

TRANSCRIPT

PROFESSOR ROSS GARNAUT

NATIONAL PRESS CLUB ADDRESS

DRAFT REPORT LAUNCH

4 JULY 2008

KEN RANDALL:

Ladies and gentlemen welcome to the National Press Club and today's National Australia Bank address. It's a great pleasure to have Ross Garnaut here today. It's been probably the most talked about document in recent times, the report that he's releasing today and who better to talk about it than him?

Ross, you might, just as a matter of record, you might recall was commissioned to make this review in April last year, this is his draft report, a final one's due in September and it will have a great impact on every part of Australian life and I'm sure you'll be interested in what he has to say about it today.

The people here in the room have – every table has a copy of the report on disc. For people listening it's available from the Garnaut Climate Review website and I'm sure there'll be a lot of

people looking to read it. Please welcome Ross Garnaut.

[Applause]

ROSS GARNAUT:

Thanks, Ken, ambassadors, ministers, members of Parliament, friends and colleagues. Well the draft report has a rather prosaic title 'Draft Report'. It almost had an exciting title. When our team in Melbourne finished the draft of the draft a few weeks ago we held a naming competition and the winner by acclamation was 'No Pain, No Rain'. [Laughter] But we are a conscientious lot, someone said 'No Pain, Greatly Reduced Rain', and someone else 'No Pain, Probably Greatly Reduced Rain'. [Laughter] So 'No Pain, No Rain' lost its ring, and we got the 'Draft Report'.

The weight of scientific evidence tells us that Australians are facing risks of damaging climate change.

The risk can be substantially reduced by strong and early action by all major economies. Without that action it is probable that Australians over the 21st century and beyond will experience disruption in their prosperity and enjoyment of life and to long-standing patterns in their lives. Effective international action is necessary if the risks of dangerous climate change are to be held to acceptable levels, but such action is deeply problematic. A solution requires the resolution of the genuine prisoner's dilemma: each country benefits from

a national point of view if it does less of the mitigation itself and others do more. If all countries act on this basis without forethought and cooperation there will be no resolution of the dilemma, we will all judge the outcome in the fullness of time to be insufficient and unsatisfactory.

Climate change is a diabolical policy problem. It is harder than any other issue of high importance that has come before our polity in living memory. Climate change presents a new kind of challenge. It is uncertain in its form and extent rather than drawn in clear lines. It is insidious rather than directly confrontational. It is long-term rather than immediate in both its impacts and its remedies. Any effective remedies lie beyond any act of national will, requiring international cooperation of unprecedented dimension and complexity.

While an effective response to the challenge would play out over many decades it must take shape and be in place over the next few years. Without early and strong action some time before 2020 we will realise that we've indelibly surrendered to forces that have moved beyond our control.

The most inappropriate response would be to delude ourselves, taking small steps that create an appearance of action but which do not solve the problem. Such an approach would risk the integrity of our market economy and political processes to no good effect. We will delude

ourselves if we think that scientific uncertainties are cause for delay. Delaying now will eliminate attractive lower cost options. Delaying is – delaying now is not postponing a decision, it's making a decision. To delay is deliberately to choose to avoid effective steps to reduce the risks of climate change to acceptable levels.

Australians are facing this new kind of challenge in the best of times. These are the times that earlier generations of Australians had hoped for their country. The internationally oriented market reforms from the 1980s were put in place just in time. Just in time for us to ride the extension of the beneficent processes of modern economic growth into the heartlands of the populous countries of Asia.

Australians in the early years of our federation took pride in the highest living standards in the world, on the eve of World War One Australians had higher average output and incomes than Americans. For seven decades we turned in on ourselves and paid a high price, for seven decades we fell further and further behind the global frontiers of productivity and incomes. Measured in the common ways the value of our output per person fell to less than two thirds of the United States.

A quarter of a century ago we caught a tide in the affairs of men that taken at the flood leads on to fortune. On such a full sea we are now afloat. In the first quarter of this year for the first time since the beginning of the First World

War average incomes and output in Australia measured in the standard ways were higher than in the United States. So we have much to contribute and much to lose as we face the diabolical policy challenge of climate change.

Australia's recent return to material grace has had two direct causes: First was our decisive rejection and reversal of mistakes of the earlier decades of our federation. Turning away from protectionism, xenophobia and the bureaucratic trammelling of the market. The second cause is the Asian economic boom. Australia's resources and human capacities are more closely complementary to those of the densely populated countries of Asia than are those of any other economies on earth.

For other developed and many developing countries the strong growth in demand for industrial raw materials and food that accompanies Chinese and Indian and Indonesian and other Asian economic growth is seen as a competitive and inflationary threat. For Australia it is unanchored opportunity. Strong Chinese and other Asian economic growth has been the main factor behind the lift in Australia's terms of trade by about two thirds over the past five years. This has lifted the average value of Australian output and incomes by about 15 per cent from the effects of increased export prices alone.

As Access Economics put it a week ago from getting paid more for doing the same jobs.

The Asian economic boom – half the cause of our prosperity – is also the cause of the sharp immediacy of the climate change problem. The increases in concentrations of greenhouse gases in the atmosphere over the last two centuries, especially the last half century, has generated the climate change that we have experienced to date and will experience over the next couple of decades.

This is the result of economic activity in the countries, including ourselves, that are now rich. The rapid increase in concentrations that are expected over the next several decades, and which makes action to avert dangerous climate change urgent, is primarily the result of activities in the developing countries that are becoming rich.

It is not desirable nor remotely feasible to seek to lower the climate change risk by substantially slowing the rise in living standards anywhere, least of all in developing countries. If such an approach was thought to be desirable in some expression of distant and idiosyncratic values, neither our own people, nor the people of the developing world would accept it. Nor would it be in Australia's interest for Asia's developing countries to accept truncation of their peoples' hopes for higher living standards, in the interest of combating climate change. Their prosperity, or its end, is translated quickly into our own.

The solutions to the climate change challenge must be found in removing the links between

economic activity and greenhouse gas emissions. For Australia, the commitment to the mitigation of climate change can be seen as the reinvestment of a small part of the immense gains that we have received from accelerated economic growth in Asia. We can see that investment as contributing to reduction of an adverse side effect of that growth.

The draft report, and as Ken mentioned, there's a disc for every person on every table, the draft report describes the methodology that the review is applying to evaluation of the costs and benefits of climate change, and its mitigation to the application of the science of climate change to Australia, to the international context of Australian mitigation, and to Australian mitigation policy.

The draft report is a stage in a journey, the process of the review has been a very public process, we put out an interim report in February, an Emissions Trading Scheme discussion paper in March, held a lot of public fora around Australia, I received 4000 submissions, and this is a stage in that process. Here we lay out our approach to the issues, our methodology, in a transparent way, and invite responses, invite criticisms, which will be taken into account in the supplementary draft report at the end of August, and the final report at the end of September.

It will be the supplementary draft report that contains the results of the joint modelling that

our review is doing with the Commonwealth Treasury, and also the review's own work on the modelling of the benefits of mitigation in the form of climate change avoided.

It's that supplementary draft report that will answer many of the questions that are sharpest in your minds about the review's recommendations on targets and trajectories, the implications of that for likely carbon pricing, and when we have that, we can talk in more detail about the structural impact on the Australian economy. But those answers have to await the modelling, I've avoided speculation on these matters, and it would not be helpful to speculate now.

While the draft report does not present the results of modelling the costs and benefits of climate change mitigation, it does provide the first public exposure of aspects of the review's joint modelling with Treasury, it presents the first description of the approach, and the first results. It describes and explains the reference case upon which subsequent economy-wide quantitative analysis will be built, a perspective on growth and structural change in the economy over the 21st century, on the assumption that it is affected neither by climate change, nor by climate change mitigation policies.

The modelling suggests that Australia, in the absence of climate change, would end the 21st century with a population of 47 million, each with three times the average output and incomes

of average Australians today. The economy will have grown by 700 per cent. By comparison, the world's output will be 15 times as large as now, with most of the increase in the developing countries, led by China until about 2030, and then India and Indonesia. The rest of the world has less population growth, only 40 per cent, to a peak of about nine billion, and with population declining late in the century.

The draft report also presents the early results of the review's modelling of the costs of climate change, without action, without mitigation, or at least the cost of those impacts that are of a kind that can be fitted into the economic models, and for which we have data.

On middle of the road impacts, as defined by the science, these impacts which we've subjected to modelling, cut 4.8 per cent from GDP by the end of the century, over \$400 billion in today's purchasing power, \$400 billion per annum over, 5.4 per cent from consumption, and 7.8 per cent from real wages.

The modelling can cover only some of the benefits of climate change mitigation, those that are amenable to quantitative analysis, and for which data were available in the timeframes of the review. Comprehensive analysis of the cost of climate change, must take account of these factors.

Three of these factors are of special importance, and chapter two of the draft report talks about

them conceptually in some detail. First are conventional economic effects felt through markets, which in principle can be put through a general equilibrium economic model, but for which we simply didn't have data in time.

For example, we didn't model the effects of climate change on international tourism. The reference case says that by the end of this century, international tourism will be a huge export for Australia, you can just imagine, Indian incomes on average, will be higher than Australian incomes today, Indians will be great consumers of international tourist services, and a lot will be expected to come to Australia.

With unmitigated climate change on the basis of the mainstream science, we won't have much, if any, of the Great Barrier Reef, of Kakadu, of a number of our great environmental assets, that are important attractions for international tourists. We've studied those impacts, we briefly mention them in chapter seven, and on our website, we've put up the detailed scientific and economic studies that lie behind our work, so there's a lot of detail there on the website.

But we didn't have good enough data to feed into the economic models, the effect of loss of some of our export tourist industry. So that comes into the second category, market economic effects, which would affect domestic product and incomes, through conventional market processes, but for which we did not have

sufficient data of a hard kind, to feed into the model.

And then, the modelling does not include the insurance cost and value of avoiding extreme outcomes. The modelling is based on what the science says are the most likely outcomes, the median of the probability distributions, but the outcomes are uncertain. The science says that in the most likely case, there will be substantial drying and a lot of warming of Southern Australia, and that will have a very big effect on the agricultural capacity of Southern Australia, for example. But there's a chance, a 10 per cent chance, that it will be much drier than that, and there'll be virtually no stream or river flow, for example, in the Murray-Darling Basin.

The costs of that are very much higher than the costs of the median case, costs are very much larger than simply taking a weighted average of all the outcomes might suggest. Australians might be prepared to pay for some insurance against those extreme outcomes.

That insurance value of avoiding extreme outcomes is not taken into account in the modelling. The fourth category of cost, the third category that's not caught up in the modelling are all those things that we value that are not amenable to easy conversion into monetary values. For example if we lose the Great Barrier Reef and Kakadu and other great environmental assets, this will have an effect on

our market economy through discouragement of international tourism. But Australians will feel a loss in addition to that, that's just one example.

There are likely to be substantial health costs associated with the warming that will be associated with unmitigated climate change through the 21st Century. We can model the monetary health costs, and we've done that and they're not all that high. But if you have much higher levels of mortality and in Queensland because of the much higher proportion of hot days a lot of people will attach value to that independently from the costs of medical services.

So we want people reading the report not to take our single numbers about the costs of climate change as the whole story. There are three other categories of cost that are not picked up in that story. Domestic policy must be deeply integrated into global discussions and agreements. Only a global agreement has any prospect of reducing risks of dangerous climate change to acceptable levels. The costs of achieving any target or holding any trajectory for reducing Australian greenhouse gas emissions will be much lower within the framework of an international agreement.

The continuation for long of strong Australian mitigation outside a global agreement is likely to corrode the integrity of the Australian market economy for reasons that we discussed at some length in the draft report.

So why should we be early and before firm commitments by all the big emitters. The first thing to say is that we're not that early. If you take it by number, more developed countries are already doing quite a lot than are not and that's because there are more developed countries in Europe than anywhere else. In – although the United States as a national polity is not taking strong mitigative action. Some of their US states, some much bigger than Australia including California, have done a lot and that's been reflected in greatly reduced greenhouse gas emissions at significant cost.

Japan and the United States and Canada and New Zealand are all, like us, discussing major mitigation efforts and the discussion in the United States is of course particularly influential and has hopeful elements. Most – the way the international community has discussed these matters there is general acceptance but the first step was going to be by developed countries and what we are doing is as it should be, a step as one of the developed countries. There were reasons, some of them good reasons why the international community agreed on that approach. We and the United States agreed on that in an international conference in Kyoto but then in 2001 decided not to ratify the agreement that we had reached.

There will not be a next step, there won't be progress from the developed countries into the developing countries unless the developed countries have done what they said they would

do, start to take some steps. Well why should we do anything ahead of China, India, and the other rapidly growing sources of greenhouse gas emissions? We talk about this a lot in the draft report.

Chapter four is path breaking on an international scale, it reworks all of the business as usual emissions taking into account the realities of economic growth, of the energy intensity of that growth and the emissions intensity of energy use in China and other major developing countries. It tells a very strong story, that's where the growth in greenhouse gas emissions is concentrated.

Well why should we move ahead of them? Well, we agreed to, it's partly a question of historical responsibility. It's partly a question of capacity, of capital and technology and incomes but most importantly, it's a practical necessity in getting others to take the next step and they need to follow quickly. It's a theme of the draft report that it's essential that China, in particular, becomes a part of a serious international mitigation effort early, and much earlier than the current international discussion contemplates.

There's another reason why we don't want to be the reason why the world doesn't take the first step and makes the second step possible and that's that Australia has a bigger interest in a strongly mitigative outcome than any other developed countries. Our location makes us

already a hot and dry country and small variations in temperature and rainfall have a much bigger impact here than on other developing countries. As President Prime Minister Putin has said, on occasions, a couple of degrees wouldn't do us any harm at all.

[Laughter]

The same can be said of Canada and of the northern belt of the United States. It can't be said of us. If any developed country has got a strong interest in making sure that the global community doesn't drop the ball, it's Australia.

There are two other reasons why it's especially important for us, unlike other developed countries, our neighbours are mainly developing countries, many of them fragile developing countries. The problems of our neighbours would inevitably become our problems.

And the structure of our economy means that our terms of trade will be damaged more by the effects of climate change than would those of any other developed country. What Australia does, does matter. We've been punching above our weight on climate change for the last seven years. Any discussion of climate change policy in the United States over these years and I've been involved in a lot, hears a lot more about Australia than about any other developed country. We were the reason why the Bush administration was say – was able to say we are not alone amongst developed countries. And

that mattered in the United States domestic debate.

What we do by getting things right, developing a good model can be highly influential. What we do is make – in making sure that we are one of the developed countries that we are making similar efforts to other developed countries is a necessary condition for developing countries taking steps.

And it's less costly to move with the pack than to have to move with – in a panicky reaction later on. If it happened that we were out on our own in 2020 then there will be processes for review and reassessment. I think if we do our part well the discussion in the rest of the world suggests that we won't be on our own.

The – it will be the supplementary draft report and not this draft that presents our views on trajectories but we – the general approach we're adopting is the one put forward in our interim report recognising that up till the end of 2012 our targets are the Kyoto targets which we've accepted. After that, as a first step, we should be making similar efforts to other developed countries. And beyond that, it's in Australia's interests for there to be a strong global mitigative effort and we need to be prepared to encourage that effort by saying that we are prepared to go further if in the context of a comprehensive global agreement, the world is addressing the issues effectively in a way that will provide a solution to the problems.

Well, once we've defined our trajectories, how do we get there? The much talked about emissions trading scheme is the centrepiece. We've - the general approach to that was laid out in our discussion paper in February. There are some further developments, mostly of an incremental kind, in the draft report. The emphasis is on broad coverage; the broader it is the less costly the scheme is going to be.

On credibility, the need for it to be grounded in firm principle and not be subject to - to pressures from particular interests. The whole scheme will unravel in a very dangerous way if it becomes subject to arbitrary change because of particular political interests. It will all be built around clear trajectories, which once they're announced will be firm for five years, but which are consistent with longer term indicative trajectories.

Emissions trading scheme is not the whole of the mitigative effort, but other measures should be introduced only when they correct cost effectively for a market failure. We discuss three kinds of market failures that we think will be important. Correcting these will reduce the costs of adjusting to the emissions trading scheme.

The first, and probably the most important, relates to the need for a much bigger effort in research, development and commercialisation of lower emissions technologies. This is important for the whole world. We point to some data that

suggests, for the world as a whole, there needs to be an increase in research and development and commercialisation of new low emissions technologies in the order of \$100 billion per year.

We're suggesting that there should be an international low emissions technology research and development commitment by all countries, with all countries committing - all relatively rich countries committing to spend a certain amount of money on research. On some arithmetic we've done and presented in the draft report, our share would be about \$3 billion a year at present. And that's going to be very important in Australia and in the rest of the world, in developing the capacity for low cost adjustment to a low carbon economy.

Each country would be able to adopt its own priorities on how it goes about this - this effort. We may choose to emphasize things that are very important here; geothermal, solar, geosequestration of emissions from coal combustion. Japan or France, with large nuclear industries, may - may choose nuclear. Important thing is that the investment was going in to innovation in low emissions technology.

In addition to that very strong need for increased effort on research, development, commercialisation, there will be market failures related to network infrastructure, which if they're not corrected will be barriers to the introduction of renewable energies in large

quantities into our grids. We need to do something specifically about the transmission grid. We're suggesting that energy infrastructure should be included in the program of the Building Australia Fund. And there are also market failures related to energy efficiency, related to information problems and principle and agent (*) problems.

The report acknowledges that we have a strong national interest in the future of low emissions coal technologies, and we've got a number of suggestions there for taking that forward. I'm running out of time. I commend those aspects of the report to you.

The international community is too late with an effective mitigation effort to avoid major impacts. It may yet fail to put in place substantial mitigation, in which case the challenge of adaptation to climate change will be more daunting. But in the best of circumstances, damage from climate change, perhaps events damage, is likely to be part of the Australian reality of the twenty-first century and beyond. Our final report will analyse closely the adaptation issues.

Adaptation to some of the possible consequences would test us and our values and preferences in profound ways. Contemplating the adaptation challenges of future Australians helps to focus our minds on the more difficult dimensions of mitigation choices. We are led to think about how we value future against current

generations. We are forced to decide what will we - what we will be prepared to pay in terms of consumption of goods and services foregone to avoid uncertain prospects of possibly immensely unhappy outcomes. We are forced to decide what consumption of goods and services we will be prepared to forego to avoid loss of things that we value but are not accustomed to valuing in monetary terms.

We rightly make much of the - of the global wonders, and I've mentioned the Barrier Reef, the wetlands of Kakadu. There are others; the Karri forests of Western Australia. We will need to think about whether we are prepared to pay for their preservation. As a changed future approaches, Australians will find themselves thinking about how much they care about dimensions of our national life that have always been taken for granted.

If we and the world do too little, the risks are high that there will be change beyond recognition, and the economic and, therefore, social conditions in the western district of Victoria, the southwest of Western Australia, in and beyond the Adelaide Hills and the fine wine country, through all of the farming districts of South Australia, and in the Murray-Darling.

The Murray-Darling features prominently in the draft report's analysis of the possible impacts of climate change. And I - I suggest that you look at the material on what climate change will do to runoff in the streams and rivers of the basin.

Under ‘business as usual’, the economic base of the Murray-Darling will be gone, however clever governments may be at COAG or elsewhere.

The Murray-Darling is the heartland of old Australia. It produced Australia's defining identity, the Australian legend around the nomad shearer and drover, the bush ballad and the doctrine of mateship. It generated the subsequent Australian military legend, with the formation of the Australian Light Horse for the Boer War and its transformation into the First Light Horse in World War 1.

It produced the country's first and most durable national poets, Paterson and Lawson; folk heroes, for good or ill, Ned Kelly; and sporting legends Don Bradman, Hayden Bunton and Margaret Court, just to name the first of a golden hoard. It was decisive in the movement towards Federation, contributed a high proportion of political leaders in the earlier mid twentieth century, prime ministers Watson, Chifley, Menzies, Ford and McEwen, and was and is the natural home of the national capital. Mr Percival, the pelican in the Coorong, was the film favourite of my generation's children. The Murray-Darling Basin would be mourned. [Applause]

KEN RANDALL:

Thank you very much, Professor Garnaut. As usual we have a period of questions from our media members now, starting today with Gerard McManus.

QUESTION:

Professor Garnaut, Gerard McManus from the *Herald Sun*.

Two questions. First of all, if the Government does sign up to your report, will they be signing up to the longest political suicide note in Australian history?

Secondly, in terms of compensation, for people who have superannuation funds, should they be compensated for the deterioration in their... the investments they've made in coal industries, in resources, and in the power industry that they've invested in?

ROSS GARNAUT:

First, the politics; that's a matter for ministers to judge. They'll take their decisions on that. They've already taken some decisions, they'll take a lot more. I think that there are ways of managing these matters that could become substantial political pluses, especially given the Australian community's interest in the matter.

The fact that if the Government is disciplined in making sure that it sells through competitive processes all of the permits within the system, it will have substantial amounts of revenue to reduce the cost of transition to the new regime.

Given all of these things, my own view is that there are political pluses in there. But that's for the Government and not for me to decide.

I was asked to prepare an independent report. That's a requirement of my terms of reference. That's exactly what I have done. And independence works both ways. I'm giving a view on what I think will work best for Australians, as I'm required to under my terms of reference. The Government, elected by the Australian people, will form its own judgements and implement them.

On superannuation, if the Government is disciplined in selling permits, it will have a substantial amount of revenue. We've suggested in the draft report that half of that revenue should be returned to households in one way or another; could be through tax cuts, it could be through social security adjustment. I myself would like to see a very strong focus on efficiency increasing adjustments to tax and social security, and there are plenty of opportunities for that, so you get an economic benefit along with the tax and social security adjustments. There can be payments for energy efficient households.

We've suggested in the report that the focus of that large amount of money should be on the bottom half of the income distribution. If superannuation funds have some investments in businesses whose value falls as a result of that, many people, and especially in the lower half of the income distribution, will be compensated amply in other ways.

But the more general point there is that, for good reason, superannuation funds run diversified portfolios. There will be winners and losers from - in the business sector from the introduction of the emissions trading scheme; some very big winners. If you saw *The Economist* last week, it talked about the next tech boom being the renewable energy boom, and superannuation funds are investing - especially the best of them - investing in the sunrise industries.

Even in the coal-based power sector there will be winners and losers. And for those who are well managed, use their opportunities effectively, there will be positive opportunities. There will be losers but it's not very easy to tell in advance which companies will have the management structures and the opportunities to do particularly well. The market will sort that out, as it always does.

But the well invested diversified portfolio in a superannuation fund will find that some of its assets have increased value, some reduced value.

KEN RANDALL:

Next question is from Chris Hammer.

QUESTION:

Chris Hammer from *The Age*, Professor Garnaut.

Two questions. You say petrol must be included in emissions trading. Would it compromise the

scheme if petrol price increases were offset by cuts in fuel excise or any other measures?

Second question. You say all the revenue from selling permits in emissions trading should be returned either to the community or to industry. Why not spend some of that money on adaptation or infrastructure? Would you be critical of government if it did spend some of the revenue in those areas?

ROSS GARNAUT:

Well, the second bit of the question first. The draft report recommends that half of the revenue from permits should be - should go back to households in one form or another; energy efficiency support, or tax and social security adjustments in efficiency raising ways.

It suggests that 20 per cent should go to support for research, development and commercialisation of the low emissions technologies.

Now, the international low emissions technology commitment that we suggest, which in 2013 will be upwards of \$3 billion if our approach is adopted by the international community, maybe more than 20 per cent generates, in which case the 20 per cent will be a contribution towards that. But 20 per cent will eventually be a substantial sum of money.

We suggest that up to 30 per cent should go to trade exposed emissions intensive industries for

reasons that are laid out in our interim report, and emissions trading paper - discussion paper.

We're suggesting that there should be a lot of discipline in the application of that money, with a materiality threshold.

We found through this process that almost every company in Australia is trade exposed and emissions intensive.

[Laughter]

And it will be a nightmare if there's an attempt to compensate them all.

So there has to be a materiality threshold. There will be some that would be affected much more than others. We don't in this draft report try to do detailed sums on which they are, but there's some obvious ones.

We don't think that agriculture can be included in the scheme initially, but if it were event... we say it should be as soon as possible. But if it were, then the sheep and cattle industries are obviously trade exposed emissions intensive. The metals processing industries are. But there needs to be a hard materiality threshold, and obviously that threshold will be more readily breached if the carbon price is higher.

And we suggest there that once the Government has decided on a proportion of permits that's

going to go back to the business sector for this sort of compensation, that if a discipline is attached to inclusion of trade exposed industries, then a surplus of funds can go back to the business community as efficiency raising reductions in taxation, focusing especially on distorting input and transaction taxes.

And the first bit of the question, I think you said, are we saying that petrol must be included. Well, this is an advisory report, it's an independent report. We're not saying governments must do anything. What we do say is that a broadly based scheme will be more effective, it will send better signals to everyone who has to make adjustments to the low carbon economy, and it will be lower cost. A broad base will lower the cost of adjustment for the economy as a whole.

If you are simultaneously reducing excise, then you would send some funny sort of signal because what this is all about is encouraging people to economise on activities that are intensive in emissions.

It would also contradict some of the messages that Australia and the IMF and the OECD and many other countries are trying to send to developing countries where - it's a hard job in India or Indonesia or China, with traditions in all of them of controlling petroleum prices to let the prices rise to reflect global market realities. We're saying to them rightly, you'll be better off and the world would be better off if you let

prices rise by the full extent of the global price rise. Well we're blunting the effect ourselves and it weakens that message.

Now would a few cents destroy this scheme? No. But I don't see any good reason to do it and you could give back that revenue, even to motorists, in other ways that encouraged emissions efficiency, probably do better for the motorist and at the same time avoid cutting across your mitigation messages.

KEN RANDALL:

Thank you. Chris Johnson.

QUESTION:

Chris Johnson from *The West Australian* Professor you mentioned that there are some iconic regions around Australia that could be irreversibly damaged if we don't address climate change. And on the reverse of that, if we do pursue these mitigation measures, there are regional communities around Australia which are built around coal and other high emitting industries that could also be irreversibly damaged.

Have you studied the impacts of these and is this a price that Australia has to be prepared to pay?

ROSS GARNAUT:

Yes, we are studying that. We'll be saying a lot more about that in the supplementary draft report, because we do need the modelling, the – our review's joint modelling with the Treasury to tell us more about that. Amongst other things

you need a carbon price and – but that’s very much on our agenda.

If you think about regions that might be hurt a lot by mitigation, then you think of the coal generating power regions. But as we said in the discussion paper these could be regions of prosperity and expansion if we can make the carbon capture and storage work commercially. From what I’ve seen, and we’ve put a fair bit of effort into trying to understand these things, the prospects are pretty good. The technology works. What we don’t know is the cost of introducing these technologies on a commercial scale. If it does work, then these regions will become regions of expansion and exceptional prosperity.

At the same time, we would have secured the futures of the coal exporting regions, another set of regions. The Hunter Valley has got a lot of jobs in power generation. It’s also got a lot of jobs in coal exports and the success of carbon capture and storage will help to secure those jobs.

So the reliable way of securing the future of people in the La Trobe Valley, in the Hunter Valley, is to do everything we can, as early as possible, to test the near zero emissions technologies. And it’s a bit of a theme of our report, that we should put a major effort into that.

If that doesn't work, and it will be some time before that's clear, then there are questions of regional adjustment and we should approach those in the way Australians have approached similar regional adjustment issues in the past, when they've done it well. Think of the adjustments in the Hunter Valley with changes in the steel industry. But we're a long way from that and at this stage the prospect for those coal based regions is at least as much one of prosperity and expansion as of relative decline and we've got to put a lot of effort into settling that question as soon as we can.

KEN RANDALL:

Paul Buongiorno.

QUESTION:

Paul Buongiorno, *Ten News*. Professor I gather from your earlier report and what you've said today, of course I haven't read your report today, is that there is a sense of urgency that Australia and the world must address climate change.

We know we have the Copenhagen meeting next year. How important is it for Australia, especially in view of your – your view that Australia should take a leading role that the elements, indeed the design of Australia's emissions trading scheme be in place for that meeting in Copenhagen?

And is there a danger, however, that we could rush to this and that we probably do need another couple of years before we see a final shape?

ROSS GARNAUT:

Well the meeting in Copenhagen is a critical one. That will be the meeting that will probably be decisive in determining whether we've got good global arrangements from 2013. And I didn't say Australia should play the leading role. We can't play the leading role, others have already done that. We should play our full part as one of the developed countries. Developed countries need to play the leading role.

My hope is and the analysis behind that hope is set out in the draft report, that with developing countries getting their act together, showing that they've got things in place that will be working towards mitigation in 2013, will make it possible to get commitments from at least the major developing countries. There's no hope unless all of the developed countries have done that.

So we've got to play our part as one of the developed countries. And we will be much more credible there if we've put in place arrangements where – that make it clear that we can deliver on any commitments that we make in reducing emissions. Can we do that by 2010? Well it would have been better to start half a dozen years ago. No doubt about that. Now is not the best time to start. That best time was years ago and there were proposals before the Australian Cabinet years ago, to make that start.

But that's water under the bridge. We can't go – rewind that history. From what I hear, from

the very able and hard working officials who are beginning the preparations for a 2010 start, it's hard, terribly hard, but possible and that's the basis on which I'm working.

KEN RANDALL:

Next question's from Simon Gross.

QUESTION:

Simon Gross from *Science Media*. Speaking of coming first, you'd be aware the Kiwis tend to beat us in a few areas. Their government has recently outlined or announced their emissions trading proposed regime. I wonder if you have any observations about their regime. And how imperative is it to limit variation between an Australian scheme and a New Zealand scheme, given the number of companies that operate in both countries?

ROSS GARNAUT:

Well we've suggested in the international chapters of the draft report, there's a lot of advantage in Australia eventually moving towards a lot of integration, a lot of trade with comparable countries and we've said that New Zealand and Japan are obvious early candidates for that.

I think it's a good idea for New Zealand and Australian ministers to be talking about these things with a view to communicating about anything that each is doing that might be a barrier to later trade. So these are issues that we shall put some attention on.

The special feature of the New Zealand scheme, compared with others is it's – is it's gone a lot

further on agriculture than others. I think that's something for us to study. It's also – it's gone a lot further on forestry than others, a lot of the works been done in Australia on the technical aspects of incorporating forestry in a regime. We – but – although the work here is excellent, we should also be looking at what others are doing and New Zealand's doing quite a lot.

KEN RANDALL:

David Crowe.

QUESTION:

David Crowe from the Australian Financial Review. What's your thinking at the moment on the kind of revenue that could be raised from this scheme? There is a lot of speculation about the total volume of dollars - \$8 billion sometimes, sometimes \$15 billion. Have you thought about what the range is in terms of what the pool of money is available?

The second question is about the process in deciding where that goes. What's your thinking at the moment in terms of the best way to make those decisions? Should the independent carbon bank be the organisation that decides who gets compensated and how? Is there a way to separate that from the Government to remove the political pressure and to keep the discipline that you've talked about today?

ROSS GARNAUT:

Well the last question first again. The broad policy questions can be made only by the Commonwealth Government. That's where responsibility lies. But when it gets down to administration of the scheme, for example

administration of a set of payments to trade exposed industries once the policy has been set, I think there are lots of advantages in that being done by an independent regulator. Just as we see lots of advantages in the Reserve Bank being independent, lots of advantages in the taxation office being independent. A lot of money will be at stake at making what are essentially administrative decisions. At that stage they will not be policy decisions. And within our framework that's a role for the Independent Carbon Bank or whatever you might call the regulator.

On the question of how much revenue will be raised, that's a function first of all of the carbon price, and I've said that the joint modelling that we're doing with the Treasury will be revealed in the review supplementary draft report at the end of August. That will give us an idea of that very important variable. The other important variables are coverage, how wide the scheme, if you cut any bits off you've got less revenue, and whether you're giving away any permits free. The approach of this review is that all permits should be sold even if you're going to make payments to business because then you've got a transparent process, you know exactly how much money you're allocating.

But as I said in the speech I don't want to speculate about numbers, but you know what – you can see from the report what Australia's carbon emissions are, therefore you can work out with 100 per cent coverage what a \$10 or a

\$50 price would generate. And they're not small amounts of money.

KEN RANDALL:

Cathy Alexander.

QUESTION:

Hello, professor. Cathy Alexander from AAP. Many Australians would be wondering what climate change is going to mean for their standards of living. You pointed out in your speech that we do have quite high standards of living at the moment. What is it going to mean for ordinary households perhaps first of all with the efforts to reduce emissions, you seem to be saying perhaps that doesn't need to affect our standards of living that much. But further down the track, the actual effects of climate change you seem to be saying that is actually where our standards of living will fall further. But I'd just be interested in your thoughts.

ROSS GARNAUT:

Yes we're doing some very detailed modelling of effects on standard of living of individual households. We'll be taking the results of our joint modelling with Treasury and then getting people at the Melbourne Institute to run that through their household distribution models, and we'll get a very detailed picture of that, and we'll be saying – presenting some of the results of that, well all of the results of that, all we've got, in the supplementary draft report.

I'll just point out one fact that is mentioned in chapter 19 on income distribution. The proportion of income that's spent on electricity, gas and fuel, petrol for the poorest 20 per cent

of Australians is about twice as high as a percentage spent on those things for the richest 20 per cent of Australians. That's one of the reasons why we think it's important that the half of the revenue from sale of permits that goes back to households should be concentrated on the bottom half of the income distribution.

KEN RANDALL:

Malcolm Farr.

QUESTION:

Malcolm Farr from the *Daily Telegraph*, professor. There's an argument and quite a strong one that motorists are already getting a pretty hefty price signal courtesy of crude oil. Why, they might ask, do we have to cop it in the neck again through an ETS?

ROSS GARNAUT:

Yeah good question. The increases in petrol prices as a result of the global market developments of course are huge compared with any imaginable level of carbon pricing. Think of the highest number that's been part of the Australian discussion as applying over the next decade. Multiply that by a large number and you don't get anywhere near what the markets have done to the petrol price. So let's have that perspective.

It is certainly true, and we discuss this in the report, that higher petrol and natural gas and coal prices are having a mitigative effect and that will be producing emissions growth in the next couple of years below what it otherwise would be. But what we're putting in place is a reform agenda that will last until the job is done

through times when the oil price is high, through times when the oil price is low, if we ever have another one.

It's a system for all seasons, and we can't be sure that the oil price won't be falling quite a lot in two years time when the system's introduced. What we need is a robust system that has integrity in itself, and where it has adverse effects on people in the community who are judged to be candidates for support on equity grounds let's look at cost effective, efficient ways of looking after them and not distort the whole system in the interests of trying to promote equity through little changes in the system trying to promote equity and probably not succeeding.

KEN RANDALL:

Next question's from Stephanie Peatling (*).

QUESTION:

Stephanie Peatling from *The Sydney Morning Herald*, Professor Garnaut. The Australian public's about to have a crash course in emissions trading. Most of them probably don't know very much about it at this point in time. To gain their trust and confidence that this is the right way to go how important is bipartisan political support?

ROSS GARNAUT:

There's no doubt whatsoever that any big reform will have a much better chance if there is broad community support, and bipartisan political support. And they – I was doing a lot of work on the liberalisation of the Australian

economy in the mid 80s for Prime Minister Bob Hawke.

People who are still close friends of mine, like Jim Carlton, were closely in touch and supportive, and there's no doubt that that was helpful to getting it right. In the – if you don't have political partisanship, then there's more risk you'll make arbitrary adjustments for political reasons. Once you start making arbitrary adjustments, it's not very easy to hold the line against making more, and you could end up with a bit of a mess of a scheme.

One of the things we say in the report is that it would be better to have a clean carbon tax than a deeply compromised emission trading scheme.

KEN RANDALL:

Karen Middleton.

QUESTION:

Professor, Karen Middleton from SBS television. The Prime Minister has taken to referring to your review s just one input in his decision making process. I wonder how you feel about being just one input, given the amount of work that you've undertaken. And what other inputs should rank alongside yours? And whether you think this might be a sign that he's considering political things as well as the science and the economics, how you feel about that?

ROSS GARNAUT:

Well, the – I'm just one input into the Prime Minister's thinking, and he's just one input into mine.

[Laughter]

Ah, that – this is an independent report. When the Prime Minister was Leader of the Opposition, and I sat down to discuss the terms of reference with him, and with Anna Bligh, who was acting in behalf of all the states at the time she was Treasurer.

We both agreed that we'd write, there, in the terms of reference that the report will reflect the independent judgment of the author. And that protects us both. That means that I don't have to look over my shoulder at how others are reacting. The very good team of people I've got working with me can work with me to come up with something that we think will work best for Australia, but it also means that Government doesn't have to look over our shoulder and say, we want you to change this or change that, because they are independent. If they don't like some things, they don't have to accept them, and that leaves us free to say what we think is best.

KEN RANDALL: Matthew Franklin.

QUESTION: Hi Professor. Matthew Franklin from *The Australian*. I just wonder if you have a gut feel as to what the man in the street, the level of commitment there is among the general population to the sorts of changes that you are proposing, and whether you think that perhaps they're not as well understood as they might be, and that's a reason for a debate. Secondly, just

picking up on the question earlier about the timing and the 2010 start up.

You acknowledged before that it's people telling you that that will be difficult.

Do you acknowledge that there might – there have to be a truncated introduction of some of these changes. And if you do, what par.... what are the key things that you would want to see begin in 2010?

ROSS GARNAUT:

Yeah. I think that people in the street don't understand much of the detail about this. They don't understand much of the detail about any big policy change. Successful public policy involves a large element of public education.

I think the starting point here is a good deal more promising than it was on trade liberalisation in the 1980s. I'd been working on those issues since the early 70s. Did a book with Kim Anderson(*) in the early 80s in which we presented the rather depressing opinion polls on Australian attitude to protection. And they loved it.

And those opinion polls didn't change as the whole Government went about getting rid of protection. But the whole context of the reform program was one in which people were satisfied that this was moving the country in the right direction, even though they did not like these particular measures.

The starting point is more promising with climate change. The sorts of polls you saw in *The Australian* earlier in the week are radically better for reform than the opinion polls on trade liberalisation or financial liberalisation in the 1980s.

I think that the Government has a very strong base there from which to build in a program of public education.

KEN RANDALL: Daniel Street(*).

QUESTION: Professor Garnaut, Daniel Street from the Nine Network. Further to Matthew's question, given this is, to borrow your own words, a diabolical policy challenge, would you object to introducing the scheme by 2012? And what is the difference in delaying this by a couple of years, its introduction?

ROSS GARNAUT: Well, one question you have to ask is whether it would help to delay it. A lot of the difficulties of 2010 are going to be the difficulties in the first year of the scheme. Some of these will be political difficulties. It's change. We're a conservative polity, and that's a good thing. We don't do a lot of stupid things that some other countries do.

We don't immediately embrace change; whenever a major reform is introduced there is immediate resistance.

That will be the case in 2010, and in 2012. The sooner the structures are put in place, the sooner the process of learning and adjustment takes place. And one problem is that we don't have much time. One of the advances in knowledge, global knowledge through this review process has been through the work we've done on business as usual emissions growth.

If the science is right, and we say that on a balance of probabilities it is right, a rational person who is not a climate scientist can't say, can't rationally say that something else is more right, if that's right, then we'll be running towards dangerous points of climate change relatively soon.

We should have been taking action a good deal before now. 2012 is a couple of years after 2010. Does any particular two years make the decisive difference? Well, for the world as a whole, it might. But I think the critical question is would it actually help to delay?

And it might not help.

KEN RANDALL:

Peter Martin.

QUESTION:

Peter Martin, *Canberra Times*. Professor, you're saying that all emission permits should be sold, petrol should be in. You're going on a road show. Five cities. Five days. Town hall meetings, next week, to educate people, I suppose, about these ideas, get them thinking about them, and then just three days later, at the

press club, here, on 16 July Minister Wong issues the Government's green paper saying what it thinks. What's going on? Is the Government trying to close down the discussion that you're just beginning to open, or are you communicating with them behind the scenes and it's sort of part of a coordinated thing? What do you think's happening?

[Laughter]

ROSS GARNAUT: Well we've been pretty busy...

[Laughter]

...on this big thing...

QUESTION: Yeah.

ROSS GARNAUT: ...but we've had a very open process and we've been open to government. I've had good meetings with the Opposition spokesman on the environment and other members of the Opposition. With Senator Milne from the Greens and Bob Brown and with ministers in the Government.

Our views, as they appear here, haven't come out of the blue. There's a consistency in our thinking. But they've developed. We've learnt things as we've gone along. But the Government knows our views and I would hope that they've been influential.

The second point to make is when I used to be involved in these sorts of things, in many ways a green paper was throwing out ideas for discussion. A white paper is what closes down discussions, says what the Government is going to do.

And I think the stage the Government is at on 16 September is the green paper stage, where it's putting out ideas for discussion. There will be a broader discussion. The scope of the draft report of our review is much broader than the scope of the green paper.

I understand exactly why the Government needs to move so early. It has committed itself to the 2010 timetable. There's not much time. It has move things along and frankly that it is one of the reasons we've put out there emissions trading scheme discussion paper so early, in advance of this – last March – so that the public airing and debate on that could be part of the Government's thinking.

KEN RANDALL:

Michael Madigan.

QUESTION:

Professor, Michael Madigan from *The Courier Mail*, Brisbane. You see to see an optimistic side to the economics of global warming. Do you really believe that a world forced to abandon more expensive forms of energy generation and refine and develop cheaper forms, such as solar power, is set to make people actually wealthier, rather than poorer? And if an Australian Government were to tell

the people that, do you think they would be believed?

ROSS GARNAUT: Well you heard me wrong if you said – if you heard that I said there was an optimistic side to global warming. I called it a diabolical problem and a lot of other...

QUESTION: I understand that, but [indistinct]...

ROSS GARNAUT: ...not very – no.

QUESTION: ...there were opportunities involved.

ROSS GARNAUT: Oh, there certainly are opposit...opportunities involved in mitigation. But would we be better off if carbon dioxide and methane and other greenhouse gases had no warming effect whatsoever? Would we be better off if there were no inconvenient side effects of use of fossil fuels? Yes, we would be better off. But in the process of adjustment to a low carbon economy and the only reason we're adjusting is that there are side effects, that the climate change risks are real and large. That's the reason we're adjusting. We will be somewhat poorer as a result of that. In the end, the judgement of our community has to be one of whether – of reducing the risks of climate change warrants that, that's what the supplementary draft report will be all about in detail.

But that all said, mitigation can be done at a reasonable cost if we do it right, where our work has gone far enough to know that. And in some of the regions that feel most threatened by mitigation, like the coal regions, if certain technological developments work, that can be actually a plus for them. Apart from anything else, you absorb 20 or 30 per cent of the power generated in a coal based plant, in the sequestration process, so if sequestration works, you need a substantial expansion, a lot more jobs, just to make the sequestration work.

KEN RANDALL:

We'll have to finish question time today with one from Matt Peacock. But Professor Garnaut will be around for a while yet to answer questions beyond the room.

Matt Peacock.

QUESTION:

Professor, Matt Peacock from the *7.30 Report*. Just back to an earlier question. Given that you agreed that the science appears to be getting worse, almost by the day and the problem's particularly urgent, why leave room open in this climate where business is beating a path to your door and the Government's door, for two years of an early start, when that's really just treading water?

ROSS GARNAUT:

Well it's not really just treading water, but our first preference in the draft report is to move straight to the unconstrained scheme. But acknowledging that the changes we've seen in fossil fuel markets are not small changes, they

are of historic dimension, they may yet be so large that they are the – the critical factor in shifting some of the world's big economies of the northern hemisphere into recession.

They are having a mitigating effect. It prob...well it does mean that our emissions will be lower than they would have been in the Kyoto period. What we are saying is that a fixed price for the first couple of years would be a legitimate second best.

We point out the advantages of going straight to the unconstrained scheme. That all of the market processes and instruments get working more quickly. You – if it's unconstrained then although we're ahead of our – even if we are ahead of our Kyoto targets in the early period, there will be an incentive for firms to reduce emissions and to bank permits to use that later dates when they're [indistinct]. They're all advantages.

But it's not just trading water to have a scheme with a fixed price for the first couple of years. It's better than that. It's not the best. We'd say it's second best.

But it's not just trading water, because you get in place all of the compliance mechanisms. You begin the process of administration of the acquittal of permits. Under the scheme, every business emitting greenhouse gases will have to acquit a permit. There's administrative apparatus, there will be compliance

requirements within each business. You get those all working and you would reduce some of the uncertainties of the transition. There are costs and benefits. It's not treading water, but it is second best.

KEN RANDALL: Thank you very much.

[Applause]

KEN RANDALL: Ross Garnaut, thank you very much. A marathon session, but a fascinating one. His memento was the case there'll have to be another one soon.

ROSS GARNAUT: Okay.

KEN RANDALL: Thank you.

ROSS GARNAUT: Thanks.

[Applause]

* * **END** * *

TRANSCRIPT PRODUCED BY MEDIA MONITORS
target-monitor-analyse