## Professor Ross Garnaut - The importance of economics in environmental governance

Just as an objective reality without any normative comment I think I probably have held very senior offices in government, business and academia in a way that no other Australian has. Most of my life that's been relatively easy moving between them, it's become much harder lately, and climate change made it very hard, the polarisation of thinking about that that meant that for example – well I chaired the board of two very large mining companies, one of the top 20 companies on the Australian stock exchange for a while. Somehow my old friends in the mining industry thought of me as a traitor which was to me a very strange idea. It showed that one couldn't in all circumstances move comfortably across the spheres that I'd been moving across for most of my life. I think that you'll find some interest given your topic in this project in a book I have got coming out next month called Dog Days: Australia After the Boom, which reflects on the deterioration, or what I see as the deterioration, of Australian political culture since the turn of the century in ways that has made it harder for governments to govern in the public interest. That's the theme of the book.

Dog Days of course were the names given to the hottest days of midsummer, first by the Egyptians and then by the Greeks and Romans, people around the Mediterranean, where at the end of July and early August you had days that were quite intolerably hot. Everyone became very cranky and ungovernable. The name came from the two weeks of the year when the dog star Sirius rose above the horizon with the sun. So the Egyptians and the classical people in the Mediterranean noticed these things more than we notice them today. Anyway that's where the title comes from. This evening I am going to talk mainly about carbon policy, climate change policy. I know that your project is much more broadly placed than that but I think the issues that arise in carbon policy illustrate wider issues and challenges. In some ways the climate change problem is more difficult than the others if that's possible. I called early in my work when the six premiers and two chief ministers asked me to do this work back in April 2007. I wasn't long into it when I described the problem as a diabolical policy problem and that word sort of caught on.

It was diabolical I thought then, and I wrote about it in these terms then, for four reasons. One is there is quite a lot of uncertainty around the relevant scientific realities, uncertainty first of all about the relationship between carbon emissions and concentration in the atmosphere of carbon. Then uncertainty about concentrations in the atmosphere and precise degrees of warming, uncertainty about degrees of warming and other aspects of the climate, what it does to rainfall patterns and the intensity of extreme weather, and uncertainty about climatic impacts and how they affect economic activity like agriculture. So that was the first reason it's diabolical. The second reason was that required action now and consequences of action were a long way in the future. The earth will continue to warm for the next several decades because of what's been done in the last few decades and the good climate science says that what we do now won't start slowing warming, won't have any effect for several decades. We're not used to thinking in these timeframes. The cumulative effect of not doing anything

now over a long period of time would be catastrophic but the consequences about doing something now, and taking some pain and cost, won't be felt for a long time.

Simple minded people in the financial markets think we should apply a discount rate to the future, something like the discount rate that equity markets apply investment, build rate of return of 7% or 8%. But if you do that then anything that happens in half a century's time won't count at all. In my first briefing of the parliamentary committee on climate change chaired by the Prime Minister in late 2010 I made the point – and these were all busy people with other things on their mind, and I could see in the first couple of minutes I hadn't caught their attention. Then when I started talking about discount rates – and so I made the point by saying that if you apply those equity market discount rates, and if the modelling shows that the human species will be extinct in 50 years you still won't do any mitigation. Julia Gillard then – quickly a grin went onto her face and said well you've got us there Ross. That's the first decision of the multi-party committee; we're against the extinction of the species. But it is a really hard issue for people to come to grips with, and partly it's an issue of cognition, people just find it difficult to relate to things that happen a long time in the future. The only solution to a cognitive problem is education, so it's our job.

But this confusion about this question of discount rates – I wrote a paper recently, it's coming out as a chapter in a book from the University of Queensland specifically on the relationship between discount rates and intergenerational distribution of income and judgements about investment in powerful things in the long term future, the bottom line of which is that that is not relevant to apply equity market type discount rates. In some length I go into that but the point can be made very simply, it was made to me by John Quiggin in a paper that he presented to the review when I was working on it the first time around. He said we're thinking about how we should value the future, the long distant future, the welfare of people living in 100 years time. Think about it in terms of how people value the welfare of their children as much as they do their own welfare, and if you think of our children having similar sort of welfare functions and valuing the welfare of their own children as highly as they do their own welfare then you've got a continuous link which stops us from justifying discounting the welfare of people living in the future. I thought dramatised things really well and when I think of the headaches that Jane and I had at earlier stages with our own kids and the pure delight of our grandkids I think probably we should introduce a bit of a premium for the way of long distant generations.

But it's hard to think systematically and rationally about why we should bear some cost now for things that have their benefit in the long term future. It's a diabolical problem too because no country's action can avoid dangerous climate change, in fact we won't get effective mitigation unless all substantial countries play a substantial role. Effective mitigation requires international cooperation to an extent and on a scale that we've never known before, and we've got a lot of learning to do about how we can make that work. Finally it's diabolical because the type of change that's necessary takes on very powerful private interests where people's stance depends to some extent on where they sit. An awful lot of wealthy people in Australia stand where the

fossil fuel industry sit, disproportionately those private interests are much stronger in Australia than in the other developed countries. The only one that might have been comparable is Norway but they don't have the big private sector in the fossil fuels industry so that's incomparably different. So that's another reason why there's a particularly difficult problem.

So we shouldn't really be surprised that the last four changes of leaders of major political parties have been over this issue, and the last two changes of government have been to a significant extent over this issue, it's a hard issue. On the uncertainty point we can insist on people being logical and consistent in the way they treat uncertainty, and a lot of the people who argue for not doing anything about climate change want to treat uncertainty in a very different way, some treatment of uncertainty in other areas of our life. The uncertainty is not about whether greenhouse gases warm the planet, it's not even – the uncertainty is about the extent of warming, there is genuine scientific debate about the extent to which the doubling of carbon dioxide will change temperature. But there is pretty wide agreement on the mean of the probability distribution, the uncertainty is whether it will be higher or lower than that. The higher ends take us into catastrophic territory. Normally when we face uncertainty with some of the possible outcomes being catastrophic we pay quite a lot for insurance. The mean of the expected outcomes in Australia's risk of finding itself in a major war is actually fairly low, we'd only justify spending a few billion a year on the basis of the expected costs of war weighting the probability distribution by the probability of various outcomes. But we spend 20 to 30 billion a year on defence because there's a small chance we might be involved in something much nastier and we'll need a fair bit of firepower.

In our personal lives the expected value, the sum of all of the outcomes weighted by their probability the expected value of our house burning down is actually very small but we all pay much more than that for insurance because the outcome would be catastrophic. So the mean of the expected outcomes in all the scientific works says that there's something pretty serious here that's worth paying a lot to avoid, and to the extent that there's uncertainty it should increase the urgency and increase the amount we're prepared to spend on it. If we treated uncertainty about climate change in the same way as we treat uncertainty about climate change in the same way as we treat uncertainty about climate change in the same way as we treat uncertainty about other things we would see it as a more urgent issue and a bigger issue. But what tends to happen is it becomes an argument – uncertainty becomes an argument for not doing anything. Jumping to the events of this week the Abbott government has prepared legislation, the Prime Minister announced it this week and it will be introduced at the first setting in the parliament right at the beginning, to repeal the legislation of 2011 on carbon pricing and related matters. The fact that it's introduced to the house of representatives doesn't mean that the law will change, it obviously will get through the house of representatives but whether or not it gets through the senate is actually a complicated matter.

It will only get through the senate if it gets three votes from the Palmer United Party, and in my forthcoming book I say that – I'm giving you a preview here – I say that if the legislation was repealed on the votes of the Palmer United Party that would be a taint on our democracy. Why that's the case is that Palmer recognises that he has a personal conflict of interest, he personally is being prosecuted by the carbon authorities for failing to pay \$8 million worth of carbon liabilities from his Queensland coal mining activities. He was asked by one of the ABC reporters soon after the election when it was clear that – well when it was seen that he would win the seat of Fairfax, he probably has won that, but whether or not it survives a recount we'll have to wait and see, but three members of his party have won senate seats. So when asked about how he would handle that conflict of interest he acknowledged the conflict of interest and said I will – he was asked if he would sell his mining interests which are directed personally by him, it's not just a minority of shares in a mining company. He said no I would handle this like I would handle conflict on a board of directors, I will recues myself from any decisions. Well in recusing himself from a decision in the house of representatives is quite important, but much more important and similarly appropriate is for him to advise members of his party who clearly are under his direction that they should recues themselves in the senate.

He may not but in my mind this is a very straightforward issue, it's straightforward corruption, it's straightforwardly a taint on our democracy if the carbon legislation is repealed on votes of the Palmer United Party. Anyway that will play out over the next few months. Australia has a very powerful interest in successful mitigation. My first climate change review – two reviews, one initially commissioned by the six premiers and two chief ministers and then the Commonwealth joined it with the election of the Rudd government at the end of 2007, so it became a joint Commonwealth state activity then. That analysis showed that Australia will be damaged more by unmitigated climate change than any other developed country, not than any other country because some developing countries would be hurt proportionally more but we've got more at stake for the reasons that I discussed in that first review, a huge amount at stake. I know that some people think that if we just saved our resources for adaptation. then we could avoid the worst of outcomes. Having lived with this issue for half a dozen years I've come to the view that thinking about policy, national policy, for adaptation in a world in which there hasn't been any mitigation in the world of business as usual is fanciful, there will not be nation states in their current form if the world changes as much as it will change with unmitigated climate change.

Adaptation is tremendously important but for it to be relevant we have to have successful mitigation. With successful mitigation there will still be a lot of adaptation required but without mitigation adaptation is for people who haven't got sick of smoking pot. So it's tremendously important for Australia that international mitigation works and it's more likely to work if we do our fair share. It's a very hard task of international cooperation to deal with this problem, it's only going to work if all countries do their fair share, and as the world's biggest per capita emitter and most rapidly growing per capita emitter in the world Australia is not pulling its weight and that does have an effect on the mood in the rest of the world. We're affected by what other countries do and other countries are affected by us, there's no need to overstate that but it's in our interest for us to do our fair share and to encourage an effective international effort. The international task I think was naively framed to begin with from Rio De Janeiro through Kyoto until Copenhagen where an attempt was made to sit down and negotiate a comprehensive legally binding agreement among states.

When I was working on my first report I didn't challenge that approach very much but it seems to me pretty clearly now that that is naive, the task of international cooperation doesn't, at least in the early stages, lend itself to that sort of negotiation, that sort of binding agreement. Amongst other things if you put a lot of national negotiators into a room then somehow the job becomes to make sure you do less than anyone else. I observed this over lots of years of being closely involved with trade negotiations, and the really good progress that countries in the Asia Pacific region made with trade liberalisation was when they each did it on their own. I called that process – I wrote a book about it – the concerted unilateral liberalisation, where each country took account of what others were doing but saw itself as making decisions on its own. The idea of a single comprehensive agreement, a legally binding agreement, was fanciful. I say this in retrospect but I didn't say it in the second one. It's fanciful partly because the United States – it's inconceivable that the United States would bind itself to an international treaty, it didn't bind itself to the league of nations even though President Woodrow Wilson was the father of the document and was the main instrument through which it all came together. But when he put it to the US senate it was thoroughly rejected.

Clinton and Gore signed up to the Kyoto agreement but when they put it to the senate for – as any international treaty has to be put to the senate in the United States – it was defeated in a government with Clinton and Gore, and Gore who was already very active on the climate change issue was defeated 99 to 1 in the US senate. So anyone who thought that even if the US had signed on to a notionally binding international agreement in Copenhagen – that it would have become a treaty of the United States is kidding themselves. Great powers tend not to bind themselves internationally. China, for similar great power reasons as the United States, thinks of itself as being a bit above binding international agreements. I think it probably would have if the United States did but it took great comfort from the fact the United States would never do it, so it wouldn't become an issue within China itself. This became apparent at Copenhagen which was a diplomatic fiasco but something was rescued from that. Obama, in the last hours of that meeting before he flew out of Copenhagen, sat down or actually busted into a meeting of the heads of government of China, India, South Africa and Brazil, and they worked through what became the communique from the conference. That really established the basis of international cooperation since then.

It was formally adopted at the Cancun meeting of the United Nations Framework Convention on Climate Change in 2010 and I describe what's come out of that as concerted unilateral mitigation. Each country there's no attempt, for the time being, to establish a comprehensive binding agreement. Each country voluntarily puts on the table its domestic commitments, but there's no sanction if you don't reach them. Each country voluntarily puts commitments on the table. The voluntary commitments are very comprehensive and far ranging, including from the countries which had never made commitments before. The United States had never had a target before that but Obama committed the United States to reducing emissions by 17% between 2005 and 2020. That was a radical change in American positions. He said that this is not a treaty, I am not entering a treaty for the United States, but this is a serious domestic commitment and serious political commitment. China made a commitment to reduce the emissions intensity of its production by between 40% and 45% between those same years that the American commitment covered; 2005 to 2020. This was a radical change in trajectory. You had major commitments from Europe, you had an important commitment from us to unconditionally reduce our emissions by 5% on 2000 levels by 2020 even if the rest of the world did nothing, but to go to minus 15 or minus 25 if other countries were taking commensurate action.

That's a serious commitment in the same form as Obama or Hu Jintao's commitment. People think of the minus 5 as being our commitment, there's lots of people with an interest in emphasising that, but equally valid is the minus 15 and the minus 25% commitment. The opposition has endorsed the whole range and the minister for environment specifically confirmed the whole range at a meeting at Melbourne University during the election campaign. The 2011 legislation puts us in a pretty good position to meet the minus 5, the minus 15 or the minus 25 in a reasonably low cost way. For a start it sets up a process outside day to day politics for setting the target, for deciding whether it should go from 5 to 15, to 15 to 25, and legislation established a climate change authority which has the task of advising on targets. Unless the house of representatives in this senate both overall the recommendation the recommendation holds. Now the government says that it will abolish the Climate Change Authority but it has to get that – not only the carbon pricing but it has to get that through both houses of parliament. I think the Climate Change Authority is a tremendously important part of the governance of Australia's climate arrangements. I took the model shamelessly from the British Climate Change Committee I think it's called there, even stole some of the words of the suggested legislation. But I think they got it right.

The existence of a body outside politics making recommendations within this framework has been influential in Britain. The Climate Committee's first recommendations went far beyond what the Cameron government had anticipated but after some internal dissension within the government they decided not to try to overrule the legislation, so Britain has those stronger targets now. We've got the same government structure, I think it's an excellent one, I think it would be a tragedy if it was lightly thrown out of the window. It's not much noticed and it's not much discussed but within the next couple of weeks Anthea Harris, the chief executive of the authority, will bring out a draft of their recommendations on what our targets should be. My guess is that it will suggest that what the rest of the world is doing equates to about a minus 15% target for Australia, and it will require a vote of the house of representatives and the senate to overrule that recommendation and to get rid of the Climate Authority. It's worth our all taking an interest in that. Then the carbon pricing arrangements takes the form of an emissions trading scheme and that also has a lot of well thought out governance and dimensions. One that is different from the CPRS that the Rudd government put forward in 2009 is that the assistance for trade exposed industries will be reviewed from the perspective of economic rationality by the productivity commission in 2015.

I think that's very important, my own opinion is that while the 2011 legislation is much more reasonable on compensation for trade exposed industries than the original CPRS still goes too far, and I'd be pretty confident that Neil's old colleagues in the productivity commission will be hard headed and analytical about that question,

and save the consolidated revenue a fair bit of dough. Carbon pricing is a major source of revenue now, half of that is being given back in a productivity increasing tax cut with the increase in the tax free threshold which reduces marginal effects of tax rates. The new leader of the opposition rather cleverly said he would give the same tax cuts or he wouldn't repeal them while repealing the carbon legislation, he did there what Paul Keating did in attacking the GST of John Hewson in '91. Well Abbott was on Hewson's staff then, he was his press officer, but when Hewson said we'll introduce the GST and that will fund tax cuts Keating said we'll give the tax cuts without the GST, and that worked politically. Well Abbott did the same thing, he said we'll give you the tax cuts without the carbon pricing. That leads to a rather big hole in the budget, people aren't facing up to the extent of our budget difficulties at the moment, or at least the people in the public sphere. Newscorp has gone from saying that the budget deficit is destroying the country to saying that a worse budget deficit, which it is now, is no problem at all. That's the media environment in which we have to live in 2013 but it actually is a serious issue that will become important over time.

So what happens next? I wouldn't be certain that all of the existing laws will be repealed but the odds are that they will, the odds are that we will have to live with that taint on our democracy. But we shouldn't take it for granted, I think the political activity from now on is more important than the political activity that's gone on up to now if you're interested in the governance of climate change policy in Australia and survival of the Climate Authority, which wasn't a part of the high profile election commitments of the Abbott opposition, is a very important issue in itself. I think the governance arrangements of the 2011 policies are very strong and worth a close interest. We'll see what happens. If all of the laws are repealed, carbon pricing, Emissions Trading Scheme and the Climate Authority, we'll be left with one heck of a vacuum. We'll be in a worse position of course than we ever were because at least half a dozen years ago there was a general expectation that we would be heading towards carbon mitigation policies off some strength, some quality or other. Well we'll be left with almost nothing, that's what direct action is, almost nothing, indistinguishable from nothing given the amounts of money that have been put aside for it.

That will create a policy vacuum, I don't think the issue will go away, I don't think there's a slight chance that it will go away. I don't even think it will be a winning issue for an Abbott government, but how cleverly alternatives are developed and argued as we seek to fill that vacuum is going to be tremendously important. Thanks.