will grow by 40 per cent between 1990 and 2010 indicating that it does not believe its own policies will make much difference.

Despite the repeated claims from the Federal Government about all of its efforts to tackle Australia's emissions, the fact is that very little of any consequence has been achieved, and that is why underlying emissions continue to grow unchecked. So when the Government says that Australia will meet its Kyoto target because its policies are working it is telling a whopper. Australia will go close to meeting its Kyoto target because the governments of NSW and Queensland have been restricting land clearing.

Of course, the argument that Australia will meet its target anyway is wholly inconsistent with the claim that ratifying would result in job losses.

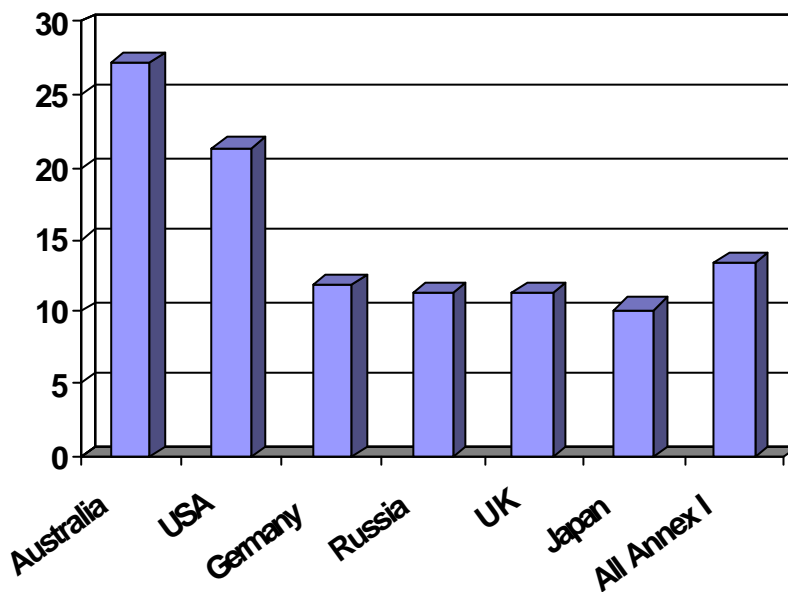
Silly Excuse No. 10. Australia contributes little to global greenhouse gas emissions, so it doesn't matter if we ratify or not

It is sometimes argued that since Australia is responsible for only around 1.4% of total global greenhouse gas emissions, we should not worry too much about reducing them. This argument is fallacious and even dangerous in its implications. Firstly, if the world were made up of 71 nations all of which were responsible for 1.4% of global emissions,

then no-one would take any action. More importantly, this argument has no moral basis. As an analogy, Kerry Packer could argue that since his taxes amount to only 0.01% of all tax collections in Australia, it will not make any difference if he refuses to pay his taxes. But we know that Mr Packer's refusal to pay would undermine the integrity of the tax system, and many others would refuse to pay.

The whole international climate debate is infused with issues of justice, and progress is possible only if each nation is seen to be doing its fair share. Australia has the highest emissions per capita of all industrialised countries, some 25% higher than those of the USA - see Figure 3. As a wealthy nation with the highest per capita emissions in the industrialized world, Australia must be seen to do its fair share, otherwise other nations, no matter how big their emissions, will feel less obligation to do theirs. If a wealthy nation with high per capita emissions refused to adopt emission reduction targets, it would be impossible to persuade developing countries to adopt targets in subsequent commitment periods.

Figure 3 Greenhouse gas emissions per capita for selected Annex I countries, 2001 (t CO₂-e)



In contrast to our willingness to compare the number of Olympic gold medals to our population and regard ourselves as the true winners of the Athens Olympics, we are reluctant to compare our greenhouse gas emissions performance. Besides, it is simply untrue that Australia's emissions are too small to worry about. Among industrialized countries, Australia has the thirteenth largest population but is the seventh largest emitter.²³ In absolute terms our emissions (528 Mt) are higher than those of some major

²³ See Hal Turton, *Greenhouse gas emissions in industrialized countries: Where does Australia stand?*, Discussion Paper No. 66, The Australia Institute, June 2004. Figure 3 is also from this source.

European countries such as France (502 Mt) and Italy (527 Mt) and only 20 per cent lower than those of the UK (661 Mt). So if Australia's emissions are too small to worry about so are those of Italy, France, UK, Spain and Canada.

Where to for Australia?

Where does this leave us in Australia? Given the pre-eminence of climate change and its implications for the future, no government anywhere in world can claim it is managing the environment well without starting to decarbonise the economy. Yet if we do a stock-take we find a nation in which:

- per capita emissions are the highest in the industrialised world;
- emissions from energy and transport (the two key sectors) are growing out of control;
- policies are manifestly failing to have any effect and are little more than window-dressing;
- the Government has withdrawn from the only global plan to tackle the problem and offers no alternative;
- our future rests on a vague Government hope that we can continue to burn coal at ever-increasing rates and at some point bury the problem under the ground;
- we are excluded from a huge emerging market for trade in emission permits; and
- the renewable energy industry, that had so much promise, is now questioning future investments.

However the international climate regime develops, Australia has a serious problem to deal with. Although frequently claiming that it has a world-leading \$1 billion greenhouse program, the Government has consistently underspent the allocated funds. At the rate it has spent allocated funds, it would not be until 2008 before the rubbery \$1 billion was spent.²⁴

Moreover, even those programs that have been implemented as claimed have, for the most part, proved singularly ineffective, especially the much-touted Greenhouse Challenge Program which, in the end, is little more than a tax-payer funded PR exercise for some of Australia's biggest emitters. The one exception is the Mandatory Renewable Energy Target (MRET) which, although requiring an increase in renewable energy of only around 1%, showed how quickly industry will respond to the right incentives. But in its recent Energy White Paper, the Government announced that it would not extend the scheme beyond the original target date of 2010 thereby throwing the nascent renewable energy industry into disarray.

²⁴ Paul Pollard, *Missing the Target: An analysis of Australian Government greenhouse spending*, Discussion Paper No. 51, The Australia Institute, January 2003

After withdrawing support for the development of the renewable energy industries, the Federal Government has decided to invest heavily in geosequestration, an unproven technology that, if it works, will not make much of a difference for 20 years or so and will almost certainly be prohibitively expensive. It has been urged on by its own Chief Scientist, who also works for mining giant Rio Tinto. For a Government that says it is worried about the uncertainty associated with the Kyoto Protocol it is taking a mighty gamble with geosequestration.

By refusing to join global efforts to cut emissions and initiate policies that will begin the process of large and sustained emission reductions, the Howard Government is storing up trouble for the future. The problem of climate change is not going to disappear, it will only intensify. Future governments will be obliged to act, if not willingly then as a result of pressures from the international community. There is no question that the more we delay the transition to a low-emissions economy the higher the costs will be.

Australia has turned its back on a global plan and once again has decided to ally itself with President Bush. Unlike the invasion of Iraq, Australia is the *only* nation to join President Bush's coalition of the unwilling. By aligning ourselves with the Bush Administration in this way we have excluded ourselves from the negotiations that will determine the course of global efforts to protect the climate. Australia is already viewed with exasperation, sometimes even hostility, by the international community, and it is unlikely to be sympathetic to our claims when we decide to re-enter the process later on.

We know from the Intergovernmental Panel on Climate Change that Australia, along with the rest of the world, must cut its emissions by at least 60% if we are to stabilise climate change and prevent dangerous disruption to our way of life. In the face of this challenging but achievable goal, it is astonishing that the Howard Government has not begun serious action to cut our emissions. I cannot think of a more serious case of policy failure with such dire long-term consequences, not just for the environment and Australian's way of life but for the economy in a global business environment that is being so rapidly transformed.