

Minister Mark Butler on Labor's Climate Change Strategy

Climate change policy is at last back on the political agenda. Kevin Rudd has stated that if re-elected he will shift to a floating carbon price and a full emissions trading scheme from 1 July 2014, a year earlier than currently legislated. The political value of the proposed move has been considerable and the negative aspects relatively small and manageable. But is it enough and will it work?

Despite the bitterness and division that has enveloped the climate change debate in Australian politics, the 2020 emissions reduction target of both main parties is the same. Both accept that Australia must contribute to the long-term objective of keeping global average temperature increases to less than 2 degrees.

This public discussion with Mark Butler, Minister for Climate Change, explored how the Labor Government intends to achieve the target most efficiently and how this would prepare Australia for the long haul of addressing the climate change challenge. After his opening remarks, Mr Butler was joined in conversation by Grattan Institute Energy Program Director Tony Wood.

Speaker: The Hon Mark Butler MP, Federal Member for Port Adelaide, Minister for Climate Change, Australian Labor Party.

Chair: Mr Tony Wood, Energy Program Director, Grattan Institute

MARK BUTLER: Thank you Tony, and for that gentle suggestion for people to be kind to me, I think it was, that I'm new and I probably don't know much about climate change I think was your implication, so thank you for that. I think that's precisely what I was going to say in my introduction, to go gently with me, but we'll see how we go. Can I acknowledge the traditional owners of the land on which we meet and pay my respect to their Elders, both past and present, and really thank the Grattan for this opportunity; I'm also doing this down in Melbourne next week. The work that Grattan does in this area is incredibly important, our public policy think tanks – I hope that's not seen as a term of derision – but public policy think tanks around the country really are an important part of the public policy debate and the work Grattan does in this area I think is very, very critical.

As Tony suggested, I am still pretty new at this, I think seven or eight weeks I've been the Minister for Climate Change, Environment, Water & Heritage, so there's probably not a lot I can contribute to you as people who've been working in this area for a considerable period of time when it comes to the finer details of climate science. But I did scratch out some remarks on one of the extraordinary number of flights that I've taken over the last few weeks about what I thought around the politics of climate change both here, domestically in Australia, and also internationally because not only because we're in an election campaign, but we are in such an interesting and I think at a time with such significant opportunity. I really embrace the chance to have a bit of a think about where we're at beyond the election campaign.

Although I am new to this portfolio and I've spent the last few years essentially in social policy portfolios like homelessness - which is why I enjoyed the photo exhibition out the front - and mental health and ageing and things like that. I have had a long interest in this portfolio area which was really sparked by reading a book by Jeremy Leggett about 15 years ago "The Carbon War" book which really sparked an interest that I've continued since then reading a whole range of other books. In retrospect, there are a couple of things about Leggett's book that really struck me, both at the time but I think really strike me now in retrospect.

First was the bare knuckled nature of the fight between the ENGOs particularly and industry, fossil fuel industry particularly and fossil fuel exporting nations as well, including Australia as part of the JUSCAN group back then 20 years ago or so. Also struck me the degree to which the ENGOs did not have much by way of industry on their side at that time, with the possible exception of the reinsurance industry which was starting to crunch the numbers and think a bit about what the climate was gonna mean to them in terms of their business. It really was a very bare knuckled fight about 20 years or so ago. Things are a little bit more sophisticated now and there's a little bit more even-handedness around things than perhaps there was when Leggett was at the negotiations.

The other thing that struck me about that book and a lot of the writings about climate change at that time was the degree to which impact was thought of in 2030 or 2040 or even 2050, not so much the Pacific Islands but for developed nations on large continents. The degree to which people were thinking about temperature rise, ocean level rises, tipping points like potentially what might happen to the Gulf Stream 10, 20, 30 or even 40 years down the track back in the 1990s. Today I think what is really clear, not just in the Pacific Islands that Tony and I were talking about before we came in here; what is so clear is that we now think about the impact of climate change right now. Yes, we're thinking about what it's going to mean in one, two, three or four decades, but we are living the impact of climate change here in Australia, and in so many other countries around the world today, and we're not thinking of it just in the future.

In Australia, and South Australia particularly, we're still recovering from the end of the worst drought in 100 years, a drought that ended a few years ago but is still having its impacts felt in so many communities along the Murray Darling Basin. Average temperatures, in spite of the protestations to the contrary by Andrew Bolt and his ilk, are still rising. The summer of 2012/13 was the hottest summer on record in Australia. Our Bureau of Meteorology had to add a new colour to their weather chart, the colour purple, to indicate temperatures over 50 degrees Celsius. And calendar 2013 here in Australia and elsewhere in the world is on track to be the hottest calendar year on record. So in spite of those who say otherwise, temperatures are still rising.

Extreme weather events, as the scientists have predicted for years, are becoming more frequent and they're becoming more intense. We experienced a few years ago devastating fires across the country, but particularly in Victoria, which, again, led the authorities to have to introduce a new level of fire warning beyond extreme because the conditions those days in Victoria were well beyond the band of extreme that was seen in the warning levels at that stage. So we do have a new warning level now of catastrophic. We've had flooding much more regularly, much more intensely than has been the case over the historical average and if you're from Queensland particularly you know that we have had many more cyclonic events which not only cause direct impacts to the communities and to the reef and others, but also have led to much more frequent flooding along the Queensland coast, again, pouring stuff onto the reef.

Now, obviously Yasi and other cyclonic events have the most direct and obvious impact on communities living along the Queensland coast in particular. But a few weeks ago, I think in my first week or two as the Minister for the Environment, I released the latest Reef Report Card which shows that the Great Barrier Reef is in a state of very serious distress, partly because of some decades of agricultural run-off, increased nitrogen loads that particularly cause the crown-of-thorns starfish to spawn, a very significant cause of degradation of the coral. But the last few years of regular cyclonic activity and flooding, which leads to more sediment load and nitrogen load being pushed onto the reef, have really put the reef in a very, very precarious position. So not just communities, but the country's and one of the world's most significant environmental assets, the Great Barrier Reef, is living today the impact of climate change; those events, not to mention the acidification that's causing a whole range of other things to happen to the coral.

The World Meteorological Organisation (WMO) has told us that ocean levels are rising now about twice as fast as they did on average across the 20th century and this is leading, as you know, to far more significant storm surges inundating areas that have never been subject to flooding events before, most spectacularly seen last year in New York City with the super-storm Sandy flooding the subways there causing billions and billions of dollars of damage along the

north-eastern United States coast, particularly in perhaps what is the world's most iconic city. This month, again only in the last few weeks, I've had to announce additional funding to the Bureau of Meteorology because we have recognised they don't currently have the capability to deal with the multiple extreme weather events that they are now dealing with, extreme weather events in a number of different parts of the country regularly, particularly across summer periods, is something that the BoM simply wasn't set up to do. We've had to fund new flood forecasting IT systems, new storm surge forecasting IT systems to deal with what we know is not just a one or two year thing that's happened over the last five years, but is going to be a regular challenge for our BoM well into the future.

You'll also know if you watch this area that recently the world tipped over the 400ppm (parts per million) level in terms of the CO₂ levels in the atmosphere. You also know that the preindustrial level of carbon dioxide in the atmosphere was about 280ppm and when I started reading this stuff it was 380ppm, and we know that the tipping point is generally thought to be about 450ppm when things start to get very, very serious. It hasn't been as high as 400ppm for about 3.2million years, so this is something that continues almost inexorably to continue to increase. President Obama in his State of the Union I think put it far better, unsurprisingly, than I could and probably anyone else in this room could when he tried to pull together these different events that have happened in the US pretty much in the same way that they have here in Australia, and he said "Now, it's true that no single event makes a trend, but the fact is the 12 hottest years on record have all come in the last 15. Heatwaves, droughts, wildfires, floods – sounds a bit familiar – all are now more frequent and more intense. We can choose to believe that super-storm Sandy and the most severe drought in decades and the worst wildfires that some states have ever seen were all just a freak coincidence. Or we can choose to believe in the overwhelming judgment of science and act before it's too late".

Many of you will have seen reports that the latest draft to the IPCC report was leaked to Reuters a little while ago, this is the report that's due to be released formally in late September. And, again, what the report confirms is that the scientific consensus around climate change continues to harden, particularly the consensus around the degree of impact that will be felt in coming decades, but most importantly perhaps or most significantly perhaps in this latest report the degree of scientific certainty or consensus around the role of human activity, particularly the burning of fossil fuels, continues to increase every time the IPCC reports. There is still though a battle with what President Obama called earlier this year the Flat Earth Society, still a battle with the Flat Earth Society. Flat Earth has peaked in my view about four or five years ago and they peaked here in Australia and elsewhere around the globe for a few reasons that all came together, a bit of a perfect storm for the Flat Earth Society.

In my view the GFC (Global Financial Crisis) played a role. People started to focus on the day-to-day bread and butter issues that they were dealing with around jobs and economic prosperity, and pushed issues around the environment and climate change, that they see a little bit more distant from their own households, further down the list of things that they tell us are very important to them. The GFC did have a role. In Australia, I think the end of the millennium drought did have an impact on the degree to which people saw climate change as an immediate issue for them. Certainly my state of South Australia the intensity of the drought, the length of the drought, caused people almost to taste and feel climate change in a way that they hadn't really before. Alexander Downer talked about his conversion to climate change, the reason why he moved from being an opponent to supporting how its decision to introduce an ETS, which ended up coming to naught, as being talking to people in South Australia, in his electorate, and the number of people in his electorate who said because of the drought they had come to believe that climate change was a reality. The end of the drought I think in Australia exacerbated the sense that the GFC gave to people that climate change was something that was more distant to them than they had thought previously.

Overseas, what was it called, Climategate? The IPCC email scandal I think did feed the conspiracy theorists that this was all crap - someone else has said that - this was all crap and really it's just something being thought up to make our lives more difficult than they otherwise would be. It fed a lot of the journalists like Bolt; it fed a lot of the Flat Earth Society organisations

around the world who started fundraising and undertaking very significant advertising campaigns against climate change action.

And perhaps finally, but not least, Copenhagen was able to be presented as a failure. Copenhagen, from which so many people had high hopes, was able to be presented as a bit of a failure. And I think that capacity to present it as a failure was maximised by the sense of chaos around it - why they decided to put it in such a cold place I've never quite understood - but that sense of chaos that you saw from the pictures from Copenhagen I think allowed people to report this as essentially the collapse of international negotiations around climate change. In actual fact Copenhagen, while it certainly wasn't the success that many hoped it to be, was not a complete flop. I read some of the remarks that Ross Garnaut gave when Mary Nichols was at the Grattan recently and Ross talks about the importance of the fact that it was at Copenhagen that Premier Wen first tabled the idea of a commitment by China to reduce the energy intensity or the emissions intensity of their production by 40% to 45% from 2005 levels by 2020; a very, very significant commitment by China at that time and one that they've built on.

I just want to talk a bit about what's been happening in China, because I think what's been happening in China particularly this year is the thing that gives me the most hope about the next iteration of international negotiations. Now as you know if you've looked at China, China historically has been an incredibly energy-intense economy for reasons I've quite never really understood, but historically their economy would run at about 800 TCE (tons of coal equivalent) for every \$1million of GDP, about 800 TCE; while the world average is around 300 and countries like Germany and Japan are able to run their economy on about 200 TCE per \$1million of GDP.

Now China was able, from that figure of about 800 20 years ago, to get their energy or emissions-intensity down to about 400 by the beginning of the last decade. So within about 10 years they got their intensity down to 400, it peaked back up at about 450 by 2005, which is importantly the base point that Premier Wen was talking about. But the important thing, as Ross pointed out, is that they've done a lot of the hard work to get that 800 down to 400 already, before Premier Wen made the commitment that he did. The Economist magazine, which did a cover story on this a couple of weeks ago, and Ross Garnaut's talk to the Grattan a little while ago, talk about why it is that the Chinese leadership, particularly the new Chinese leadership, building on Premier Wen's commitment, have taken this very, very significant shift and they talk about particularly the smog alerts in Beijing in January this year where air pollution levels reached 40 times the WHO recommended level as safe, 40 times that level. They talk about the US Academy of Sciences report that indicates that life expectancy in China, and northern China particularly, is actually starting to trend downwards by about five or five-and-a-half years because of the impact of such poor air quality there. The Economist talks about the impact of this event in January in Beijing is similar to the impact of the river - I can never pronounce the name of the river - that in 1969 in the US caught fire because so much crap had been poured into it by factories, caught fire leading to the creation of the EPA, a whole range of other elements of environmental consciousness in the US; that this has had a very significant impact on the Chinese administration.

By June, in that very short period of time, you see a comprehensive suite of policies released by the Chinese leadership. This is a government that does not have to deal with a hung parliament and a hostile senate. When they decide to do things they can get stuff done pretty quickly. The centrepiece of the new Chinese suite of policies is a cap on energy emissions of about 400 billion TCE by 2015. Now, Greg Hunt has talked a lot about the inexorable trajectory upwards of Chinese consumption of coal, and I'll talk about a couple of other reasons why that's actually not going to happen, but the important thing is that while the Opposition's talked about the Chinese consumption of coal going way up and almost doubling what it is now, the Chinese leadership has put in place an energy cap of 400 billion TCE by 2015, this is a very, very significant thing, with the intention of having that cap on energy emissions morph into a broader emissions cap in the second half of this decade. As also I think is a little bit better known, the Chinese leadership has decided to pilot seven Emissions Trading Schemes, the first of which has already started in Shenzhen, a very significant economic centre with about 10million people in it. Overall these seven pilot ETS schemes, some of which are in cities, some in broader provinces, cover a

population of more than 200million people. This is a very significant pilot scheme by the Chinese leadership and, again, there is the intention for that to morph over time, over the course of the second half of this decade, into a national Carbon Trading Scheme.

Again, I tend to quote President Obama more than Innes Willox, but Innes Willox, from AiG put it in June I thought really colourfully, when he said that “These pilots show that even nominal communists recognise that cutting emissions, at least cost, requires the power of market mechanisms” and as I said, again, these pilots were intended to morph into a national Carbon Trading Scheme. I think in recognition, as we saw this evolve in China, in recognition of the fact that we do have quite common ambitions now to move to market-based trading schemes, we decided in April along with the Chinese leadership to set up a joint carbon trading experts group, that started a few months ago, to start to share information between Australia and China on our experiences around emissions trading and to be able to swap expertise in this area, which I think is again an example of the deepening of the relationship with China.

Last but not least I just want to talk about China is to look at their renewable effort. Really only eight or 10 years ago China was not a significant player in the renewable space, except for hydro, very significant hydropower power. For those that have gone to the Three Gorges Dam which I have, it's just quite an awesome thing to see the extent of the hydropower that they're able to generate from some of their dams. But you see a very big lift over the last couple of years by the Chinese into wind and into solar. The Chinese have a renewable energy target of 20% by 2020, which is a little easier for them to achieve than us because of that very big platform of hydro that they've had in place for a long time, but there is huge growth in wind and solar at the moment. In 2012 the Chinese spent about US\$67billion on renewable energy projects and they will see that continue to climb in coming years; they're now the biggest renewables investor in the world by quite a significant margin.

Now all of this, this idea of capping emissions in an economy that continues to grow at about 7% or 8% per annum, moving to ETS schemes in an area that covers more than 200million people, and a very significant push on renewables constitutes I think nothing short of a seismic shift in what is now the largest polluter, the largest emitter of carbon dioxide by quite a significant distance, and a country that accounts for fully two-thirds of all of the growth since 2000 in carbon dioxide emissions, quite a seismic shift. We are also seeing progress in the world's second biggest polluter, the United States. As many of you would know, Congress has rejected the idea of a Cap & Trade Scheme. A Cap & Trade or an Emissions Trading Scheme was put to Congress by John McCain from the Republican Party - the Malcolm Turnbull of the Republican Party as I like to describe him - and Joe Lieberman, who had been with the Democrats but became Independent I think, not quite sure where Joe is at the moment. Very high profile leaders of their party in Congress rejected essentially through opposition by the Tea Party elements of the Republican Party.

But as you'd know, a few months ago President Obama decided that he wasn't going to continue to wait until Congress acted in this area and has undertaken a range of measures, particularly around regulating the energy sector's emissions, to move towards the commitment they've made as a country to reduce their emissions by 17% on 2005 levels by 2020. Most importantly though I think as you would know, because Mary Nichols spoke to the Grattan, states, particularly California, the ninth largest economy in the world in its own right, has moved to an ETS scheme which in terms of its coverage is going to be very shortly a broader scheme even than Australia's. So, again, in that second largest polluting country, so critical to getting international consensus around change, we see quite significant shifts.

I am utterly convinced, I'm not usually a glaring optimist, but I'm utterly convinced that particularly the shift in China but also the shift in American attitudes here means that the next phase of negotiations under the framework, which are due to reach agreement by 2015 for the post-2020 period, are going to be very ambitious. I think we had the low point a few years ago, I think we are now moving to a phase where China and the US will lead a very ambitious agenda into this round of negotiations. So it's important to have a look at and have a think about where Australia is at this point.

Well, Australia is at a fork in the road. We're in the middle of an election campaign where there is a fair bit of difference between the alternative parties of government, the alternative Prime Ministers but, we were talking about this earlier, I can't think of a significant policy area where there is such a difference between the two major parties, such a difference. Tony Abbott has sought to close a lot of the difference in schools and a range of other areas rightly or wrongly, but in this area there is a very clear contrast between the Labor Party and the Coalition. Labor's rock solid commitment is to press on with the suite of policies that we've had in place now for some time in the Clean Energy Package. At its heart is a price on carbon. This is a commitment we've had in policy terms for many, many years, taken to a number of elections and we'll take to this election. This is, at its heart, the sort of market-based mechanism that Innes Willox and the Chinese Communist Party have in common between them.

The recent decision to curtail the fixed price period to move to a floating price from 1 July 2014, if we win the election, I thought I'd just explain very shortly for a couple of reasons. The first reason, the more administrative reason, is that we found that the first year of operation of the fixed price or the carbon pricing scheme went very smoothly with the CER. I think with the exception of Clive Palmer's organisation particularly, everyone acquitted their carbon price liabilities quite straightforwardly, the Clean Energy Regulator I think is very pleased with the way in which that all happened. So to the extent the idea of an extended fixed price period was about transitioning to the scheme smoothly, I think we're clear that that's no longer necessary. For my own part, I think as we move to a linkage with the EU, I think it was increasingly anomalous to have a fixed price at around \$24 when the eventual market price quite clearly was much, much lower than that. So moving more quickly to what is going to be the effective market price, we're going to be a price taker more than a price leader I think with our linkage with the EU, made sense sooner rather than later as well.

But I think, to be frank, from our point of view, from my point of view and from the Prime Minister's point of view, the idea of having a carbon price fixed at a level that was significantly higher than the effective market price had eroded community confidence in the idea in climate action to a very, very significant degree. And we were keen to try and get that monkey off our back not as a government, but as a group of people who are keen for action on climate change, to get that off our back and to have an opportunity to re-litigate the need for strong action on climate change, rather than having everyone focus on this heated campaign against the dreaded Carbon Tax. What this does mean, as you know, is that one year sooner than would otherwise have been the case we move to a position where there's actually a legally binding cap on emissions, which wasn't going to happen until 2015. This brings into play one of the other elements of our policy which is to have an independent authority, the Climate Change Authority, set the caps and the targets rather than the Prime Minister and I sitting in a room and coming up with it ourselves, which I'm sure would send a shiver down your spine. This is a very good group of people, very expert group of people lead by Bernie Fraser, as you would know if you follow this area of policy, their caps and targets review is due for release the month after next, in October, which will recommend to government particularly the idea of a target in 2020.

I am regularly asked, in my long tenure as the Minister for Climate Change, "Do you think 5% is still the right minimum target for 2020 or should we be looking and are you willing to announce a higher target?" usually, not often asked about a lower target. And my response to that is that we take the role of the authority very seriously. When the authority reports to the community in draft terms and when the authority reports to the government in final terms in February, I've indicated that we will regard that report with the utmost seriousness. I think they are doing their job well, it is a very significant group of people doing the work and it will be then I think that we have a discussion as a community about whether there should be a higher target than 5%.

International linkage is also I think incredibly important. This has been part of the intellectual thinking around emissions trading for many, many years, the idea that at the end of the day the atmosphere doesn't really care whether carbon pollution is abated in Australia or Europe, or anywhere else for that matter, provided that the systems under which it is abated are robust and rigorous. That is why I think we'd want to move to the linkage system with the EU more quickly than was otherwise going to be the case and we think that gives business the opportunity to

undertake their abatement activities in the most effective and the cheapest way while again being very clear that both the EU and Australia have a robust cap on emissions in place. The EC (European Commission) has been very positive in our discussions about bringing forward the linkage by one year to 2014 and I think that's positive. And I think if you have a look at what the Europeans do in this area, I think we all take heart from the fact that the European Parliament recently agreed to the back-loading proposal around permits which I think will just keep a floor under the price at a time of very significant economic adversity in Europe. I think it's generally seen, and I see it this way, that the European Parliament's vote was a real vote of confidence in the idea of Emissions Trading Scheme in a very long term sense in Europe, and I think that was very positive.

And the other plank to our policy obviously is renewables, and I think this is where I think we've seen the most significant shift in the way in which we do business in Australia. Again, the idea of a strong renewables policy requires a suite of approaches; no approach in and of itself gets the sort of change we've seen and the sort of change we want to continue to see into the future. At its centre is the idea of Renewable Energy Target (RET) obviously which, like China's, is 20% by 2020. A target which, if our policies remain in place, I'm very confident we will meet and probably some more on top of that. Very importantly I think, we have indicated that we want to move to a four-yearly review of the RET. The clean energy sector has said to us very clearly and loudly that they want to have a less regular review to inject more investment certainty into this sector and we have said that if we are elected on September 7th legislation to change that review period to a four-yearly review will be introduced into the parliament in the spring session or the summer session, whatever the session is before the end of this calendar year.

ARENA, which has been put on the chopping block by Joe Hockey today, is also a very important part of the suite of policies supporting emerging technology. We saw only a couple of weeks ago that with ARENA's support we were able to announce the largest PV solar project in the southern hemisphere, the AGL project at Nyngan and Broken Hill, about 150 megawatts, 2million panels I think go onto this thing, which will be about 375 hectares in area, just an extraordinary project. And last but not least, the Clean Energy Finance Corporation which has supported the largest wind farm in the southern hemisphere, the Macarthur Wind Farm in Victoria. These have all been a great success, not just because I think of common law of policies, often we've been building on really good work by state governments, including my own in South Australia, but this has been really good work done over the last 10 or 15 years and I want to be a bit parochial and talk firstly about what we've achieved and then South Australia.

In Australia, when we came to government there were about 7,400 households that had PV solar on their rooftops; there are now more than a million. We put I think about 3,500 on rooftops every week, so the growth there is just extraordinary. We've trebled the amount of wind power in the time we've been in government in Australia; we've doubled the number of renewable energy jobs to about 24,000 across the country and we saw in 2012/13, the first year of the carbon price arrangements, that the share of the national electricity market, that renewables held increased by 25%, while you saw brown coal down by more than 10%, black coal down by 5-10% and, as a result, a significant reduction in carbon pollution by the national electricity market. But the parochial story is South Australia's. South Australia was probably the first mover with renewables with a RET by the Rann government and when Snowtown 2 is complete, the second wind farm at Snowtown is finished, we'll be over 30% renewables. We're almost 30% in South Australia already.

And I was looking last night on the internet at an article that a fellow called Ketan Joshi from Infogen had written up over the last few days about the last few weeks, and if you've been flying as much as I have you'd know it's been a pretty bloody windy few weeks, I've had some pretty hairy landings, the upside of which is that the contribution to electricity generation by wind has been just extraordinary. In South Australia over a nine day period in August wind power accounted for 46% of South Australia's power demand. All of South Australia's power was delivered by wind and gas, which is ironic given it was election period. Wind and gas accounted for the whole of South Australia's electricity generation and we were able to put some of that electricity back into the national grid. So we really have seen a significant shift in the role that renewables plays over the last several years.

Now the other choice on offer of course is direct action. There are a range of problems with this policy. The problem at its heart is that the policy rests on a body of opinion within the coalition that climate change science just isn't convincing. Now, I don't think that Greg Hunt has that view. I'm convinced that Greg feels strongly about climate change, I just think he's been loaded with a policy that's a dud. He does it bravely, it's sort of like giving Bill Shorten Work Choices to go out and advocate; he does it bravely but at the end of the day this is a policy driven by people within the Coalition that don't actually think that this is a very real challenge whatsoever.

The trouble is that this approach that was framed at the time that peak of climate change denial activity, the Flat Earther's approach I've talked about earlier, the problem is that the world's moving on and in many cases the world has moved on from that frenetic activity around climate change denial four or five years ago. The first thing to say about it is very clearly no-one supports this policy; no significant expert or body of opinion supports this policy. The Econ survey that was released I think last week showed that only 7% of businesses, businesses that included IKEA, AGL, Westpac and others, only 7% of them indicated that they supported direct action. Greg Hunt - and this is nasty of me but I thought this was quite funny - Greg Hunt yesterday was quizzed to name on Triple J radio some people who supported it. He nominated three Nobel laureates who were then chased down by Triple J. One of them, Tom Schelling said "I'm puzzled that Mr Hunt would cite me as a supporter of his program on direct action. Until you wrote your enquiry I'd never heard of direct action, let alone commented in support of it, nor have I ever been in touch with Mr Hunt." Another, Finn Kydland - I should know who that was but I don't - said "I'm not at all familiar with this so-called direct action plan".

This is a plan that has no supporters and in and of itself that's not important it's a good plan, but I think what it indicates is that it's not. It's a plan that also rests on very shaky assumptions. I've said a couple of times that having soil carbon as the centrepiece of a climate change plan is simply a fantasy. Soil carbon has a role to play and I'd like to see it play a greater role as we understand it better into the future, but having it as the centrepiece of a climate change policy today is simply a sham. The Climate Change Department says that soil carbon initiatives that are contemplated in the direct action plan would deliver about 1/20th of the abatement that Greg Hunt says it will. The University of Western Australia says that the abatement will cost 10 times, about \$80 a ton as opposed to \$8 a ton, so 10 times the amount that Greg Hunt says that it will. There are plenty of other questions that I'm not going to labour about this policy, plenty of other problems and plenty of other costs.

In closing though, can I just say a few things. Climate change policy and climate change politics has been pretty frantic over the last few years. This term of government, particularly this term of parliament, has seen climate change politics really dominate the atmospherics and the actual voting pattern of the parliament. I can't see that changing. I hope that politics and policy around this area will be more constructive than it has over the last few years, because I think the last few years have reflected very poorly on the parliament, but I think that climate change is going to dominate national politics and national policy for as long as any of us are around. It is a diabolically complex area of policy, a diabolically complex area of politics where I think politicians are going to be continually harassed by the community - I don't say that in a bad way, I say that in a good way - continually harassed by the community that they've either gone too far too fast or they haven't gone far enough or fast enough. This is going to be the thing that dominates the national political scene I think for as long as I can see ahead.

So it has been difficult, but it's not going to get much easier. This is going to be the thing that dominates so much of our economic, environmental and social policy thinking over the coming few decades. We should be upfront about that. But I am convinced that the stars are aligning in a way they haven't, if ever, for a very, very long time at a global level for this next iteration of climate change negotiations to be ambitious and to be very positive. And I think that it is absolutely critical that Australia take to that negotiating table, as a very big emitter of carbon pollution, a very big economy in the world, that we take a credible policy to those negotiations. We at the end of the day have a generational responsibility to our children and our grandchildren and beyond; we have a global responsibility as a rich country that emits a lot of carbon pollution to make serious change to the way in which we do things in this country, much

more than planting some trees or hanging the towel up on the back of a hotel room door when we're staying interstate. This is going to be tough change. This is going to be a serious change to the way in which we do business if we're going to grapple with the challenge of climate change in a responsible and sensible way.

I'm convinced that our policy suite is the right suite of policies to take to the election, I hope that we're able to win this election and carry on with the work that we've been doing over the last few years and I look forward to your very gentle probing questions for the next little while. Thank you very much.

TONY WOOD: Before we actually start, I was going to steal a little bit of time and just start with a couple of questions and then go to the audience and just one more of an international perspective and maybe one on a more domestic policy perspective because I think you spent I suspect about equal time on both of those perspectives. I'm not sure, the next time I see Innes Willox I'll mention that you bracketed him with the Chinese dictatorship, I think Mark, and see how he feels about that.

Like you said, I've been to China and what's interesting, you talk to so many bureaucrats and they're seriously worried about the impact of higher energy prices on electricity for consumers, as we are. The conversation is remarkably similar in that context. But then you talk to some of the bureaucrats there, there's a guy who's been out here several times, Mr Li Junfeng, who says "Well, people are getting sick of being able to see the air they're breathing" and you look outside and it's as bad as you can imagine at the moment and those of you who have been to China, like you have Mark, would reflect on that. So I think you could argue that they could clean it up and not touch the CO₂, just get rid of all the stuff that's causing the problem, but I think they've realised there's an opportunity to do both and that's what seems to be happening. But as you mentioned, we had Mary Nichol and we were fortunate to host a couple of events with her when she was here, and for those who don't know who she is, not only was she recognised by Time Magazine as one of the most 100 influential people in the world today, she's also the head of the California Resources Board, so she's responsible for the Californian Cap & Trade scheme. And what they're doing is, they will be from January 1 they'll be looking to Quebec and they've been seriously designing their schemes in parallel with the Quebec government. And there were some obvious questions about linkage here, so I guess I want to just explore that issue because a lot of criticism that has been made of the policy is around this linkage questions, that the prices are going to crash, it's not going to do anything, all they'll do is mortgage our future, the most aggressively negative country you can think of in Europe, maybe Poland, maybe whoever it is, and surely we shouldn't be outsourcing our policy to the Europeans? We're just going to be a price tag, as you said, and when you look at what's happening in China and California and linkages, so it's unlikely, even with your optimism, there's going to be a single system? So what's your prognosis of how this might play out given all your optimism?

MARK BUTLER: When Mary was here we spent some time talking and I think both California and Australia are focused on the linkage arrangements that we respectively have in place, which we need to settle down and cement, ours with the EU and theirs, as you say with Quebec and I think also some of the North Eastern states as well perhaps. So there's no plan for us to move towards a linkage scheme with California, I think we want to bed down EU, but there's a lot of interaction between our two jurisdictions about exchanging information expertise, seen most obviously by Mary coming over, as there is with China.

Ultimately I guess my intellectual approach to this is that linkage makes sense. If you link with schemes that are robust they make sense because, as I've said, it doesn't really matter whether you're abating in Australia or abating in Europe, the objective must be to abate. And what it does allow business to do is to do that in the most effective, efficient and cheap way possible. So it's frankly cheaper to abate in Europe than it is here, and it probably is, then I've got no intellectual objection to the idea that Australian business can do that by purchasing things. I think Greg's being pretty negative about Europe and frankly it's pretty easy to create some concerns about whether you really want to hitch our wagon a continent parts of which are going through very significant economic challenge. But instead of just focusing on Romania, which

tends to be Greg's favourite country to pick on, we also focus on Germany which is very significant economy in the world, still, I think, the second biggest exporter in spite of having a carbon price in place; France; the UK, this is a very significant body of economies that are doing this.

So I'm committed to the idea of international linkage, not just because it's something I've picked up from Greg Combet's work, I think it is the right way to go. I think ultimately you're not going to get to a position I don't think in any of our lifetimes where you have a single trading scheme that effectively covers the globe, but I think what you will see is more linkage because it makes sense. One of the things I didn't talk about that's also picked up from Kyoto obviously is the idea of the CDM (Clean Development Mechanism) units as well, the idea that you can abate by effectively paying for operations in some of the developing countries. That has obviously been a controversial area as well that we've been focused on; trying to get some more rigour and robustness around the Kyoto units is something that we are continuing to monitor. And you will have seen, if you paid attention to the finer detail of the announcements the PM and I made a few weeks ago, that if we get this through for the first year of trading in 14/15 the CDM units are capped at 6.75% or something. So again, we're trying to keep that level, keep the trading with CDMs at a level that's not going to completely deflate the price.

TONY WOOD: And one specific domestic issue, you've made a lot of comments about the renewable energy commitments that the government has and arguably the original NRET was introduced by the Coalition government at a lower level and so forth, but that was the fact of the matter. And essentially there is some degree of bipartisan support for a Renewable Energy Target and one could argue that at that time it was actually climate change policy that was delivering something quite useful. I guess the question if we wind forward to when we've got an Emissions Trading Scheme where you're trying to get the lowest cost abatement, one of the reasons for linking with Europe is because, as you said, if you can do it cheaper why not? But how do you justify having a RET which is not lowest cost abatement? And if it was, it would be delivered through the Emissions Trading Scheme and clearly with an Emissions Trading Scheme the RET doesn't reduce any emissions at all, all it does is move them around.

So how do you rationalise having a RET within an Emissions Trading Scheme framework?

MARK BUTLER: Again, my intellectual approach to this is that I don't think price alone changes behaviour in the way that we want it to change. I think in addition to price you need a range of other significant policy leaders that force behavioural change. Price is a way to handle it and ensure that the behavioural change is able to be traded and allocated across the economy in the most efficient way possible. But at the end of the day, I'm still convinced that if you had to look at all of the things on the table the two most significant drivers of change will be the cap on emissions - not the price, the cap, whether the price is \$6 or \$24, the thing that will drive pollution down is the cap - and the RET. I'm still convinced that having a RET, having a renewable energy target, is critical to driving a change in the energy market and if you don't drive change in the energy market your capacity to reduce emissions economy-wide is impossible.

So we are still very committed to the RET, we're not only committed to it as a 20% target by 2020, we've also restated a number of times our commitment to the 41 terawatt commitment because it may well be, it's 20% of something a little bit smaller given where energy emissions are going, the energy market's going. We will look in 2016 at what the RET might do post-2020, we're not indicating any intention to do that before 2016. But I still see the RET as a critical element of the suite of policies to drive that behavioural change.

TONY WOOD: Why don't we open it up to the floor?

AUDIENCE: Coming from the point of view that there are some sectors, particularly in transport, which will not be able to electrify and one of them is aviation and there's a huge opportunity in Australia to develop an industry to produce renewable aviation fuels. But the RET as it stands at the moment is really looking at the form of fossil energy that comes from coal. So I was wondering what the thinking was in possibly extending the RET to the oil sector and having an

equivalent of a RET or incorporating a 20% target for renewable liquid fuels to encourage development of that industry in Australia?

MARK BUTLER: In my long time in this portfolio, that's never been put to me so I don't have an answer to that. As I said, our broad approach to the RET is to let it run as it is subject to the changes I talked about about having a longer review period 'til 2016. But I just don't want to answer that off the top of my head. I'd be happy to talk to your sector about that, but no-one's actually put that proposition to me, they might have to Greg, but I've not had that discussion before.

AUDIENCE: I was wondering what both of you think about the current integration between climate and energy policy in Australia and how that might change in the future? Because you have both spoken about the renewable energy target tonight, so perhaps it would be convenient if that was part of your portfolio, Mark, then at the same time energy policy is quite slow moving but climate requires a more timely approach, so perhaps you could comment on that as well?

MARK BUTLER: I'd be happy to take it all over if Gary let me. You're right, there are some counterintuitive allocations of agencies and policy areas to the portfolio. So Gary Gray as the Minister for Energy, for example, has responsibility for ARENA doesn't he, the Renewable Energy Agency; I have responsibility, as the Minister for Climate Change, for the Energy Security Fund for brown coal. So you would generally think, and certainly as a Minister, the renewable energy sector is really I'd see as a constituency in my portfolio, whoever happens to sit in my seat at the time and the coal sector, the traditional established energy sector, would be traditionally seen as more of Gary Gray's constituency, but it's sort of flipped over. So there are some anomalies, I think is a fair way to describe them, but what Gary and I do is just work together. There's no intention to change that into the future, but equally these things change pretty regular in government so they're not set in concrete forever. What we do is get over those things by making sure that our portfolios, our offices, our advisers, our agencies, work very cooperatively and we're always very clear what the other is doing. Good point though.

TONY WOOD: Part of the answer to that question is in relation to the way energy sits in Australia versus others. Here in Australia, we actually have a relatively unusual situation with a percentage of our riches that come from stationary energy and so, given that context, it's not that surprising that it gets a lot of focus. But I think the underlying thesis would be that the Emissions Trading Scheme, the sooner it expands, the sooner it covers all emissions, provided you can establish the robustness of the process, because in some of the cases of the agriculture etc. some of the measurement is not yet in place. Now, the good news is some of those sectors are themselves really keen to develop the measures so they can actually participate and make the changes or, in some cases, develop businesses.

But you're right, we do have in Australia, probably for a reason, more of a fixation or a focus on stationary energy than many other countries. New Zealand on the other hand has a fundamentally different problem from ours in terms of where their emissions come from, a slightly different problem as well. But I think we do have an unusual circumstance and that explains why you've seen so much emphasis on energy and electricity in comparison with many other countries.

AUDIENCE: You mentioned in your concluding remarks about the ETS legislation and I think you said if you get it through. And whoever wins the election is going to be the issue of the position of the Senate and we've just gone back to Department and made some comments on the draft legislation for the ETS, which I think because of the caretaker convention they probably wouldn't be passing anyone's comments through. But one of the comments we've made as an industry is if you reach a certain date and if the Senate situation's not sorted out, you really need to make a call can you actually move towards 14/15 because there's option processes and so on. So to the extent you can without knowing what the Senate outcome is going to be and we have heard what the Greens have had to say, how do you think you'll be playing that post a successful election?

MARK BUTLER: You're right, all of the parties, including the Greens party, come to their selection with clearly stated positions that the Greens, for reasons I still don't entirely understand, will steadfastly oppose a move to a floating price; we've got our position. So I think the Greens are in a different position to us and to the Coalition in the sense that they're a balance of power party in the Senate. Let's assume they still have influence in the Senate and that we win a majority in the Lower House. My view about it simply is that the Greens have now voted against an Emissions Trading Scheme twice in the Senate. We would be operating now within an Emissions Trading Scheme, would have been for a couple of years by now, if they had supported the CPRS. And I think the fact that they did so was deeply regrettable because what it led to was the sort of politics we've seen around climate change over the last few years which has been deeply, deeply damaging to the broader objective of the common objectives that, say our party has with the Greens Party. I think that was a really bad thing for them to do and I suspect and I hope in their heart of hearts, when they're having a glass of organic wine on the deck, that they admit that to themselves.

It's all well and good for them to take this position to the election, where they are often trying to get product differentiation from us particularly, the Labor Party, but if we were to win and we were to get legislation through the Lower House, put it up to the Senate, I think for them to vote against an Emissions Trading Scheme for the third time would be utterly unforgivable and I think it would be very damaging to their position. Now, if we were taking up a position that said knock off carbon pricing per se, which is fundamentally at odds with their platform, I think everyone would understand why they just stand on their digs and oppose that. But that's just the view I take, we have no guarantee about that, and if we were not able to get it through the Senate at some stage there would be – it's not much help if we try and put it through the Senate twice and then threaten a double dissolution, because by the time that's all over we're in to 2014/15 anyway. There is going to be a drop dead date at which point in time we have to say to industry "Look sorry, we've not been able to do it" and I don't know what we think that is. The auctions would be around February/March wouldn't they, so it's summer probably. But we're working on the basis we're going to win and we're working on the basis that they're going to see sense.

AUDIENCE: Minister, I wanted to ask you about energy efficiency, you could almost say it's the forgotten leg of climate policy where the rival parties – and your main program's probably the Energy Efficiency Opportunities Program, it gets a bit of criticism from those who participate and the states will have these various energy efficiency schemes that are again of questionable effectiveness. What's your view on where we should go with energy efficiency policy?

MARK BUTLER: I think we've had this discussion before haven't we? Yeah.

TONY WOOD: Don't give him the same answer this time.

MARK BUTLER: Yeah, I can't remember what the answer was. Look, what we released in July, we called it an issues paper or discussion paper around this that the working group I think had put together around energy efficiency. And to be frank with you, this is not an area that I thought we were going to be in a position to refine before the election. It is an area that if we are re-elected and I am appointed to this Ministry again I am very keen to work on because I think there's some very exciting opportunity in the energy efficiency area. I think a lot of that thinking was not at a point where we could do anything substantial in the matter of weeks, the short number of weeks between me coming to the portfolio, the paper going out and the election. And I think, as you've indicated, there are some pretty tricky state jurisdiction issues around some of this.

So I am keen, if we're re-elected, to do some substantial work on this and I've talked to my office and the Department who are of that view as well that this is an area where arguably Australia has underperformed. I think that was a bit of a message out of the issues paper and I think that we could do much better in another term of parliament, really push the envelope on this. But I don't have developed thinking around this, I deliberately took the view that it wasn't realistic to reach a developed position in the short time we had before the election, but it's very much on my list of things that we would do, if re-elected, quite soon after the election.

AUDIENCE: You were talking about international linking and, Tony, I think you made the comment about Australia being a price taker and my observation, you might have some comments on it is, Australia is a price taker in many markets: we're a price taker in oil, in wheat, in aluminium, etc. so really we should be fairly comfortable, I think, with being a price taker in what is just another market, but maybe you may have some comments back on that.

My question Minister is, at the end you were talking about how climate policy is going to remain a policy and political hot potato for as long as you can see. And I can see the policy relevance for a long time, but I'm just wondering about the political hot potato that you see it being. I've just spend the last decade or so working employment policy in Europe and I've sat through three general elections in the UK where I doubt the price of carbon was ever mentioned. The EU ETS has three non-EU countries that decided to opt into that scheme and that was seven years ago, eight years ago. Clearly they don't have a political issue about choosing to join an Emissions Trading Scheme. So I'm just wondering why do you see not just policy relevance, but the political bite in this for such a long period?

MARK BUTLER: I'll respond to your first point first. I think it was me who talked about us being a price taker in this area and I don't say that with any sense of negativity, I think that's just the position Australia finds itself in in global markets. I don't think that's a particular problem and even if it was, it's not something we can do anything about.

I'll turn to your second point. I hope, I mean, I'd like to see in the next 12 months that the political heat around some of these threshold questions about pricing, like moving to an Emissions Trading Scheme as against whatever direct action is, could be resolved and we could move on in the way that the UK has moved on, so you've got much more bipartisanship for example there. David Cameron wrote a gushing letter to Julia Gillard when we got our carbon pricing legislation through. So I'd be hopeful we could get to that point at some stage. I'm not sure how quickly it will be, but let's say it happens over the next few years and there's much more consensus around the fundamental architecture of emissions trading at least.

Nonetheless, if we're looking at emissions reduction in the order of 80% over the next 37 years we're talking about the sort of changes that possibly will happen anyway to our food bowl, to our river; not mitigation but the adaptation stuff that we're going to have to do, this is just politically going to be really, really tough. Communities in Australia, more than the UK I think because of the fragility of our environment, whatever happens communities are going to be significantly impacted to one degree or another by what happens. Even if, in my marvellous optimism, there's a huge agreement reached in the next couple of years, the idea that we're able to keep the carbon pollution to a level that will keep us below 450ppm is incredibly ambitious. You just look at the trajectory of China particularly, but India as well, it's incredibly ambitious.

So you have to prepare for there being a significant impact on a country with a fragile environment like Australia and even if there's consensus around the architecture of emission trading, there will be change to the way in which communities operate that is inevitable and often very difficult. I mean, ageing is the other big policy challenge. I see the two as the two big things for the next few decades in Australia. How you deal with the profound demographic shift that is involved with the retirement of the baby boom generation. It's not about whether we have a particular view as a community about whether it's a good thing or a bad thing, it's just happening and it's going to have a very profound impact on the way in which federal budgets operate, the health system operates, housing operates. All of these sorts of things are going to be the big issues for national politics and national policy and some of them will be really tricky.

TONY WOOD: As Mark mentioned in discussing the Pacific Islands before, about a month ago when Minister Tony de Brum was here in Australia from the Marshall Islands. Now some of you won't know where the Marshall Islands is, but it's in that part of the world where they share a common problem with countries like Kiribati and Palau where the average height of the country above sea level was less than 2m. And you think about that and you've got rising sea levels and for them, right now they've got a severe drought in the north of the country and severe flooding in the southern part of the country and the water table has absolutely gone to hell. And there's

huge debate about this, so there's actually a big Pacific island forum in Madaya in September, and they're small island developing states and there will be another common set of voices which will add to, I think in a different way, to the sort of momentum that Mark you're talking about coming out of China and the United States, but equally you've got a lot of countries for whom this is a real problem and it's happening right now. So that'll be an interesting extra political lever I think into the whole process.

AUDIENCE: My question, following on from the last question about climate change is going to be a big political issue, there's going to be a lot of policy proposals, a lot of changes to the way things work. How do you see that playing in terms of businesses being able to invest and take advantage of the markets for carbon, either from the point of view of is there anything the government can do to help to smooth out those bumps or is there anything that we as industry should be looking to do to prepare for the inevitable political changes that will come over the coming decades?

MARK BUTLER: I think the best thing that we can do as a government is to have a framework that works for business. This is why I think the idea of Emissions Trading Schemes or Cap & Trade Schemes is so attractive. It combines that idea of a cap, so you get that broader social objective in place of actually driving down carbon pollution, but at the end of the day leaving business to decide between themselves how most effectively to do that. So you don't have a command and control system working out of Canberra that says "Okay, Industry X, you've got to operate in this way now and we're going to send inspectors around to just make sure that you're changing the way in which you operate, you use energy, and have production processes to ensure that you're compliant with something drawn up in Canberra".

So having a system that delivers the objectives we need as communities, while ultimately giving business some leeway to work out how to do it most effectively, is the great intellectual achievement of emissions trading as a concept. The other thing we need to do is to deliver investor certainty and that is really tricky as you're developing new systems and as there's a lot of political heat around these things, but renewable energy or clean energy is one of those examples where clean energy have come to us and said "Look, this idea of two-yearly reviews of the RET is just too unstable, you need to deliver us greater certainty than that". Even four-yearly really, given the investment timelines that you guys are thinking of, is pretty short. So what can we do to deliver the greatest possible level of investor certainty in a market that's still pretty new and moving fast? I think that's our overall objective.

In terms of businesses, I think at the end of the day the businesses that succeed as we transition into a clean energy future – to use that phrase – are the ones that are smart and brave. Those that are flat-footed are going to go the way of the dinosaurs and this has happened in every major transition that economies like ours have made. Those that are brave and agile and engage with smart researchers, devote money to R&D, they're the ones that will still be around in 10 or 20 years and successful. But you guys are better at that than me.

AUDIENCE: Back on the international stage, you're very optimistic about what might happen in 2015, but we know it's not going to happen in two weeks in November/December 2015; there needs to be a lot of work leading up to that and much of that work could happen in the G20 of which Australia is the Chair next year. So my question is if you are re-elected do you have a plan for how to use the G20 towards a 2015 agreement? And if you're not re-elected, what do you think is going to happen?

MARK BUTLER: I'll answer the second one first, because I think this is an important point of difference. I agree the G20 is a great opportunity; a smallish forum, a manageably-sized forum where all the key players are at where you can have some good productive discussions about the broader imperatives. The Major Economies Group is a bit similar. So having these smaller ginger groups that can really drive change I think is a really positive thing. But at the end of the day – and I know you're not suggesting this – it's not an alternative to multilateral work that allows groups like the Marshall Islands to come and have their say, a lot of the African countries that are going to be very severely hit by changes in the climate to have their say as well. So it's that balance really. We'd like to see the G20 discuss this. I haven't got a plan I can outline to

you now for us to do that, but I know that in our thinking our chairing of the G20 forum, climate change is on our list.

The Opposition have presented this as the alternative effectively to framework negotiations or multilateral negotiations and particularly suggested that we as a country are going to be able to use our influence as Chair to bring together what they call the G4 of India, China, the US and the EU to come up with some negotiations steered by Tony Abbot that will deliver an alternative to a post-2020 agreement. I just think that's fanciful and I think it's just being political. If they win the election I think they'll move away from that, it's just part of a framing they're trying to continue, which indicates that the UN processes are fundamentally flawed and I just don't accept that. I think they wax and wane in terms of their levels of success, but this ultimately is a global challenge and there will inevitably be leading countries, as there always is in world affairs, always has been in world affairs, and we should harness that. G20 is now the pre-eminent forum for that I think in so many areas of policy, but ultimately this has to be something that all countries are given an opportunity to participate in, comment on and sign up to.

TONY WOOD: I know there are a few hands still around but I think we're well and truly past the time at which we said we would finish, so we'll try and do that. There are a lot of other issues. The last time I was in China there was a conference of clean energy and the major things at the clean energy conference were solar, wind and nuclear, a topic we didn't discuss tonight.

But whatever happens on the 7th of the September, I think we've seen from Mark Butler tonight someone who has in a short space of time got across what, as he himself said, is a very complex area of policy, and whether or not after September 7th you are the Minister for Climate Change or the Shadow Minister for Climate Change I'm sure you'll continue to add to the general quality of the Australian political debate. So please, if you could join me in thanking the Minister.

End of recording