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SENATE

STANDING COMMITTEE ON ECONOMICS

**Reference: Exposure drafts of the legislation to implement the Carbon Pollution
Reduction Scheme**

FRIDAY, 27 MARCH 2009

SYDNEY

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**SENATE STANDING COMMITTEE ON
ECONOMICS**

Friday, 27 March 2009

Members: Senator Hurley (*Chair*), Senator Eggleston (*Deputy Chair*), Senators Bushby, Cameron, Furner, Joyce, Pratt and Xenophon

Participating members: Senators Abetz, Adams, Back, Barnett, Bernardi, Bilyk, Birmingham, Mark Bishop, Boswell, Boyce, Brandis, Bob Brown, Carol Brown, Cash, Colbeck, Jacinta Collins, Coonan, Cormann, Crossin, Farrell, Feeney, Fielding, Fierravanti-Wells, Fifield, Fisher, Forshaw, Furner, Hanson-Young, Heffernan, Humphries, Hutchins, Johnston, Kroger, Ludlam, Lundy, Ian Macdonald, McEwen, McGauran, McLucas, Marshall, Mason, Milne, Minchin, Moore, Nash, O'Brien, Parry, Payne, Polley, Ronaldson, Ryan, Scullion, Siewert, Stephens, Sterle, Troeth, Trood, Williams and Wortley

Senators in attendance: Senators Bushby, Cameron, Furner, Hurley, Joyce, Pratt and Xenophon

Terms of reference for the inquiry:

To inquire into and report on:

Exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme

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Committee met at 8.38 am**NELSON, Mr Tim, Head of Carbon Analysis and Government Affairs, AGL Energy****SIMSHAUSER, Dr Paul, Chief Economist and Group General Manager Corporate Affairs, AGL Energy**

CHAIR (Senator Hurley)—I declare open this sixth hearing of the Senate Standing Committee on Economics inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme. On 11 March 2009 the Senate referred the exposure draft to the economics committee for inquiry. The draft reflects the government's white paper on climate change released in December. These documents affirm the government's commitment to a medium-term target range of reducing emissions by five per cent to 15 per cent of 2000 levels by 2020 and a long-term emissions reduction target of 60 per cent below 2000 levels by 2050.

The government has released six draft bills for public comment. The Carbon Pollution Reduction Scheme Bill 2009 is the main bill and covers the arrangements for the scheme. A second bill relates to the consequential amendments needed to the National Greenhouse and Energy Reporting Act 2007. The Australian Climate Change Regulatory Authority Bill 2009 will establish the authority that will administer the scheme. The remaining three bills are technical bills in case the charge for the permits issued is at some stage considered taxation. This inquiry will focus on issues relating to these bills. A separate Senate inquiry will consider aspects of climate change policy more generally. This committee is due to report to the Senate by 14 April 2009.

These are public proceedings, although the committee may agree to a request to have evidence heard in camera or may determine that certain evidence should be heard in camera. I remind all witnesses that in giving evidence to the committee they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee, and such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to a committee. If a witness objects to answering a question, they should state the grounds upon which the objection is taken and the committee will determine whether it will insist on an answer. If it does, a witness may request that the answer be given in camera. Such a request may also be made at any other time.

I welcome Mr Nelson and Dr Simshauser. Do you wish to make an opening statement?

Dr Simshauser—Yes, we do. If you don't mind, I will hand that over to Tim Nelson.

Mr Nelson—Thank you, Madam Chair. AGL is a strong supporter of the Carbon Pollution Reduction Scheme legislation. We believe it is critical that the scheme be implemented on time to provide investment certainty. Without regulatory certainty there will be delays in investment, and security of energy supply could be compromised in the medium term.

AGL is Australia's leading integrated energy company, with 3.2 million customer accounts. We have over 170 years of experience and we operate retail and merchant energy businesses; coal, gas and renewable power generation business; and an upstream gas portfolio. We are the largest private owner and operator of renewable energy assets, and we are looking to further

expand this position by exploring a suite of low-emission gas fired and renewable energy generation development opportunities.

There will be a number of impacts on AGL as a result of the implementation of the Carbon Pollution Reduction Scheme. These can be summarised as increased wholesale energy and compliance costs and investment incentives. AGL is Australia's largest retailer of electricity and gas. In 2007-08 the greenhouse gas emissions produced in association with the supply of AGL customers totalled 53.3 million tonnes. This is around 10 per cent of Australia's greenhouse gas emissions. While AGL will not be required to purchase AEU's for the predominance of those wholesale energy costs, those wholesale energy costs will change as carbon is priced into generator and gas producer decisions.

That said, AGL believes that energy efficiency is likely to play a significant role in minimising cost impacts on consumers. The South Australian and Victorian governments have already implemented residential energy efficiency schemes, and the New South Wales government is in the process of implementing a similar scheme. A national approach to energy efficiency policy is likely to provide significant benefits for residential, commercial and industrial consumers of energy.

In terms of investment incentives, the Carbon Pollution Reduction Scheme will provide investment certainty for new gas fired and renewable power projects. Power stations generally have asset lives of several decades, and certainty about their long-term prospects is vital to secure capital. The scheme will allow energy companies like AGL to integrate carbon pricing into business decision making and to invest in capital with these types of long asset lives.

We have already started putting in place systems and processes for managing these risks and opportunities. This is largely because emissions trading was an election commitment of both major parties in the lead-up to the 2007 Commonwealth election. AGL believes it would create significant regulatory uncertainty and sovereign risk if the proposed Carbon Pollution Reduction Scheme were not implemented.

There are two primary changes to the scheme that AGL believes may be considered by government to enhance investor certainty. These are the introduction of deferred settlement for liable parties as a transitional measure and an extension of assistance provided through the Electricity Sector Adjustment Scheme. With regard to deferred settlement, businesses with large carbon liabilities will be required to purchase Australian emission units to manage the risks associated with forward contracting of their products. As such, there is likely to be a significant increase in the working capital of many businesses. Given the current state of credit markets, there may actually be a barrier to businesses raising this working capital efficiently. Deferred settlement would be a mechanism for overcoming this short-term issue.

In summary, it is critical that the scheme be implemented as quickly as possible. There are already significant costs being imposed upon the community as a result of the uncertainty being created by the ongoing discussion about the scheme and its potential start date. Investors will not be able to proceed with new intermediate and baseload power station projects until the details of the scheme are finalised. As these projects have significant development time frames, it is critical that the scheme be finalised to allow companies like AGL to work towards providing a secure and stable energy supply for our customers.

CHAIR—Thank you, Mr Nelson. And thank you to AGL for your comprehensive submission. I have some more detailed questions, so if other members have general—

Senator BUSHBY—You may go into your detailed questions.

CHAIR—Right. Your submission to the green paper argues that the waste facilities and forestry should not be included. Can you elaborate a bit on these concerns.

Mr Nelson—Essentially the concerns we have with those sectors being covered are around measurement. We think that they are far better off being included in the scheme through an offset provision. That way, companies that are in a position with greater measurement of their facilities and that have been doing it for longer can then apply to the government to essentially have any emission reduction or abatement created through an offset provision.

CHAIR—You are saying just waste and forestry. What about other companies that may be in a position where they feel that they should benefit from this offset provision?

Mr Nelson—Essentially it is all about coverage. If the sector is covered there should be an implicit economic incentive to go about creating abatement because the increased costs that the business is incurring can be avoided by reducing emissions. Really, with the coverage of the waste sector, given the measurement uncertainties for some of the facilities—not all of the facilities—we thought that was an easier administrative way of making sure that sector received the same economic incentives as other sectors.

CHAIR—I am not quite certain how the offset would work in with the trading. How do you envisage that happening?

Mr Nelson—Essentially there would be no allocation or liability of permits for companies in that sector, but to the extent they could then go to the regulator and say, on a measured basis, ‘We have reduced our emissions by X tonnes,’ we are able to create Australian emission units—in a similar way to the reforestation provisions under the current bill.

CHAIR—Thank you for that. I also want to explore international links. I think your submission suggested they be restricted in the first years to provide more stability to the scheme. Professor Warwick McKibbin in Canberra was suggesting to the committee that that be a permanent feature, that we perhaps have a central independent system and that we do not have that kind of international trade. Do you see that that could be permanent or do you support the idea it should only be in the first years?

Dr Simshauser—In terms of international linkages, one of the things we see as quite an important feature of the current legislation is the ability to draw in CERs from abroad. That is obviously going to provide some degree of price stability. Linking into other markets could actually exacerbate volatility and we do not think that is a good thing. So I think we are probably on a very similar page to Professor McKibbin from that perspective. That is how we distinguish that.

CHAIR—As Professor McKibbin acknowledged, down the track, as more countries came into an emissions trading system it would be desirable for global companies to have some sort of

trade. I think he was suggesting that it would be through a central facility much like the Reserve Bank. Would you also support that kind of concept?

Dr Simshauser—This is along the lines of the independent carbon bank. There is some merit in that, in our opinion. We think it is a reasonably elegant solution in a way. I suppose we almost look at the CERs as the equivalent of that to try to create that stability. Our observation of what has occurred in the European Union is that you have had some very wild fluctuations in the price of carbon permits in that market. If that were the primary linkage to markets abroad it would more than likely run the risk of importing that same level of volatility into our markets. So we think that the approach that the legislation currently envisages, with an unlimited access to CER markets, is going to be the best way to dampen that risk of volatility of price, as distinct from the European Union, where there are quite definitive limits over how many CERs those countries can import. For example, the England and Wales market can only import I think nine per cent of CERs; that is the limit of the amount of CERs that they can bring in. Consequently, once you have exhausted that bucket, you are then having to deal within country for the balance of your compliance commitments, and that is where you run the risk of high levels of volatility. Volatility in a market like carbon will not be a good thing for anyone.

Senator BUSHBY—Thank you for coming along this morning. In your opening statement you referred to energy efficiency playing a big role, and you mentioned some of the measures that a couple of the states have made. We have seen a lot of talk recently—and I actually saw a gentleman from CHOICE on TV this morning repeat it—about how one of the problems with the current proposal is that, under the cap-and-trade system, if households do become more efficient, if they spend money on solar energy and put it back into the grid, that will reduce the ask overall for other players; it will reduce how much industry might have to reduce to meet their overall target. What are your thoughts about that aspect of the current legislation, given that you made the comment that energy efficiency at a household level will be important? If that is just going to be lost by industry taking it up, it is not really going to solve much, is it?

Dr Simshauser—Maybe I can answer that in two parts. I may not be directly answering your question, at great risk—I definitely will not lose it on the second part. We see energy efficiency as a really important part of the overall framework. If you look at any economy around the world trying to tackle climate change right now, they generally have a three-pronged approach. The first will be some form of emissions trading or a variant thereof, the second will be a renewable energy target—and there are good reasons as to why they sit side by side—and the third will be energy efficiency. It is critical that we try and exhaust all avenues to take on the task that we have in front of us. Insofar as energy efficiency making it easier for incumbent industry, my response would be that, if that is the case, it is more than likely going to be a transient issue. Over time, fundamentally, we all know where we need to get to, and we need to pull every lever we have at our disposal to get there. We cannot look at this as a three-, five- or 10-year issue. There is a very long glide path we have to try and tackle this over. If we go down one path and in the process it lightens the structural pain that is going to occur in other parts of the economy, I do not see that as a bad thing.

Senator BUSHBY—That last statement sums up your thinking: if that is the way the legislation is heading then that is part of the adjustment process, effectively.

Dr Simshauser—Correct. I think it is far better to try and get a balanced portfolio. Let's not focus on what will happen in the intervening three-year period; let's focus on where we are heading over a 50-year time frame. This is a long-term game that we are collectively trying to tackle. I do not accept that focusing on energy efficiency and lightening the load for others in industry is a terrible sensible argument to pursue in the context of a centennial issue.

Mr Nelson—Just to elaborate on that answer, households can take quite measured and strong action under the Carbon Pollution Reduction Scheme legislation as it stands by buying Australian emission units and voluntarily surrendering them. If a household want to create extra scarcity in the market, that is an option available to them.

Senator BUSHBY—They can, but that would obviously be at great personal sacrifice. That would be a good thing if people chose to do that. But, in terms of households doing their bit, any way you look at it, households becoming more efficient is a good thing, whether it is from a climate change perspective or otherwise. I think there is a body of thought among people who are doing that that they are doing their bit to lower emissions overall. If it is basically compensated by industry taking a slower route to the end point that Mr Simshauser was talking about, in the overall mix, that may well be part of the structural process, but it does not give a lot of incentive to households to do their bit and to make the investments in infrastructure that might help bring down emissions.

Dr Simshauser—I understand the argument. All I can say is that, whatever the structural path we go down, everything that people do will make a difference. Sitting back and using the argument of, 'Well, if I do this, it's just going to get swamped,' is the same as saying, 'Everything that Australia does gets overtaken by one of our northern neighbours sequentially.' It is just not a logical argument.

Senator BUSHBY—Surely the scheme as it is set up should provide incentives for people to take action. If you want to go out there and do your bit to help tackle the problem and by doing your bit, all you are doing is making it a take a little bit longer for industry to adjust, that takes out a bit of the incentive and a bit of the feel good factor out of doing your bit to help.

Mr Nelson—There are some pretty simple ways in which the legislation could be amended to take account of that. Essentially, for the targets that have been set for the first three financial years of the scheme, there could be a mechanism whereby any recognised action that is taken by households could be used to slightly adjust those targets. I do not see it as a problem which cannot be overcome given the current structure of the scheme.

Senator BUSHBY—I am pleased to hear that there are, in your view, ways to overcome that, because I think that that is a problem—particularly given, as you said, that energy efficiency should play a big role. But it may not play as big a role as it should if the incentive is not there.

Mr Simshauser—I will add to that point. I believe that any trade off, if that is what we can call it, that occurs in that space between energy efficiency and industry is only going to be transient at the end of the day. It is not as if their actions are going to be locked in stone and disregarded in perpetuity. As we go through and deal with our next gateway targets, everything that people do will ultimately be accounted for. Where you are heading to is the notion that industry will free ride off that. That will only be a transient issue.

Senator BUSHBY—But it will be a transient issue.

Mr Simshauser—That is right.

Senator BUSHBY—It will exist; it will occur. If, as you said, Mr Simshauser, we are trying to get all avenues of attacking the problem working together then this might undermine that aspect of it a little bit. But I will move on from there. In general, are you locked into long-term contracts or short-term contracts with your clients? How does your industry work?

Mr Simshauser—We have quite a big portfolio. It would be in general biased towards shorter term deals over one- to three-year time frames. However, an organisation our size has a vast number of very long running contracts as well.

Senator BUSHBY—The majority are short term. Given the length of time that there has been discussions about the likelihood of an emissions trading scheme, would that have been factored into the majority of the contracts that you have written in the last two or three years?

Mr Simshauser—Increasingly so. That is correct. A contract will have a price or a re-opener in it—one of the two.

Senator BUSHBY—With the longer term contracts, we have heard from other energy providers around the country—particularly from WA, where apparently the tendency is to do things on long-term contracts—that many of their contracts are 10- to 15-7 year contracts or even longer. They were written well before the ETS was around and there is no scope to incorporate the increased cost factor that may arise from it. Do you have any scope? On the whole, from what I heard from you just then, with most of your business being short term, you have the ability over a relatively short period to incorporate any increased costs.

Mr Simshauser—That is fair to say, yes.

Senator BUSHBY—You mentioned that there were two main changes that you would like to see to the contract. One was to do with the conservation of electricity. The other one was—

Mr Simshauser—Deferred settlement.

Senator BUSHBY—deferred settlement. How important are those changes to your support for the scheme?

Mr Simshauser—We see those two changes as very important. One of the things that, I guess, distinguishes the Australian model from what has transpired in the European Union—and I am dealing specifically with deferred settlement in the first instance—scheme. As I am sure you would be aware, there was a vast amount of free allocation. Consequently, for compliance purposes firms did not have large working capital requirements. They were not really required to participate greatly in auctions to procure their permits. Secondary trade was probably more convenient in fine tuning, rather than establishing vast compliance hedge books going forward. Obviously, that is not a good analogy for Australia. We are designing quite a different approach for a whole range of reasons.

That will bring with it a fairly sizeable requirement for working capital to deal with compliance. In any industry you tend not to be paid in advance; there is usually some delay. In the power market there is, in general, a six-week delay between the timing of the electrons being punched into the grid and the settlement of those at the wholesale level, and then at the retail level it can be as much as three months after the consumption point. So you will have this requirement for large working capital to establish your compliance positions. In the current environment we think that is going to be pretty tough. Again, we do not see it as a particularly difficult problem to solve. The analogy we put is that it is almost like the taxation system, where you would bid for your compliance position, those permits would be held in escrow or something similar and then drawn down and paid for once they are actually submitted for compliance, which would give you adequate time to establish your working capital position.

There is also the issue of whether the federal government would be taking on any credit risk. They would take on no more than they currently do with the taxation system. The other suggestion we would have in order to make sure that it is not something that would be a gain by industry is that, to the extent that people have bought positions intended for compliance and then subsequently opt to trade that position, they would need to basically settle their position before drawing down those certificates.

Senator BUSHBY—I want to come back to the overall question of the importance of the amendments to your support. If the government were to defer settlement, that would defer a lot of the money it would have received and used for compensation. For how long are you talking about deferring the settlements?

Dr Simshauser—Really, it would line up with either settlement in the industry or compliance settlement.

Mr Nelson—I think it is fair to say that, over time, as credit markets start to improve, the need for a deferred settlement mechanism will start to abate as markets become more used to dealing with the increased working capital requirements.

Senator BUSHBY—I think what you say makes a lot of sense but, looking at it from the perspective of government, they would need to start compensating from day one because prices will go up and they will not want to borrow more money because they have already borrowed a lot. How do you think the compensation for electricity needs to be changed?

Dr Simshauser—Our general view is that we believe that the impacts of the scheme will last longer than five years. I do not think that is a terribly contentious position, and I think most of the modelling work that has been done by the federal government points to that. It will really have an impact over a greater period of time so our suggestion is to extend the time frame rather than the volume over the first five-year period. Take the ESAS, which in its design is really quite adequate, it really is just the length of time and the volume of permits allocated in that.

One thing that stands out to us is that, by and large, black coal generators have missed out on that. The impact on black coal generators is expected to occur later than in southern Australia, where the impacts will be acute much earlier on in the scheme. So the general thrust of it is in the right direction, and we think it should be extended from five years to 10 years and going through the same process to do the measurement. We do not think it is feasible for us. We are

trying to be pragmatic about this but we do not think it is feasible to try to cram a bigger number into a five-year window, because all that will do is take an already exhausted pie and cut it up even more harshly than is already being done. We do not think that is a sensible policy option, but we do think that extending it from five to 10 years would be an important step. The Electricity Sector Adjustments Scheme is not a production subsidy. Plants will close down whatever the time frame, based on the fundamental and underlying economics of the power grid.

At the end of the day, behind this, as you recall, we are basically accounting for about 50 million tonnes of CO₂ directly or indirectly in our business and we are really talking now to the indirect exposure that we have. What this really is all about, from our perspective, is making sure that the counterparties that we deal with stay intact financially upfront so that they are able to make their transition out of the industry as rationally and smoothly as you can expect under the circumstances.

Senator BUSHBY—Regarding the two major changes you have just outlined—and I think you have given some fairly cogent reasons supporting your argument—what if those changes were not made? What impact would that have (1) on your support for the scheme and (2) on your industry?

Mr Nelson—In terms of the direct impact on AGL, neither of those changes that we have suggested are really going to benefit AGL directly. We are a business that has a strong balance sheet. We are in a much better position than most of the other players in our industry. The changes we have suggested are really to ensure that the transition is as seamless as possible. That is really the only benefit that AGL sees out of this—it is about providing that investment certainty. As to whether or not we would still support the scheme, we would support the scheme but we think that the ESAS should be reviewed at some point in the future.

Senator BUSHBY—But, as I understand it from what Dr Simshauser was saying, if the scheme went ahead without those changes it would have consequences for the energy market and potentially for the economy.

Dr Simshauser—It is fair to say that there will be impacts on generators of varying degrees as a result—that is correct. It is not really an electron issue per se. It is a balance sheet issue and the ability of those organisations to transition and move into a place where they can redirect their capital and build the next fleet of power stations, which presumably will be quite different from the fleet that we have at the moment.

Mr Nelson—On the balance of what has been put forward, given that the scheme is required for us to build the next fleet of generation, that is the primary objective for AGL—to get the regulatory certainty. To answer your question, we would still support the scheme.

Senator BUSHBY—The prime reason for your support for the scheme is that you want the regulatory certainty?

Mr Nelson—Without a doubt.

Dr Simshauser—Absolutely. Tim and I were talking last night. We do not know how many inquiries we have now been through dating back from 1999.

Senator BUSHBY—We are getting closer. This one is actually on the legislation!

Dr Simshauser—Which we greatly appreciate. I think we are inquired out! For us, we just really want to see rubber hitting the road because, really, any delays or further uncertainty around the process is going to make it very problematic for us going forward.

Senator FURNER—On the last statement you made, we have heard from others that we should actually defer the scheme and some have indicated that we should go to Copenhagen with no scheme whatsoever. In your opening statement, you mentioned the concern that delay would affect the security of energy supply and create uncertainty. What would be the consequences of not having a legislative framework in place this year for energy markets?

Dr Simshauser—Maybe I can answer this through an alternative scenario. Let's assume, for example, that the legislation is sent off to paper heaven and we just end up in a policy vacuum. Everyone out there knows something is going to come sooner or later, so it is still going to be priced into the marketplace in terms of the risk capital that people put on the ground. When we go and talk to bankers and to equity capital markets, they might say, 'We know there's nothing happening in the next year or two, but we know and you know that something is going to come sooner or later—it's just a matter of when. If you come to us and you want to invest in this wind farm or that gas fired generation plant, you need to actually put your assumptions in around emissions trading.' Then we go through that process of what we put in and, quite honestly, that is going to end up being a very elongated process. At the end of the day, the other side of the table is going to price that uncertainty—they have to price uncertainty—and every time you price uncertainty there is a risk that you will overprice it. If you start overpricing that risk you will see that manifest itself in higher electricity prices to consumers. Then you are starting to talk about a deadweight loss scenario.

Senator FURNER—So it is a domino effect right through business and consumers, basically.

Dr Simshauser—That is the risk, yes.

Senator FURNER—You have been operating in New South Wales for some time. I understand you have been dealing with climate change for at least the last decade. You have been operating under a scheme called the Greenhouse Gas Abatement Scheme. Since that scheme has been in place, how many energy companies or emissions intensive firms have either shut down or relocated, citing this New South Wales scheme as the reason behind their moving out of the state?

Mr Nelson—My understanding is none.

Senator FURNER—It had no effect whatsoever?

Mr Nelson—There has been no industry that I am aware of that has relocated on the back of the GGAS.

Dr Simshauser—In fact, in my former lives in the industry, at utilities in both Queensland and South Australia, it actually generated investment in the plant. Millions of dollars were committed to existing power stations to increase efficiency because there was an opportunity for

those businesses to respond to that policy setting, reduce greenhouse gas emissions and make a dollar out of it.

Senator FURNER—Does the sign of the CPRS show that we have learnt lessons from the New South Wales scheme, do you think?

Mr Nelson—Without a doubt. I think most people in the industry have been looking at these issues for as long as we have. We would say that the CPRS represents, in our view, a very well-designed scheme based around cap and trade, which is, as far as I can tell talking to people both within Australia and internationally, universally regarded as the best way of dealing with this public policy issue.

Dr Simshauser—If I can add to that, one of the things that we believe was a very elegant part of the design was the unlimited CERs. We think that is the thing that is going to bring the price stability that the European scheme is lacking and that is a very desirable part of the scheme, trying to create some sort of price stability in a commodity market. I should just add: the national electricity market is the world's riskiest market. There is no commodity. It is a very little known fact, but it is the world's riskiest market. Players like Origin and AGL are the biggest players in that market. We do not really need risk added to that already risky market, so we think that that CER part of the framework is quite important to try to assist companies transitioning.

Senator FURNER—And what parts of your generation portfolio do you think will do well out of carbon price?

Mr Nelson—Without a doubt, the renewable generators that we have within our portfolio—the gas-fired generators. To give you a feel for that, we own 645 megawatts of hydrogeneration assets. We own the Torrens Island Power Station in South Australia and the Somerton peaking plant in Victoria. Without a doubt, those assets that have a lower emissions intensity than the market average will benefit under the CPRS.

Senator XENOPHON—Further to Senator Furner's questions about GGAS, you have said that it has not caused any impact on investment. I think that is a given. But do you see GGAS and this scheme as being similar in their scope? One was a baseline and credit scheme; this scheme is quite different.

Dr Simshauser—You are right; you have touched on an important point. There is a design difference between GGAS and a cap-and-trade scheme.

Senator XENOPHON—It is a fundamental design difference, isn't it.

Dr Simshauser—That is correct. The GGAS was important in some respects as a transitional measure. It was a well thought out scheme in the context of the environment that industry was facing. If we were to go down a baseline and credit scheme for emissions trading more generally across the economy as a template, it would bring some problems with it because, fundamentally, if we are going to pursue that, ultimately you will still want to set a cap in place.

Senator XENOPHON—Can I just indicate I am not supporting it based on a credit scheme, but there are fundamental design differences. I think Danny Price from Frontier Economics, who

was responsible for designing and implementing the scheme for the Carr government, was quite critical of the current cap and trade. Is your main concern one of certainty rather than scheme design? You have not been so much focused on the scheme design, per se, as the need to have some investment certainty with whatever scheme is in place. Is that fair in terms of your emphasis of AGL's point of view?

Mr Nelson—Senator, without a doubt the CPRS from our perspective is preferable for providing regulatory certainty. In any type of baseline and credit scheme the big problem from a company that will be operating in the market's perspective is the lack of transparency because for every single sector a baseline has to be set. So rather than being able to operate on an aggregate supply and demand basis it is very, very difficult to work out where emission reductions will be coming from on the basis of data as it is flowing through. From our perspective and from most of the entities that we talk to in the market today—those being the electricity and the gas markets—are of the view that the CPRS represents a more superior design from their perspective.

Senator XENOPHON—But there is no reason why you could not incorporate elements of both in terms of having a baseline intensity and also having a cap and trade. You can have a hybrid; it is not impossible.

Dr Simshauser—That is correct. Technically you could design a scheme like that, Senator.

Senator XENOPHON—In terms of AGL's position that supports this, you have a lot of gas to sell, so obviously that is good for you because it is less energy intensive. That is correct in terms of advocacy of the scheme?

Dr Simshauser—Yes.

Senator XENOPHON—You also get the most compensation for the Loy Yang power station. Is that yours as well?

Mr Nelson—We own an equity share of 32.5 per cent of it.

Senator XENOPHON—A significant share, but you get a fair wad of compensation because it is a brown coal generator, is that right?

Mr Nelson—Indirectly, yes. We have an undertaking with the ACCC that we are not allowed to talk with Loy Yang about those types of matters regarding price.

Senator XENOPHON—It is not a criticism. You will get a fair wad of compensation indirectly with Loy Yang. In terms of your retail arm you also get a percentage of the price. That is how it is structured in terms of your cost structures or your profit structures? Again, it is not a criticism.

Mr Nelson—Actually most of our residential customers are still on regulated tariffs. Our ability to pass through costs is essentially determined by the regulator.

Senator XENOPHON—But your commercial customers, your business customers, that is not the case though, is it?

Mr Nelson—It is a competitive market, yes.

Senator XENOPHON—If prices go up, presumably your income will go up by virtue of that simple function?

Dr Simshauser—Income will go up but only gross income not net income. Our expectation is that this price of carbon will come in as a revenue line, but it will also go out as a cost line. We certainly do not have any forecast inside AGL that is predicting some sort of profit-take out of emissions trading as a result of rising prices to consumers. As we mentioned earlier we are facing about \$1 billion worth per annum. If you take \$20 or \$25 a tonne in terms of increased costs, we expect that our revenues will go up by the exact same amount.

Senator XENOPHON—You are bound to pass on your unregulated charges to industry though, won't you? You are not constrained in the same way, apart from competition?

Mr Nelson—You are right. Competition is the constraint.

Senator XENOPHON—Finally, I think Senator Hurley asked you about the issue of waste facilities in forestry and you argued about them not being included in the CPRS, then you said there were measurement issues. Is that something that is insurmountable in terms of dealing with those measurement issues, because I know that the waste industry is quite concerned about the way they are being treated under the current scheme?

Mr Nelson—It is a time frame issue really. Essentially how quickly can we get to the point where, for every waste facility that would be covered, you would be confident in the accuracy of the emissions. In terms of the overall scheme of things I think waste is about 15 million tonnes out of the broader economy. It is very much an issue for the people in the waste sector but in terms of the broader impacts on the economy, I think you would say that it is pretty limited.

Senator XENOPHON—You have talked about GGAS. Do you think GGAS could work on a national basis with some modification to take into account the concerns you have raised?

Mr Nelson—There is one fundamental difference with GGAS and the CPRS, which I do not think can be overcome unless you redesign GGAS, and that is GGAS's targets are on an intensity per capita basis. To get an absolute emission reduction target as proposed with the CPRS you would have to change the end objective of GGAS. Could all of the other elements of GGAS work at a national level? I think, without a doubt, they could. Would they be as efficient as the CPRS? In our view, no.

Senator XENOPHON—You could change the objective though, couldn't you?

Mr Nelson—Yes.

Dr Simshauser—But I believe that if you change the objective there would be two consequences of a baseline and credit, or a variant thereof, in the place of a cap-and-trade

system. What the baseline and credit will do, theoretically at least, is suppress the price relative to a cap and trade, the reason being that obviously if you are under the cap you are a net seller and if you are over the cap you are a net buyer for that increment. That is what we see as the benefit in lowering the price.

Senator XENOPHON—It changes the merit order, does it?

Dr Simshauser—That is correct. The flip side of that is that that is going to make the task of demand side abatement much tougher because you have now suppressed the clearing price of commodity plus emissions. So, all things being equal, if you have a lower price you have less incentive for the demand side.

Senator XENOPHON—But you could go for a tougher target, couldn't you?

Dr Simshauser—Yes, you could.

Senator XENOPHON—That is the flip side of it, is it?

Dr Simshauser—Let's go down the path of a tougher target. If you lower the greenhouse intensity my sense is that southern Australian power stations will be bankrupt about five times faster because there is no money to deal with the structural adjustment issue; there is no pool created to do so. That is going to be a very acute issue for South Australia and Victoria. That is the only downside I can see with the baseline and credit. It is very good for New South Wales, Queensland and Western Australia. I believe that all of those states will fare reasonably well out of it, but my one concern with a baseline and credit and a more aggressive sort of baseline is that there is a great risk that it will accelerate the damage to southern Australian power stations.

The reason is that in Australia the dispersion of emission intensities of our power plant is so vast. We are not congested around a central mean. For example, if you take Playford power station in South Australia and Hazelwood in Victoria, they are almost four times higher in intensity than a combined cycle gas plant, so the task of adjustment for those businesses becomes much tougher because there is no ability for them to deal with transition. I am not talking about holding the plant for an artificially longer period in the market place. It is just how those firms transition themselves out and replace their capacity with cleaner technologies. That is the only concern I have about a baseline and credit scheme. It is the one issue that I have never been able to get clear in my head or solve the problem of.

CHAIR—There is a question on notice from Senator Cameron.

Senator CAMERON—I have a couple of questions. Could you give us your view on the proposition by Colonial First State that for every dollar of carbon risk there is a dollar of carbon opportunity. I would like to hear your views on that. The other question is about the feelgood factor. What is more important: getting a feelgood factor for everyone in the country or taking the economic and environmental decisions in the interests of the country? You also spoke about having regulatory certainty and, if you did not get that, there being security of supply issues. I suppose the South Australian example is one of the examples. Are there any other examples where, if you do not get this regulatory certainty, the security of supply could be affected? That is a huge issue from my perspective.

CHAIR—If you could give a written submission to the committee secretariat, that would be good.

Dr Simshauser—That will be fine, Chair. We will be sure to do that.

CHAIR—Thank you for your evidence here this morning. I call Mr Paul Curnow.

[9.24 am]

CURNOW, Mr Paul Henry, Private capacity

CHAIR—Good morning, Mr Curnow. Would you like to make an opening statement?

Mr Curnow—Yes, thank you. I am a partner in the global climate change practice of the international law firm of Baker and McKenzie and I have been specialising in the area of climate change for the last 10 years, having worked on all areas of climate change law, advising on the design and implementation of emissions trading schemes and the establishment of some of the world's first dedicated carbon funds as well as advising on hundreds of Australian cross-border carbon transactions across mandatory and voluntary markets, including projects under the clean development mechanism as well as many forestry offset projects under Greenhouse Friendly and the New South Wales Greenhouse Gas Abatement Scheme. As someone with this breadth and depth of experience in carbon markets for many years and who had involvement in some of the very first markets, I feel well placed to share with the committee my thoughts and observations on the government's proposed Carbon Pollution Reduction Scheme and the draft legislation implementing scheme.

In terms of that scheme, I would like to make a few introductory key points. The CPRS is a well-designed cap-and-trade scheme that places Australia on par with the international efforts. The European Union has had an emissions trading scheme in place its 2005. New Zealand has legislation for an ETS in place. Japan is now planning a mandatory scheme. The US has had a number of subnational schemes for a few years, and of course the Obama administration has indicated its intention to put in place a national cap-and-trade scheme. We should not forget that all the larger developing countries also have a number of domestic policies and measures in place to reduce their greenhouse gas emissions, including, for example, renewable energy efficiency targets in countries like India and China as well as hosting CDM projects.

The choice of cap and trade in scheme design is also on par with international efforts. All of these countries are considering cap and trade and not carbon taxes, baseline credit or intensity based targets. This is important because, if Australia were to choose a different scheme design to cap and trade, we would have the same problems as we do with different rail gauges across the country—incompatibility to link, with greater transaction costs, which would ultimately mean greater compliance costs for Australian business.

It is critical that the legislation implementing scheme be passed as soon as possible and without delay. You will no doubt hear and probably have heard from many organisations appearing before the committee that giving certainty to business is critical in ensuring the transition to a low-carbon economy in a way that avoids adjustment shocks and allows Australia to play its part internationally in a least cost way. Having advised many businesses on scheme design, and many of those will be affected as liable entities as well as the market-makers, I can echo these comments. Even some of our clients who do not fully agree with the government's scheme policy or design are now starting to realise that they still need some policy certainty in order to move ahead with key investment and operating decisions. For this reason, it is important

that scheme legislation be passed soon so that the implementation timetable for a July 2010 start can be maintained.

The system of caps and gateways is an innovative way to provide policy certainty to industry and business. The ability to set longer term gateways, up to 10 years after five-yearly caps, is critical in giving industry and business longer term policy certainty to plan and invest for longer term climate change action. But, at the same time, this system gives the government flexibility in setting the emissions levels to take account of Australia's economic circumstances, what progress is being made internationally to a post-2012 framework as well as what the science tells us in about reductions required to avoid dangerous climate change.

The ability to link internationally under the scheme by bringing in eligible international Kyoto units and over time by allowing Australian units to be sold into overseas markets is also an important aspect of the scheme's design. Global warming is an international problem with global causes and consequences. One tonne of CO₂ emitted anywhere in the world has the same cumulative effect as another tonne emitted somewhere else. Similarly, one tonne of CO₂ reduced anywhere in the world has the same cumulative benefit as another tonne reduced anywhere else in the world. This is why global action is imperative on climate change and imperative in the context of Australian implementing its own scheme. Allowing linking between schemes is the way in which governments and businesses will be able to build up global action and, importantly, this linking of schemes allows the global community and Australia to reduce emissions most efficiently and at least cost. Even though the international negotiations on a post-2012 framework will take the a few more years, global action is proceeding through the growing number of domestic emissions trading schemes and the way that they will increasingly link to each other from the bottom up. This is not just developed countries. Developing countries like South Africa, Mexico and South Korea are considering implementing their own emissions trading schemes to link up globally.

CHAIR—Thank you, Mr Curnow. Following on from that, you were talking about the linkages of schemes internationally. Professor Warwick McKibbin on Wednesday talked about shielding Australia from that international market. He said it might lead to increased volatility in the Australian market. So he proposes a kind of hybrid scheme whereby there would be a central body that would deal with the international markets. Do you think that is a realistic proposition given what you have said?

Mr Curnow—I do not see the need for that sort of body or entity to regulate that. I think the volatility is something that at the moment really goes, if you look at the European scheme, much more to the broader financial environment and the economic environment and I guess to some extent to the issue of scheme design in Europe. A lot of the selling off of permits there really is a result of the allocation process in Europe, where there is allocation on the basis of production, and mostly freely allocated, and so much so that there is some overallocation because of the decline in economic activity, which has allowed a short-selling of those permits. With respect to the issue around linking, the way the government has proposed to ban exporting for the first five years is really the way in which you would deal with that price volatility, because that puts some downward pressure on price in that, once there is full exporting and importing, to some extent we will be looking to the global price as far as what sets the Australian price. Having a ban on exporting for the first five years would put some downward pressure on that price.

CHAIR—Thank you. You mentioned that the allocation was one of the problems with the European system. Are there any other key problems that you can see in terms of that cap-and-trade system?

Mr Curnow—I think really that was probably a fundamental issue. It explains a lot of the price activity over the last few years in the European scheme. It relates very much to that allocation process. Without a large amount of auctioning—it was probably only up to five per cent in total—there was no real price discovery at the start of the scheme, so I guess for a while that was played out in the markets, which is why we saw some volatility there. The crash that people are aware of a couple of years ago was really the market doing its job. It was reacting to supply and demand. There was oversupply because there was overallocation, so the price dropped. I think a lot of the issues around price in Europe have really gone back to that process of allocation. Bear in mind that that was in the first phase, which was always intended as a pilot phase under the European scheme. Phase 2 of that scheme, which started last year and goes through to 2012, by all accounts will be short, so there will not be overallocation. There has been a lot more scrutiny in the national allocation plans that have been set at the member state levels to make sure that there will not be a repeat of that overallocation.

CHAIR—Do you think the current proposal by the Australian government for allocation is adequate, that it overcomes some of these problems?

Mr Curnow—Yes, I think compared to other schemes, the proposed Australian scheme has a much higher level of auctioning of the total number of units that would be put into the system compared to others. I think that is an important element in terms of allowing early price discovery for the market, particularly in order to build that liquidity and allow the intermediaries and the market-makers to come into that market.

CHAIR—Do you expect a vigorous market in secondary trading to develop in the CPRS?

Mr Curnow—Absolutely. We have seen that already in Europe with the European scheme around the linking of the project based credits from the Kyoto protocol into that scheme and we have seen that across other countries even where there are not formal trading schemes, like in Japan, who are big purchasers of CDM and JI credits globally. The market has responded to that as markets do in terms of setting up the range of derivative products that will build that secondary market as well as I guess the infrastructure. So in Europe, for example, you have trading that is done on a forward basis, over-the-counter trades as well as futures trading, on the various exchanges. Those are obviously growing by the day as that market grows.

CHAIR—I suppose people are now very aware of derivatives and other instruments of secondary markets. Do you see any problems developing in that kind of market?

Mr Curnow—There is discussion about how quickly the secondary market will move to what you might describe as a securitisation of the various carbon credits. A carbon credit is not like any other commodity on which derivatives are based; it does have its differences. That is also why, in linking, compatibility of schemes is important, because it means you avoid that difference across different types of credits, which allows for a much easier flow in a global market. There will be some limitations around achieving that level of securitisation over carbon

credits in the secondary market because of the fact that you have different qualitative and quantitative limits placed, to some extent, in different schemes.

Senator BUSHBY—In your opening statement you went through a list of other countries that are also looking at ETSs and the actions that they are taking internationally. But it is fair to say, isn't it, that the ETSs that each of those countries are looking at are all different to some extent? Most of them are cap and trade.

Mr Curnow—They are cap and trade.

Senator BUSHBY—And within that, there are a lot of variations as to how they are applying it.

Mr Curnow—That is right. The thing to remember is that you will get differences at a domestic level in terms of looking perhaps at what gases are covered, what sectors are covered, how you allocate permits—all of those key scheme design issues. To some extent that is not as important to the linking, because it goes to how within those schemes there may be a surplus or the markets may be long or short, depending how broad they are and how the allocation has been done. The key thing around linking is that there has to be that compatibility in being able to account for the transfer of permits from one system to another, so that you do not get double counting in the system or gaps in the system, from an environmental point of view.

Senator BUSHBY—But the bottom line is that each of those nations that may well consider it will look at their own domestic circumstances, and the political pressures, environmental pressures and economic pressures they may be under, to try and design a cap-and-trade scheme that will work best within their economy but will then plug into the international—

Mr Curnow—Yes.

Senator BUSHBY—Presumably in Australia the government has looked at the issues, and the proposal that we are looking at today is based on Australia's peculiarities.

Mr Curnow—I cannot speak for the government, but my understanding is that there has been a lot of analysis of other schemes, particularly the European scheme, to learn from how they were set up initially. I think this scheme presents a lot of innovative things and others will learn from Australia—things like the obligation transfer number system. I think that presents a lot of opportunity for other countries who want to have a broad coverage and give flexibility as to where that liability is placed, particularly when you bring in transport. There is also the inclusion of forestry and the whole methodologies around that. So there are a number of innovative aspects here that I think others will learn from.

Senator BUSHBY—So, as you say, there are new measures in this ETS that may not be in other ETSs. But the bottom line is that, in setting up a cap-and-trade scheme, a government has a lot of options. In terms of the design there are a lot of things that a designer can look at and make decisions while still aiming to achieve the desired outcome. There are a lot of things that you can do differently in setting up a cap-and-trade scheme to reach that point.

Mr Curnow—Certainly, there will be differences. But I would argue that, when you analyse the various cap-and-trade schemes put in place, they really will not differ that much. They will differ really only in terms of how broad their coverage is and how you initially allocate the units.

Senator BUSHBY—And the compensation issues.

Mr Curnow—Of course there is compensation, which—

Senator BUSHBY—And how they deal with that as part of the scheme, when looking at the whole scheme and the way it works.

Mr Curnow—Yes.

Senator BUSHBY—So there are a lot of choices they can make. The government has gone for the approach that it has taken. As you note, there are some new measures in there, which in your opinion are good ones, but they could have and could still make other decisions to do some things differently—

Mr Curnow—Absolutely. There is always room to—

Senator BUSHBY—while still delivering an ETS based on a cap-and trade model.

Mr Curnow—That is right. There is probably not a lot that you could add to this scheme that has not probably already been thought of as far as types of design features go. To my mind, the way that you would tinker with this scheme would be more around the existing components, such as allocation, coverage—

Senator BUSHBY—A lot of the evidence that we are receiving from affected stakeholders around the country is on doing those sorts of things differently. That is one of the reasons why we are here. You also stated that it is critical that the legislation be passed without delay—those were your words. Then you went on to say that certainty is needed for business and that even those who do not agree with the need for the scheme are still calling for certainty. Is the certainty that is required the passing of the legislation and the setting up of the frame work so that businesses know exactly what they are going to be dealing with or is it the start date? If the legislation was passed today, and they knew exactly what it was, does it matter whether it is starting in 2010, 2012 or some other time—apart from the environmental concerns?

Mr Curnow—It depends. It would certainly depend on where you sit in terms of your type of business. If you are sitting on refinancing or reinvestment decisions, things are lined up and you have made an assumption that things would start on 1 July 2010 and you have factored in the price and then there is a delay, there is going to be a cost to you. Certainly a number of business that we have spoken to would be in that situation. There are others who are going to have a large liability under the scheme who would want one or two years of extra time to get ready for the scheme as a benefit. Realistic, that partly depends on where you sit as far as your—

Senator BUSHBY—But the bottom line is that what your clients in particular would like to know is the regulatory frame work that they will have to deal with. The sooner that that is in

place the better. There are varying considerations as to what impacts the implementation date might have on your clients.

Mr Curnow—Having observed this, my sense is that perhaps in only the last three months there has been a growing consensus around the fact that we need that certainty in terms of the legislation being passed so that there is certainty around the scheme commencing. Then there is some divergence of views as to whether that should be 1 July 2010 or one year later. From a personal perspective and after observing how these markets work, delay in the longer run is just going to lead to higher costs for a lot of businesses. The early start date is there to give industry the full period in which to meet the required target.

Senator BUSHBY—I have one final question on that before I move on to another issue. If the scheme contains some flaws—there are issues with certain businesses or there are issues with the way it might apply—is it better to get that right before you implement it or is the certainty of knowing what they are dealing with more important?

Mr Curnow—It depends what flaws you had in mind. It depends on whether we are talking about details that would probably be the subject of regulation—and a lot of it will be. Bear in mind that a lot of the detail here, not from a macro policy point of view but the more technical aspects, will be laid out in regulation. That makes sense in terms of providing time to work out the technical layer of this scheme. To the extent that there are no fundamental flaw in the broad scheme coverage, you would want that passed because that would give certainty.

Senator BUSHBY—You are in a group within Baker and McKenzie which works on the provision of legal advice on climate change. How long as that been set up?

Mr Curnow—We set up this practice about 10 years ago at a global level.

Senator BUSHBY—How long has it been going in Australia?

Mr Curnow—In Australia, 10 years as well.

Senator BUSHBY—Do you envisage that there will be a great need for business, both large and small, to obtain legal advice around their obligations under the legislation as proposed at the moment?

Mr Curnow—Yes, I think that is right. I say that from current experience. We are certainly advising a range of clients on the draft legislation as well as the scheme more broadly. But you would expect that, mainly because you have a new piece of legislation that is putting in a new regulatory regime. People obviously want to make sure that they understand it, what their obligations are and the broader commercial implications of how you deal with the carbon pass-through—what that means for existing and future contracts and all those sorts of issues.

Senator BUSHBY—This line of questioning is not intended to reflect on you and I. Good on you—if you see an opportunity for business and you take it, that is good. What I am interested in is the obligations that it is going to place on business in addition to the direct costs that will arise as part of an intended consequence of the legislation, to shift people away from emissions intensive activities. There will be a lot of compliance costs and, as you just indicated, all

business who are affected will need to understand their legal obligations under this regulatory framework once it is in place. Those obligations will be new and different to what a lot of them are used to.

Mr Curnow—That is right. But I would add that I do not think advice around understanding those would go on indefinitely. I think there would be a period after which you would expect people seeking that advice to understand it. Once you got your reporting systems in place and worked out your liability, I think that could quite quickly be absorbed into an organisation as an internal function which companies did as they do for other areas of compliance or even the trading side of things. Over time you would see the resources built internally, after which the transaction costs around legal advice or whatever would certainly be lower.

Senator BUSHBY—I do not want you to disclose anything protected by legal privilege, but have any of your clients raised issues regarding the timing of this in terms of their competitors in other countries not having to wear the same issues?

Mr Curnow—Yes. A number of clients have raised the issue and a concern around that, to the extent they fall within the category of emissions intensive trade exposed industries. I have noticed in the last few months that that is still a concern and the focus is on the current process of working out the definition activities from the basis of the compensation package as a way to deal with that, as opposed to delaying the scheme indefinitely. That is, I guess, the key issue for them. I think that comes back to your earlier point—

Senator BUSHBY—The lesser of two evils, effectively.

Mr Curnow—Perhaps. I cannot speak for them on that.

Senator XENOPHON—Mr Curnow, you said that you do not want us to go down the path of the old narrow gauge, standard gauge and broad gauge railways, so we need to have a system that meshes. But, as long as there is a basic cap-and-trade framework, there can be variations on a theme, can't there—as long as there are emissions permits to trade and there is a trading mechanism in place?

Mr Curnow—Yes. As long as you have a fungible, permanent standard. It is all based on one tonne of carbon dioxide equivalent, across the Kyoto gases. That is what that represents. At a very rudimentary level, as well as the infrastructure, that is probably the most you need to transfer between two systems—a way for recording an export of one permit for another, inputting that into another, and finding out what that means for that system. I think, as they start to diverge more, it is likely you will have more technical questions around the way that they link. Also, importantly, there are political limitations; you are perhaps going to see more reluctance by countries to link two schemes which they feel are too different.

Senator XENOPHON—The fungible, the permit, that is the key to it though, isn't it, if it is a CO2 equivalent?

Mr Curnow—Yes, that is a fundamental, but if you do not have the political support to actually link the schemes then you could still have compatible units.

Senator XENOPHON—Can I ask you about Europe? I think it may have been touched on earlier that the European scheme is now A\$25 in the permit price Euro equivalent. The price then plunged to as little as \$7 not so long ago. What can we learn from that, and what similarities are there with the Australian scheme so that we will not get that enormous volatility which does not give price certainty for renewables?

Mr Curnow—It has been an interesting thing to watch that price in Europe and the recent drop. If you look at the market fundamentals for Europe, the price should be twice as much, if not three times, according to some analysts.

Senator XENOPHON—What does that mean? You say it is the market fundamentals. Does that mean there is a market failure in terms of that particular scheme?

Mr Curnow—I think you have behaviour in the market there which is going against those fundamentals. I think that is being driven at the moment by the fact that people are using permits as a way to raise cash by selling them off. That really does go against the market fundamentals that you have unlimited banking in the European scheme from phase 2 to phase 3. The Europeans have unilaterally extended their scheme out to 2020 irrespective of what happens internationally. You have a longer-term target with unlimited banking and that really should imply that you would be not selling those off now; you would be holding onto those. The other key thing there is that the market will be short in this phase because the European Commission was much tighter in the allocation of permits through the member states and their national allocation plans. If it is projected to be short, goes up to 2020 and there is unlimited banking, you would expect the price to be a lot higher than it is. I think what has happened is you have people selling off permits as a way of raising cash.

The other issue is that they are able to do that because of the allocation rules of Europe which basically meant that for a temporary shutdown you do not have to surrender those credits or those permits; only for permanent shutdowns. So for two weeks if there is less economic activity and output, I guess, that is freeing up permits of some liable entities, who are then able to sell those off. That increase in sale and supply in the system has led to that price dropping.

Senator CAMERON—Both Senator Bushby and Senator Xenophon have put certain positions to you. Has anything that may have arisen from those positions changed your view that the CPRS is well designed and on par with international developments?

Mr Curnow—My view is that it is well designed, particularly because it has some very innovative features as I mentioned. From the work I do in various markets, I think, it is certainly on par. Of course we have not seen what the US has in mind as their potential cap-and-trade scheme, but my understanding is that there are already going to be discussions between the Australian government and the US government to look at what they might learn from our scheme.

Senator CAMERON—One of those innovative initiatives is the clean development mechanism. There has been some criticism that we should not be buying emission reductions offshore. What is your view on that?

Mr Curnow—My view is that you want full linking and that will take a few years because we are in a process of other countries setting up their own domestic schemes. You obviously have full linking at the sovereign state level between Kyoto parties, those who are parties to the protocol, but at the domestic emissions trading level we do not have the full linking, which I would view as important over time. The reason for that is that it opens up the opportunity to achieve the lowest cost abatement, wherever that might be achieved globally, given that it has the same impact wherever that is undertaken.

The CDM in that context is really what was at the core of including that originally under Kyoto—it allowed emissions activities to be undertaken in developing countries, where I guess the cost of abatement is less than developed countries, and developed countries could use those units towards their compliance targets. So in that context I think the linking of the ability to bring CERs into the Australian scheme is important. It also of course allows Australian companies to connect to those projects in offering services and technologies that we might have in those projects. I think the other important thing about the CDM is that at the moment that is the key way in which developing countries are engaged on climate change—that is the way that they are learning how you reduce emissions, how you report those emissions and how you account for those emissions. I think it has been a way to actually focus them around taking domestic action.

So I think, in all of those contexts, including CERs in the Australian scheme is important. There has been some criticism about that potentially meaning that Australia could achieve its entire target with offshore permits. I think in reality that would never happen for a number of reasons. We are only one buyer in the global market for CERs and while at the moment the price in Europe has dropped I think it will go back up in the next couple of years. So the ability to bring in CERs will always be a function of what the global price for that is compared to the Australian price. The other reality is that, being a project based mechanism, you do not necessarily have certainty of delivery—the output from those projects may vary and so the number of CERs actually generated may be different to what people imagine it is at the moment. There was a figure quoted at one point of 1.6 billion CERs. That is what is in the pipeline not what has been issued at the moment, so that is what is coming down the pipeline. Most of that has already been forward sold—mostly to European and Japanese buyers—so the probability of Australia getting all of those CERs and bringing them in to meet our entire compliance obligation I think is highly unlikely.

Senator CAMERON—How would you deal with the criticism that we are going too far ahead of everyone else, that this is not the right economic climate and that no-one else is doing anything like what we are doing? You raised the issue of China and India actually taking emissions abatement steps. Could you give me a flavour for how you feel about that?

Mr Curnow—I think it is fair to say that the Australian scheme would be the most comprehensive emissions trading scheme—mainly really because of its coverage more than anything else. I think every scheme that comes along after another will to some extent be more comprehensive because people will learn from what others have been doing. Certainly the coverage of the Australian scheme, as far as domestic schemes go, is broader than others. But Australia is not really ahead of where other countries are at or will soon be at in terms of putting in a domestic emissions trading scheme. I think the other thing to remember is that very few

countries are looking at putting in domestic schemes which they are then going to quarantine from the global market. So a sense of linking those is what we are seeing in those places.

In terms of China, India and the like, certainly there are no broad national schemes in China or India as far as baseline and credit or cap and trade or sectoral or anything like that goes, but obviously that is one of the areas for discussion internationally—potentially having sectoral targets for countries like China and India. I think the notion that developing countries are not doing anything is just incorrect. If you go to China, you will see that obviously they have a lot to do in terms of reducing their emissions—but they have a mandatory renewable energy target of 20 per cent by 2015, I think it is; they have energy efficiency targets; and they have a whole range of measures around reducing emissions which, while not at a national cap level, are policies and measures that are being implemented. We see that across a number of those countries.

Senator CAMERON—Are you aware of the work of Frontier Economics and Danny Price in terms of the baseline and credit approach of emissions intensity?

Mr Curnow—Not in any detail. I am aware of baseline and credit schemes, having worked on New South Wales greenhouse gas projects, and of course the CDM is a baseline and credit scheme. It is in itself a baseline and credit scheme which brings credits into a cap-and-trade system.

Senator CAMERON—Can you advise us what you think would be the lost opportunities if we do not move quickly on this scheme?

Mr Curnow—I think a failure to have the legislation passed, and I guess not having certainty in terms of what the policy position is going to be, would have a large impact on current investment decisions—and not even just in terms of long-term competitiveness but also existing investment decisions that impact within the country. You are going to have potential significant losses there. You have probably already heard about the fact that in the electricity market there is no forward pricing beyond 2012-2013 because people are unsure about what the price is going to be. Delay in that context obviously means that you are going to get significant issues in the electricity sector. That is just one example. So I think delay really leaves all sorts of industries from all sides—whether they be trade exposed or strongly affected through to the market makers and the financial intermediaries, those who are actually going to be financing these projects—in a position where they are really not sure how they go about making their investment decisions. So I think there is a significant cost there the longer that is delayed.

CHAIR—Thank you.

Proceedings suspended from 10.02 am to 10.16 am

HERD, Ms Emma Louise, Director Emissions and Environment, Westpac

ROUSEL, Mr Geoff, Executive Director, Global Head Commodities, Carbon and Energy, Westpac

CHAIR—I understand that Senator Pratt is joining us via teleconference from Western Australia.

Senator PRATT—That is right.

CHAIR—I welcome the witnesses from Westpac. Do you wish to make an opening statement?

Mr Rousel—Yes, we do.

CHAIR—Please go ahead.

Mr Rousel—We would like to start by thanking the committee for the opportunity to appear today to discuss the draft CPRS legislation. Westpac's environmental credentials extend back more than 15 years. Over that time we have reduced our own emissions by over 40 per cent through energy and resource efficiency measures. Last year we committed to a further reduction of 30 per cent under a new five-year climate strategy. Having long accepted the scientific consensus on climate change, Westpac supports the need to implement effective policy frameworks which promote the decarbonisation of the economy in a cost-effective manner. As a financial institution, Westpac's contribution to the policy debate has been its investment, risk assessment and financial market expertise aimed at ensuring that any legislation promotes a deep, liquid and effective market environment in which Australian business can adapt efficiently to a carbon constrained economy. Accordingly, we have been heavily involved in consultation over the CPRS on multiple fronts.

We strongly support market mechanisms and specifically a cap-and-trade scheme as the most efficient means of achieving greenhouse gas reductions at least cost. Emissions trading and putting a price on carbon is a mechanism which makes all other policy responses affordable and achievable. We do not believe that a carbon tax would support effective emissions reduction across the economy while supporting continued economic growth. A carbon tax would not incentivise Australian industry to innovate and find smarter, cleaner and more cost-effective ways of running their business. We also do not believe that a carbon tax would ensure that Australia meets its legal obligations under the Kyoto protocol in the most cost-effective manner nor provide regulatory certainty for business.

Throughout recent policy debate we have seen that there is a broad industry consensus that a cap-and-trade emissions trading scheme is the most appropriate policy response for Australia. Encouragingly, we note that the debate is now focussed on ironing out specific details of the cap-and-trade model set out in the draft legislation. While there is still some outstanding technical detail to be finalised through the regulations, Westpac supports the vast majority of the detail set out in the government's CPRS draft legislation.

We do not support delaying the start date of the scheme. Practically speaking, business responds to issues when they need to. If the government delays the introduction of the scheme, business will delay implementing an effective response and Australia's emissions reductions targets will become more difficult and more expensive to achieve. Implementation at a later date would understandably be met with a heightened sense of scepticism and inactivity. Economic modelling undertaken both domestically and internationally consistently demonstrates that delaying an effective policy response increases the economic costs and provides a significant shock to the economy. Failure to implement an effective and comprehensive policy response at this stage will increase the amount of regulatory uncertainty currently hindering investment and the structural adjustments required to decarbonise the Australian economy.

We see the growth of carbon markets as the preferred policy response, as an inexorable global trend. Last year the covered market globally was worth US\$118 billion and is expected to reach \$150 billion in 2009. Market expectations are that when North America comes online the global carbon market will be worth more than \$1 trillion by 2020. Let there be no doubt that there is already a carbon market and a price on carbon in Australia, and it is growing. Market activity includes forward trading of Australian permits, AEU's, offshore credit trading, predominantly CERs, and, importantly, the incorporation of carbon price considerations into existing markets and investment decisions, which will be correlated to the carbon market.

Prices in the Australian national electricity market already reflect inclusion of the price of carbon from mid-2010. This is a live market in which participants and corporates are today making a real, irreversible long-term investment decisions. Regulatory uncertainty around the start date of the scheme exacerbates the volatility of these prices, making such decisions more difficult. Financial institutions are in a unique position when it comes to climate change and the associated risk to business as we lend to and invest in every other aspect of the economy. We must both take a view on what will make market mechanisms function effectively and understand what cost impost industry, individual companies and the economy can comfortably bear. We believe that the current design of the CPRS has significant price and market-buffering measures in place to respond to current economic conditions. The CPRS is also explicitly designed for a slow start which ramps up over time in response to changing market and regulatory conditions. It also includes a broad range of price-buffering mechanisms and transitional assistance support measures for liable entities.

It is easily forgotten amidst the fear of change and the challenges of the unknown that the financial incentive provided by a cost on carbon will result in innovation and a growth industry of Australia as the world economy stabilises. Westpac has already seen the seeds of such endeavours. In our recent submission we have not sought to respond to or comment on every aspect of the draft exposure legislation. We support the technical detail provided by the Australian Bankers Association and the Australian and Financial Markets Association. Our submission has sought to raise a number of contextual arguments to the legislation which will influence final design, and we would be happy to comment further on anything in our submission.

CHAIR—Thank you, Mr Rousel. Just exploring any delay in the proposed start date, are you talking about delaying the legislation or the actual start date of the regulatory system? In other words, would the market conditions be satisfied if the legislation were brought in and then the actual start date were delayed a year?

Mr Rousel—I believe not. Certainty would come from the legislation coming in, but first of all there is the cost. By delaying the start date of the scheme, even if the legislation were passed, the modelling shows that the cost will be increased. Also, there is an underestimation, I believe, of the amount of investment that has already gone into this. There are thousands of people working in companies around the country and have been for quite some time preparing for it. To delay it would be to have all those people sitting idle. There is a significant cost around delaying the start date of the scheme. It is important that the legislation gets passed for certainty so that people can know the framework in which they will be operating. Most of the work and preparation that has been done has been geared towards the start date of the scheme. As I mentioned, there is also potentially a lack of understanding about how much the price of carbon has already been factored into investment decisions made. So if you delay the start date of the scheme by one or two years, those investment decisions will be undermined—the foundations will be removed.

CHAIR—Talking of the price, can you explore for me a little bit more your views on the price cap. I think you are on record as saying that there should be no price cap in the first few years. Can you explain a bit more about that.

Mr Rousel—Yes. If we are talking about the price cap being the permits available at a fixed cost, which is how I believe the legislation refers to it, we are against any market regulatory restricting mechanism. We believe that the price should be able to move freely. We believe that in the design of the scheme, in attempting to get it right, there are several price valve safety mechanisms, if you like, and that the \$40 price cap is not necessary. One of the most difficult things in designing a scheme such as this is always the unknown of what goes on in the global economic climate, as we have just witnessed in one direction. There is nothing to say that there could not be a sharp turnaround.

We advocated originally that no price cap be set, and if there were one—if it were deemed necessary to have one for industry—then it should be set high enough that it ensured a low probability of use. We would suggest a slightly higher starting point and that the percentage increase per year was higher such that, as people become familiar with the scheme and operating within it, it gets out of the way, if you like, so that the market continues to move freely. It is too easy to be scared of price volatility. We have seen what happened with commodities volatility over the last five to seven years.

CHAIR—Do those views reflect your views as a financial market person? Do your clients feel another way? Are they comforted by that \$40 cap?

Mr Rousel—I think it depends on their position. A liable entity would I am sure be comforted by that. In general, though, I think it is often forgotten, because we take it for granted that we operate in a free market economy, that the price of our commodities, everything, goes up and down—our cars, our milk. It depends on the importance of that to your business. It provides price signals for some groups when they are low and price signals for other groups when they are high. I am sure they would be comforted, but I think sometimes that can be lost in the bigger picture of what we are accustomed to dealing with. When the price of cars are cheap we buy one and when the price—

Ms Herd—Can I add to that. It also adds another complicating factor in trying to predict where pricing is going to go. You end up with a situation where you then have to take into account a number of variables and future price scenarios: if the price goes to this, then we engage X trading strategy. If we know that there is any chance of it hitting \$40 then that adds an extra layer of complication over everything.

The other point I would add is that the implications in terms of changing everyday trading behaviour. As someone internally noted when we first realised that the \$40 price cap was going to be there: ‘Well, it is just going to sit there with a giant bull’s-eye on it. In a practical day-to-day sense, everyone is going to trade around the expectation that at some stage we are going to hit the \$40 mark and it is going to be free permits for all for that particular year at a fixed price.’ When you have a likelihood of the price actually interacting on a regular basis with the actual market in the short term, then it does distort and change behaviour for all of the market participants.

CHAIR—How do you then feel about the five to 15 per cent target? We have had a lot of evidence both ways, but from many groups that it is too low. Do you have any views on that?

Mr Rousel—As a financial intermediary we tend to see both sides of the debate on that front as well. We definitely have an environmental hat on a lot of the time. Ultimately what you are talking about is a compromise. As far as we are concerned, the most important thing is to get a framework in place with which people become comfortable and that over time, depending on what happens—which is very difficult to predict in the global environmental debate—being able to adjust to it.

Ms Herd—We are also seeing a recognition that actually achieving the five per cent target will be no mean feat when you take into account current emissions growth, particularly in the energy sector in Australia. However, when you look at the upper range of the target, what we are finding is that a lot of the companies that we are talking to fairly ambiguous about that upper target because, once you actually get a global framework in place, whether it is 15, 20, 25, it is a lot more achievable because you will actually have an effective global market operating. A lot of companies are focusing on the minimum target in terms of what they need to do by 2020, but in terms of the upper range there is a recognition that that it does need to take into account the science.

CHAIR—Thank you.

Senator XENOPHON—Can I ask a supplementary question in relation to that. You mentioned the upper bands of the target. The evidence the committee heard on Wednesday from Richard Denniss from the Australia Institute was that, if we lock ourselves into five to 15 per cent and Copenhagen in a few months time has a higher target, there is a risk to taxpayers in terms of that differential between the high target of Copenhagen and locking ourselves into, say, a maximum of 15 per cent. Is that something you have considered?

Ms Herd—We are not really in a position to comment on the permutations of the international negotiations, but in terms of the practical aspects of the market, it is the five per cent target that people are actually more focused on. We have not seen anything specifically that looks at what

the short-term economic impacts would be of locking in at the international level—a potentially higher target.

Senator XENOPHON—What if Copenhagen were higher than our highest target?

Ms Herd—Like I said, we are not actively engaged in international negotiations, so we are probably not in a position to comment on what the likely outcome of those negotiations is going to be.

Senator XENOPHON—Okay. Thank you.

Senator BUSHBY—Thank you, Westpac, for coming along today. Just a threshold question: have you had the opportunity to go through the exposure draft legislation in detail?

Mr Rousel—Yes.

Senator BUSHBY—That is good. It is a fairly short time line and it is thick legislation, so not everybody has.

Ms Herd—We have got very good at reading a 600 page reports in a short period of time.

Senator BUSHBY—That is good to hear. Yesterday it was revealed that there was some modelling undertaken by the New South Wales government through Frontier Economics which indicated that the proposal was going to have a disproportionate impact on regional areas and that ultimately—and I think this is interesting in the context of your statement that there could be a \$1 trillion global economy by 2020 in trading in carbon units—that the cost to the Australian economy, according to Frontier Economics, could be \$2 trillion. That is just the Australian economy.

Senator XENOPHON—Over 40 years.

Senator BUSHBY—Yes, over 40 years. We are talking about \$1 trillion global economy in trading by 2020. That is the whole world. In Australia, according to this report, there would be a \$2 trillion cost to the economy over 40 years. Have you had a chance to consider that at all?

Mr Rousel—I have not seen that report at all. That sounds very surprising to me. You would need to see the premises behind it—\$2 trillion over 40 years? I would even need to work out what the inflation impact of that was, but it would be significantly less than it sounds. My experience—

Senator BUSHBY—I have not read it. I am going on reports. I am not sure whether that is \$2 trillion in real terms or adjusted.

Mr Rousel—As I say, I think you would really need to see it before you could comment on it.

Senator BUSHBY—But what also says is that areas like the Hunter Valley, central west Queensland, Gippsland, central Western Australia and the Kimberley are looking at—not over 40 years, earlier than that—a 20 per cent reduction in their regional economies as a direct impact

of the proposal. Is that something that the bank has looked at in terms of what impact it might have in the regions? You are operating in all of those regions, I am sure.

Ms Herd—It is difficult to comment on cost impacts without actually looking at what they have taken into account and in particular whether or not they have taken into account the ability of the companies or organisations operating within those regions to mitigate those cost impacts. As a financial institution we are talking to a broad range of companies in different industry sectors. What we are finding is that a lot of them are focused on not just looking at the cost aspect of the equation but actually looking at strategies for mitigating those costs—and, in particular, in the lead-up to the start of the scheme, actually implementing a number of different trading and internal investment and external investment strategies over time, as the price of carbon is expected to rise, to mitigate changing cost impacts in different markets scenarios. So we cannot comment specifically on the report itself or what those projected regional impacts, but we are seeing the ability of Australian businesses to mitigate cost impacts over the long term is very much driven by having a strong understanding of what the regulatory framework is and then being able to look at forward pricing and put in place planning scenarios and actually look to mitigate those cost impacts over time.

Mr Rousel—Because we speak to a broad range of people, that is our best litmus test. We obviously need to look at the risks of individual companies and sectors and we do that. But if you talk to all of these companies, no-one has yet indicated to us that they are going to be closing down or putting off a whole bunch of people. I think sometimes the public voice could be suggested to be positioning themselves within a scheme that they believe will go ahead—so for a desirable outcome with that—as opposed to actually assuming that we do not want them to stop.

Almost universally our customer base is saying: ‘We want it to proceed. We want the framework to be right. We want to get started so that we know the environment we are operating in.’ The work that has been done to date is significant. There will always be some companies that are more advanced than others. There will always be some people who leave it to the last minute. But on the whole there has been a surprisingly, even to us, fairly universal message that we just need to get it done and started and get the framework right.

Senator BUSHBY—Business right across the country is giving us the message that they want certainty.

Senator CAMERON—Some want some more money.

Senator BUSHBY—There is a fairly consistent view about certainty which I have picked up on as well. From a business perspective I can understand that looking forward they like to make employment and investment decisions based on knowing the regulatory framework they will be working within. Whether it is the implementation date or the legislation date varies as to what people want certainty on. Obviously there are many businesses that would like a little more time to prepare before it actually hits, even if they do want to know what they will face now—

Mr Rousel—We think it is both. As I said before, if you have certainty but a delayed start date then there are two parts: firstly, there is the cost of increase. We have an international legal obligation and we need to get there. The later we start having everybody pointing in the same

direction to achieve that the greater the cost will be, because it is a steeper trajectory. Secondly, because of the preparation work that has been done and the investment decisions that have been made we are better off saying: 'That's the legislation. It's done. It starts here. That's what we have been preparing for and that is what we should go with.' There will always be people who are not as ready as others and there are some people who are absolutely 100 per cent geared up and running test scenarios now.

Senator BUSHBY—I think Ms Herd made the comment, and like you I have a strong belief that Australian industry and businesses have the ability to adapt to the challenges placed in front of them. In my view, I see this as a challenge for business, but I think business largely has the ability to rise to it. But that does not change the fact that there will be a consequence—and it is an intended consequence but I guess the issue we are looking at today is how you adjust for it—in that there will be structural changes within the Australian economy and that there will be winners and losers within that. This report that came out yesterday suggests that certain parts of regional Australia will be big losers as a part of that structural change. Those areas that I read out before are coal-producing areas. They are energy intensive areas that are based on stuff you dig out of the ground and burn to make electricity, basically. They will be big losers. I am interested in your view. It is one thing for a business to rise to a challenge and adjust, but it is a different thing where you have whole communities based around industries that will basically be wiped out. What effect will that have on those communities and on business in general? Should the CPR Scheme, as proposed, better address the impact it will have on those areas?

Ms Herd—There are a couple of answers to your question. The first is that this is a policy signal that has been a long time coming. The engaged policy debate around the introduction of an emissions trading scheme is more than 10 years old and it has occurred on a number of different levels. As a result, a large number of companies within the most impacted sectors have been explicitly positioning for the introduction of carbon price signals. I hesitate to use the words winners and losers, but when you talk about companies that have been planning for the arrival of this policy mechanism they will benefit because they have been planning ahead for the introduction of this scheme.

Senator BUSHBY—That is fine for the companies.

Ms Herd—Secondly, I would say that there are a significant number of transitional assistance measures built into the scheme design, both in addressing the fact that we are at an early stage in the organic growth of the carbon market—and I believe that it will take a lot less time than people think—and in the momentum we are seeing in policy frameworks internationally, and also through other assistance funds built into the scheme, through the electricity sector adjustment fund and various other government funds built into the scheme. The question of whether particular companies in particular regions have sufficiently addressed these regulatory impacts in their business and how efficiently they are able to access these transitional assistance funds is probably one that is more suited to them.

Thirdly, I note that, in the forward trading that is already occurring in permits in the Australian market, it is energy companies and brokers that are doing all the forward trading. The companies that are the most impacted are often the ones that are most ahead of the game in these particular issues. If they know it is going to be a significant business risk for them they are unlikely to sit

back and just let it wash over them. Without looking at the report I am not able to comment on the specifics.

Senator BUSHBY—I know.

Mr Rousel—Or, might I add, they are unlikely to invest the time, energy, expenses and resources to do that if they thought that their company was going to go under and therefore impact the communities.

Senator BUSHBY—You are talking a lot about companies and businesses. I guess that it is probably appropriate for you to talk about as witnesses, but it is a bigger issue. If you were a company operating in Gippsland and you were forward thinking, if you were making all the right decisions, that might well involve you leaving Gippsland. That does not help the community, the people who live there and the people who work for the company.

I will move on from there. What levels of activity does a company like Westpac anticipate having in the proposed scheme in terms of trading? I noted that you participated in the first trade in AEU's. What do you anticipate your involvement will be once this is up and running?

Mr Rousel—Basically, we are a financial services company, and this scheme is about creating something which is going to be designated as a financial product. For us, it really is standard banking, so we will lend our balance sheet to people who want to do capital works and internal abatement and to the renewable energy sector. Price certainty is the other element for our customer base in making their business decisions. To draw a parallel with the price of aluminium, when you are starting an aluminium mine they need to have a price expectation to do their business metrics. The same will apply for this. We will facilitate the price risk certainty of carbon permits forward dates options at the request of our customers. So really we are just a financial and media conduit. The way the scheme is set up, for example, there will be designated auction dates once a month—at least that is the forecast for the regulations; it is not all finished yet. That does not necessarily fit in with the schedules of companies; it does not fit in with board approvals; it does not fit in with when they believe the price is right for them. As financial intermediaries, our job is to help provide them with those prices as and when they request them, give them that certainty and then manage the risk until such time as—

Senator BUSHBY—So effectively the scheme that is being proposed presents to Westpac as a new opportunity to expand business, to potentially add an additional income stream for your overall business?

Ms Herd—We have been trading the EU scheme for a couple of years now.

Senator BUSHBY—But this will actually ramp that up significantly?

Ms Herd—Yes. We trade the EU scheme on behalf of Australian and New Zealand customers operating in European markets and in correlation with European power markets at the moment. This allows us to bring that service back into our home jurisdiction, and we will be looking to trade the Australian and New Zealand schemes explicitly for the purpose of helping customers with price risk management.

Mr Rousel—We will expand our standard business operations to the extent that our customer base has to engage in further activity and requires further price certainty in carbon permits or cash flow issues. So it is not a substantial—

Senator BUSHBY—So it creates a market opportunity for Westpac to be involved in. It is a new area. You are already in it to some extent, but it will actually expand the market for you to be involved in and make money on, basically, as a company. I have no problems with that.

Ms Herd—I think it is also consolidation of the broader sustainability position Westpac has taken for a number of years, where we have been explicitly looking to make the argument that companies that do good will do well. This is a classic example of where you can combine environmental social governance and business as usual to achieve that broader aim as well.

Senator BUSHBY—But it will not be business as usual; it will be new business, effectively. All businesses like to grow, and this is an opportunity for you to grow into a new area.

Ms Herd—Yes. The other side of this equation, in addition to the financial markets business, is investment in renewable energy opportunities. This is through both the CPRS and the renewable energy target, which is actually promoting greater investment opportunities in new forms of infrastructure investment as well. We will also be pursuing that.

Mr Rousel—I am a little cautious about saying that it is a growth area because that could be interpreted by some as being a motive for us to be involved. As we said, we have been doing environmental stuff for over 15 years with no profit motive. The Carbon Pollution Reduction Scheme and putting a price on carbon is about behavioural change and a reallocation of capital from one type to the other. It is not an increase in capital, therefore, we probably would have been involved in it in some form anyway. The fact that it is, as Emma said, lining up with that capital and now heading towards something which is also in parallel with our environmental is beneficial, but it is not really necessarily a growth in the business, per se, it is a shift.

Senator BUSHBY—I understand motive-wise you are saying that it is not the reason you are supportive of it. Nonetheless it will have, as I think you just said, from a business perspective, have business benefits.

Mr Rousel—True, but it is likely to detract from another area of business as well.

Senator BUSHBY—Which area is that?

Mr Rousel—For example, if you are financing an area which is not potentially as prepared and you view that as more of a risk than another—

Senator BUSHBY—So some other clients maybe affected but hopefully there will be new clients that will—

Ms Herd—It is more than just one client to another. It is one client shifting their investment from one part of their business to another.

Senator BUSHBY—Apart from that, are there any other significant costs that are likely to be imposed on Westpac as a result of the CPRS? Is there any downside, apart from what you just mentioned?

Ms Herd—One of the issues that we are commenting on from a technical perspective—and this is still being resolved through the regulations and through further commentary with industry associations—is the treatment of permits as a financial product. In particular, the regulatory framework around that and the compliance obligations. We are working with both the Australian Bankers Association and the Australian Financial Markets Association to work out what the implications of that are from a regulatory compliance cost implication. That is something that we will be looking to provide further comment on.

Senator BUSHBY—That is a cost of dealing with how you actually go about work participation rather than a cost that is imposed on you, like some of your clients will have in terms of carbon costs.

Mr Rousel—That is right, yes. There are other things like that which impact on us. The application of GST to carbon permits is something we are opposed to. That certainly has extra infrastructure implications for us.

Senator BUSHBY—I have one final question on a different subject. Have you had any feedback on the effect on the competitiveness of Australian business compared with other nations that do not have a similar scheme or are not mooting a similar scheme at this point?

Mr Rousel—We have seen comment on it. Interestingly enough, as I mentioned before, it is not necessarily the upper side of the band that is the problem as long as all our competitors are in the same boat.

Senator BUSHBY—And if they are not?

Mr Rousel—If they are not then we are not going to be in the upper side of the band anyway because that would imply there has been no global agreement as such and we are still way back down at the bottom of our band. There is certainly discussion about it. As I mentioned before, almost universally all of our customers are saying that they want the scheme to go ahead. So the fact that you hear some more vocal opposition could suggest that that is posturing for a desirable outcome within an assumption that the scheme will go ahead. It is a valid part of the debate but it needs to be recognised for what it is.

Senator CAMERON—It is rent seeking.

Ms Herd—It is legitimate positioning, you could argue.

Senator FURNER—I was interested in your preliminary comments about thousands of climate change jobs being idle. What are we talking about in terms of thousands of jobs?

Ms Herd—One thousand companies covered by this scheme have all hired a climate change person.

Senator FURNER—Are we talking about five or 10 thousand; what sort of figure?

Mr Rousel—Potentially on that basis more than that. I would say that companies that have been affected have a team in place. We, for example, are not an affected entity and are not liable under the scheme, but we probably have an additional team of four to five people focused purely on this. If you extrapolate that out to all the other companies, other financial services, lawyers and tax, there would be a pretty significant number of people dedicated to it. Even if you had legislation passed and had certainty, if the scheme does not start for two years, you have just put a big hole in activity.

Senator FURNER—My experience in employment is that people would not be sitting around idle; they would be made redundant. I would be interested to hear your feedback on that.

Ms Herd—Can I just quickly argue that as well. We have been talking to our customers specifically on this issue in a dedicated program for the last 18 months. The first meeting that we had 18 months ago would have been with, say, an operations person whose job was to work out what their emissions profile was going to be. A few months after that it would have been the operations person and probably a newly-promoted, newly-appointed head of climate change strategy for the particular company.

The third meeting throughout the course of late last year and the beginning of this year would have been with three people. It would have been with the operations person responsible for emissions, with the head of climate change responsible for determining the strategy and with the group treasury people responsible for executing the strategy. So I think that kind of ramp-up in terms of the engagement and expenditure within corporations in preparation for the scheme is quite important to acknowledge because, when people talk about the costs of implementing the scheme, it has to be recognised that a fair amount of those costs have already been borne by companies in preparation for the actual implementation of the scheme. It is also important to recognise that.

Mr Rousel—It is important to reiterate that you need to make a clear distinction between the start of the scheme, being the first date at which people are required to record and report their emissions, and when they will actually start approaching the risk that they have already analysed. We have already seen trading in Australian emissions units and the legislation has not even been passed. We undertook the first trade with AGL and there have been subsequent trades since that. There are already people making firm decisions about what they are going to do.

If the legislation is passed—and that could be as early as June, for example—it is not like everyone will be waiting until June 2010 to act. That just means that they will know they have a liability that is now firm and concrete, and risk management and activity around what they are going to do about it starts instantly. If you assume, therefore, that potentially their activity will start in June 2009, then they are already well prepared, and to put a delay on that will have a significant impact.

Senator FURNER—That leads me to my next question. Earlier this week we heard from an asset management company, Colonial First State. Their position was that, without emissions trading in place, there is a line missing in the spreadsheets for companies they want to invest in, so they do not invest in those companies. How do you take into account the carbon profile of the

companies that you invest in? Also, how well informed are Australian companies about their carbon emissions?

Ms Herd—We have explicitly gone through a process of establishing a carbon risk committee within our credit risk department. This has gone through the process of training up all the analysts, the relationship managers and the credit officers. We had about 400 or 450 people trained in carbon credit risk throughout 2008. We have explicitly incorporated carbon into our credit manual and we are now going through an explicit client engagement process around the carbon risk implications for their business. This is still at a preliminary stage around a basic set of questions. Do you know what your liability is? What is your strategy for managing it? What stage are you at in terms of implementing your response? That will increase in sophistication as you get that quantifiable liability and you are able to examine the veracity of the trading strategies they have in place for mitigating that risk and also in terms of having a more sophisticated understanding and model for assessing how well companies are mitigating that risk. So it is like a gradual ramp-up process, but we are already a fair way into it—it is already in our credit manual, you could say. Regarding long-term investment decisions, they take a pretty wide view of what that carbon risk liability is going to be, but that has already been in there for a number of years as well.

Mr Rousel—There are also the new ventures. We field a lot of inquiries from people who, whilst they need to hold back until they have the certainty of scheme design, are looking at growth industries that will benefit from the implementation of the scheme. Obviously we look at those from the point of view, as we said, that it is a re-vectoring of capital—their financing opportunities that are associated on the other side. All of that is just assessing management skill levels and understanding, as part of assessing the worthiness of a company in the new environment.

Senator FURNER—What kind of firms, in your opinion, will do best in a carbon constrained world?

Ms Herd—The ones that have been planning for it.

Senator FURNER—Like the ones you have just been mentioning?

Ms Herd—Yes. It is also a question of the ones that are investing the time, the effort and the capital into managing this as a mainstream business risk.

Mr Rousel—It is a very good point, actually, when you consider the fact that it is the way it works in business currently. Those who are best prepared, most on top of the issues and work out the best way to respond are the ones who benefit and ultimately thrive.

Ms Herd—And it is not always who you think it is.

Mr Rousel—A delay in the scheme would punish them.

Senator FURNER—What do you say to the sceptics out there who claim the scheme is radical and will cost jobs?

Ms Herd—I think they are two separate issues. I think the scheme itself and its design is sound and is in line with the scheme design we are seeing everywhere else around the world. In terms of the specific question of coverage and the level of free allocation, all the specific design elements are not radical. They are very much in line with policy decisions being made in a number of jurisdictions. In terms of the question about costing jobs, as we said before, we have talked to a fairly broad range of companies across different industries and, when companies talk about what they are doing to manage carbon risk, it is not the first thing that they tell us or in fact tell us at all.

Senator FURNER—Are you getting indications from your investors on what sort of jobs will be created out of the scheme?

Mr Rousel—There are certainly, as we mentioned before, investment ideas, ideas for growth industries in and things that will benefit from the scheme. We do not see the job numbers. You can only surmise from normal business operations what they might be. I would be reluctant to comment on a number but, yes, certainly there will be jobs. There is certainly a concentration or a focus in the media on the potential dangers for us being one of the earlier countries in the globe to adopt this and very little focus on the potential benefits. Business adapts and innovates when it needs to, as we said before. The fact that we could be pushed into that if the framework is right is an incentive. You will see growth industries and innovation and in particular with some industries, like carbon capture and storage, to be a leader in that space would be a major international advantage.

Ms Herd—Someone did make the comment to me the other day from a large manufacturing company that if you are a graduate exiting university right now with a combined engineering and commerce degree than your entire life career is now set.

Senator XENOPHON—At the beginning of your presentation you said that Westpac has reduced its energy use by 40 per cent. Over how many years?

Ms Herd—We first began measuring our emissions in 1996. From 1996 to 2007-2008 we have reduced our emissions by 40 per cent, which is predominantly energy consumption.

Senator XENOPHON—It is another 30 per cent that you will be looking at in the next five years, so overall since 1996 it will be about a 55 per cent drop.

Ms Herd—The baseline has changed from last year for the next five-year period because we recalibrated our emissions reporting for the National Greenhouse and Energy Reporting framework.

Senator XENOPHON—But in broad terms you have had a significant drop, and that it is in the absence of an ETS. That is something you have done voluntarily, so that is something that if others did could lead to significant savings for them.

Ms Herd—Yes. Can I also add that that 40 per cent reduction in emissions was at zero cost. Everything that we did we recouped the investment. It did not cost us anything additional to reduce our emissions by 40 per cent.

Senator XENOPHON—Professor Ross Garnaut in Perth on Monday restated his view that there should be a low fixed price of carbon for the first few years to allow the implementation of the scheme to iron itself out. I am not saying that I agree with that position, but that is contrary to the position you have taken, isn't it? Can you comment on what Professor Garnaut asserting?

Mr Rousel—We have advocated that if you have a fixed price for a short period that is really the same as saying, 'We will have a tax for two years and then we will start a cap-and-trade scheme.' The assumption when that was debated a year or 18 months ago was that the forward markets would develop despite that. In actual fact, you would just be delaying the entire cap-and-trade system and delaying that forward market which gives companies certainty of price so that they can make decisions about what to invest.

Senator XENOPHON—So you are saying you would rather have a market mechanism front up?

Mr Rousel—Yes. What was important to us all along—and you cannot underestimate how many hours we and other companies have spent doing this, thousands of man hours, analysing the structure so that it would be right—was that there be sufficient price safety valve mechanisms built into the scheme such that companies be allowed freedom to operate, make small errors et cetera. As we said before, it is a slow start that will ramp up. We believe the slow start negates the need to have any form of fixed price in the short term, which would only delay what the scheme is ultimately trying to implement.

Senator XENOPHON—Further to that, you have been trading on the European ETS for a while and we have seen the price of permits there go up and down like a yo-yo, from as little as A\$7 and up to \$25 now. There has been quite a lot of volatility. What has Westpac learnt from their trade on that and how can we avoid that volatility that lot of environmentalists say does not give a clear incentive or price signal for renewables?

Mr Rousel—To say it went down to \$7 is not quite right—I can only assume you might be referring to the first stage of the scheme, which was a trial phase.

Senator XENOPHON—Okay, what was the price? I am talking about the collapse in recent months.

Mr Rousel—In the collapse in recent months it got down to about €8, which is roughly A\$16. So it has been as high as \$40 and down to \$16. Our argument is that we are making this into a market based mechanism and a market based price unit. If I showed you a graph of oil prices then you would see exactly the same thing—and the same for coal, aluminium or copper; all of these are inputs or outputs of industry and business and their prices all move. For somebody talking about renewable energy, yes, a low price removes a disincentive to invest for a short time. It potentially might also be the opportunity for somebody who wants to undertake capital expenditure to implement abatement equipment or technology, knows it will take a certain number of years and needs to ensure that they lock in a low price for carbon while they do that with an expectation that over time it will rise and they will benefit. So they would be able to say that now is their opportunity to lock in low-cost materials to actually build what is required to reduce their emissions liability because they expect the price to increase over time, and the scheme is designed to have an increasing price of carbon over time.

Ms Herd—Can I just add quickly that the price decrease that we have seen in the last few months is also a direct outcome of the global financial crisis in the sense that production levels fell sharply therefore emission levels will fall sharply therefore the amount of permits that the companies covered by the scheme will need is less. This was compounded by the fact that they were explicitly accessing the carbon markets to sell permits to meet short-term capital requirements. What we are seeing now is that the price is gradually going back up again because these same companies are still liable—they still have to meet their compliance obligations in December. So they are now going into the market and buying those permits back again because they still need to actually meet their compliance obligations in December. So even though the price is starting from a lower base the fundamentals of the market are still working.

Mr Rousel—Just for the purposes of reiteration, neither a tax nor a fixed price for a short term would have responded in a similar fashion.

Senator XENOPHON—I would like to move to a slightly different topic. To what extent will Westpac and other financial institutions and lenders take into account the additional costs involved with the obligations of the CPRS—in other words, how do you take that into account in the context of credit applications given that there has been a credit squeeze or the global financial crisis?

Mr Rousel—I will not purport to be a credit analyst or I will get shot when I get back to work!

Senator CAMERON—You have demarcations, do you?

Mr Rousel—Yes, they are the police. Basically they would incorporate it in the same way that we assess all other risks. So basically they would analyse their understanding of it, whether they have a price-risk management policy in place, how they are going to implement it and how effective it will be.

Senator XENOPHON—So it is another risk to take into account?

Mr Rousel—Yes, it is.

Senator PRATT—I want to return to some evidence that was given earlier this morning regarding the readiness of business to participate in the scheme. I suppose you would recognise that the government is having to decide how ready the Australian economy is—and that is clearly a decision that you have had to reach as a company as well. You mentioned a bit about how certain companies are positioning themselves in the public debate according to their interests. Behind the scenes you would be talking to them about their own readiness. Are they doing one thing and saying another? Could you just flesh out a bit for us the difference between what they are saying publicly versus how they need to be assessed financially in terms of their readiness?

Ms Herd—What we have witnessed in the public debate is that a lot of it has now moved on to very specific aspects of scheme design, whereas 12 or 18 months ago you would have had a much higher level of public engagement by companies in the policy debate. Two or three years ago it was even higher; five years ago it was even higher; and so on. It is very encouraging in the

public debate that we are now seeing companies discussing very specific aspects of scheme design in relation to how it is going to impact their company. That is a perfectly legitimate form of public policy engagement.

What we are seeing is that companies have a very strong expectation that the scheme will come in. They are positioning themselves and responding to the specific requirements of both the national greenhouse and energy reporting legislation, which is already in place and has been for a while, and the forthcoming CPRS legislation. It is very significant that for companies the debate has moved. Five years ago, this was an issue for the environmental or sustainability department; today, it is an issue for group treasury. That is a very strong indication of company readiness.

Senator PRATT—In that case, does government need to, in the process of finalising the legislation, balance various interests and make changes that seem appropriate without messing with the overall frame work and then get on with it, despite the fact that we will still have people, I suppose, biting at our heels for further changes and bigger reform—that kind of positioning that they are doing?

Ms Herd—There is a very strong consensus on the part of industry that regulatory certainty is the issue. That is the issue that everybody agrees on. We need to have the frame work in place so that companies can begin to explicitly incorporate this in their decision-making processes. One thing that I would add is that a lot of people talk about the fact that the lack of regulatory certainty is hindering investment in new forms of clean technology or renewable energy. Of more significance is the fact that it is also holding up investment in existing assets and in existing traditional forms of, say, fossil fuel based energy or traditional industries, because no-one knows what the price is going to be. There is a very strong sense of: ‘Let’s get the scheme in and bedded down; let’s work through the specific issues and get it in place.’

CHAIR—That is all the time that we have. Thank you, Westpac, for coming in; thank you, Mr Rousel and Ms Herd.

[11.08 am]

CONNOR, Mr John, Chief Executive Officer, Climate Institute

CHAIR—Welcome, Mr Connor. Thank you for coming here this morning. I invite you to make an opening statement.

Mr Connor—Thank you very much for the opportunity. We just put in our submission this morning. I have some printed copies if you need them—it depends on how efficient your secretariat is.

CHAIR—Our secretariat is incredibly efficient.

Mr Connor—Okay. Firstly, the Climate Institute is a privately funded, non-profit research organisation. We undertake research into climate impacts and public attitudes and have done extensive economic modelling in terms of the transition to a low carbon economy. That has led us to a view that an emissions trading scheme is an important tool in the response to climate change but that on its own it will not drive rapid investment in low carbon jobs or help deliver what is in Australia's interests in terms of a global agreement to reduce greenhouse gases. It is not possible to give an accurate assessment of a trading scheme by talking about it in isolation, because it does not operate in isolation.

A full tool kit is needed to effectively respond to climate change and the right tools can create a double dividend of a safer climate and new jobs for Australia, a double dividend that helps achieve an effective global climate agreement that seeks to stabilise greenhouse gases at 450 parts per million or lower—which is consistent with the government's definition of the national interest—and a double dividend that unlocks the low carbon investment required for Australia to prosper, to be innovative and to be competitive in a carbon constrained world.

I will come to the main details in a moment, but it is important to stress that this inquiry and the public debate on climate change are taking place at a time when our view, and the view of many others, is that the costs and opportunities of climate change are here. In the last couple of months we have seen extreme weather events. The Bureau of Meteorology has referred to extraordinary heatwaves which caused significant health impacts—indeed, the morgues in Adelaide and Melbourne overflowed—and damage to infrastructure, from railways through to Melbourne's tourist wheel, whose bolts popped and steel bent, leaving it dormant. I guess of greatest concern recently has been the bushfires. Research we did with CSIRO, the CRC for Bushfire and others described those as 'the fires of climate change' because the conditions that firefighters faced were unprecedented.

A range of other costs are being factored in now. We are already changing planning schemes along our coast, which is having impacts. There are also significant opportunities right now. Other world leaders are saying that we can shorten the recession through investments that lead to a low carbon economic recovery and they are investing through stimulus packages, a carbon price, energy efficiency and renewable energy portfolio standards. These are the jobs of today and the future. The government's own insulation and solar hot water stimulus package is

supporting thousands of jobs right now. With the right incentives, the commercial building sector, which lost some 10,000 to 15,000 construction jobs just in the last months of last year, is ready to employ thousands to retrofit existing buildings, and the 20 per cent renewables targets have projects with full or part financing ready to go. It is also important to realise that the delay is costing us now. Even Prime Minister Howard's task group report noted the real costs of deferred investment, for example, where they said:

... waiting until a truly global response emerges before imposing an emissions cap will place costs on Australia by increasing business uncertainty and delaying or losing investment. Already there is evidence that investment in key emissions-intensive industries and energy infrastructure is being deferred.

Modelling for the group indicated that in the electricity sector the cost to consumers from delaying action would be between almost A\$2 billion and A\$3½ billion through to just 2017.

We know that many of the companies who have been complaining the loudest have been implementing shadow carbon prices to guide their decision making for years. Last week the Climate Institute released a report highlighting that many of our biggest polluters have identified millions of dollars of carbon liability savings. Some of those savings are not taken up, according to the Business Council of Australia, because of the policy uncertainty.

Delaying action also runs the risk of locking us into longer term carbon pollution and inefficiency. This can expose the Australian economy and in particular vulnerable communities to the impact of higher energy prices when the economies rebound. Artificially pumping up high carbon and inefficient industries and ignoring portfolio climate risks will create a 'sublime' bubble that is sure to burst, as did the subprime bubble. Delay will penalise those companies which have acted responsibly and proactively in diversifying their portfolios and investing in cleaner technologies. You heard the previous witnesses talk about that as well.

As I said, emissions trading is important as part of a package of policies. Some of the other things that can actually help drive the investment—the urgent investment—in a low-carbon economy and jobs include policies for clean energy. We believe that we need to have policies that are geared towards having a mixed portfolio of clean-energy options in commercial scale by 2020. That includes, for us, carbon capture and storage. A strong 2020 renewable energy target will be an important part of incentivising a mix of technologies, but we believe that extra incentives will be needed for solar-thermal and CCS, in particular.

A national energy efficiency strategy is critical with incentives for retrofitting existing buildings and enhanced building codes, investments in public transport and urban design, and we also need to reform our financial and prudential regulations to enhance reporting of portfolio requirement risks and to better reward management of climate change risks and opportunities. Many of these elements are very close at hand or are under consideration, so the opportunities are there.

Turning to the CPRS and the legislation, I want to repeat that ETS is a critical part of the package and we want an effective emissions trading scheme up sooner rather than later. The CPRS and the actual exposure legislation provide a strong framework, which has improved on many of the mistakes of other jurisdictions, but we cannot support it in its current form and we are looking to the government and the parties with senators to improve that framework.

To help achieve the double dividend that I referred to earlier—an effective global agreement and an Australian economy prospering in a carbon constrained world—key changes are necessary, in our view. Firstly, we want stronger targets with changes to the objects, requiring at least 25 per cent reductions by 2020 with 450 parts per million or lower in the national interest actually being stated—that being a commitment, obviously, in a world of fair and comparable effort. The minister in part 2 currently has only the discretion to take the national interest into account. They should be required to take that into account when considering related caps and gateways.

We are keen to see stronger conditions on industries that receive assistance or free permits, which is an effective public wealth transfer of billions of dollars per year, to require them to demonstrate and achieve higher standards of energy efficiency and carbon productivity. This means an increase in the carbon productivity decay premium, for example, from 1.3 per cent to 4 per cent or similar measures which will drive greater low-carbon investments, such as a cap on the growth of free permits.

I would also like to see increased annual reporting of energy efficiency opportunities and greenhouse abatement opportunities, and their implementation. An important addition would be clearer and independent reporting of real and proxy carbon prices in competitor countries. It is important to understand that there are many carbon prices—proxy prices or real prices—in many other countries, from developing countries through to developed countries, that are reflected through either emissions trading schemes, carbon prices or other regulatory measures, such as on energy efficiency or renewable energy.

We are also very keen to see a dedication of greater permit revenue to low-carbon technology research and development, both here and abroad, plus funding for adaptation and developing countries. This is important, if not critical, in achieving a global climate deal, which will spin off targets and financing that will be available for developing countries. So it is very important and we think that it is a serious omission, in terms of the scheme, that we are not sending a signal through the revenue to developing countries that we are prepared to do our bit, which is also in our economic interest because a cleaner and prosperous region is going to be important to Australia's economy. Without these or similar amendments and commitments, we risk poisoning the ambition of the global climate talks and rusting the Australian economy onto its highly polluting and inefficient base.

I would like to conclude my opening remarks with the observation that many here have concentrated too much on Australia as if it were a fish bowl and not on the role it plays and will play within a global system of carbon prices, however imperfectly they emerge. It has been poorly understood that there is not a linear relationship between targets and carbon prices. Your previous witnesses referred to this. In a world where there is comparable effort to Australia—taking on 25 per cent reductions by 2020, for example—there will be a far more level playing field. There will be more sectoral agreements that make discussions of carbon leakage redundant and there will be greater flexibility in measures such as reducing emissions from deforestation and degradation.

Treasury's range for carbon prices under the five and 15 per cent, factoring in international figures, highlighted that, with \$30 to \$60 by 2020, but the additional 10 to 25 per cent was just an additional \$10 per tonne, for example. The recent carbon tariff discussion in the United States

has provided a timely reminder for many industries about our exposure, and the US will not go into a climate deal without bringing in its law enforcement agencies, and that could leave much of our polluting and inefficient economy exposed.

Our main point is that an ETS on its own is not sufficient in the response to climate change; it must be integrated within a broader approach. But we do think that this legislation and a trading scheme have the potential to play a critical part in achieving the double dividend to which I referred, but it will need the government and the Senate parties to improve it and back it up with other policies. I am happy to take questions.

CHAIR—Thank you, Mr Connor. We had the Australian Conservation Foundation in earlier this week, and they also thought that five to 15 per cent target was not strong enough. We discussed competing priorities and competing views. If the target cannot be increased, they said that they would prefer to see the legislation fall over altogether and not be passed. Would you agree with that?

Mr Connor—Our focus is on improving this legislation, so that is a hypothetical that I am not prepared to go into. We want to see this legislation go through with improvements, and that is what we are focusing our effort and lobbying on.

CHAIR—One of those improvements being an increase in targets?

Mr Connor—Indeed. The government needs either to increase that target in the CPRS itself or to make clear that it will be able to top up that target in international negotiations. The easiest and most efficient way of doing so would be to increase the CPRS figure. There are a range of other alternatives but that is a key thing that needs to come out before the passage of this legislation, in our view.

CHAIR—In your view, if the legislation were passed without targets and with a delay in the start date in order to set targets, perhaps after the Copenhagen conference, would that be a better outcome?

Mr Connor—There are three key tests that we have talked about for the targets. It is how we incentivise investment in the transition to low carbon, the economy—and we do not think that the current arrangements with the EITEIs and others provide that—and how we signal to the global negotiating community that we are prepared to do our bit in financing mitigation and adaptation. Those three things need to be interlinked, in our view, before we can come out and support the legislation.

CHAIR—So, if this legislation does not pass, how would you see things working out in future?

Mr Connor—I am treating that as a hypothetical. We are focused on this legislation getting through. We are willing to help; we have provided amendments and have discussed and engaged vigorously in the debate and that is our focus.

Senator CAMERON—Mr Connor, there has been some debate about ET industries getting 100 per cent free permits. What do you think the consequences of that approach would be?

Mr Connor—I think that would be a very bad step. I think the arrangements we have are generous enough for industries that have known for two decades that these reforms in carbon prices were coming at them. I think that would be a much greater risk for the Australian economy. Again, I think that the carbon tariffs discussion has jolted a few people into life and into realising that if we live in a world that is taking action there will be consequences from that. We are not opposed in principle to assistance for EITEIs when there is genuine carbon leakage. We have commissioned other reports and the like and we think the current scheme is too generous. But if there is to be assistance then we need stronger conditions both in the actual requirements for improving the investments in those companies and in the transparency of that. We do not want to see the car industry exercise repeated again, where we have propped up some of these industries in an artificial bubble.

Senator CAMERON—So you have been doing modelling that demonstrates that leakage is not a significant factor as we are being told by some groups here?

Mr Connor—Yes, our reports mirror what Treasury actually said: that the claims for carbon leakage are overstated. We have a report, which I can make available to the Senate, that was done by independent experts—McClelland Magasanik Associates McClelland—which looked in particular at aluminium and LNG, for example, and concluded that the concerns about carbon leakage were grossly overstated. Because companies are also factoring in global carbon prices and the like as well.

Senator CAMERON—I would appreciate it if that report could be made available to the committee. The other argument we have heard here is that we should move to biochar or soil carbon as an approach as distinct from a scheme. How realistic is that? What would the time frame on these issues be and is that the consistent with Kyoto?

Mr Connor—It can be consistent with Kyoto, but Australia has decided not to take up some of the soil carbon options, partly because of concerns around the natural variability and what happens in terms of extreme drought and the like in terms of the carbon flux. We actually think it is a very promising technology. In particular for agriculture there are a range of opportunities, including biochar, better crop management, rotational management of fields and the like that we do need to look to. They can help provide solutions for farming communities so that they can be part of that solution. But we need to move carefully on that in our view.

We have done our own calculations and built up our own model of emissions reductions that Australia can achieve. There is an online model where you can play Penny Wong for an hour and a half there, if you like, and go across sectors. This is a sector which can make significant contributions. It will need incentives and it will need inputs. It was made clear to me about the risks here the other day when someone here reminded us that much of Australia's topsoil is about 10 centimetres deep as opposed to the 30-odd centimetres in Europe and other countries. also, Victorian farmers who have just had the bushfires through and then followed up with 100 millimetres of rain would have been considerably exposed if it were a poorly designed scheme, because they would have lost a lot of carbon off their soils are those circumstances.

Senator CAMERON—In relation to the establishment of a scheme in Australia, if we can get a scheme in, even if it is flawed by pure standards or what many people would want, would that be of assistance in negotiations in Copenhagen?

Mr Connor—We are focused on getting a global climate deal that works. In fact, we are very pleased that the government said that our national interest lay in achieving a global deal that was 450 parts per million or lower—stabilising greenhouse gases. Of course, many scientists are starting to talk about 350 or even lower, getting back to 280 parts per million, which was the pre-industrial situation.

Our big concern with the government's decision with the white paper, and the proposition that we can get there by stronger action after 2020, is that it borders on science fiction, frankly. The sheer physics of the task at hand for the greenhouse gases up in the atmosphere and pulling them out as well as stabilising it makes it an almost impossible task to achieve that national interest test. So we are very focused on the global deal that works. We are very focused on Australia not poisoning the ambition towards what in fact they have stated it is in Australia's national interest.

Senator CAMERON—So if there were further delays in Australia in adopting a scheme, that would mitigate against our voice at Copenhagen, it would mitigate against us achieving and eventually proper abatement approaches and meeting the target?

Mr Connor—Australia has already been partly sidelined as a voice in those negotiations. We know of countries who have said as much. South Africa made comments like that publicly on the record after the white paper. Some of our ability to help a global climate agreement has already been undermined. We think that should be fixed to strengthen our government's negotiating position.

Senator CAMERON—So South Africa sidelined Australia; is that how it works?

Mr Connor—Australia has in effect just joined some of the middle ranks. I want to stress that these negotiations are difficult. No other country has actually come up to that national interest test either—I mean Europe and the USA. But we need it because Australia is a developed country that is most exposed to risks of climate change. We need more ambitious leadership. We are urging Australia and other governments to at least take a step back from the bottom-up approach and actually reiterate the science around that 450 parts per million. As a group of developed countries, in the context of other developing countries taking action, they need to reduce 25 per cent to 40 per cent. Let's go back and have a look at what is a fair share towards all of that.

Senator CAMERON—Plenty of arguments have been put to us that we should wait for an international response before we take action. For instance, the mining industry have put to me personally that we should wait until 80 per cent of international mining competitors have adopted a carbon trading scheme before we engage in a carbon trading scheme. Can you take me back to the Howard government's position on that, which you spoke about earlier, and take me then to what it would mean if we adopted the coal mining position.

Mr Connor—The Howard government eventually came out with this task group report, which essentially said that we should go ahead with an emissions trading scheme. History will attest that 2011 or so was their proposed starting date. But that was precisely because of this uncertainty and because investment was being deferred. They knew that there were emerging global carbon prices and that businesses were looking around to see how they should respond to that, and that was creating uncertainty, particularly in the electricity sector. But there are also

significant opportunities. We do not think that one particular sector should hold us to ransom. The Garnaut report highlighted that even for the 25 per cent reduction there is continued production growth, particularly across most of the mining sectors, through to 2050. So we do not think that that is a wise move at all.

Senator CAMERON—On page 6 of your submission you have the percentage of stimulus packages that have gone to greenhouse gas abatement programs. It shows China leading the rest of the world. Again, one of the arguments that we have had is that we are really taking ourselves out in front of the rest of the world. I have not heard too many submissions here indicate what the rest of the world is doing in practice. Are we world leaders?

Mr Connor—No, not at all. Europe has had an emissions trading scheme. New Zealand is reviewing theirs right now, but there is a very strong view of having an emissions trading scheme there. I met with the New Zealand Nationals climate change minister just last week and he made that extremely clear to me. There is a range of action in developing countries. President Obama highlighted that China has got the most ambitious energy efficiency strategy in the world right now. They also have high fuel efficiency standards. They have renewable energy targets that actually create proxy carbon prices, which is a point that people keep ignoring. We have another report I can tender for you that takes you through action in India, South Korea, Indonesia, South Africa, Brazil and the US as well. There is a world at move on this. If we stand still we will be left behind.

Senator CAMERON—Can we have that document tabled?

CHAIR—Would you table that document now.

Mr Connor—Certainly.

Senator BUSHBY—I have a follow-up question to the question from Senator Cameron and your response. In terms of leading the world, are there any other emissions trading schemes that are as comprehensive and contain as many innovative features as our emissions trading scheme, as proposed, anywhere else in the world?

Mr Connor—We have said in the submission that this is a stronger framework which shows that we have learnt from the mistakes of other jurisdictions and which can, with proper targeting both of the targets and the assistance, really help us to make a rapid transition and be competitive in a low-carbon economy.

Senator BUSHBY—When you started speaking you said that a full toolkit is required to address the challenge and that an ETS is only one of those, and you outlined a lot of measures that other nations were looking at that were tools in the toolkit, rather than an ETS. Certainly some are ETSs, but there—

Mr Connor—Was New Zealand? Japan is looking at it and so is South Korea.

Senator BUSHBY—Exactly. Most of them are considering it.

Mr Connor—Europe is in action and a number of US states have emissions trading in place. I do not want to underplay the importance of an emissions trading scheme within it. It is necessary but not sufficient.

Senator BUSHBY—We will go back to the full toolkit. One of the things that we have heard from people who are advocating strongly for action to address the issues is the need for us to employ, basically, everything that we can to bring down emissions as quickly as we possibly can. Obviously, part of that is the voluntary efforts of households. One of the criticisms we have heard of the CPRS is that those voluntary efforts of households may well just simply free up more permits for the larger polluting industries to purchase. What is your view on that aspect of the construction of the CPRS?

Mr Connor—As Richard Denniss notes in his original report, that is a problem particularly because of inadequate targets. It would be almost a quirky fact if there were adequate targets, and he highlights that in his report. It is clear that whoever acts will make it cheaper for everyone else and often for themselves. I think it is important to recognise that the benefits that individuals and others take in this area will be of broader benefit—health benefits, community benefits and a range of other benefits. It is almost a fact that, even with a national target, whether there be a CPRS or not, if someone does more towards the national target then there will be obvious consequences. The biggest problem is if the target is inadequate.

We are part of something called the Southern Cross Climate Coalition with the ACTU, ACOSS and ACF. We have said that we need to top up these targets. Our strong preference would be to increase the targets in the CPRS and increase national targets. There are other ways in some of the other international mechanisms or in some of the mechanisms that Richard Denniss and others are talking to.

Senator BUSHBY—Are you aware of the Frontier Economics report that came out yesterday highlighting the regional disparity between the costs of CPRS?

Mr Connor—I am.

Senator BUSHBY—Obviously, there is an intention in a scheme like this to impose costs to facilitate a restructuring of the economy away from carbon intensive industry. That is part of it; that is the underlying reason behind a scheme like this. Do you think that the CPRS, as constructed, sufficiently protects those who will wear the brunt of that more than others? I am thinking more of the communities rather than of the businesses. As was mentioned earlier, I agree that businesses will adapt and change, but it does have an effect on parts of Australia and the people who live there which is disproportionate. Do you think the CPRS should address that better?

Mr Connor—Certainly I saw the article in the *Australian*. I have since seen what looks like a final draft of the report, and the article in the *Australian* quite grossly misrepresented the report in that regional economies will shrink. That is absolutely not the truth. What that report and many other reports have talked about is a relative reduction in growth. We are talking about strong, continued growth. For example, in research that we did in macro modelling with Monash University we tripled the economy through to 2050, even with the carbon-neutral goal in mind. The reductions are off reference cases, which are actually almost a function of those models: you

are basically taking percentages off because they are assuming X amount of productivity and then you are shaving it off as you move capital around. So it is a complete falsehood, and I understand that the Mayor of Newcastle was pretty annoyed when he was informed of this fact, because he was quoted as responding fairly negatively to those figures. That is something which is very important to have clear in people's minds upfront.

In our view, the report itself also overstates the impacts by assuming that regions will not benefit from any of the other new investments that might emerge from the CPRS. The Latrobe Valley, in Victoria, for example, has an outstanding gas infrastructure and excellent renewable energy resources which are likely to expand under an effective CPRS and renewable energy target. The coal industry in Central Queensland may contract, but the LNG industry is likely to expand to meet the growing world demand for gas and the like. So I think that many of those impacts were overstated—the particularly dire predictions for the Kimberley region, for example. Whilst we think that the LNG industry should not have received as much support as it did get, the CPRS and the white paper have certainly done that.

Senator BUSHBY—I have not read the report, but the reports that I have read about the report do acknowledge that between the green paper and the white paper the impact on the Kimberley has been addressed to some significant extent.

Mr Connor—Yes. There is a range of other things. For example, they say that there are no international permits or flexibility until after 2020, and that is just not the case either in the green paper or in the Treasury modelling, or in fact in the white paper.

Senator BUSHBY—Are you saying that the impacts in the regions will not be disproportionate?

Mr Connor—We are talking about relative growth and relative measures, and we need to look to that. We have strongly supported with our work through ACOSS, for example, making sure that there are resources for vulnerable communities. I think you would have to say that the CPRS white paper formula is quite adequate in that regard. There are other funds which will be established to help with some regional communities, so I think there is some flexibility with that. But I also think that it is in a way demeaning to some of those communities that they will not be innovative and respond and pick up some of the other opportunities. It is important to highlight that what was not flagged is that, if there are excessive impacts in some areas, which are the regions that will benefit. In fact I think your own state in many of the models would actually benefit quite significantly because of extra efforts in forestry.

Senator BUSHBY—And what is the overall conclusion of a \$2 trillion loss to the economy over 40 years in 2007 dollars?

Mr Connor—This is Howard era stuff, quite frankly. The great trick of Brian Fisher and ABARE was always to highlight those things. Again, this is a shaving of significant and ongoing growth, and they acknowledge in their report that it does not take into account the climate impacts foregone by undertaking those issues. So I really do not think, and certainly from the way it was reported, that it helped.

Senator BUSHBY—You have some criticisms of EITEIs and the way that they are dealt with in the timing of compensation et cetera. What do you think of Ross Garnaut's principal approach to dealing with EITEIs?

Mr Connor—Our strong view is to have a 100 per cent auctioning and then directing the revenues back according to need, and we talk about that in the report that we will make available to you. I think the principle that Ross Garnaut is making is that the need to have this geared towards a global agreement is important, but I am not convinced either way of the administration of that model.

Senator BUSHBY—It seemed to be consistent to some extent with your recommendation, and that is why I asked.

Mr Connor—Yes.

Senator XENOPHON—I have a similar issue in terms of the IPCC's recommendation to stabilise emissions to 450 parts per million. Some more recent studies have suggested that you actually need to go below that to, I think, 300 or 350 parts per million. What is the Climate Institute's position in relation to that—in other words, to get to a level where the risk with respect to climate change is mitigated as much as possible?

Mr Connor—Our long-term goal is to get it back to the pre-industrial level—to get the natural systems back in sync—of 280 parts per million. We have a task here to get our systems back in sync long term, but the pathway, in our analysis, through to 350 parts per million, for example, by 2020, is similar. Professor Garnaut did talk about getting to 450 parts per million through a pathway to 550 parts per million. That, in our view of the science, would not work, but in terms of 450 or 350 parts per million, both would require similar pathways to 2020 but stronger action beyond.

Senator XENOPHON—For Australia to do our bit to get to 350 parts per million, what sort of cuts are we looking at, instead of the five to 15 per cent?

Mr Connor—Similar pathways, in our view, through to 2020. That 25 per cent reduction is an appropriate reduction for Australia—

Senator XENOPHON—But that should be the minimum reduction, not the maximum reduction?

Mr Connor—Correct—but as part of a global deal, not as a unilateral action. We are focused very much on what happens in the global deal. We want Australia to be able to say we can go to that 25 per cent reduction in a world where other countries are taking similar action.

Senator XENOPHON—Dr Richard Denniss at the Australia Institute raised a concern that, if we are locked into the five to 15 per cent reduction and at Copenhagen at the end of the year they go for a higher target, that will involve a risk for taxpayers. Is that something you fundamentally agree with?

Mr Connor—Absolutely. It has been stated baldly by government officials that that is the way to top it up—or, be an odder year, buying of permits, and I just do not think that is a politically sustainable option. The point we also make in the report is that the treatment of EITEIs also leaves us open to that exposure, particularly if they grow any more strongly than predicted.

Senator XENOPHON—If you accept that the destination is a low carbon future and we need to go for a figure that would get us to or below what the IPCC recommends, there can be various paths to that destination, can't there?

Mr Connor—There can, but the sheer physics of what we have done and put up in the atmosphere, and the fact that we delayed for a couple of decades after the problem was realised, makes it very urgent.

Senator XENOPHON—Sure, but I am asking about various paths to get to the same destination. For instance, you may have heard that Westpac have reduced their emissions by 40 per cent over the last 10 or 12 years, and another 30 per cent reduction is coming, and that is in the absence of an ETS. I am not saying we do not need an ETS, but there is a lot of low-hanging fruit out there, isn't there, in terms of immediate cuts to greenhouse emissions in this country that are not necessarily contingent upon an ETS?

Mr Connor—Yes. We did a report called *The Business Council of Australia's missing millions*, which highlights the fact that many of our biggest polluters have actually identified millions of tonnes of potential abatement, without any carbon price, which would be cost neutral after four years. But, because in lots of ways we are talking about capital stock replacement, sending the medium- and long-term investment signals and having the incentives in the shorter term through energy efficiency and renewable energy to drive those investments is critical.

Senator XENOPHON—There is no reason why all those cannot be parallel, is there?

Mr Connor—My central point is that they all need to be parallel with an effective emissions trading scheme.

Senator XENOPHON—I think Senator Bushby picked up that the Frontier Economics report on the regional impact was prepared before the announcements were made with respect to LNG concessions. Did you say that you have seen a copy of that report?

Mr Connor—Yes.

Senator XENOPHON—I might try and get a copy from you because I have not yet. In terms of compensation for households, isn't that a flaw in the current CPRS—that you are not actually driving behavioural change if you are compensating households by, I think, up to 105 per cent? Is that the best way to achieve that outcome of reducing emissions?

Mr Connor—We acknowledge in some other work that we have done on energy affordability that there need to be some cash transitional payments, but we would actually prefer a lot more effort to be put into energy efficiency for households and the like. Particularly, we think that, for example, regarding the petrol excise buffer—remembering the CPRS covers 70 per cent of the

economy—because of the price buffers for EITEIs and for petrol, the price signals are clearest for only about 40 per cent of the economy. We think that is a bad use of resources. The money from the petrol tax excise, with the CPRS increase, could have been much better employed in public transport and other infrastructure, which would have benefited the more vulnerable communities.

Senator XENOPHON—Your primary goal is to reduce emissions significantly to make a difference and presumably so Australia can show leadership, at least in the region. So your goal is there but, if you can be shown that there are alternative ways to get to that goal, you are not particularly wedded to this particular model of the CPRS?

Mr Connor—If you are talking about the Canadian model, or carbon price—

Senator XENOPHON—No, I am talking about any other alternative path to get to the same destination.

Mr Connor—It is vital that we have a price signal which is long, loud and legal. In our view emissions trading is the most effective and efficient way and one that actually fits with the Realpolitik of the world, where nation states are discussing respective targets. We need a system which is linked to a national target but also can interact with other international systems to manage the price. Ultimately it is what is going up into the global atmosphere that matters the most.

Senator XENOPHON—Finally, in terms of the Frontier Economics report that was reported in yesterday's *Australian*, is the Climate Institute planning to do a detailed critique of the assertions made in that or some analysis of that as part of your work?

Mr Connor—No, we probably will not do a detailed critique. I am happy to share the points I made in response to what we saw very briefly of the report. But that is also for others to do.

Senator PRATT—I have noticed that some environmental groups have been talking about more ambitious cuts and having a trigger to phase out EITEI support sooner if the rest of the world get to an agreement. On that basis, I want to know what the Climate Institute thinks are the most critical parts of an agreement that would enable us to reach more ambitious cuts.

Mr Connor—Parts of a global agreement?

Senator PRATT—Yes.

Mr Connor—I think the key currency in the global negotiations will be the targets that developed countries set. A commitment to peak global emissions by 2015 or 2020 in effect sends a clear signal to developing countries in terms of the effort they need to make. Critical to that is the financing for mitigation and adaptation in developing countries. There is a lot of debate about, and acknowledgement of, that now. Australia is starting to move on that. For example, the G77's position on this is acknowledged, and that is really important, but the problem at the moment is that the Australian policy position does not allow for us to send a very clear signal to developing countries that we have a commitment in that regard.

CHAIR—Thank you, Mr Connor, for coming in today.

[11.55 am]

HENDERSON, Mr Roderick Boyd, Representative of the ICAA Emissions Trading Scheme Tax Committee, Institute of Chartered Accountants in Australia

WHITE, Mr Lee, General Manager Standards and Public Affairs, Institute of Chartered Accountants in Australia

CHAIR—I welcome Mr White and Mr Henderson from the Institute of Chartered Accountants in Australia. Would you like to make an opening statement?

Mr White—Yes, thank you. Good morning. Thank you for the opportunity for Mr Henderson and me to appear before the committee to provide our observations and comments. I do refer to our submission that we sent yesterday, which has hopefully made its way to you. With the tight time frames, hopefully we have been able to meet your expectations. I will not necessarily go into a lot of detail which is already covered in the submission, but there are some aspects I would like to briefly raise. I should indicate that Mr Henderson is actually a senior tax partner at KPMG but is with me today as the chair of the institute's tax committee dealing with the energy trading schemes. It is really through how this committee works with us at the institute that we are able to draw on the knowledge of our wide membership and that has informed our submissions to date. Relating directly to the exposure drafts of the legislation, I would like to point to a number of aspects that are examples of our views.

Firstly, guiding our comments and analysis on the aspects of the legislation has been our tax policy aims of neutrality, fairness and simplicity. In some senses those are fairly great goals, and we try to balance each of those as we draw our views. But we do have some concerns about the application of what are seen to be the normal GST rules to CPRS transactions. We believe that this approach will create some uncertainty and complexity for business taxpayers, particularly relating to exports, imports and registered emissions units.

Secondly, we see that there should be some form of alignment of the income tax treatment of free permits between the emissions intensive trade exposed industries and non-EITE taxpayers. I draw particular reference to what are seen to be the strongly affected industries—that is, the coal power generators.

Thirdly, the tax accounting for registered emissions units is, in our view, inflexible, particularly with reference to what is seen to be the rolling balance method and the valuation basis of FIFO—first-in first-out—basis evaluation, which is seen as restrictive. This is really a focus we bring in terms of the compliance and burden to business. We also see that there is some clarity required for businesses that they will be entitled to the tax deductions for the purchase of emission units that are surrendered for purposes such as abatement—that is, as being good corporate citizens.

Finally, I would also like to bring to the committee's attention—and this is outside the tax aspects I have just covered—that the institute has been fairly heavily involved to date with the Department of Climate Change regarding the external audit. The National Greenhouse and

Energy Reporting Act and the CPRS are the underpinnings of the market based solution to achieving reductions in carbon pollution. For this solution to work, it is acknowledged that there needs to be reliable investment grade financial information. For this information to be of appropriate quality, we are of the view that there needs to be appropriate independent external assurance. We have to date provided the DCC with components of the best practice assurance model to assist with preparing the draft regulations to deal with this requirement. We are very keen to assist the DCC with producing appropriate guidance because, at the end of the day, we need to make sure that in introducing this system there is appropriate independent assurance. That is important in terms of timing because, from an assurance perspective, there needs to be quite an introduction of the rules and requirements to provide these services.

CHAIR—Thank you, Mr White. You have raised several issues. But, in your view, are businesses overall ready to undertake operating in the CPRS?

Mr White—I will make an initial reflection and pass to Mr Henderson, who is perhaps a bit closer to that aspect of business. When we reflect over recent years, businesses in Australia have had to adapt to a number of changes—I am talking about the introduction of a GST, Y2K, and the introduction of international financial reporting standards. One could argue that this is another layer which they will get used to introducing. Time frames are always going to be important, and the aspect that they are probably most engaged with is trying, as quickly as possible, to get clarity around how things will work.

CHAIR—By clarity you mean including the regulations that you are advising on.

Mr White—Yes.

Mr Henderson—I will add to that. We have here the design of tax legislation at the same time as the legislation for the actual policy it is aligned with. We think that is good, but it also creates challenges because we are trying to understand the legislation around the policy to ensure that tax rules will work properly in practice to allow fairness, neutrality and simplicity.

Senator BUSHBY—You were talking about clarity around how things will work. How important is it to get the design right from a tax perspective? What are the consequences?

Mr Henderson—It is very important from day one—there is a standing start—and also before day one so people can plan for the start of the CPRS system. The two main strands of tax are income tax and GST. Let me start with GST. It is important that systems are in place, particularly in the trading area—and we are not talking about one type of trading; we are talking about trading on the spot markets and the trading of derivatives. Currently, systems are not set up to deal with taxable GST supplies in trading systems, and so people would need time to be able to deal with that—and people are seeing complexity with that. From the income tax point of view, again people are making decisions as we approach a start date, and business is absolutely interested in certainty around how these tax rules will apply from day one.

Mr White—I will add to that. At the highest level it is important to get the starting point correct because, as Mr Henderson has indicated, there is a compliance cost. We are changing systems, but our experience has been that in the introduction of different types of legislation

there is also a component around training as well. So the better that you can line up compliance and training, and everything else, to start with, the more effective it will be at commencement.

Senator BUSHBY—I have clearly identified issues. I presume you have been through the exposure draft legislation in detail?

Mr Henderson—I would say we have gone into the tax rules very much in detail, but to a lesser extent the other.

Senator BUSHBY—The bits are okay? The wider tax?

Mr Henderson—Yes.

Senator BUSHBY—Also, a lot of it is to be dealt with in regulation, which I imagine you will be waiting to have a good look at when it comes out.

Mr Henderson—Yes.

Senator BUSHBY—Having looked at those tax bits of the draft legislation, presumably you have identified issues. That is what your submission deals with—the technical issues that the exposure draft raises in your mind in dealing with it from a tax perspective.

Mr Henderson—Correct.

Mr White—When we use that phrase ‘the technical issues’, it is drawing back as well to those principles that I mentioned—neutrality, fairness and simplicity.

Senator BUSHBY—Yes. So some of the issues that you raise may apply to neutrality, some to fairness and certainly some to simplicity, which I think you have already—

Mr White—Yes, and some across all three. It is a bit of a balance there.

Senator BUSHBY—And how fundamental are the issues that you have identified? Are they serious or are they minor things that will just be an annoyance to people?

Mr Henderson—You can probably talk about the fact that simplicity, in some sense, can be an annoyance or become a big impediment. But what does an area such as neutrality mean? It means that a company would do something because of the tax reasons and not because of the policy reasons for climate change abatement. We are concerned that if a company has a trigger point for tax which is different from the abatement date of their permits, which happens here, they will be taxed at the end of the tax year and, in the following December, when they abate their credits, they can be taxed at year end even though they abate those credits after year end. We are seeing some aspects like that. We think that will be the major timing impact.

Senator BUSHBY—That raises fairness issues.

Mr Henderson—Yes, there are fairness issues. There are other examples, such as taxpayers who may find they have a taxation point when they do not realise the sale of a permit and they

need to sell that permit to fund the tax liability, or they might just sell a permit at a time that is not related to their climate change objectives.

Senator BUSHBY—Have these issues only become apparent with the actual drafting of the exposure legislation, or are they issues that were apparent earlier in the green and white papers?

Mr Henderson—We picked up some aspects around that from the white paper in December, but there were other aspects, such as the FIFO valuation method, which we saw for the first time in the exposure draft. That was a particular surprise to people.

Senator BUSHBY—Presumably you made representations to the government on the ones that were apparent in the white paper, but they have still flowed through to the exposure draft?

Mr White—That is right. The submission you have there includes our prior submission. We have tracked within our current submission issues that still prevail from our earlier comments.

Mr Henderson—We will make a formal submission to Treasury and to the Department of Climate Change and Water in response to the ED, but we bring to the attention of senators that some of the aspects of this legislation are unduly protective of the revenue and unduly restrictive.

Senator BUSHBY—My next question was going to be about what revenue impacts your recommendations would have. You say that they are being unduly protective. In saying that do you mean that the revenue would not be impacted as much as they think it will be?

Mr Henderson—I will give you an example. We were told that the rigidity of some of the rules around valuation is because the drafters of the legislation fear that there would be abuse, and they perceive that certain taxpayers could hoard permits on a low base with a low cost to be sold some time in the future to ‘avoid tax’. Our response is that, therefore, all taxpayers and all businesses with no intention of any tax avoidance will be saddled with a very burdensome series of rules. So there are perceived theoretical fears of tax minimisation, which we are not aware of, and therefore these rules are very strict. It is like using a sledgehammer to crack a walnut.

Senator CAMERON—When you say all taxpayers, are you talking about the 1,000 entities that are covered by this or about all taxpayers in general?

Mr Henderson—I will be more specific on that point: it is taxpayers who will be trading or holding CPRS units, which would go beyond 1,000 because of the counterparties, the banks and other people trading in the market, as well as other companies which choose to buy CPRS units for carbon-neutral projects.

Senator CAMERON—But that is not every taxpayer by any stretch of the imagination.

Mr Henderson—It is not every taxpayer, correct.

Senator BUSHBY—It is every taxpayer who has an obligation. Making the changes that you refer to may have some revenue impacts, presumably you would concede that, but you think they are being overly protective in that sense. The whole point of this legislation is not to raise

revenue; it is to try to put in place a structure that will encourage Australians and provide a market-based incentive for Australia to move from a carbon based economy to one that is less carbon based. Would the recommendations you are making be likely to have any effect on participant behaviour which would undermine the overall objective? For example, you have talked about hoarding carbon credits. Is there anything in there, other than revenue, that would actually undermine the objective?

Mr Henderson—The only comment I would make relates to the GST. The fact that we have confusion about how imports and exports are treated might impact the participation of international trade. We are hearing that from business.

Senator BUSHBY—With what consequence? How would that play out?

Mr Henderson—In terms of trading in an Australian scheme as opposed to trading in another scheme?

Senator BUSHBY—Yes.

Mr Henderson—If there is uncertainty around the GST taxation and there are other choices people might choose to trade elsewhere, so it might impact the volume in the market.

Senator BUSHBY—So they might trade outside Australia rather than in Australia?

Mr Henderson—Yes.

Mr White—Yes, particularly around the capital inflows into Australia as well.

Senator BUSHBY—Which would probably undermine the overall effectiveness of the scheme if it were left as it was?

Mr Henderson—I think ‘efficiency’ is probably more accurate, rather than the overall effectiveness.

Senator BUSHBY—Okay, the efficiency of the overall scheme. So in that sense if your recommendations were adopted or looked into they might actually improve the scheme?

Mr Henderson—Correct.

Mr White—In terms of the efficiency that is right. I do not believe that, besides the one that Mr Henderson has raised, there are implications in what we are talking through here in terms of the behaviour, so what else would happen other than the efficiency.

Senator FURNER—It is apparent that businesses will build their systems to deal with the carbon reporting and compliance as a result of the CPRS. There will be a lot of work for lawyers and accountants in that field. Do you think that will be reduced once companies have had their systems bedded down?

Mr White—Now this is more from the accountant's perspective. Experience has shown with other major projects, where other pieces of legislation have been introduced, that there is an initial component of training and system changes and that after a period of time—and it depends on the complexity of what is being introduced—all that becomes more a part of business as usual rather than a special resource demand within the organisation. You would find some degree of decrease in cost over time as well. How much that would be from the initial investments would depend a little bit on the complexity of and the challenges of what is being introduced. We have certainly seen that in other aspects.

Senator FURNER—What was your experience throughout the introduction of the GST of the effects on businesses given that there will be two different levels of impact through the CPRS and the GST arrangements in terms of employment?

Mr Henderson—I concur that it was similar to that. There was a big ramp-up, just as people are now immediately affected both on the trading side and on the side of the covered entities that are working now. They have to be working now. They expect that to go right through past the start date and then it will drop off.

Mr White—There will be components relating to ongoing costs as well. In my opening comments, I made reference to the assurance of the underlying audit requirement. That would be a requirement that in effect would need to be ongoing. One might suggest that perhaps as the audit profession and the accountants involved in this all learn how to put this in place, while that might be a bit of a stronger cost initially with the introduction, it might be reduced down although not significantly over time, but there would be a reduction as it became part of that business as usual. It would be an ongoing cost as well.

Senator FURNER—Do you have any idea of the time frame of any of that slight reduction?

Mr White—Time frames are always a little challenging on this. If I looked across at something like the introduction of IFRS, that was probably a three-year period before things had really started to settle down.

Mr Henderson—You do expect it to go possibly a year after the start date, because you do get the laggards who are catching up as well.

Mr White—The challenge at times is that you think something is about to get bedded in but there are further changes or other drivers change and therefore it gathers a little bit more momentum as well.

Senator FURNER—This morning we heard from Mr Paul Curnow from Baker and McKenzie. He was giving evidence that the obligation transfer number is an innovative feature of the Australian scheme that other countries can learn from. Do you agree with that? How will it increase flexibility for businesses?

Mr Henderson—Sorry, I did not quite catch that about his main statement.

Senator FURNER—It was that the obligation transfer number is an innovative feature of the Australian scheme that other countries can learn from.

Mr White—I cannot reflect on that.

Mr Henderson—I do not have a view.

Senator FURNER—Okay.

Senator XENOPHON—In your submission as to the green paper, you raise concerns about the tax treatment of free permits. How does the government's draft legislation deal with that problem?

Mr Henderson—The government's draft legislation, as announced in the white paper, has taken the approach of, firstly, taxing the free permits. But there is a mechanism for when that taxation point is recognised. The white paper does announce that the permits will be allocated over a number of a years rather than just one big lump sum, upfront amount. As explained in the white paper, that would ameliorate the impact of having just a whole lot of permits taxed in one year. That is contrary to many of the submissions which asked for industry assistance to be in a tax-free format. The ED, the exposure draft, has these permits taxed. There is a distinction between the trade exposed, the exporters, and the strongly affected, the coal power stations. The trade exposed, if they still hold onto the permits after the first year, can defer the taxing point until the year in which they surrender, whereas, if the coal power stations hold them at year end, they will be taxed on the value of that permit. That is one of those paper profit issues we have already mentioned. It is recognised as a paper profit when the permit is still held and could distort behaviour.

Senator XENOPHON—You do not think it is satisfactory or do you think the government's approach in the exposure draft is satisfactory?

Mr Henderson—We have been getting resounding views from businesses in the submissions. The starting point would be to have tax-free permits similar to industry assistance provided to other industry sectors as in the past.

Senator XENOPHON—How come they have not done that yet?

Mr Henderson—It was not accepted in the white paper.

Mr White—There has not been an alignment between the EITE and the non-EITE taxpayers.

Senator XENOPHON—Just a couple of other things. In your green paper submission you noted the need for appropriate tax incentives to be included in the design of the scheme. What do you mean by that?

Mr Henderson—As part of the government's policy our major aspect will be the development of low-emissions technologies and also abatement technologies such as carbon capture storage, which is the geosequestration of the CO₂ in an underground reservoir. Very big capital projects will require significant investment in R&D and capital expenditure. The government has announced that this issue will be considered by the Henry review of the Australian tax system. In our submission, which was lodged yesterday to this committee, we pointed out that the reporting date for the Henry review is into the 2010 year. It is stated that they

will be looking at incentives for low-emission technologies. What we would like to highlight for this committee's consideration is that these incentives are seen as an important part of the Australian tax system to encourage investment and importation of capital, and we would like to see that these tax incentives are released, announced or developed in conjunction with the start date.

Senator XENOPHON—You prefer that the Henry review, insofar as it relates to its impact on the CPRS legislation, ought to be made public before the other aspects of the review?

Mr Henderson—I think we agree with that. We would like to see special fast-tracking of the incentives.

Mr White—There needs to be integration between the two.

Senator XENOPHON—Is that something you put to the Henry review, given your concerns?

Mr Henderson—Yes, we have.

Senator XENOPHON—Finally, in your green paper submission you raise concerns about the use of operational control as defined in the reporting legislation as the basis for setting liability. Have those concerns been dealt with in the context of this exposure draft? As I understand it, in your green paper submission, you raise concerns about the use of operational control, as defined in the National Greenhouse and Energy Reporting Act, as a basis for setting liability. Am I right about that? Is that premise correct?

Mr Henderson—Yes.

Senator XENOPHON—How have those concerns been dealt with in the context of the exposure draft?

Mr Henderson—In the tax rules the taxing point is measured at each year end on how many permits you hold and that will determine your taxing point. However, if you abate those permits after year end, at the reporting date, you will still be taxed. We requested that they recognise that covered entities have a liability which accrues over the course of that year and they should allow for the tax deduction to be recognised in that year.

Senator XENOPHON—Has that been done in the exposure draft?

Mr Henderson—No, it has not. We understand that New Zealand does allow an accrual of a deduction for covered entities, and we have discussed that and pointed that out.

Senator XENOPHON—You see that as a problem?

Mr Henderson—Yes, and a fairness issue.

Senator XENOPHON—Thank you.

Proceedings suspended from 12.19 pm to 1.29 pm

TONI, Mr Paul, Program Leader Sustainable Development, World Wildlife Fund**TRUJILLO, Mr Anthony, Economic Policy Officer, World Wildlife Fund**

CHAIR—Thank you for coming in this afternoon. Do you wish to make an opening statement?

Mr Toni—Yes. Perhaps I could tender a two-page summary of the statement I will make.

CHAIR—Thank you.

Mr Toni—Thank you very much for inviting us to address the committee. To reduce emissions at the scale that is required to avoid dangerous climate change will require the transformation of the electricity, energy, industrial and, ultimately, agriculture and forestry sectors. The technology to reduce emissions from the electricity and energy sectors generally by about half is available today; however, to reduce emissions beyond that and to achieve the deep reductions we need by mid-century will require major technical advances, particularly in relation to energy storage and agriculture. In these circumstances it is clearly desirable to minimise the costs of reducing emissions; however, this should not be in terms of favouring immediate costs or short-term costs over the total potential costs associated with sectoral transformation.

An effective carbon pollution reduction scheme will address short-term costs but not total potential costs nor non-cost barriers. Accordingly, it is an essential element, we would say, of the national response to climate change, including of a national carbon pollution reduction scheme, that both the longer term and indeed the medium-term transformations required be addressed at this point in time. In terms of non-cost barriers, regulation is required to address energy efficiency as the barriers to this particular issue are well known to be resistant to prices, and that this has been recently demonstrated yet again by the Energy Efficiency Opportunities Act introduced by the last government. There is also a need to foster the deployment of carbon capture and storage, geothermal, ocean and solar thermal renewable energy in the immediate future.

All of these technologies are viable and available today; however, the process of scaling them up to the level required for commercial application will take at least a decade or two. Typically, technological transformation of industrial plant operates by about a factor of seven. So, for example, a 50-megawatt demonstration plant for perhaps carbon capture and storage or solar thermal will typically only be expanded to about 350 megawatts or so. Say we assume it takes five years to build a carbon capture and storage plant of 50 megawatts—and, as the committee would be only too aware, there are no coal carbon capture and storage plants operating in the world at this point in time. If, being very optimistic, we assume that a demonstration plant could be built in five years, we would assume probably a number of years, perhaps five, of operation and testing. That might be able to be shortened. Then to scale it up will take perhaps another five years of construction. So you would be looking at after 2020 before we got to even a moderate sized carbon capture and storage demonstration plant—350 to 400 megawatts. In other words, the scaling up of these technologies needs to begin now. Neither the Carbon Pollution Reduction Scheme nor the existing Mandatory Renewable Energy Target scheme will foster geothermal,

ocean or solar thermal technology in the near future. At this point in time we have no significant investment in agricultural emissions.

Australia has ample energy resources to reduce emissions by 90 per cent by 2050. Towards the end of my presentation, if I may, I will tender a report that supports this claim. However, to achieve those sorts of emissions reductions we need to be developing those industries and developing a series of industries today. The reason for that is similar to the reason that you cannot build more than a certain number of tanks or ships or planes, even in a time of war. No matter how important an issue, there are physical constraints, intellectual constraints and infrastructure constraints to the speed with which you can deploy a new technology. The scale of reductions that are required would mean that 20 per cent growth rates would be quite common year on year. This is an exceptionally high rate of growth for any industry. Except in very rare instances like mobile phones, you simply do not see those high rates of growth. Above 20 per cent is uncommon; above 30 per cent—which, if we delay establishing these industries by a decade will be necessary—in industrial terms is unprecedented.

The present renewable energy target of 20 per cent by 2020 is probably adequate to transform the sector, provided it is banded or other arrangements are made to foster big baseload type renewables like geothermal, ocean and solar thermal. We are in fact in striking distance; it is just that our existing legislative and administrative arrangements do not focus on those industries. I do note, however, that the renewable energy target does band, as it were—as in emphasise—domestic solar, PV. While this is an attractive technology at a small scale, we really need to explore support for the technologies that are likely to provide industrial levels of power.

Finally, one of the key steps in reducing emissions at a very large scale is to reduce industrial emissions. Australia is a very large industrial country. It would be desirable to stay that way, both because we have significant raw materials which can be conveniently processed here, if we can move our industrial plant to a low-emission form. One aspect of that is undoubtedly promoting low-emission forms of electricity. Another is reducing the emissions. At this point in time there are no known ways to dramatically reduce industrial emissions for a number of processes, including cement, and iron and steel. The only known solution is geosequestration. So we have a number of very large industrial complexes, some of them which are suitable for geosequestration and some of which may be, but WWF would submit that this should be accorded a high priority in a carbon pollution reduction scheme. Perhaps I could stop there.

CHAIR—Thank you. In terms of making a high priority of things like geosequestration and carbon capture and storage, and also the bringing on of new technology for non-renewables, you have addressed it in some senses, but how specifically would the government most efficiently target the growth of those new technologies?

Mr Toni—Renewable technologies?

CHAIR—Yes.

Mr Toni—We think that the existing 20 per cent target is likely to be sufficient, but in fact measures have to be adopted inside that to specifically foster geothermal, ocean and solar thermal. I am just naming those because they are the sources of technology likely to provide very, very large-scale baseload, continuous power.

Mr Toni—So you would straight out pick those industries, the leaders in them, and give them some sort of financial assistance?

Mr Toni—Yes. The UK government has recently proposed to do this with its renewable energy scheme—that is, to band it so you have a market scheme. The technology itself is not really picked; what is chosen and favoured is the resource, whether it is solar, ocean or geological—geothermal. You are saying: ‘This is a resource that we know is huge,’ and in this country we know that all of those sources are huge—virtually without limit, in fact. ‘We will find a way to tap those energy resources and we will create a system the favours the group or organisation who has the best technology to tap it by creating, as it were, a hybrid market scheme that focuses on particular resources.’

Senator JOYCE—Thank you, Mr Toni and Mr Trujillo. You talked about carbon sequestration. Do you know of any commercially viable carbon sequestration projects that are going forward anywhere in the world at the moment?

Mr Toni—Commercially viable as in paying for themselves?

Senator JOYCE—Yes.

Mr Toni—I am not sure about Sleipner or the gas reinjection sequestration projects. They may pay for themselves, but I am not sure. But I do not know of any coal one, that is for certain.

Senator JOYCE—What do you deem the price of carbon permits to be before geosequestration will become viable?

Mr Toni—I am afraid the short answer is that we really do not know. Our information base is so slender that we just do not know. We know that we have three major technologies contesting for the gas separation technology. After that the cost will be driven partly by the distance that you have to pump it to reach a sequestration field and then the cost of pumping. So we just do not know.

Senator JOYCE—From the outset, doesn’t it seem a little bit dangerous for us to engage in a process of going down a CPRS before these technologies are proven? Aren’t we just foisting a tax for which there is no remedial outcome, no way to offset it? The only way you could offset in Australia is to move the industry, such as aluminium, someone else.

Mr Toni—No. There will be a cost in dealing with this, there is no question about it. There are measures we can adopt to reduce—not eliminate, but reduce—the impact on the aluminium sector. There is one option, which is to try to develop sectoral agreements, because in fact the number of countries that are players in the aluminium world is actually quite small.

Senator JOYCE—Is there any prospect of getting sectoral agreements within the aluminium industry?

Mr Toni—It is not something I can express an opinion on. All I can say is that there are a relatively small number of countries that would have to be part of it.

Senator JOYCE—You are probably aware of the report that the New South Wales government did that talked about a 20 per cent reduction on 2007 levels in the GDP of regional and certain regional areas over the next 40 years.

Mr Toni—Yes.

Senator JOYCE—Looking from the other side, how do we explain that to the people who live in those areas?

Mr Toni—Part of our submission is that we should actively manage the process. We should not just rely on a CPRS; we should be doing two other things. One, in the case of industrial centres—

Senator JOYCE—Say, Gladstone, for instance.

Mr Toni—for Gladstone we should be exploring geosequestration opportunities today and we should be getting in place the easements that are necessary to transport industrial waste, which is what we are talking about, to a place where it can be safely sequestered, and we should be accelerating major baseload forms of energy.

Senator JOYCE—Would there be any potential or alternate baseload form of energy that would have the capacity to support the industrial city of Gladstone away from coal?

Mr Toni—I am not sure about how close geothermal sites are to there. They would be some distance, I would think.

Senator JOYCE—You have to go to Central Queensland, inland—Alpha, someone like that—300 or 400 kilometres.

Mr Toni—That is considerably less than the New South Wales grid, which extends well into the country. That would be, I suppose, the one that would spring to mind, just because of its scale.

Senator JOYCE—We know the requirements. Is the technology out there for us to produce a geothermal baseline technology that would be able to supply an industrial city—and, if there is, how long would it take us to build it?

Mr Toni—At this point in time there isn't. I think that is part of our argument—that, in fact, we know that to scale these technologies up we have to start today.

Senator JOYCE—Do you apply your mind to any other alternate forms or policy that in the interim would actually start to move us towards this position without inducing a tax? Because, obviously, the effect of the tax is immediate—the immediate response is to get a certain return on your income. If you believe in a global market, global resources move. Could you suggest a way that Australia could actually move towards this position without bringing about the impetus of the tax immediately?

Mr Toni—WWF supports the CPRS—or, at least, an effective CPRS. I think it does form the essential underpinning for long-term emission reductions. The way to ameliorate its impact is to try to induce the step changes we need. With Gladstone, for example, there seems to be a good likelihood that CCS will be available there, if it works. Therefore, it is imperative that we test it.

Senator JOYCE—There are a lot of ifs, though, there, Mr Toni, aren't there?

Mr Toni—There are.

Senator JOYCE—‘If it works’, ‘if it's there’—if, if, if. But the introduction of this scheme is not an if; it is a certainty, if this legislation goes through.

Mr Toni—Yes.

Senator JOYCE—How do we balance those two off: the certainty of an impost on costs and the effect that it will have in the middle of a recession and the potential that, if we had more time, we would possibly be able to produce a technology that would somehow ameliorate the concerns of the people who are going to lose their jobs? The Labor Party report says they are going to lose their jobs.

Mr Toni—We are very conscious of trying to minimise the impact of this scheme. But if we accept that we must reduce emissions, pollution, from this source, there is really no alternative in the longer term—it will not impact probably within the next 5, 6, 10 years possibly even—other than to find step changes to the technology.

Senator JOYCE—My colleague has pointed out to me that you say that we have the potential to reduce emissions by 90 per cent by 2050. Is that your belief?

Mr Toni—Yes—from the power sector.

Senator JOYCE—What sort of effect will that have on our economy?

Mr Toni—It turns largely on the speed with which you transition to new forms of energy. If CCS or ocean technology work—and it appears likely they will—you would be able to hold on to much of the existing industrial base.

Senator JOYCE—Can you tell me, from your knowledge of the system, as we try to develop these technologies, which you say are obviously crucial in ameliorating the effects, what policies are currently out there at the moment that encourage me to invest, prior to the CPRS, in developing these technologies?

Mr Toni—There was a system of grants under the former government which encouraged companies to invest.

Senator JOYCE—Are those grants still there?

Mr Toni—Most of them are. They have been replaced by a new program, but in substance there is a grant system there. The difficulty with grant systems is that the cost of administration

is very high and it is very uncertain for companies. All of the companies that I have spoken to would much prefer a market based system. So the renewable energy and target system does have tremendous potential, provided it fosters the technologies that we need to transform the country.

Senator JOYCE—Do you believe that fugitive emissions, especially from coal, are a major problem?

Mr Toni—They are a major problem, but it is an issue that can be managed over time.

Senator JOYCE—We have received evidence and we have gone through the graphs of the seaborne coal and noticed that, although we believe we are a big player, when you take all the other countries into account, Australia is not a big player. Four per cent of the coal that is used in the world is Australian coal; the other 96 per cent comes from somewhere else. If we remove the coal industry or put the impetus for the further development of alternative sites than where this coal is accessed from, what industry do you have in mind to take coal's place?

Mr Toni—Could I answer that in two stages. Firstly, we are not suggesting that we do for a long period of time—probably mid century—because we would like to see CCS fostered in this country and fostered very quickly. If CCS works—and the probability is that it will; after all, these are existing technologies—we will see emissions in the power sector decline by something like 70 per cent.

Senator JOYCE—What is going to take the place of our export coal industry?

Mr Toni—For the foreseeable future, I think there will be an export coal industry. The coking coal industry is unlikely to be affected in the foreseeable future because we will still need steel.

Senator JOYCE—But the ultimate goal is to replace it. But what will we replace it with? We have to keep the capacity of the Australian economy to obtain an external source of money, because we live predominantly on imports. Our terms of trade demand a capacity to export a major product.

Mr Toni—Yes.

Senator JOYCE—If we take coal, which is our major export product, out of the mix and then everybody continues to wish to drive imported cars, read imported books, watch imported television shows on imported television sets and walk around in imported clothes, what are we going to put on a boat and send in the other direction?

Mr Toni—For some time I would expect it to remain coal.

Senator JOYCE—And after coal?

Mr Toni—After coal, the sky is the limit. Originally we exported whales. Then we exported seal skins.

Senator JOYCE—Do you suggest we go back to whales?

Mr Toni—No. I do not think that would work somehow!

Senator JOYCE—That would be an interesting suggestion from the WWF! They are environmentally sustainable.

CHAIR—I do not think you can lead them into that, Senator Joyce.

Senator JOYCE—I know. I just could not help myself!

Mr Toni—The point I am trying to make is that, over 200 years, we have had exports change—often dramatically—and the economy has stayed healthy and got bigger and healthier in fact.

Senator JOYCE—The manufacturing industry is precluded because of the baseline impacts of electricity. The coal industry is precluded because of fugitive emissions of coal. The agricultural industry is precluded because of methane emissions of ruminant animals. I am fascinated to know what 21 million people will do. We cannot just all take in one another's washing.

Mr Toni—I am afraid I cannot answer that question, other than to say that the issue is the emissions. If you find a way to address the emissions, there is no reason to believe that you cannot have these industries.

Senator CAMERON—Mr Toni, you have obviously had a look at the government's white paper and the drafts that are out there. Have you seen anywhere where the coal industry is designated as disappearing?

Mr Toni—No.

Senator CAMERON—What is your organisation's view about timing to move to a CPRS? Do you believe we should do it earlier rather than later?

Mr Toni—We would support a 2010 start date.

Senator CAMERON—Should we take into account the current recession in a short-term approach or should we look longer term?

Mr Toni—We would submit that you should look longer term.

Senator CAMERON—All the discussion from Senator Joyce this morning has been about job losses and assertions that are not based on any factual position in the CPRS. What is your organisation's view about the potential to grow jobs in the economy as a result of the CPRS and other initiatives?

Mr Toni—This will require the transformation of our economy. It will be done over a period of time, but it will be a transformation. Just as after World War II we had a particular profile in the country and that has changed over time, I would expect that by 2050 we would have a country that was in many cases based on similar sorts of industries because our comparative

advantages will not go away. We are a very energy rich country. We have very large amounts of raw materials and we are operating in a particular part of the world where those raw materials are in demand and will continue for many years to be in demand. I think people will have different job descriptions, but in many cases it will be an evolution of their existing job. Metalworkers will work on the blades of turbines that are used to gather wind or ocean energy, as opposed to perhaps working inside a fossil-fuel-burning plant.

Senator CAMERON—So you broadly accept the analysis that has been made by Treasury that the economy can continue to grow even with the CPRS?

Mr Toni—Yes, and I think that the Treasury modelling is outstanding in world terms. There is no similar detailed modelling anywhere that I am aware of—possibly the UK, but not many places outside of that.

Senator JOYCE—That contradicts with the modelling of the New South Wales government.

Mr Toni—No, they are not inconsistent because one is looking at the impact on a particular area, which is important to try to manage, and the other is looking at national, or at least very large-scale, impacts.

Senator CAMERON—We have evidence this morning that the New South Wales report does not demonstrate declines in jobs per se. There might be a decline in jobs that may have been created without a CPRS but the alternative to that is to allow the earth to continue to warm up and have greater problems. Is that your understanding?

Mr Toni—That is correct.

Senator BUSHBY—You noted this afternoon and in the short submission that you provided that we need to address the non-cost barriers such as energy efficiency. You would be aware that the way the proposed draft legislation is set up with its cap and trade has the effect, which I would suggest is perverse, whereby if consumers or households voluntarily reduce emissions it means that there is more flexibility for the large emitters to then emit a little bit more and still fall under the cap. Is anything about the CPRS that you think could be changed to address that issue.

Mr Toni—We would certainly support it being changed to address that issue. I am not sure what mechanism might be adopted but cancelling the number of emissions units would seem to be one way to do it.

Senator BUSHBY—To repeat what we heard this morning, the suggestion from the Climate Institute was greater targets, which would have the same effect. If the target is bigger it is harder to meet and if people are reducing it then there still needs to be work done to meet it. It would be a perverse consequence if people were voluntarily reducing their emissions under this current proposal and it meant that other emitters could increase their emissions as a result of that.

Mr Toni—Yes, it would be a very unfortunate result.

Senator BUSHBY—Following on from Senator Joyce's questions, you mentioned possible measures to protect the existing major industrial centres. What sort of measures do you think could be employed to protect them?

Mr Toni—Aggressively pursuing low-emission forms of energy is the main way.

Senator BUSHBY—The intention of the scheme, which I think everybody understands and probably most people support, is to introduce a market mechanism that will encourage a shift from a high-carbon based economy to a low-carbon based economy and that necessarily involves structural change and in the process there will be winners and losers. A lot of the argument about this revolves around how you deal with the transition and ensure that people are appropriately protected during that transitional phase. What you are saying here is that for political reasons, if nothing else, there should be measures put in place. But if the measures you are talking about putting in place are aggressively pursuing alternative low-carbon technologies, that does not necessarily protect the people in those areas because they may well work better in other areas or develop in other areas or in major metropolitan areas.

Mr Toni—That is certainly the case.

Senator BUSHBY—Do you think measures should be specifically applied to those areas most affected or do you think that the aggressive pursuit of low emissions technology will solve that?

Mr Toni—In many cases, it will solve it.

Senator BUSHBY—And if it doesn't?

Mr Toni—There is a very high chance that it will. The existing scheme proposes transitional measures for seriously affected—

Senator BUSHBY—And you think that they are adequate?

Mr Toni—Yes. What we would say is that we should try and use those measures to get an environmental outcome at the same time—and indeed an economic one.

Senator BUSHBY—You mentioned under 'solutions' a CPRS with support for ET limited to 20 to 30 per cent as proposed by Garnaut. We had Professor Garnaut before us on Monday in Perth. He was talking about his principled approach to compensate for emissions in intensive trade exposed industries. With your 20 to 30 per cent, are you referring to his principled approach to compensation?

Mr Toni—Yes.

Senator BUSHBY—Okay. That is interesting. That figure is not necessarily how I understood his explanation of that.

Mr Toni—Perhaps I am using the word 'principled' in a different way.

Senator BUSHBY—‘Principled approach’ is a term that he uses for basing the compensation on principles that he outlines, as opposed to basing it on an ad hoc basis, which is how he describes the government’s approach.

Mr Toni—I thought that there was an intersection of two elements to his scheme. One was the principled distribution of the pool of money that you have decided to set aside to compensate or assist big emitters through the transitional process. But there was an additional element, which was that the figure of 20 per cent was a policy decision. I may be wrong, but I do not think that I am.

Senator BUSHBY—I asked him to explain the principled approach. To the best of my memory, as I understood it he was saying that if you are an exposed industry then the government compensates you by giving you an amount which is equal to the difference between what you achieve for your sales and what you would have achieved if your major competitors also faced a similar scheme. It is a margin type of thing. You are compensated for that difference. It might be the other way round, but it is the difference between what you are losing because we have a scheme here and what you would have received if other people also had the scheme. You do not get the full benefit, but you get a partial thing, which puts you back into a competitive position, basically.

Mr Toni—In our submissions on the green paper we supported Professor Garnaut’s approach on that issue.

CHAIR—You want the emissions trading reduction target to be up to 25 per cent. Currently, it is five to 15. Do you think it might be a reasonable proposition to put the bill through but leave the target open until after Copenhagen later this year?

Mr Toni—That would be one option. Australia is a small emitter, but it does have quite a loud voice in international affairs for a medium-sized country. The WWF is hoping to see a strong leadership position from Australia.

CHAIR—Before Copenhagen?

Mr Toni—Before. If a deal is not struck at Copenhagen, it will be many years before we get another shot at it, being realistic.

Senator FURNER—Just on that subject, in Melbourne’s hearing we heard from Mr Pascoe from the ACF. He made a statement that every year of slowing action locks in a worse future for dangerous climate change. Surely on that basis alone we should not delay this legislation if there is a need to be in a strong position on the global stage to deliver at Copenhagen. If down the track there needs to be some amendments made to it or changes, it would be possible to do that.

Mr Toni—Yes, an effective emissions trading scheme is very desirable, and this scheme has good bones to commence operation in 2010. However, it is just as desirable that the national response to climate change be as comprehensive as possible at this point in time and addresses the transformations we need, not just the relatively minor steps that are presently proposed.

Senator FURNER—Having no scheme is worse than having any scheme, is it?

Mr Toni—It just depends whether it affects the transformation, Senator. Ultimately that is the objective. That is the key issue in a sense.

Senator FURNER—Thank you.

Senator XENOPHON—Can I just raise the issue of biosequestration and also biochar: is that something that you have considered in the scheme of things as to the impact it could have on reducing emissions?

Senator JOYCE—Biosequestration or geosequestration?

Senator XENOPHON—Geosequestration.

Senator BUSHBY—We have already talked about geosequestration.

Senator XENOPHON—I will stand corrected by my colleagues, but I think that biochar is part of biosequestration.

Senator BUSHBY—That is my understanding.

Mr Toni—WWF supports any measure that can be adopted to reduce emissions.

Senator JOYCE—Is it biosequestration or geosequestration?

Mr Toni—Geosequestration is, essentially, pumping industrial pollution underground such as the CO₂ from the power sector or from the industrial sector.

Senator JOYCE—What is biosequestration?

Mr Toni—Growing trees really, but also enhancing soil carbon I think would be encompassed by the term.

Senator XENOPHON—In relation to Copenhagen, one of the criticisms that has been made by Richard Denniss of the Australia Institute the other day in giving evidence to this committee was that, if we lock ourselves into a five to 15 per cent target and Copenhagen comes out with an agreement at, say, 25 per cent, then there is a taxpayer risk for that difference between the 15 and 25 per cent. Do you have a particular view on that?

Mr Toni—That is true. If we have to meet the target that was set for the nation or accepted by the nation, then that would mean that the government, who is required to meet it, would have to purchase additional credits.

Senator XENOPHON—Finally, the destination that WWF wants is to have a significant cut in emissions to get to 400 parts per million?

Mr Toni—Ultimately 400.

Senator XENOPHON—Four hundred because 450 may not prevent that tipping point in terms of climate change. Is that the concern? Are you confident that 400 is an adequate or safe figure? Others have said 300 or 350.

Mr Toni—At this point in time we would be over the moon to get to 400. It may well be that as the science develops and the impacts emerge it may rise.

Senator XENOPHON—The ETS, whilst very important, is just one of several paths to get to the same destination. There is no reason why you could not have a number of parallel paths in terms of energy abatement and biochar.

Mr Toni—Absolutely not.

Senator XENOPHON—You are not particularly wedded to the scheme; you are interested in results and getting the best possible environmental result as quickly as possible?

Mr Toni—That is correct. It is going to be horses for courses. There is huge potential to reduce emissions through energy efficiency, enormous, we know that.

Senator XENOPHON—What do you say they are in terms of Australia's emissions? By way of background, Westpac gave evidence today that in the last 12 years they have reduced their energy use by 40 per cent and they are planning to reduce by another 30 per cent in the next few years.

Mr Toni—That is very impressive. WWF internationally has a program, called Climate Savers, which is major corporations who agree to voluntary emission reductions. Without exception all of them have achieved enormous reductions and in some cases more than 50 per cent over a 10-year period; in other cases, 12 or six per cent, but always significant. The International Energy Agency has estimated that energy efficiency could contribute up to one-third of emission reductions to 2050. Australia is not a very energy efficient country. I would not be able to hazard a guess as to how much of that would be applicable in Australia.

Senator XENOPHON—Does that prediction of one-third by 2050 take into account new technology? I was reading an article, I think in the *Economist* the other day, that says that LED technology is now rapidly improving. They are doing some research overseas which, if it is perfected in the next couple of years, could mean huge energy savings in public lighting and lighting in buildings. Are technological advances factored into these predictions?

Mr Toni—Yes. It is using existing power and wasting it less. To give you an example, households are attributed with about 20 per cent of Australia's emissions. Fridges create about 20 per cent of household emissions, so probably about four per cent of emissions are attributable to fridges alone. There are 900,000 fridges sold per year in Australia, believe it or not, so the turnover of fridges would not take long if you legislated to require very efficient fridges. A six-star fridge uses about 50 per cent less power than a three-star fridge, which is more efficient than the standard anyway. That is a very long and elaborate series of figures, but fridges alone could get you nearly half of the proposed emissions reduction.

Senator XENOPHON—If it is four per cent? Is that right?

Mr Toni—Four per cent of Australia's emissions.

Senator XENOPHON—So you could reduce it by two per cent overall.

Mr Toni—You could reduce it by two per cent by 2020. You would have a very large turnover of fridges.

Senator XENOPHON—In terms of the government's target of five per cent?

Mr Toni—Yes, if you legislated for only six-star fridges.

Senator XENOPHON—And that would do it?

Mr Toni—It would get you a long way, wouldn't it?

Senator XENOPHON—Yes.

CHAIR—Thank you for coming in this afternoon and giving evidence.

Mr Toni—May I tender this report? This is the report that supports the statements I made about the need to foster a series of industries at the same time otherwise the material resources and the personnel simply will not be available as and when they are needed.

CHAIR—Thank you very much. I ask the Australian Industry Group to come to the table.

[2.14 pm]

BURN, Dr Peter, Associate Director Public Policy, Australian Industry Group

CHAIR—Thank you for coming in, Dr Burn. Do you wish to make an opening statement?

Dr Burn—I do, thank you, Chair. It is an honour to appear before the committee today. I am here on behalf of the Australian Industry Group. The Australian Industry Group has members across the manufacturing, construction, logistics and services industries. We represent businesses in areas as diverse as metal manufacturing, ICT, defence and aviation. We are a hands-on organisation and we provide direct services to our members in industrial relations, occupational health and safety, environmental management and business development; and, of course, we are also a leading voice in business contributions to policy debates.

I am an associate director of public policy and I have responsibility for climate change at AI group. We regard the carbon pollution reduction scheme as a critical policy area. It is a policy that we need to take action on. It is a policy area that we need to take action on and it is one that we need to get right. AI group supports the adoption of an emissions trading scheme in Australia. We prefer market based approaches because, properly designed, they will deliver relatively inexpensive reductions in greenhouse gas emissions. They provide strong incentives for investment and research and development in areas that will or may deliver reductions in emissions.

Of the market based approaches, we prefer an emissions trading scheme to a carbon tax primarily because it will more readily link to a system of national targets—and this is the sort of system that we face in the international environment. We think that the legislation giving effect to the scheme should be passed this year. This will provide business with a level of certainty that is currently lacking—which is a deterrent to investment, particularly in long-lived assets in emissions intensive industries but not only in those areas.

For the following reasons we support an ETS with as few exemptions as possible. A broad base will ensure that a wide range of abatement opportunities are explored, there will be fewer distortions between activities and the burden will be spread more evenly. We recognise that actions taken in Australia alone will not remove or even have an appreciable impact on the threat of climate change. We nevertheless think that Australia should now put in place a system that will enable us to make our contribution to global efforts to reduce the accumulation of greenhouse gas emissions. We are not naive enough to think that Australia acting will somehow turn the tide in the development of an international agreement but we nevertheless agree that Australia should take some initial steps and indicate its readiness to take further, more decisive steps in an effort to add to the momentum towards genuine global action.

We also recognise that acting before other countries will damage the competitive position of domestic producers in a range of industries, and this will have potential impacts on the level of activity in these industries, the level of employment in these industries, the level of new investment in these industries, and the links between these industries and the regions and communities in which they operate. We are conscious that acting before other countries will not

reduce greenhouse gas emissions if activity is simply shifted to those countries which do not impose carbon costs. We agree with Professor Garnaut in this respect—Australia needs to address the diabolical dilemma of carbon leakage.

We need to ensure that we do not place our own businesses, the people they employ and the regions in which they operate at a competitive disadvantage when this does not contribute to the positive environmental benefits that we are all looking for. We therefore advocate the adoption of strong measures for trade exposed industries, along the lines of the emissions intensive trade exposed measures proposed by the government, together with the Climate Change Action Fund initiatives also proposed. We have some suggestions about how those can be improved and ought to be improved, but along those lines.

Finally in my introductory comments, in the past month or so the Australian Industry Group has put the argument that our carbon pollution reduction scheme should not take effect until 2012. There are two reasons for this. One is the administrative rush that is currently evident. It is evidence, for instance, in the narrow window of opportunity that we have to give input on the draft exposure legislation. It is also evident in the very narrow time frames involved in the process for applying for emissions intensive trade exposed assessment that many of our members are involved in. They are having to do a lot of work in a very short time frame and are reporting extreme difficulty in meeting those deadlines—the current deadline is 1 May. It is a very tough deadline. So that is one reason. The other reason is the impact of the global financial crisis on businesses—businesses cash flow and businesses ability to access credit. These are putting obstacles in the way of businesses preparing for a 2010 start date.

CHAIR—Thank you, Dr Burn. Did I understand correctly: that you said the legislation should be passed now but the start date should be 2012?

Dr Burn—That is right.

Senator JOYCE—Many of the witnesses that come before us say, ‘It’s a great idea but not me; I should be exempt,’ unless they have a part of it. Your position seems to be, in summary: it is a great idea, but not now. You believe in the emission trading scheme. You believe in the CPRS. You believe we should pass the legislation. You think it should be more broad based and encompassing of everybody but you do not want it to happen just yet.

Dr Burn—For the reasons that I just gave.

Senator CAMERON—I have a point of order. I have attended every one of these hearings, and I have not heard that proposition put in the terms that Senator Joyce has just put. If Senator Joyce wants to put propositions and claim that they came from the committee they should be put accurately to the witnesses.

Senator JOYCE—I just put it.

Senator CAMERON—Yes, that is right. You just put it. Put it accurately.

Senator JOYCE—What is your point of order?

Senator CAMERON—That you are misleading the witness.

CHAIR—I am sorry; I did not hear.

Senator JOYCE—Is that the point of order?

Senator CAMERON—Yes.

Senator JOYCE—Do you want to rule on that? Am I misleading the witness?

CHAIR—I want to keep on time. Can we just continue on?

Senator JOYCE—I would say your point of view is overruled, Senator Cameron.

Senator CAMERON—At least the witness now knows the truth.

Dr Burn—We support the introduction of an emissions trading scheme. We believe it should be comprehensive—as broad based as possible. We think that, for the reasons I gave, it ought not start until 2012. That is because of the administrative rush and the impact of the global financial crisis on businesses' readiness to engage in it.

Senator JOYCE—How many employees does your industry cover?

Dr Burn—Our industries cover something in the order of 700,000 employees.

Senator JOYCE—The feedback that you are getting from all your members is that they are happy about the implications on the price of power and issues such as that?

Dr Burn—No, Senator. That is not the feedback we are getting. Our members are very concerned about the impacts that this will have. We did a survey some time ago, that you will no doubt be aware of. We surveyed our members and they indicated that they were willing to take action to address climate change even though it would impose costs on themselves. This is not to say that they are happy about it, but they recognise that in order to achieve that benefit some costs will need to be borne.

Senator JOYCE—What is the benefit they are going to achieve?

Dr Burn—I will not now speak on their behalf. The benefit we see, as I indicated in my opening comments, is that this can help deliver some momentum towards very much needed global action.

Senator JOYCE—It will deliver momentum.

Dr Burn—It could help to deliver very much needed momentum on global action. I think I made it very clear that we are not naive enough to think that we are going to turn it around by acting, but we think that we can add somewhat to that momentum, and that we ought to put in place a system that illustrates our credentials in that area.

Senator JOYCE—So there is a belief by the group that it will create the momentum that will start changing the views of other people in the world?

Dr Burn—It could.

Senator JOYCE—It could?

Dr Burn—It could; yes.

Senator JOYCE—Why do they think it could?

Dr Burn—Because if Australia acts and that encourages other people to act more than that will build up the momentum.

Senator JOYCE—And if other people do not act where does that leave us?

Dr Burn—It depends very much on how we design the scheme. The critical question is: what is the unconditional offer? At the moment the unconditional offer is a target of five per cent below 2000 levels by 2020. That is what the current proposal is. We think that is a very big ask. That is an ask of stripping one in five emissions out of our economy, relative to business as usual, by 2020. We think that is a very big ask.

I think we could design the scheme so that the unconditional offer included the range of outcomes that could come out of international agreements. Then we would probably go below a less stringent target than a five per cent reduction. It very much comes down to the design of the scheme, and that is the answer to your question: what if an international agreement does not occur? So I think we have got to design a scheme that covers the range of possible outcomes of Copenhagen and other international forums.

Senator JOYCE—So you are aware of the white paper, and the white paper reflects the legislation that is going to come forward. This is a really simple question. Would you be voting for it? If you were in my shoes would you be voting for it or not?

Dr Burn—I am not in your shoes, and it would be foolish for me to reveal my bargaining position, wouldn't it? We are currently involved in arguing, before the full range of political parties, for changes to the policy and in time changes to the legislation. So I would like to reserve my position.

Senator JOYCE—I find it all interesting, Dr Burn. If this scheme goes forward or it does not, I will still have a job if I am working on this side of the table but a lot of your members will not.

CHAIR—What is the question, Senator Joyce?

Senator JOYCE—Why would they be encouraging a scheme that is obviously going to put their members at a competitive disadvantage to people overseas? The only logical thing to do is to move your industry there.

Dr Burn—I think that is a very important question, and I will take a minute or so to answer it. One of the main factors in businesses' support for an emissions trading scheme is the threat of alternative regulatory approaches. Let us cast our minds back to 2007 when the former government announced its intention to move on the emissions trading scheme. Incidentally, it was in a form very similar to what is currently in the draft legislation. At that time we were faced with the prospect of each state putting in place an emissions trading scheme and trying to stitch them together. We were facing the prospect of each state acting in a large number of ways on ad hoc basis to reduce emissions by other forms.

The costs of those forms of regulation are potentially very high. I think businesses came to the realisation—and certainly our members did—that we needed to get sensible about this. We needed to have a national scheme, a scheme that was capable of displacing all the other schemes and methods of regulating greenhouse gas emissions that we were, and prospectively will be, confronted with. So it is a choice in that sense of regulatory efficiency. It is much better to go down this route, which is the view of our members, than the alternative route that we are facing.

Senator JOYCE—I refer to the membership of your association and the fact that we have alternative views. How do people become a member of your association? There would be about 700,000 employees who would be under the umbrella of and covered by your organisation. Do people pay their membership? How does it work?

Dr Burn—We are a membership organisation. People join us voluntarily because they want to be members.

Senator JOYCE—Do they pay membership?

Dr Burn—They pay membership.

Senator JOYCE—You might not have this information. How many export dollars come from within your organisation?

Dr Burn—I cannot answer that question. I can undertake to get back to you with some data about that.

Senator JOYCE—Is it predominantly export dollars? Is it predominantly an export industry or predominantly a domestic industry?

Dr Burn—Like the Australian economy generally, it is more about domestic sales and export sales. But our members include very big exporting industries in metals, in a range of manufactured goods and in a range of service industries, so there are considerable export dollars. I think the export to total GDP ratio in Australia is something like 20 per cent. I would be surprised if we were very different from that. With import competing, it would be even more so. I dare say your question relates as much to import competing issues as it does to exports.

Senator JOYCE—What I am leading to is the baseline requirements that are affected, things like the foodstuff of industry, one of the most fundamental being electricity. How does your industry see that panning out if, as everybody suggests, over a term we move to geosequestration, which means currently—because it is not commercially viable—a high carbon

permit price to make it viable and geosequestration is not evident in a large-scale commercial form at the moment. All these things start saying that what we are going to have is probably—because we still have to deal with fugitive emissions and we are moving away from coal, so it all points to this—a very expensive price for power. How does your group feel that it is going to survive in that sort of economic environment?

Dr Burn—We think that power prices in Australia will rise quite a lot—and that is straight out of the Treasury modelling. I think that power prices are anticipated to roughly double by 2020 at wholesale level—that being household electricity prices across the NEM. Our members regard that very seriously. They regard the need for them to take action to improve energy efficiency, and to seek other efficiencies in their organisation to offset those costs, very seriously indeed. It is a very big challenge.

Senator JOYCE—So if they could offset those costs wouldn't they just offset them now before it? What is going to happen in the future that is going to make it a worthwhile proposition to offset costs that you have not already offset?

Dr Burn—I was discussing this with a member a year or so ago. He had gone through a period in which he had made a hell of a lot of changes in his business to reduce his energy bills and energy usage. I said, 'Why did you do that? What motivated you to do that? Was it a change in the price?' He said, 'No, it was just the next thing to do.' So I think there is a fair bit of action. Businesses are generally fairly busy and the next thing to do will now be to become much more focused on energy efficiency and on reducing emissions than it has been previously. Not everything is done in the real world like the timeless economic models suggest.

Senator JOYCE—My final question is this. In the current financial crisis the people within your industry group are going to have to go out and hold permits. They are going to have to borrow money to hold assets. If they all start doing this, this is going to have huge ramifications for the economy. If they do not have the capacity to do this, that is going to have huge ramifications for their business. Do you think it is a wise move to foist that on people in the middle of what is regarded as a recession, a financial crisis, in which you cannot get access to credit?

Dr Burn—I agree totally with that. That is one of the motivating forces behind our call for the scheme to start in 2012. As it is, the scheme will impose liabilities that will be due at the end of 2011. A two-year delay will mean that those liabilities will be due at the end of 2013—much more manageable given the crisis, as we anticipate and we all hope of course.

Senator CAMERON—Obviously, Dr Burn, you have had a look at the white paper and have studied it and the economic modelling that underpins it.

Dr Burn—Yes.

Senator CAMERON—Do you agree that economic activity will continue to increase in Australia even with a CPRS?

Dr Burn—Yes, we think that, other things being equal, economic activity will continue to rise in Australia notwithstanding the introduction of a CPRS.

Senator CAMERON—And Australia will not be the only country around the world facing increased electricity prices?

Dr Burn—I would expect that to be true too.

Senator CAMERON—The ACTU gave some evidence here to say that they were conducting analysis of the skills required in an emerging economy that was carbon constrained. Has AiG done anything like that?

Dr Burn—We have not commissioned any work on that but we are very conscious of the need to develop skills, particularly in the transition to an economy. We face demands from our businesses, about ways they can reduce their energy intensity right now, that we cannot meet. We suspect that there is going to be a hell of a lot more such demands in the near future for that. The longer term changes to labour markets and training also need to be factored in, and I think that is probably more what you are talking about. As part of a more general look at the way we train our emerging workforce, and the existing workforce for that matter, we need to incorporate very closely the demands of industry—and this ought to be a dimension of that as well.

Senator CAMERON—Would AIG take a positive approach on that and actually develop training, work with your members and analyse the training needs and the skills requirements?

Dr Burn—Yes.

Senator CAMERON—Would you be seeking support for that proposal?

Dr Burn—We do not have plans to seek support for that at the moment. But we understand that the Climate Change Action Fund, for example, may well fund this sort of thing. We are not too sure. If it did, we would either seek support or guide our members in the direction that they could receive support.

Senator CAMERON—How many AI Group businesses will be directly liable for permits under CPRS?

Dr Burn—We do not have a number for that. In fact, we do not even have an estimate for that. Interestingly, we are currently doing a survey of our members and a very large proportion of them—much larger than we would expect—have an expectation that they will have a direct liability. We think a lot of businesses think they will have a direct liability when they will not. Our industries are very emissions intensive relative to the rest of the economy—that is, agriculture apart, but agriculture is not in it yet. We would expect to have a much greater proportion than the ratio of 1,000 to whatever the number of businesses is.

Senator CAMERON—But there would be AIG members who would be eligible for assistance under the government's scheme?

Dr Burn—We would anticipate that, yes. We have members in metals manufacturing, plastics, chemicals and all of those industries, for example, and many of those industries seem to be likely—and I would be very guarded about this because the process is very uncertain at the

moment—to get some form of allocation of permits under the emissions intensive trade exposed measures.

Senator CAMERON—A number of submissions to the committee have said that delay equals cost and that a delay means that achieving the target of reducing emissions will be even harder. Does the AIG believe in that approach?

Dr Burn—Not appreciably, particularly relative to where we were, say, a year ago because of the impact of the global financial crisis on the emissions trajectory. We would say that the delay and the slower pace of the economy may well be offsetting each other. The additional thing, and the most important element here, is that, if the legislation were passed this year, businesses would start immediately investing with the knowledge that the scheme will start. We think that they will take action from that point—that is, from the point when legislation is passed—and that will be reflected in their investment decisions regardless of whether the scheme starts in 2010 or 2012.

Senator CAMERON—That goes to my next point. Westpac were here and they said that they were advising many business clients in relation to the scheme and that there is a willingness amongst their clients to actually get in and get things moving because business certainty is the fundamental for them. Is what you are getting back from your people as well?

Dr Burn—Our members want the certainty as well.

Senator CAMERON—Thanks.

Senator FURNER—Just on the subject of timing and delay, we heard in Perth from a Dr Ottaviano. He is the CEO of Carnegie Energy. That organisation has put \$25 million into the economy over the last two years. I do not know whether he is a member of your organisation. His comment on delay was that one thing that kills investor confidence—and we are seeing this at the moment in the global financial crisis—is uncertainty. Almost more important than the desire and almost more important than the cost of carbon is the certainty that it is going to happen and moving to it as soon as possible; the more delay the more uncertainty is built into the minds of investors. Surely someone that has developed and put so much money into the economy, as this gentleman has, demonstrates that investors out there—particularly in renewable industries—should not be delayed by this legislation not being in place as soon as practicable in 2010. Would you agree with that?

Dr Burn—With everything other than your very last comment. We totally agree that the certainty is required. We totally agree that the passage of the legislation would give that certainty. But the certainty would apply whether the start date was 2010 or 2012 because people would then be certain about the start date. So the certainty will be achieved when the legislation is passed regardless of the start date.

Senator FURNER—But, as Senator Cameron indicated, we have heard from not only businesses but also financials out there that certainty is imperative. It is the case that we need to make sure people know where their businesses are heading for the future.

Dr Burn—I totally agree. That is why we want the legislation passed this year. Passage this year would provide the certainty. People would be certain that it was going to start in 2012.

Senator CAMERON—Just on that point, if your members do not have that certainty, what are the implications for them?

Dr Burn—The implications are that they will remain unsure and they will be investing less than otherwise.

Senator JOYCE—What difference does it make? Just work on the premise that it is going to go forward and if it does not then it is a bonus to you.

Senator BUSHBY—Just following up on that point, Dr Burn, does the Industry Group believe—Senator Cameron asked the question, but I do not know that you fully answered it—that cost would be higher if implementation was delayed even if the terms of the regulation were finalised early?

Dr Burn—I do not think he asked that question, but I think it would be very hard to establish that case because, even if the targets remained as they currently are anticipated to be, reaching those targets would require a steeper rate of decline but we would face costs for too fewer years in that period. I think it would be very hard to show that overall costs would be greater were we to start earlier, given that people will have—

Senator BUSHBY—Were you to start later, you mean?

Dr Burn—It would be very hard to show that if you started earlier the cost would be less, yes. I think it would be very hard to show that, because you would have two years fewer costs involved. You would have a steeper rate of decline in emissions. That might be harder in some ways to achieve but I doubt very strongly that you could show what effect on costs—

Senator BUSHBY—On the steeper rate of decline of emissions, would you agree that, as unfortunate as it is, the current financial or economic situation—which, according to Professor Garnaut, may actually result in a decrease in world emissions this year—gives us a small window in which to actually make sure we get our measures right to tackle it because the trajectory is not going to be as deep as it would have been if we did not have the current economic problems?

Dr Burn—We agree with that, yes.

Senator BUSHBY—Moving on from there, you have raised a lot of issues about the scheme and things you would like to see in. To some extent they are and are not in the current scheme that we are looking at as part of the exposure draft. Is it more important to get the scheme right, address those issues, like making sure the EITEIs are appropriately dealt with, and allow the time to meet those requirements, or is it more important to get it passed and active even if it will include insufficient measures, from your perspective?

Dr Burn—It is a question of level of detail. Never do you get the legislation perfect before passing it, but we would like to see the legislation passed and developed as fully as possible in

the time available. We think that the time available if the passage is this year would be greater if the scheme were not to start in the middle of next year. At the moment we face a rush of having it passed by basically the middle of this year—I think June is the timetable. It is a very big ask to get everything done. Were we to give ourselves a couple more months this year, I think that the scheme design would be fundamentally better. It is very hard to see how that can happen with a 2010 start date.

Senator BUSHBY—Correct me if I misstate you, but just then you said that you would prefer a few extra months now just to shake the details out and that your 2012 proposed start date would give you an opportunity to have an extra couple of months to make sure everything is right before it is actually passed—is that correct?

Dr Burn—That is right.

Senator BUSHBY—That is good. And you would prefer to see a little bit of extra time now and get things right rather than pass something which certainly will provide you certainty but might also provide you certainty of things that are not particularly good for the economy?

Dr Burn—Yes.

Senator JOYCE—I have a question about certainty. This certainty thing has me perplexed. Does that mean that if we do not go forward with it there are a cost savings that your industry will have because they do not have to implement costs and that is good, or if we do go forward to certainty there are cost savings? Why is the certainty an issue? For me, to use an analogy, it sounds like certainty that you are going to get belted. If you do not get belted, surely that is an advantage? Why do you need to be certain about it?

Dr Burn—I will go back to my previous answer. I think that businesses are pretty sure they are going to get belted, if you like, one way or another. We think that the design of the scheme will ameliorate some of those impacts and that going ahead with this scheme is better than the alternatives. I think that certainty has a disproportionate impact. People are worried about the extreme things that could happen. We do not expect extreme things to happen, but people are worried that they may and that is affecting their behaviour. The realistic situation is that when the scheme is in people will be able to assess it rationally and coolly without a lot of the claims that are around and that will help inform business decisions. At the moment people are factoring in a much wider range of possibilities because of the legislative uncertainty, and that is a deterrent to investment. People have to try to take this to boards and convince boards, ‘You ought to be making such and such an investment, but we do not know whether Australia will have a carbon pollution reduction scheme.’ Boards, in those circumstances, are saying, ‘Bring it back to us once we know what is going to happen.’ That is the deterrent to investment.

Senator BUSHBY—You mentioned carbon leakage in your opening statement and that the AiG considers acting before other countries will damage competitiveness and have an effect on employment. Does the CPRS as it is currently designed and as it is presented in the draft legislation adequately address this and avert that risk?

Dr Burn—It certainly does not affect avert the risk, mainly because the details of the emissions intensive trade exposed measures and the climate change action fund are not there.

Those two schemes are critical in addressing the whole issue of carbon leakage. At present, the draft exposure legislation—

Senator BUSHBY—So passing the legislation in its current form would not provide the certainty that you need in those areas—

Dr Burn—That is right.

Senator BUSHBY—and certainty for future investment?

Dr Burn—Without the regulations that would give effect to the emissions intensive trade exposed measures and the climate change action fund measures in the legislation, that is right.

Senator CAMERON—But you are in discussions with government now on that detail, aren't you?

Dr Burn—Yes, we certainly are.

Senator BUSHBY—I wish you luck with the discussions. I hope that we get something that is going to work. I have one final question for you. Professor Garnaut has also suggested that the scheme should be introduced with a low fixed initial price to allow the wrinkles to be ironed out before imposing a significant burden on the economy and industry. What is the AiG's view on that?

Dr Burn—We had discussions with the financial sector about that, and they were very wary about the ability to essentially start off with a carbon tax and transition to an emissions trading scheme, which is essentially what that is. They were very sceptical about the ability to develop the sort of financial products that would help smooth the introduction if that was the case. We took their advice on that and opted for support for a lower cap, if you like, for the emissions trading scheme rather than a carbon tax to start off with.

Senator XENOPHON—You raised concerns in the AiG's submission on the government's green paper about the implications a CPRS might have for existing contracts and the ability to pass on liabilities with fixed-price contracts. Have those concerns been addressed in the draft legislation? You might want to take that on notice.

Dr Burn—I will take it on notice.

Senator CAMERON—Could you also take on notice the question I asked you about how many of your members would be affected by the scheme?

Dr Burn—I will take on notice that as well.

CHAIR—Thank you, Dr Burn, and thank you for coming in this afternoon.

Proceedings suspended from 2.51 pm to 3.02 pm

GIBBS, Mr Steve, Director, Government and Industry Liaison, Investor Group on Climate Change**PEGAN, Mr Frank George, Chairperson, Investor Group on Climate Change**

CHAIR—I now welcome the Investor Group on Climate Change. Thank you for coming along this afternoon. Would you like to make opening statements?

Mr Pegan—We will make a joint opening statement. I will start off, followed by Steve. Thank you for the opportunity to address you today. The Investor Group on Climate Change represents over 36 institutional investors with funds under management of half a trillion dollars. We represent not-for-profit super funds, which are known as industry funds, retail super funds, public sector super funds, fund managers, asset consultants and advisers. Many of the IGCC members are super funds and act as fiduciaries on behalf of millions of workers across Australia. As fiduciaries we need to be able to act in the best interests of members over the long term; the term I speak of here is 40 to 60 years. Most of the members of our members will be with them for 40 to 60 years.

We see climate change as a long-term issue that needs a regulatory framework not only over the life of this parliament but also into the future, which will provide investors with the confidence to be able to assess the risks and opportunities around climate change and make long-term investments in the interests of their members and the Australian economy. In terms of climate change we are supportive of the government's action to introduce the CPRS, which will give the investors certainty for the future, opportunities for new markets, opportunities for technology and opportunities to measure the risk and quantify the investments. Our members are universal investors. They invest across the global sector, across different sectors and across different industries. I will now pass to Steve.

Mr Gibbs—Investors care about climate change and climate policy because these issues will have an impact on the global economy as well as on individual assets. The economic costs which are felt from climate change will increase, we believe, the longer it takes to take action and any delay in reducing emissions significantly increases the risk of more severe carbon intensive infrastructure and development pathways. IGCC supports the introduction of the CPRS, as Frank has said, and emphasises its view that placing this legislation with a start date of 2010 is essential for the Australian economy and in particular for investors. For investors to invest, we need to know the rules. We therefore call on the Senate to pass the legislation and not to delay the start.

Members of IGCC are part-owners of many if not all of Australia's largest companies. As owners, IGCC do not support the views being expressed by some of those companies that the CPRS will be damaging to the Australian economy. As owners, we think that those comments show a short-term, narrow self-interest and are not looking at the long-term economic and environmental prosperity. As long-term investors, we repeat that the longer we wait the more expensive and harder it will be to avoid damaging climate change. The transition to a low-emissions economy will result in jobs being created by providing certainty for private sector

investment. The CPRS provides the essential policy for investment certainty in technologies and industries that facilitate the transition to the low-carbon economy.

There are many design features in the CPRS which we specifically support. Whilst there are other design features which we would rather see changed, we believe that these are not so significant that the legislation should be blocked or its passage delayed. Rather, the legislation should, we believe, contain sufficient provisions for the review and amendment of the scheme once it is in operation to ensure that it operates in the most effective way and that unintended consequences are expeditiously dealt with. In our view, you could debate, model and revise details for years and still not get it completely right. No-one knows with absolute certainty how markets will precisely react to the CPRS, and subsequent amendments are almost certain. So, whilst there are details we would have rather seen being different, we believe that the best course is to pass the legislation so that investors, who are essential for economic growth and jobs, can get on with what they do best, and that is invest. Thank you.

CHAIR—Thank you, Mr Gibbs. We have heard previously that there are already quite a lot of costs factored in to the Australian economy, particularly assessment of costs into investment decisions. Would you agree with that proposition?

Mr Gibbs—There are, yes. What investors cannot do is really invest in technologies that are going to assist the transition to a lower carbon economy unless we know the rules and the precise impact it is going to have on those companies.

CHAIR—We were discussing earlier that there may be a lag between getting this started and getting renewable technologies and other technologies up to speed. So your view is that the sooner the legislation is passed and the sooner we know the rules and regulations surrounding investment, the earlier that is going to start.

Mr Gibbs—Yes, precisely. The sooner we know, the sooner our members can start the analysis and the sooner they can decide where an investment return can be made. Do not forget that we must make returns on behalf of our members, but there will be returns to be made from investing in companies that are better placed to survive and prosper in a lower carbon economy.

CHAIR—Thank you.

Senator JOYCE—Mr Gibbs, you said that investors care about climate change. Is that correct?

Mr Gibbs—Our members care about climate change. The members of the Investor Group on Climate Change care about climate change.

Senator JOYCE—Mr Gibbs, you are one of those, are not you?

Mr Gibbs—No, I am not actually. I used to be. I used to be the CEO of ARIA, the superannuation fund for Commonwealth public servants. I am no longer in that position; I have not been for 12 months. I now have a number of roles on different boards, including a role as Director Government and Industry Liaison with the Investor Group on Climate Change.

Senator JOYCE—Can you put a dollar amount on how much your group is worth?

Mr Gibbs—Half a trillion—\$500 billion. Funds under management are \$500 billion.

Senator JOYCE—That is a lot.

Mr Pegan—And representing over two million individuals' savings. I have not got the precise number.

Senator JOYCE—That is good. Mr Pegan, you are also a representative of the investors, and you care about climate change?

Mr Pegan—Yes. I took the voluntary position to be chair of this group, so I saw this as a very serious matter. I am also the chief executive officer of Catholic Superannuation Fund. In that role I have a fiduciary responsibility to my members to ensure that we get the best outcome when we invest their moneys for the long term.

Senator JOYCE—And you have a concern about climate change?

Mr Pegan—We have a concern about climate change because, in any areas that we invest in across sectors, across markets, across the world, one of the things we have to come to terms with is the regulatory framework we invest in. This area is a missing gap; it makes it very hard to do the proper analysis to determine the risks and the profile that we need.

Senator JOYCE—Do you care about climate change because of the uncertainties in investment returns or do you care about climate change because of the changes to the global climate?

Mr Pegan—In the role I play here I care about an investment return to the members to ensure that in the future they can retire with some dignity and have sufficient funds. Therefore, this is an area that could impact on that return.

Senator JOYCE—So you look at the issue through the eyes of climate change being an external issue: 'I really don't care whether the world gets warm or cold or hotter; all I am really worried about is the investment return of these people'?

Mr Pegan—I am worried that we have a framework in which we can determine the best outcome for members, correct.

Senator JOYCE—Is that your position too, Mr Gibbs?

Mr Gibbs—Yes. The Investor Group on Climate Change is concerned about climate change because climate change is with us. It will continue. If the globe heats up, that will have impacts on economies, on countries and therefore on our investments.

Senator JOYCE—The premise you are seeing it through is the return for your \$500 billion.

Mr Gibbs—Because climate change will impact on our investments.

Senator JOYCE—We are going around in circles. It is the premise of the return that is the issue. Why would your investors not have a concern about going forward with a policy that is not actually going to change the climate but just make their money less able to be invested in this nation?

Mr Gibbs—We would say, if I understand where you are coming from correctly, that every country should be doing something.

Senator JOYCE—Every country should be; I agree with you. Are they?

Mr Gibbs—Of course not. It would be silly for me to try to say they were—of course not. But we believe that in our country, where we reside, we should be supporting the introduction of something like the CPRS—just as, if we were in America or somewhere else, we would be saying the same thing.

Senator JOYCE—So we should be supporting it even though other countries are not doing it for what reason in regard to your investors?

Mr Gibbs—Can I answer that by saying that we are part of an international grouping of other organisations with similar aims that have been calling for some years now—

Mr Pegan—The International Investors Group on Climate Change.

Mr Gibbs—Yes, which we are part of, and that group has been calling for international action for some years.

Senator JOYCE—You are calling for the same involvement all around the globe, not just in Australia?

Mr Gibbs—That is correct.

Senator JOYCE—How are you going in the United States?

Mr Pegan—I don't know.

Senator JOYCE—How are you going in Russia?

Mr Pegan—I have got nothing to do with Russia.

Mr Gibbs—Maybe not as well as here.

Senator JOYCE—Canada?

CHAIR—Senator Joyce, I think the witnesses are indicating they are not intimately—

Senator JOYCE—The International Investors Group on Climate Change—

Mr Pegan—We have signed up and become a member of them and we exchange information.

Senator JOYCE—In your exchange of information, how are we going in China?

Mr Gibbs—I do not think there is a group that we are talking to in China.

Senator JOYCE—This is not looking too good.

Mr Pegan—Part of this is having the debate, having a talk with people worldwide. Our members are universal investors. They invest across the globe. They are interested in what other jurisdictions are doing. In lots of cases we do not know because there is nothing there to know. But we are still keeping our eyes and ears open to find out. So we join together with different associations worldwide to get an understanding. One of the major areas we got ourselves involved with is the Carbon Disclosure Project. That analyses 3,600 companies every year across the world and how they manage emissions trading and carbon within their corporations.

Senator JOYCE—So if you are talking about an investment that produced less carbon and an investment that produced more carbon but more of a return, what recommendation would you give to your investors?

Mr Pegan—We go through a process and the first thing we look at is what the legal framework is. If I was going to invest overseas, the first thing I would look at is what the legal framework is. I have got to make sure every dollar I put in the marketplace will come back to me, plus a return. Secondly, how does it stack up with alternative investments? We just do not look at investments in terms of carbon trading and non-carbon trading.

Senator JOYCE—Say you have got two investments, both where ownership is not under question and the legal structure and judicial system is all provident and will support your investment. One has a certain negative carbon impact; one has a positive carbon impact. But the negative carbon impact has a far greater return. Where are you going to invest your members' money?

Mr Pegan—Only after I have gone through the process—

Senator JOYCE—Okay. You have gone through the process, and they are all exactly the same. Which way are you going to invest it?

CHAIR—That is very hypothetical. Mr Pegan—

Senator JOYCE—I am questioning the value of the premise and why someone would come here and advocate a certain outcome but not be willing to put their money where their mouth is.

CHAIR—Mr Pegan has said that there are other factors that he considers. It is a difficult hypothetical that pins him down to a position that he does not believe he would be in. Please move on with your questions.

Senator JOYCE—Thank you very much, Madam Chair, for your assistance there. We have been hearing all the time about uncertainties. It is all about curing uncertainties in the market. Do you agree that we have to go forward with this to get rid of uncertainties?

Mr Gibbs—Yes.

Senator JOYCE—Can you explain to me what the cost benefit is of going forward with something that is certainly going to make things worse for you as opposed to not knowing whether it is going to come in or not?

Mr Gibbs—From our point of view, it depends on what time frame that you are looking at. If you are looking at something in the next year, you might well say what you just said. But we have to look long term. It is not a question of doing something that impacts on you now or not doing it; the question is: do you do something that impacts on you now for the long-term benefit and to address something that you know is going to come and bowl you over in 10 or 20 years time?

Senator JOYCE—You are talking about—

Mr Gibbs—I am talking about climate change.

Senator JOYCE—That worries you?

Mr Gibbs—Of course it worries us.

Senator JOYCE—How did you get here today, Mr Gibbs?

Mr Gibbs—How did I get here? I am not sure that that is precisely relevant. Is this the—

Senator JOYCE—It is very relevant.

Mr Gibbs—Is this the Detroit car question, is it?

Senator JOYCE—It is very relevant. I want to know how you got here today.

Mr Pegan—I can answer that. I flew here and I ticked the box to pay for the green offset.

Senator JOYCE—Okay. How did you get here, Mr Gibbs?

Mr Gibbs—The same way. I was in Melbourne and I flew here.

Senator JOYCE—You flew here. Aviation is probably one of the biggest inputs.

Mr Gibbs—Absolutely.

Senator JOYCE—How did you get from the airport across to here?

CHAIR—Senator Joyce—

Senator JOYCE—No. You can try and protect them but—

CHAIR—No, I am not trying to protect anyone. I am pointing out that our terms of reference are this legislation, not whether climate change is a factor or not.

Senator JOYCE—Okay. I will be far more blunt. People are very convenient with their concerns. When you really drill down into their lifestyles, they are not really worried about it at all.

CHAIR—That is not occupying our attention here. We are looking at this bill.

Senator JOYCE—Fair enough. I have had my say.

Senator CAMERON—Mr Pegan, given that your principle approach is to invest effectively for your membership, do you agree with Westpac and Colonial Mutual, who say that the companies that are going to be successful in the future are the companies that get on the front foot in terms of climate change and make a difference in terms of their own carbon footprint and the technology to assist in reducing the carbon footprint of the planet?

Mr Pegan—The research is showing that. The research papers that IGCC and other groups have done say yes. But I would not say that it is 100 per cent.

Senator CAMERON—Both Westpac and Colonial Mutual indicated that one of the biggest problems that their clients who want to invest in new technology to reduce their carbon footprint have is the lack of certainty. They said that there was a line missing in terms of their applications for loans, and that line is about knowing what is going to happen in terms of legislation on carbon. Do you agree with that?

Mr Pegan—Yes.

Senator CAMERON—Does that mean that you have less opportunity to invest in companies if this legislation does not go through?

Mr Pegan—Sorry; I missed the question.

Senator CAMERON—So there is less opportunity for your organisation to invest in companies that are going to—

Mr Pegan—I put it the other way around. We have to take a greater cognisance of the risks of investing in the marketplace. It is not necessarily that the opportunities will go away. There will be a lot of good companies who are not adopting what you are suggesting. We still have to invest money because money flows in, and it is about the risk. We have to measure the risk relative to every other investment we make. That is what we have to look at. We have identified that one of the key risks going forward, as long-term investors, is climate change. We do not want to be investing people's long-term savings and then suddenly hitting a brick wall because we do not know where we are heading with it.

Senator CAMERON—Are you aware of a Business Council of Australia report a few years back—

Senator JOYCE—Probably not!

Senator CAMERON—on short-termism?

Mr Pegan—No. I am not aware of the report.

Senator CAMERON—In your experience in Australian industry, would you agree that there are some short-term decisions made?

Mr Pegan—I would agree that, within the sector that I work in, in the past a lot of short-term decisions have been made which impact on decision making and that we need to look longer term.

Senator CAMERON—So there needs to be a cultural change to try and look longer term. One of the key factors of longer-term decision making is global warming.

Mr Pegan—Yes. When we sit around the table with the board of directors talking about how we are going to invest \$3 billion of members' money into the future, we are looking at a five-, 10-, 15-year horizon. Therefore, we try to work out what the risks are. We cannot quantify all of them, but if you identify a risk you feel strongly about then you want to be able to quantify it before you make a decision against a long-term investment. If we are going to invest in the Australian economy in the long term, we want to make sure that halfway through that investment the regulations do not change on us and impact on our returns.

Senator CAMERON—Senator Joyce asked you about what other countries were doing. Would it surprise you to know that we have had submissions that say that China is actually investing more of their economic stimulus package in green approaches than any other country in the world?

Mr Pegan—I have to agree with you, because I have read that. Your statement is correct. I have read that in finance magazines.

Senator CAMERON—In your view, we are not on our own in trying to deal with global warming if countries like China are actually engaging with it as an international issue?

Mr Pegan—We are not alone. We know that it varies between countries that are involved and countries that are not involved at all.

Senator JOYCE—They do not sell permits.

Senator BUSHBY—Thank you, gentlemen, for coming along today. I note that in your opening statement and also in response to some questions you have been talking about the need for certainty. Mr Pegan just a few minutes ago made a comment along the lines of, 'You need to make sure that halfway through your investment regulations do not change on you,' which I can understand. I think it is a very sound principle to take when you are investing other people's

money. Where I see an issue with that statement is your earlier statement that there were some aspects of the current CPRS which you did not think were perfect but that you thought you could get it into legislation and fix them later.

Mr Gibbs—I think what I said was that we did not think they were significant enough to warrant—

Senator BUSHBY—Sorry—you said they were not significant enough to delay.

Mr Gibbs—a delay.

Senator BUSHBY—And you said they could be amended once the legislation was—

Mr Gibbs—Then I said I thought inevitably there would be some changes, because no-one can predict precisely how this is going to work, and that changes could be made later. That is true, but our view on those issues is that, even if they are changed, they are not significant enough to prevent rational investment decisions now.

Senator BUSHBY—Just for the record, what are the design features that you would like to have in the CPRS that are not there?

Mr Gibbs—They are actually set out in our submission. They are matters such as the fixed maximum price for carbon—we do not think there should be a fixed maximum price—and the extension from the white paper to more EITEI compensation. We believe in the EITEI compensation. We are not convinced that the extension, as it has turned out, from the white paper to the legislation, is warranted. Again, that is a preference but we are not going to oppose the thing just because that has been taken into account.

Senator BUSHBY—Just looking at that briefly, if you are talking about the period of time that the EITEI compensation applies, surely changes to that could impact quite significantly on investments that you make in companies that are affected?

Mr Gibbs—Sure. And I think, on that issue, the reality is that once it is in it is not going to be taken out. So I think we have our certainty. We rather it was not there in the first place but if it is there I think there would be almost no chance of that being removed or something. So that is not going to impact on our investment decisions.

Senator BUSHBY—So does the motivation behind the issues or design features that you would have liked to see in the CPRS, but that are not there, come back to the high priority that you stated earlier in relation to this issue—the return on investment for your investors?

Mr Gibbs—Sure; and our view that long-term climate change will have an impact on investments we have already made. We are about a scheme that has potential for maximum carbon abatement.

Senator BUSHBY—A lot of companies and others have presented to this inquiry and have raised issue in other forums about the CPRS. In terms of the specific details of the draft legislation it has only been out for a couple of weeks and I guess there may well be more to

come out of that. People have raised issues. You just raised some issues that are relevant to your investors and other industries, and others have raised issues about the CPRS, which may well be perverse or negative in some respects. The previous witness suggested that if you took a few extra months and ironed out a few of the wrinkles before you passed the legislation that would enhance greatly the certainty that would exist. Surely if you took the time to make sure that you got it right—if you took just a little bit of extra time to make sure that what we passed into legislation was the best that we can possibly do—then you would provide your members or your investors with a far greater degree of certainty and you could make your decisions on a far better informed basis.

Mr Gibbs—It would be silly for me to try and argue that we should not do the best we possibly can but—

Senator BUSHBY—What I am saying is that the time factor is—

Mr Gibbs—I am a little sceptical that it would be only a month or two. If it was only a month or two, and if it did not delay the passage of the legislation and the start date, of course I would agree.

Senator BUSHBY—It may well delay the start date.

Mr Gibbs—And that would be our concern. There are a lot of interests here, and there are a lot of people who are arguing for changes in different directions. After we work through all of that—and I know there are some elements that think it should not happen anyway—we do not want to put at risk the 2010 start date. Therefore we are saying we are prepared to wear some of these things that we do not particularly like because the most important thing is to have a scheme and to have it start operating next year.

Senator BUSHBY—Am I wrong, then, to draw a conclusion from what you are saying that the start date is the primary issue, and that it overrides all other considerations?

Mr Gibbs—No, no; of course that is not so. We would not accept a fundamentally flawed scheme for an early start. That would be silly.

Senator BUSHBY—There are some claiming that this is.

Mr Gibbs—Some would argue it is flawed. We do not think it is. We think it is a viable scheme. It provides an ability for investors to understand broadly the impacts so that they can invest. We think it should happen because of that. We think it is in ‘good enough shape’—I use that term—for it to start next year. I know that there are others who do not believe that. That is inevitable when we start debating these sorts of radical changes to the economy.

Senator JOYCE—Mr Gibbs and Mr Pegan, are you prepared for it to affect the decisions you make or are you prepared to pay more for the decisions you make?

Mr Gibbs—It is not just a matter of paying more, with respect, Senator. There will inevitably be companies that will be immediately impacted in a negative way, but in the long term many of those companies will adjust and come out of this in much better shape than they are in now.

Senator JOYCE—Of that \$500 billion, how much is Australian?

Mr Gibbs—There are some fund managers who are members who are investing only in the Australian market. All the super funds would invest globally.

Senator JOYCE—Roughly.

Mr Gibbs—Let's say somewhere between 30 to 50 per cent would be invested in Australia.

Senator JOYCE—Is or could be?

Mr Gibbs—Is. The average super fund invests 30 per cent in the Australian equity market and perhaps another five to 10 per cent—

Senator JOYCE—That is \$150 billion.

Mr Gibbs—Between \$150 billion and \$250 billion.

Senator JOYCE—Invested in Australia?

Mr Gibbs—Yes.

Senator JOYCE—And you are responsible for it?

Mr Gibbs—I am not. The members are, whether they are fund managers of the superannuation funds—

Senator JOYCE—Do you influence their decisions?

Mr Gibbs—Not personally. They are all independent—their boards and their decision-making processes.

Senator JOYCE—So what is your role? How do you dovetail into their decisions?

Mr Gibbs—I am employed by the IGCC to help them talk to government and industry about what the aspirations of the members are.

Senator FURNER—Is it a good time or a bad time, during the current global financial crisis, to introduce this CPRS?

Mr Gibbs—We would all rather not have a global financial crisis.

Senator FURNER—I know. That is beyond our control.

Mr Gibbs—Our view on that is that the longer you leave this, no matter what the economic background, the harder and the more expensive it will be to do something about potentially damaging climate change.

Senator FURNER—So that will have a direct effect on your clientele and your investments?

Mr Gibbs—That will have a direct effect on the long-term return that we can deliver to the members.

Senator FURNER—As a group that controls a very large amount of people's money, aren't you required, as part of a fiduciary duty, to protect against the risks of not acting on climate change and the costs that would lead to?

Mr Gibbs—I believe that is precisely why the organisations that join the Investor Group on Climate Change are members.

Senator FURNER—What do you think about the features of the scheme designed to promote long-term certainty, such as long-term gateways?

Mr Gibbs—We are long-term investors, so clearly 'long-term' is our language.

Senator XENOPHON—On the issue of agriculture, you have previously expressed the view that the question of including agriculture in the CPRS needs to be addressed sooner rather than later and that the offsets of agriculture need to be recognised in order to encourage abatement activity. How do you say this issue should be dealt with, either through inclusion in the CPRS or through offsets schemes that would benefit your investors?

Mr Gibbs—We argue that agriculture should be included in the CPRS as soon as it is practical.

Mr Pegan—We invest across all sectors and across the whole economy. So to exclude one part of the economy means the decision making becomes a bit distorted.

Senator XENOPHON—What thoughts does your group have about the mechanics of that, the adjustments that are needed?

Mr Gibbs—I do not think we would hold ourselves out to be expert enough to provide a reasoned view on the precise detail of what would be necessary to include agriculture. That is why we say 'as soon as practical'.

Senator XENOPHON—Other than the general principle it ought to be included?

Mr Gibbs—Exactly.

CHAIR—I have one final question. We have heard confirmation during this inquiry that there will be a derivative trading market out of the emissions trading market. Would your members be involved in that in any way? Do you have any views on how that would work?

Mr Gibbs—Most of our members are actually investors rather than suppliers of product. There are a couple that might.

Mr Pegan—Yes, there are a couple.

Mr Gibbs—Other than that, I could take it on notice and get some advice from those who may be, because I am certainly not an expert myself, nor is Frank, on derivative products.

CHAIR—That would be good. I am thinking of any concerns in the way the market may operate and any care that needs to be taken in regulating that kind of market.

Mr Gibbs—We can certainly take it on notice and talk to people or convene a small group who could provide some advice.

Senator JOYCE—Do people just pay you money to be a member of your group? You are not actually directly responsible for investment decisions are you?

Mr Gibbs—Me personally?

Senator JOYCE—Yes.

Mr Gibbs—No, I am not.

Senator JOYCE—Are you, Mr Pegan?

Mr Pegan—Not in my capacity as IGCC chairman. This group has been set up because people of like mind who invest in the same markets as we do are concerned about climate change and want a single voice to work through and do the research, the study, the travel and all of that type of work. Most of us do this voluntarily.

Mr Gibbs—But in your day job you are.

Mr Pegan—In my day job, yes, I am. As the chief executive officer of Catholic Super, I manage close to \$3 billion for 40,000 members.

Senator JOYCE—But the group that you are representing here today is not responsible directly for the investment of a cent?

Mr Gibbs—No, the members are.

Senator JOYCE—But not you?

Mr Pegan—No, the members. I make that clear.

Senator JOYCE—You are the organisation they put out there and say, ‘We have a concern about global warming so we have got Mr Gibbs and Mr Pegan and they talk to people about it’?

Mr Gibbs—That is right.

Mr Pegan—These funds voluntarily joined us because they have the same philosophy and understanding.

Senator JOYCE—How much does it cost to be a member of your group?

Mr Pegan—For a fund, roughly \$1,000 a year.

CHAIR—Thank you for your evidence.

[3.36 pm]

FLANNERY, Professor Timothy Fridtjof, Private capacity

CHAIR—Welcome. Would you like to make an opening statement.

Prof. Flannery—I would like to begin by reflecting on the difficulty of the job that you face as politicians dealing with this scheme. And remember that it was only 20 years ago that the first significant global leader warned us of the dangers of climate change, and that was Margaret Thatcher, in 1988. It is only 20 years since the world's first jurisdiction started measuring greenhouse gases; that was California, in the same year. If you compare that with the long history we have of dealing with economic issues, which go back centuries, and even social policy, which goes back at least a century, I think I can see that we have a very shallow history here and we cannot expect to get everything right all at once. It takes a lot of experience and a lot of time to get complex policy like this right.

So I would like to just suggest at the beginning that our politicians really have to have the will to fail on this. You have to have the will to learn through failure because that is the way that good policy is forged over time. The failure in this case may be an individual policy that is flawed or suboptimal but you nevertheless have an obligation to the people of Australia to forge an overall effective response to this very urgent problem of climate change. That means that the ETS will be one element within a series of learning approaches to this and we shall find out as time goes by which are the most effective.

I said that this was an urgent issue and it most certainly is. We were warned just two weeks ago by 2,000 of the world's climate scientists gathering in Copenhagen that the real world changes in the climate system were tracking the worst-case scenarios of the 2001 IPCC report. The situation in brief is more grave than we thought. We have less time than we thought and there is a risk that if we leave things go the climate system will tip into a new state and therefore any action we take will be useless.

We are seeing lots of effects from climate change in Australia. Of course, many of the things we see have multifactoral impacts on them. But I would like to just show you one example that I brought along with me. I am a biologist by training and I care deeply about our biodiversity. Perhaps the clearest example we have in our country of an impact of climate change is the near extinction of a particular creature that comes from your state, Senator Joyce. It is the Mount Lewis form of the lemuroid possum, which is from the tropical rainforests of north-east Queensland, which is a world heritage area. It is a very protected environment where there are no other impacts that we can detect, except for climate change. This possum is now on the brink of extinction and the Mount Lewis form of the lemuroid possum will go extinct most likely within the next few years unless we do something. So it is not just the Murray-Darling river system in crisis or extreme fires; there are quite deep-seated impacts on our environment and ancient endemic life forms in this country.

In terms of the safe concentration of CO₂ in the atmosphere and where we need to be aiming globally, there is considerable debate on this. We are already at 390 parts per million of carbon

dioxide in the atmosphere. Some argue that 350 is the safest level. Some say 450. Whatever the case I think that there is a widespread view in science that early action and effective action is what is required now rather than continuing to wait.

Nicholas Stern made a very clear case in his report that there is not a single jurisdiction in the world that relies only on an emissions trading scheme to achieve its objectives in dealing with the climate problem, and Australia should not be alone in that. In fact, emissions trading schemes are widely considered very necessary in dealing with climate change but not by themselves sufficient; other measures are required. Australia's emissions trading scheme is rather unambitious on the global scale. European nations as a whole are aiming at a reduction beyond 1990 levels of about 20 per cent by 2020. The new US position is to return to 1990 levels by 2020. The Australian position, once you strip away all of the land-clearing concessions and so forth, seems to add up, the best that I can reckon it, to an increase of 34 per cent over 1990 levels by 2020. That is a relatively unambitious scheme, but that is what we are stuck with.

The other major sectors that I think we need to look at in addressing this problem are clearly within the biological carbon area that Leader of the Opposition has very clearly focused on and targeted in his response. Biochar, a permanent form of sequestration, which has many other benefits, need to be invested in, as does forestry. We have done reasonably well with stopping land clearing in Australia, although it is remarkable that we have collected no figures on land clearing since 2006 in this country, so where we stand in terms of our Kyoto commitment is very unclear to biologists such as me. Of course there is also the area of better range lands management. For all of those things we can sequester carbon in the soil over the longer term. In my view, we need better metrics around all of those potential sequestration options, and it is probably best not to link any of them to the emissions trading scheme but to deal with them separately. The risk of failure is too great if we link these approaches.

I think we also need to consider in this country that termination of conventional coal burning by a particular date as another policy initiative. What that date will be is, of course, open to conjecture. If we wish to stabilise CO₂ at 350 parts per million, the optimum date is probably around 2030.

I have a few problems with the ETS as it is put forward. One is the maximum price on permits, which was mentioned earlier. Also a broader view which I think is important is that no government scheme should take away the volition of the individual to do good, and this scheme has considerable potential to do that by capping all emissions at five per cent. I believe that individual actions should be additional to that target because if I go out and decide to plant a tree or do something with my own money I do not want that to be seen as insignificant. I think it needs to be additional to the industrial target we set for our 250 largest emitters. Within the scheme, we need to design it carefully to allow that to occur.

There is a very interesting initiative now in Europe called project sandbag where individuals buy emissions permits. The reason that occurs in Europe is that the Europeans gave away too many permits in the beginning, the price fell too low and there was very little action in terms of emissions reductions. Individuals put their own money through project sandbag into buying permits and effectively destroyed them and therefore increased the price of carbon. That should be permissible, I believe, within the scheme that we are contemplating here in Australia. It is very important not to take away the volition of the individual in terms of doing good.

Overall, my personal recommendation is that you pass this scheme for all of its faults, but to realise that we are very early in the experiment of regulating carbon and that we need other legislative initiatives to go alongside the ETS, and they would include an increased focus on biological carbon and elimination of conventional coal burning, so a shift to CCS or to other technologies, within a reasonable time frame, and that if we do that we will be in a much better position to deal with this very significant threat. Thank you.

CHAIR—Professor Flannery, I understand that, talking about the volition of the individual as part of the scheme, you were saying that biochar, the sequestration and the termination of coal burning are better kept separate. I am wondering if other initiatives in encouraging households and individuals to reduce their carbon emissions might be done in the same way. My understanding is that under the current ETS if individuals choose to buy permits then they can—that is part of the current scheme—and then those permits are voluntarily relinquished. So would it not be better to have a separate scheme? Because a number of householders are already undertaking activities to reduce their emissions, without being able to buy permits or being part of an emissions trading scheme but simply because they see the need. I take your point that, under an emissions trading scheme, that may allow someone else to emit more for longer; but would it not be more effective if you gave them other kinds of assistance?

Prof. Flannery—I agree. I do not think that involving individual households in the emissions trading scheme is at all desirable but I do believe that any abatement that occurs at that level should be accounted for separately and in addition to the industrial cap that we set at five per cent or whatever it happens to be.

Senator XENOPHON—On the issue of voluntary action in terms of abatement, Dr Richard Denniss from the Australia Institute says that the more individuals do the more permits it frees up for heavier polluters. That is what you are alluding to in the context of that.

Prof. Flannery—It is.

Senator XENOPHON—There is another issue, which Dr Dennis referred to, that if we have such a low target of five to 15 per cent and Copenhagen in a few months time comes up with 20 or 25 per cent then there is a risk for taxpayers that we will have to make up the difference in terms of those additional permits. Do you think that we ought to wait, as some in the environmental movement have said, so that we can aim for a more ambitious target—given that if we are lock ourselves in to the five to 15 per cent then that exposes taxpayers to a significant risk and also sets a bad example to the region if we want to show regional leadership on this.

Prof. Flannery—I agree that potentially it does, and I can see no logic to adhering to an upper target of 15 per cent. I think we should wait for the international negotiations.

Senator XENOPHON—But we have to vote on a bill that refers to a target of 15 per cent.

Prof. Flannery—I would try to trade away the 15 per cent, if you can, and just leave that open. Why would you have an upper target? We do not know what the international negotiations will be. We have committed ourselves to five per cent but the upper target surely is contingent on the global agreement, I would have thought.

Senator XENOPHON—As I understand it the legislation—and I am sure Senator Cameron will correct me if I am wrong—says that it is five to 15 per cent. So that is the upper target in black and white in the draft exposure bill. You are saying that that is something that would unduly constrain us given Copenhagen is coming up at the end of the year.

Prof. Flannery—Absolutely, the five per cent I can accept, and see that that is our own national target; but I fail to see the logic of having an upper target of 15 per cent when we have no idea what those negotiations will produce.

Senator XENOPHON—Professor Flannery, I know that, controversially amongst some quarters, you have said that we should be looking at nuclear power in terms of reducing emissions. Are you particularly wedded to this particular design of the CPRS or are you more interested in the destination and you do not mind if we have alternative paths to get there as long as we get to that destination of a target of 350 parts per million?

Prof. Flannery—I do not think we know what the best pathway is to get to that target of 350 parts per million. As I tried to explain, this is an extremely complex piece of legislation. It is dealing with a very complex problem, because the industrial emissions are part of it and there is a whole lot of biological carbon as well. Our experience in dealing with these matters is very limited—it is a matter of only two decades since we have really recognised that we have a problem. Therefore I have suggested in my statement to you that we hedge our bets by having a number of different policies—the ETS being one of a number—because we just do not know. We do not have the wisdom to know.

Senator XENOPHON—Further to that, and finally because I know other senators want to ask questions, I did not quite follow you when you said there is a need for better metrics and you do not co-link. Can you just elaborate on that?

Prof. Flannery—In terms of biological carbon, we have only begun to realise relatively recently that there is significant potential for sequestration of carbon over the long term in agriculture and forestry and in our rangelands. The first study, for example, of Aboriginal burning and impacts on carbon in Northern Australia was only completed by the CSIRO in January this year, and that was a desktop study without on-the-ground metrics. We need more investment in understanding what the potential scale is for those sequestration options and what the impacts of those options are, should we exercise them. Because we have a very large job to do and we are uncertain as to our pathway, I suggest decoupled policies, not interlinked policies. We do not know which one is going to work, and we do not want the failure of one to then impact upon the other. We need to hedge our bets in that regard and that is why I am suggesting that whatever we do in the biological carbon areas on farms is delinked from the industrial emissions scheme. After all, we are really dealing with two very different things. Industrial emissions and emissions trading are all about measuring, quantifying and paying for something that never existed, an emission that never occurred, an avoided emission. When we come to the on-farm stuff what we are actually dealing with is what I would call ‘atmospheric cleansing’, that is, drawing carbon out of the atmosphere and sequestering it in the ground. There is no equivalent between the two and there is no a priori reason why we should be linking those two approaches.

Senator XENOPHON—Is that funded? Does that mean you are saying that we are putting too many of our policy eggs in the one ETS basket and we need to be a bit broader than that?

Prof. Flannery—Absolutely. You need a series of policies, I believe, because we are uncertain as to which the best pathway is.

Senator XENOPHON—Thank you.

Senator FURNER—In your preliminary submission you indicate that the planting of a tree would not count against Australia's national emissions. The draft bill has actually set out mechanisms to recognise reforestation and, in turn, the mechanism allows for the creation of permits for reforestation, and those permits count towards the national targets. So if you plant a tree, providing it locks in carbon, it counts. What other voluntary actions would you consider should count towards the Kyoto target?

Prof. Flannery—Can I just clarify the issue of planting trees? I am not really convinced that linking tree planting with the ETS is the best policy. I think perhaps we need a separate policy, as I tried to explain. Nevertheless issues like that are, in my view, not fatal to the adoption of the ETS. Other things that could be counted towards the national achievement of emissions reductions would be, effectively, the action of individuals or groups outside that ETS. Housing is a good one. I know that the government is going to start with the Green Loans campaign at some stage in the future. That will, hopefully, result in significant emissions reductions from housing; just from people's houses and reduced energy use. I would argue that those sorts of things, because they result from the individual action of someone trying to do good, should be accounted for as additional to the target.

Senator FURNER—Similarly someone committing themselves to reforestation. Farmers have been doing it for years in terms of reforestation on their lands so that is an indication towards the fact that they are committed to reducing carbon emissions.

Prof. Flannery—Could I just say though that they are quite different things because, if I insulate my house, I then cause less coal to be burnt and less emissions to go into the atmosphere. You can imagine it as part of an emissions trading scheme or however you want to do it; that is a similar sort of thing. Whereas, if you plant a tree, what that tree does is draw carbon dioxide out of the atmosphere. It is not actually an emission as such; it is a reduction of carbon dioxide from the atmosphere. So just from an intellectual position there is no reason why you would link those two events. Sure they are all part of the carbon balance but they are two different things. The reason the emissions trading schemes are somewhat difficult is that we are trying to estimate something that never happened and avoid an emission. They are structured around that particular enterprise, not the enterprise of atmospheric cleansing or drawing carbon out of the atmosphere.

Senator FURNER—Are you in a position to update the committee on the latest science coming from the recent Copenhagen climate change conference?

Prof. Flannery—Yes, I am. I was not at the conference but I did read the communique and I have various colleagues who were there. The conference at its termination handed a document to Anders Fogh Rasmussen, who is the Danish prime minister. The principal finding was that

earth's climate system is tracking the worst-case scenario of the 2001 Intergovernmental Panel on Climate Change projections. It is no longer the median projections that we are tracking but the worst-case scenario. We are on track to warm the planet by four degrees or more by the end of the century, if no action is taken.

Senator FURNER—So that is why it is imperative to act and without delay.

Prof. Flannery—It is, indeed. This is much worse than we thought. That upper margin was 10 per cent probability in 2001. So the probabilities have changed. It is now looking like we are on track to achieve it.

Senator FURNER—Okay. Thanks.

Senator CAMERON—On that point, what are the implications for agriculture in Australia of the recent Copenhagen findings?

Prof. Flannery—Once you get further downstream from the basics of the warming, CO₂ accumulation and sea level rise you get increasing levels of uncertainty in the models, because you are trying to then model average soil temperatures and rainfall patterns and so forth, which are quite complex. The CSIRO projections are, though, for continued and substantial decreases in rainfall across southern Australia, and for substantial increases in the soil temperatures, which means we have less soil moisture and therefore things are more difficult for farmers. We have already seen a very significant shift, I believe, over the last 12 or so years in the Murray-Darling Basin in that regard. The Copenhagen findings suggest that we will get to that endpoint sooner.

Senator JOYCE—Thank you very much, Professor Flannery. Is it global warming or climate change? Which one is it?

Prof. Flannery—There are three factors: the greenhouse effect leads to global warming which then leads to climate change.

Senator JOYCE—So the proposition is that the world is getting warmer—that is the issue that we are looking at?

Prof. Flannery—It is in actual fact that the world is getting warmer. There are 20 satellites and 17,000 earth based stations which have been recording the warming for a century or so.

Senator JOYCE—I am not disputing that. I just want to make sure that it is clearly on the record that it is about the globe getting warmer. If we take the carbon back to 350 parts per million, are you stating that the climate, therefore, would not change?

Prof. Flannery—No, I am not. The best estimate is that, if we get back to 350 parts per million, the earth will ultimately warm by less than two degrees, which will be insufficient to cause destabilising or dangerous climate change. Two degrees of warming is generally considered about the level where you start getting very significant impacts.

Senator JOYCE—Do you believe that by the manipulation of carbon dioxide in the atmosphere you can affect in perpetuity the temperature of the globe?

Prof. Flannery—The Kyoto protocol at its most basic is really an attempt by a species—our species—to regulate the gaseous composition of the atmosphere for the benefit of all life. The protocol is one step in a very long—it will be a species-long—attempt to do this, because we are now such a significant element of life on earth that we have no choice but to regulate our inputs into that atmosphere.

Senator JOYCE—So you believe we can regulate the temperature of the globe—if we could do anything that we liked with carbon, we could regulate in perpetuity the temperature of the globe?

Prof. Flannery—At the moment we are in a position where we could avoid dangerous climate change, were we able to reduce CO₂ levels. Centuries from now, as we become wiser and better at doing all of this, perhaps we will be able to do as you suggest. But at the moment we are at the very early stage, taking infant steps, in that regard.

Senator JOYCE—So we could avoid a future ice age or something by regulating carbon in the globe?

Prof. Flannery—The next ice age is about 80,000 years away and by then, I think, we will probably be good enough to be able to do that. All that coal we have got, of course—that is when we will need it, because you need to put a lot of carbon in the atmosphere to do that.

Senator JOYCE—We should be pumping it up into the atmosphere then?

Prof. Flannery—That is right.

Senator JOYCE—Do you believe that there is a general community consensus that global warming is bad and something should happen about it?

Prof. Flannery—There is not a consensus, but if you look at the trajectory of public opinion over the last decade you can see a very significant shift towards that view.

Senator JOYCE—Can you show me any actions that are perceptible in the way the community is working at the moment that shows that they are concerned about that? Are they driving their cars less, are they using their power less, are they making different decisions in their consumption?

Prof. Flannery—I think the last election was a significant indicator.

Senator JOYCE—Was that on global warming, you think?

Prof. Flannery—I think that and Work Choices are widely viewed as being to two of the more significant issues for the electorate. In terms of what people are doing voluntarily—

Senator JOYCE—That is a vote, but it doesn't cost anybody anything to vote. What about in the way they spend their money?

Prof. Flannery—About 10 per cent of people—somewhere between eight and 10 per cent, I think—are buying voluntary green electricity now in New South Wales. We have seen a shift to smaller cars.

Senator JOYCE—Do you think that that has nothing to do with the price of fuel?

Prof. Flannery—It has had something to do with the price of fuel as well. But everything is multifactorial in this world. We can only claim a proportion of this as likely to be due to a new awareness about climate. When you couple that with the voluntary green electricity buy, you might say that perhaps only 10 per cent of people were doing that—that is something for economists to look at—but I do believe there is a groundswell of concern and I do believe that that is translating into voluntary action.

Senator JOYCE—Do you believe that if there is a community benefit that there should be a community cost?

Prof. Flannery—That is right. We are investing in the future.

Senator JOYCE—Well why didn't they compensate the farmers for land clearing?

Prof. Flannery—Because at that stage the government did not make it clear to farmers that this was a trade-off between the farmers and the miners. That was, I think, a very, very bad thing to do.

Senator JOYCE—So basically there was no whole manipulation of it: it went through state parliament, so they did not have to pay compensation?

Prof. Flannery—Yes, it was a catastrophe. I think it is extraordinary that even today most people do not realise that the Kyoto clause—the special clause—was just a direct wealth transfer from farmers to miners.

Senator JOYCE—That is correct. So you can understand why the farming sector would be, in essence, sceptical, because they have already been burnt once and they can see this coming up and burning them again.

If there is a five per cent change in carbon emissions in Australia on, whatever it is, 1990 levels, is that actually going to affect the temperature of the globe?

Prof. Flannery—Can I just explain, to the best of my understanding, what the five per cent is. I hope I am correct on this. If you take away all of the forest offsets and everything and just deal with emissions—just deal with the burning of coal and other fossil fuels—what our policy will get us to, I think, by 2020 is a position where we are producing 34 per cent more emissions than we were in 1990. So it is not a five per cent cut; it is 34 per cent more rather than 39 per cent more. It is five per cent off that trajectory. That is the best of my understanding of it. Will that affect the globe? It depends upon how that impacts on Australia's leadership at Copenhagen.

Senator JOYCE—But in isolation, will Australia's change affect the temperature of the globe?

Prof. Flannery—There is no single change being considered by any government anywhere in the world that I am aware of that would affect the temperature of the globe. They all add up together to something.

Senator JOYCE—What you said there is very important—what is the effect of all the other nations in concert as to how it affects it. Do you firmly believe that Australia is in a position where the world cares about what we do?

Prof. Flannery—I was at COP 14 at Bali when Rudd made the announcement, and it was a very significant moment. The other nations of the world that were represented there certainly did care. It had a big impact and it had a big impact in terms of global news and , so I do think that at that level they do care.

Senator JOYCE—That is a very good point—the Bali announcement. Have other countries since come on board—Indonesia, being predominantly one, because it was in their backyard; China? After they finished clapping, did they go home and change or did they just finish clapping and go home and giggle?

Prof. Flannery—Australia's ratification has probably been one factor among many that has caused very significant changes globally. If you just look at the green stimulus packages globally, for example, the three that greenest by far are China, South Korea, which is the very greenest, and the USA—and they are some of the largest as well. That did not come about just because Australia ratified the Kyoto protocol, but I am sure it was a factor—one of many factors—that brought about that outcome.

Senator JOYCE—How do you come to that belief?

Prof. Flannery—How do I come to that belief? Just from observing the negotiations and observing, through my network, what goes on. You see a build. As people start switching and making commitments, it starts to build toward a particular outcome.

Senator JOYCE—You are a professor; you are far more diligent and esoteric than me. Is there anything empirical that you can put your finger on and say, 'I can prove to you that that affected their decision, because in this report they gave reference to Mr Kevin Rudd and this is why they made this decision'?

Prof. Flannery—Politics is not an empirical science. It is not that way. This is something about feelings. It is about the sense that people are standing with you so therefore you are more able to go ahead and do something effective.

Senator JOYCE—Okay. Let us go to the 15 per cent target. We have heard that it is all about certainty. Some people who come in here give that as their main argument: they want this because of certainty. You have stated that what we should be doing is rubbing out the 15 per cent ceiling so that if we need to we can go higher. How do you think that that matches with certainty?

Prof. Flannery—There will always be investor uncertainty just because government regulation does not negate risk in total. What would we be doing by rubbing out the 15 per cent

ceiling? I would have to think through this. But if the world agreed on a higher target, would an investor group such as the ones that we have just had in be happier or not with Australia having a differential target? I do not know the answer to that question. You would perhaps need to ask some businesspeople that one.

Senator JOYCE—Dr Flannery—sorry, Professor Flannery. I imagine that you have a PhD. I can call you ‘Dr’, can’t I?

Prof. Flannery—That is all right, yes.

Senator JOYCE—I can call Professor Garnaut ‘Dr’ too, because he would have a PhD. I am sure that he would have one stacked in his cupboard somewhere.

Senator CAMERON—You have called him a few more things than that.

Senator JOYCE—I did not call him a whacko.

Senator CAMERON—You have.

Senator JOYCE—That was what Joe’s father called him: ‘Whacko Garnaut’. We have not. You would have to be at the forefront. You are bang smack in the media spotlight on environmental issues. You carry a picture around in your wallet of Mount Lewis possum, which is unusual.

CHAIR—Let us not discuss unusualness, Senator Joyce!

Senator JOYCE—I think that unusual is nice; it is better than bland. Let us say that you epitomise what would be the avant-garde of a way of life that is trying to change the world. I pose to you the question that I posed to the other gentlemen, and I think it is right to do so. What I am espousing is that this does not really change anything. Is this a social clique where you say, ‘I’m changing because I can afford to change, and if you can’t afford to change with me, stuff you’? Is it just a cultural decision that nice rich people can make that other poor people can’t? How did you get here today?

Prof. Flannery—I got here in my little Toyota Prius.

Senator JOYCE—Good. Why didn’t you catch a train?

Prof. Flannery—I had to drop into the university first and I wanted to be here on time.

Senator JOYCE—Do you drive your Prius everywhere?

Prof. Flannery—Not everywhere, but I drive it a reasonable amount.

Senator JOYCE—Do you always—

Senator CAMERON—Are we going to have a clause on Professor Flannery’s car?

Senator JOYCE—What did you call the Prius, Dougie?

CHAIR—We are going back over this. Senator Joyce, we are trying to discuss this exposure draft.

Senator JOYCE—But there is an important point here. Do you honestly believe that it will resonate with the Australian people—or any people—if we go out there with a stick approach and try and beat them into submission for the purpose of the globe?

Prof. Flannery—No, I do not. I will address the question that you raised, which is a very important one, about whether I represent some deep green end of the spectrum or not. I do not. I am an absolute pragmatist on this. As Senator Xenophon has said, I am not opposed to uranium mining, because I see it as being an important element in places like the China and the USA in a viable energy future. I am an absolute pragmatist in terms of this. I chair a thing called the Copenhagen Climate Council. Among my councillors is the largest Chinese energy generators, the Virgin group and Intel. They are some very big companies. So I am not a green fringe person; I am pragmatic and pretty much in the centre—and perhaps towards the business end of things more than anything else.

Senator XENOPHON—I drive a Yaris, not a Prius. You referred to the issue of eight to 10 per cent of people in New South Wales and other states opting into green energy. From a policy point of view, what would say if it was a case of an opt out system? In other words, we would all be deemed to be opting in to green energy and we would have to opt out if you did not want to be. Is that the sort of thing that would see a more significant take up of green energy in terms of that change of behaviour?

Prof. Flannery—I am certain that you would see a more significant uptake of green energy if you had an opt out clause. That is a very sensible approach.

Senator XENOPHON—Can I just go back to the issue where you are troubled and I think a lot of people are troubled by the 15 per cent target, particularly in terms of getting down to 350 parts per million. Given that we have a piece of legislation that says 15 per cent, are you saying that we should amend that to at least 25 per cent or keep it flexible so that, post-Copenhagen, we can adjust that target?

Prof. Flannery—I am not a politician but I would have thought it would be sensible to have no upper target at all until we know what those negotiations are, just to give ourselves flexibility to sign onto what is the global deal.

Senator XENOPHON—If there is an absolute choice between a take-it-or-leave-it upper target of 15 per cent now or wait until Copenhagen, what would you do if you were faced with that absolute choice?

Prof. Flannery—I would ratify that legislation past the ETS.

Senator XENOPHON—Even though that will lock us into 15 per cent for up to 10 years?

Prof. Flannery—Yes, I am afraid so. My view there is simply that we are in the infant stages of learning how to deal with this and we need a number of policies. I am not convinced the ETS is even going to be the most significant of the policies that we end up deploying.

Senator XENOPHON—It is a bit of a Hobson's choice though, isn't it?

Prof. Flannery—It is a very difficult choice.

Senator XENOPHON—Thank you.

Senator BUSHBY—I was interested in your comments that you are at the business end in terms of the balance and are a pragmatist. I think pragmatism, in particular, is a very good way of approaching most issues. Also I was interested in the comment you made just then that the ETS may well prove not to be the most significant weapon in the fight against climate change. Today we are here looking at the draft exposure legislation for an ETS, which I acknowledge the purpose is to effect structural change so that we can actually shift from a high-carbon emissions society to one that is lower, to some extent. In doing so we have had a lot of evidence that the ETS will impact on various industries and also on certain regions that are dependent upon some industries in varying ways. Although, as I said, it is a deliberate thing to actually force that structure, part of the legislation that we are looking at today is designed to deal with the transition from the high- to the lower-carbon emissions economy. I guess a lot of the argument that revolves around this draft legislation relates to the transitional elements. You have raised some issues with ETS as well, and I think it is a good time to do it because it is only an exposure draft and there is an opportunity for the government to take on board things that are raised and fix them. I, like you, have a problem with the aspect that takes away the incentive to individuals. I would hope that they will fix that because there is a lot of goodwill out there and this is just going to remove any incentive for anybody to do that.

Coming back to the specifics of some of the issues on the transition, there has been a lot of talk about carbon leakage. You were recommending early action and I understand your argument there. If early action implements an ETS which has the effect of putting up the price of goods that are made in Australia subject to the ETS and making goods that come from places where they do not have an ETS and possibly are even less efficient in terms of emissions when they make those goods, is that a good thing to do early or is that something that we should try and get right in terms of the global solution?

Prof. Flannery—It is a good thing to do early. I have just come back from India and attended the council of Indian businesses, which has 9,000 of the largest businesses in India, who presented their paper on climate change. They made the point one of the reasons that Indian business is so successful and so competitive is that they are faced with a perpetual energy drought and they have become very, very efficient at using energy. I was approached recently by someone from the TWU about a Buy Australia scheme, and they asked me how it would look environmentally. The answer is, 'a catastrophe'. You would be much better off buying iron ore from Brazil or aluminium from Iceland, which is produced more sustainably than in Australia.

At these meetings that are coming up in COP 15 it is quite possible that the United States and China will come together at that meeting with a common understanding of what needs to be done. Once you get the large blocs on board the chances of carbon border tariffs coming into

play in the future are not insignificant. My view would be to get our industry into the best shape we can early by making it value energy and assisting it in whatever ways we can to make that transition but do not delay, because delay is dangerous in itself for the reasons I outlined.

Senator BUSHBY—I hear what you are saying, but there are examples, particularly amongst some of our largest emitting industries like aluminium, where they have taken significant steps in the last 10 years or so to improve their efficiency—by 40 per cent, from memory. As I understand it, aluminium refining in this country is possibly the most emissions efficient in the world and up to seven times more efficient than some countries, including China, I think. Given an example like that, the argument you use does not really work.

Prof. Flannery—It does because, as efficient as they are, they are still tied to a polluting energy base. So, while they may have done marvels in terms of increasing their efficiency, until they loosen the apron strings to that dirty energy base they will be vulnerable to any global tariffs on carbon that may come into play in future, compared with somewhere like Iceland, which is doing it all through hydro or deep geothermal. We have the potential in this country to shift—in the next three decades or so, I would say—to a very clean energy base.

Senator BUSHBY—I have no arguments with that, and that may well negate the need, if we retain an aluminium industry, for such carbon based tariffs to be implemented against us, because hopefully through a whole suite of measures that you are discussing we may well move to lower carbon energy provision. It is the high use of energy in the aluminium industry that is the problem, not the fact that it comes from carbon based sources. If we had alternative baseload sources to supply it, it would not be such an issue.

Prof. Flannery—I met the president of Alcoa, Klaus Kleinfeld, and some of his senior executives in October last year in Spain, and they were deeply concerned at the Australian aluminium industry because of the high carbon exposure. They are moving as quickly as they can towards low-emissions aluminium within their portfolio of global assets. I can see within that industry that it is not that they want to stay tied to dirty energy; they need assistance and a way forward. I would say their view is that it is inevitable that, wherever they go, that will be a problem for them at some time or other.

Senator CAMERON—I noted your concern about locking into the 15 per cent and the upper ceiling. Are you aware that the Prime Minister has indicated that post 2020 Australia will play its part in any global agreement?

Prof. Flannery—I was not aware of that, but I am very glad to hear it. If you will forgive me for saying it, it is easy for a Prime Minister who is unlikely to be in power in 2020 to make such a statement. Perhaps the job of our politicians today is to put some flesh on that statement. If we were, for example, to look at some of the longer term policy adjustments that are required outside an ETS, by way of biological carbon or a phase-out of conventional coal burning at a particular point beyond 2020, that would start putting flesh on that assertion in a real way.

Senator CAMERON—2020 is not that far away!

Prof. Flannery—Perhaps I am being too pessimistic, but certainly three or four elections is a good run!

Senator CAMERON—Wouldn't any politician in 2020 be faced with an absolute lay-down misere that they have to be part of a global agreement? Don't you think the culture and the politics will have changed so much, and the climate will have changed so much, that by 2020 this country will play its part regardless of who is in power?

Prof. Flannery—I hope you are right, and that is my general sense—that we will be drawn more into a global deal. But there is so much to be done. I can imagine a scenario where the Copenhagen meeting falls over for one reason or another, people are thrown into disarray and we do not know where we are going to go globally at that point. We are at a very delicate moment in those negotiations now. I hope you are right, but it could be wrong.

Senator CAMERON—It could still be Kevin from Queensland, you know!

Prof. Flannery—That is right. For his sake I hope so.

CHAIR—Thank you, Professor Flannery, for coming along this afternoon.

Prof. Flannery—Thank you.

[4.20 pm]

BETZ, Dr Regina Annette, Joint Director, Centre for Energy and Environmental Markets, University of New South Wales

MacGILL, Dr Iain Ferguson, Joint Director (Engineering), Centre for Energy and Environmental Markets, University of New South Wales

TWOMEY, Dr Paul Joseph, Research Fellow, Centre for Energy and Environmental Markets, University of New South Wales

CHAIR—Good afternoon and welcome. Thank you for coming along. Do you have an opening statement that you wish to make?

Dr MacGill—Yes, we do. Firstly, thank you very much for the opportunity to discuss these very important issues with the committee. In our opening statement there are really three issues we want to pick up. The first one is the policy context. I will speak briefly to that. Paul is that going to speak on the issue of national targets and then Regina is going to speak on some of the specifics of the proposed Carbon Pollution Reduction Scheme, and we will take it from there. Hopefully you have just been given some notes on our introductory statement. Very briefly, the Centre for Energy and Environmental Markets is an interdisciplinary research centre involving the faculties of engineering, business, arts and social sciences, science and law at the University of New South Wales. Researchers in the centre have been looking at emissions trading and other environmental policies with a very specific focus on climate change over the last decade or so.

In terms of the policy context—and no doubt after the days of sittings that you have had you have heard this—we just quickly want to flag that, although the scientific understanding of climate change does continue to evolve and there are significant uncertainties, the case for taking effective action is very clear just in terms of managing the risks that we face. In our view, the most effective role that Australia can play, given the context of very high per capita wealth compared to many other countries in the world and being amongst the world's highest per capita emissions, in supporting and facilitating the international response required is a leadership role on what can be done to transform an economy such as ours towards a low-carbon economy.

In terms of achieving that, a coherent and comprehensive policy framework will be required and the sorts of issues we see as important in assessing such a policy framework is effectiveness, efficiency and equity in terms of this transition required. Effectiveness is the key criterion in that failure really is not an option given the risks of catastrophic change that we seem to face. What that suggests is high levels of assurance. So we really need a policy framework that delivers an effective response regardless of all of the many uncertainties that we do see out there. That relates to things such as the timing of taking action and also the policy mix.

In terms of efficiency, the first thing to say is that it is actually a second order objective in some key regards in that, even if it costs us a little more to avoid dangerous warming than it might have if we had done something a bit differently, the science suggests that is still a price worth paying. Effectiveness is actually the key criterion. The other key point on efficiency is that

it is actually dynamic efficiency or longer term innovation which is actually the key efficiency we need to focus on. That is the sort of efficiency that drives the transformation of our economy that we need to see.

In terms of equity, the sort of transition that we are looking to have to make will be quite wrenching. There is no doubt about that. So high levels of social consensus will be required and perceived views on equity will be a key part of building and maintaining that consensus.

Building such a policy framework is almost certain to require significant carbon prices across the economy and seen by all the key stakeholders. However, it is important to note that governments world wide have really struggled to date to introduce those widespread, economy wide or significant carbon prices across the economy. It is proving, whether you look at emissions trading or carbon taxes, to be a really challenging policy to get in place in terms of effective, efficient and equitable change.

So there is no doubt that we need other policies. There are many things these other policies have to do. There are a lot of market areas or potential market areas that we have to correct. We have to provide assurance against the possibility that some of our preferred policies might prove less effective than we hoped in practice. We need to facilitate social consensus towards behavioural change, we need to deal with equity and we need to drive innovation. Thank you. I will now hand over to Paul.

Dr Twomey—Turning to the topic of national targets—which must be a topic you are quite weary of now after five or six days of hearings—I would like to make a brief comment on the ways of comparing the burden sharing and particularly some of the recent literature that you might not be so familiar with. As we know, the Bali road map called for deep cuts in global emissions but avoided stating specific targets. We do not know how Copenhagen is going to turn out at this point of our negotiations. However, there is also this important figure of minus 25 to 40 per cent emission reductions of the working group of the Kyoto protocol and there is the 30 per cent reduction out there of the EU for a global deal for developed countries as a whole.

The Bali road map also stated that, in reaching these deep cuts in emissions, we need to ensure comparability of effort. Determining this comparable effort among developed countries is clearly one of the major issues of current negotiations. On the international stage, there are many factors that may be and indeed are considered in working out this comparable effort. These include things like GDP, recognising the ability to pay, emissions intensity, recognising the potential to reduce reductions, cumulative emissions, recognising historical responsibility for the stock of atmospheric CO₂, population growth, recognising that increased populations involve increased emissions, and population level in terms of setting some sort of targets per capita and end point targets per capita. There are baselines. These are ways of estimating business as usual and projections in comparing reductions against that. There is credit for early action, recognising that some countries have already taken serious efforts and that those should be taken into account. There are different methods of calculating the marginal cost of reductions, such as what the carbon tax or carbon permit rate of a country is. And there are different ways of calculating the total cost of reduction using macroeconomic models or calculating the total costs within a marginal abatement curve.

As you have probably been told many times in these hearings already, for some people the reductions of five to 15 per cent framed in population growth seem quite reasonable against the European targets. However, against most of these other criteria that I have mentioned, Australia's effort does not look so strong. For example, a couple of months ago the European Commission's major document as we approach Copenhagen, called *Towards a Comprehensive Climate Change Agreement in Copenhagen*, analysed four metrics: GDP per capita, the emissions per GDP, early actions and population growth. They applied these to all developed countries across the world. So for the overall 30 per cent reductions of developed countries which is the global deal that Europe is aiming for, the reductions of Australia—which was combined with New Zealand in the statistics and calculations—by these four indicators that I mentioned would have been 34 per cent, 37 per cent, 48 per cent and six per cent—the last being the population growth adjustment. Evenly weighted on these four metrics, Australia and New Zealand would come out at minus 38. This is compared to the minus 15 which is the maximum that we would be going for.

Another report by Ecofys called *Factors underpinning future action* examined another different set of metrics, including the famous contracting and convergence of aiming for a per capita convergence and a number of other criteria. In their findings, looking for a 30 per cent reduction by 2020, on these various indicators Australia, again, would be looking at approximately a 22 to 28 per cent reduction on the different metrics they consider. These are indicative because there are a number of assumptions in a lot of these metrics that need to be taken into account. For example, the EU did not take into account land use change. But they are indicative of a number of these studies.

So there is no obvious best choice of what is right. It clearly involves the difficult task of weighing up values and ethical principles. In practice, what we are likely to find and do find is that countries tend to focus on those indicators that favour them requiring less reductions. For this reason, it may be expected that some sort of averaging of these many measures would be used in the negotiation process, like in the EU paper. As I say, in such an averaging process, on balance, Australia's targets are unlikely to seem particularly strong. So it appears somewhat inconsistent that the draft legislation states that the global 450 parts per million stabilisation would be in the interests of Australia, yet there is no option of an Australian 2020 target consistent with achieving this, such as gaining 25 per cent reductions on the table for Copenhagen. Thank you.

Dr Betz—I am going to focus on the Carbon Pollution Reduction Scheme design. I want to flag four topics: coverage, unlimited use of CDM and JI credits, free allocation in the price cap, and I will then go into a small discussion of what could be a possible solution. Coverage plays a role not only with regard to what can be covered; the question is also the relation between: what do I cover and what is the target? By covering sources, there are transaction costs incurred to these companies or emitters. If you go for very small targets they will have these costs, although they might not actually have to contribute to the reductions and so there is actually no benefit. So the efficiency of the scheme is not going to increase but they will have the costs. That is something which needs to be kept in mind and which needs to be balanced. We have seen in Europe that they have actually excluded some of the small ones because they saw that there is an imbalance. Going for a minus five per cent target and such a broad coverage, there is a misbalance. So I would propose that there needs to be a change. An emissions trading scheme with a broad coverage is only really efficient if you go for a more stringent target. This is research which we have done. We have numbers behind that.

The second point, looking at the unlimited use of Kyoto units in the scheme that is proposed, appears to be inconsistent with the principle of supplementality within the Kyoto protocol. In the Marrakesh Accords, for example, it states that domestic action shall thus constitute a significant element of the effort made by each party. So my question is: when Australia is allowing unlimited use of CDM and JI credits in their scheme, which is covering about 70 per cent of emissions, how can they demonstrate that they do something domestically? It might be interpreted by other countries that there is a lack of willingness by Australia to do its fair share of emissions reductions domestically.

The other thing is that the CDM will not be the appropriate mechanism in the long term, as key developing countries will also move beyond project based mechanisms in getting emissions caps, or no loose targets—something like that. So it puts the Carbon Pollution Reduction Scheme at a risk of being very dependent on the future developments of these Kyoto mechanisms. In the proposed change—and this is something to be included in the draft legislation—there is already restriction of types of units over time. Why should there not also be a quantity limit of the use of these credits, which is in line with what the European Union has?

The next point relates to free allocation. Emissions trading is giving a right to pollute. From an equity perspective there should be a principle of polluter pays. The revenue to be raised should be used to achieve equity objectives and also to support the economic transition. We have seen in the European Union that all free allocation rules—and we had more than 27 different allocation plans and rules—will create distortions. For example—and this is what is proposed for the trade exposed energy intensive industries—if you use a benchmark which is multiplied by an output which is updated over time, you are weakening the incentive to reduce your output. It is a subsidy for output, basically. On the other hand, we have seen that if you give free permits to companies which are sufficient, some of them are reluctant to trade. They become very passive. Although they might have very cheap abatement options, they are not implementing those and that will reduce the efficiency of the scheme. So there the proposed change would be: cap the free allocation, because there is no other scheme I know where the share of free allocation might actually increase over time. The other question is: why do we have a windfall profit test for the coal generators and why do we not have the same windfall profit test for the trade exposed energy intensive industries?

Going to the issue of the price cap, a price cap risks environmental integrity, and maybe also the physical cap. It shifts the risk to the taxpayer because there is still the Kyoto commitment, or another post-2012 international commitment, that needs to be fulfilled. So the government would go out and buy international credits most likely. So it is a shift of the risk from the private sector to the public sector. The risk might be even greater if the potential is there that you can indirectly bank those credits into the future—what is currently allowed under the scheme and which cannot really be prevented. So you will have the circumstance of not having achieved your cap being imported into future periods.

The proposed \$40 in the draft legislation, which is growing slightly, might also be too low because we have seen international carbon prices at around \$60 and we have seen high volatility. So having a price above \$40 internationally is not unlikely. Although we have a recession at the moment, this is long term—we are talking about 2015 as well.

The proposed level of risk also includes the fact that we might not see appropriate abatement options implemented because they will be just capped by that price level. And we may prevent linking with other schemes that do not have this price cap.

So in our view the proposed change would be to at least go for higher increases over time—you would go out of the \$40 range more quickly. You might also consider how you would actually provide some level of investment assurance and reduced risk to the ones investing in low-abatement technologies—prices floors in auctions and things like that.

I will now move to one of the things we have stated to think about, which is called the additional action reserve. We have seen all this debate about voluntary action and that we cannot do anything beyond the cap. It is not the first best option; it will be the second best option. The first best option is still a much more stringent cap. But if we are not able to achieve that there could be an option to introduce an additional action reserve, which would mean that we are setting aside part of the allocation that would otherwise go to industry into a reserve and we would allow units in the reserve to be cancelled based on specific actions that are part of a positive list. The aim would be that we achieve additional reductions to the atmosphere from actions which are not purely driven by the Carbon Pollution Reduction Scheme.

The proposal for the reserve will have potential advantages. It will give the opportunity to achieve a more stringent target not only by retiring units. This is foreseen right now. You can voluntarily go into the market to buy them and retire them. But Australians might want to see something. They do not want to just have the electronic transfer and cancelling of units. This would be one of the potential advantages if we are to have tangible emissions reductions in Australia. It would be a bit similar to a no-lose type, which has been discussed for developing countries, because Australia would not lose if they would not achieve these additional emissions reductions—but they could achieve them. But there would be no punishment because the international target would not include them.

The form of a reserve would give certainty to the industry that that would be the maximum amount which would be taken out. It would also give some certainty about or an upper limit on the cost to the government in retiring those units. Most importantly, this reserve approach would give room for complementary measures. It would provide incentive to state governments and to individuals to do more through voluntary action. If it is very transparent, it might be that people would be very motivated psychologically to make sure that this reserve is emptied over time.

CHAIR—You have described a very good long-term scheme, but the Australian government is taking a significant step in proposing this emission trading scheme. There is quite understandable nervousness from industry, because there are a number of assumptions about the underlying prerequisites to changing our economy from being emissions intensive to something else. Things like solar thermal, geothermal and carbon capture and storage systems are simply not proved at this stage. The argument is that we should start it now at a lower level firstly so that it gets through parliament and secondly so that industry will support it and get behind it. Then we can get some confidence that they are able to achieve these levels and then go on to improve them. What is your response to that?

Dr MacGill—There is certainly a complex set of political judgments which we do not claim to have the expertise in. Perhaps the role that we see ourselves as playing is in making sure that

those decisions are as well-informed as possible by the underlying understandings that we have of policy frame works. One of the challenges that we potentially face with a carbon pollution reduction scheme approach and the national targets associated with it is that it is not necessarily just initial small steps. By locking in targets perhaps a decade out or so, in some ways these schemes can represent a locking in of small steps. That is very different from taking early small steps.

So many industries and people are nervous about what all this means. We should be. We are entering uncharted territories. The real challenge we face is that what the climate science tells is that we have a fairly small window of opportunity to turn this around. Perhaps small steps are all that we are able to achieve, but, given that context, it is very important that the politicians, the industry and the public realise that we are not putting effective action on the table. Then we can revisit the question of just how serious we are about taking the types of actions that look to be required.

Dr Betz—From a European perspective, they had a pilot phase of three years. Then they made some changes. Now they have a five-year first phase of trading. They were not locking in things for 10 years. When I compare those small steps, you can have them for a shorter period. But there is no time to do it over a 10-year period. I am very much a fan of having pilot phases and starting small. But the period which we are looking at needs to be much shorter.

Senator BUSHBY—Thank you for coming along today and contributing to the inquiry. You mentioned the small targets that the CPRS currently contains—the five per cent—and talked about the fact that you are still imposing the structure of a CPRS but with the aim of a small gain. You said something like, ‘The efficiency is not high, but the cost still exists.’ I would not mind hearing a little bit more about that. If my summation there is right, basically the economy, business and industry still has to wear all the costs—it has to, as we heard this morning, get legal advice on how it applies; it has to buy the permits if it does not get them free; and all those sorts of things—and yet what you get in the end is not what you could get given the pain that you are causing.

Dr Betz—Exactly, and I think it goes a little further. Emissions trading is an instrument where you give flexibility. Through trading, where those with cheap abatement costs reduce emissions and those with high abatement costs buy the permit, you achieve efficiency. But if you go for a very small target you will only need very few companies to achieve that, and all the others will just be covered without really contributing to that efficiency. So we compared the efficiency gains with the scheme and the costs of such a scheme and we varied the target. We saw that it is only worthwhile having a very broad coverage when you actually go for more stringent targets; otherwise the costs are higher than the benefits.

Senator BUSHBY—So another way of putting that would be that the benefits to be gained by ramping up the target to a higher level—a more stringent level, as you describe it—would not come with a commensurate increase in pain, effectively. The pain is already there; you could double the target without doubling the pain, to use an analogy.

Dr Betz—Yes.

Dr MacGill—The principle behind a broad based emissions trading scheme, of course, is that everyone sees a price signal. There is a lot of effort—transactions, monitoring and so on—to make sure that everyone does see this price signal. If you are not really requiring them to do much, then you are requiring participants to make a great deal of effort to not actually perhaps drive much change.

Senator BUSHBY—Yes, if you are going to put them through the pain, you want at least to get a decent result. We have heard some evidence today, from Professor Flannery and others, about other tools. A lot of people have come in and said that you need to throw everything at this that you can. I am a coalition senator and the Leader of the Opposition has put forward the idea of biochar and other ways of reducing carbon in the atmosphere. Do you see that other tools have a role to play in the overall structure of how this works? Professor Flannery talked about nuclear energy as a way of reducing carbon emissions.

Dr MacGill—The sort of transition we need to see is unprecedented. They are uncharted waters, so as to knowing that there are particular technologies that are the answer—well, maybe. But there is a considerable amount of uncertainty. With regard to biochar—and I believe the Leader of the Opposition also talked about carbon capture and storage—I think we would classify those as promising but still unproven opportunities to reduce emissions, firstly, and likely to be only able to play a limited role in the short term. So there are both of those issues: uncertainty and timing.

Senator BUSHBY—Professor Flannery was also saying that the ETS may prove to be of limited use in the long run compared to other measures. It is not clear yet what will work.

Dr MacGill—I would agree, and there are some interesting parallels between the idea of very promising but unproven technologies and promising but unproven policy measures. No doubt you are getting all sorts of advice that you need this policy and that policy. We would say that to put together the sort of comprehensive and coherent policy framework required is not something that comes out of a grab bag of this and that. It actually requires a very structured and thoughtful process of government saying, ‘How exactly do we find a set of policies which provide a high level of assurance that we can reduce emissions and transition the economy?’

Senator BUSHBY—You have raised a number of matters that are not necessarily reflected in the current exposure draft. The reason we are here is that we do have an exposure draft, and hopefully the government will listen to the evidence that comes before it, take that into account and present some improved legislation for final consideration. The question I have is: how important is it to get the legislation right so that the scheme is the best it possibly can be? If there are still issues outstanding, should we take an extra few months to make sure that we get things right now or should we just get it up and then try and fix it?

Dr MacGill—There is almost no chance we will get it right.

Senator BUSHBY—Yes.

Dr MacGill—So a process for implementing improvement is a really key part of getting it right now. We need to say, ‘We can’t get it right; we need to be able to change it.’ It strikes us that that does not appear to have received enough attention in the proposed scheme. If we look at

another designer market—the national electricity market is another example of a designer market in Australia—we find that there are very formal processes by which we can change the rules as we go, because there is an acknowledgement that things change, problems emerge and so on. We need a process for being able to change the rules. The challenge here, of course, is this issue of investor certainty. But a balance does have to be struck between that and the ability to improve the scheme over time.

Senator BUSHBY—If you had a process built in as to how changes would be made, rather than waiting for ad hoc changes that are thrown at parliament from time to time, it would provide some degree of certainty.

Dr MacGill—A certainty of process rather than a certainty of outcome.

Senator BUSHBY—Yes, that is right.

Dr MacGill—That is what people see in the national electricity market.

Dr Betz—I would like to support what Iain said before, but also flag that there are things you have never thought of before, which can only be learned when the scheme is up and running. That is what the European Union found as well, and they had to make amendments.

Senator BUSHBY—That comes back to your comments earlier about small steps and pilot projects, on shorter terms rather than—

Dr Betz—Yes.

Senator BUSHBY—That is interesting. You also made comments about free allocation in terms of permits to emissions intensive trade exposed industry. What do you think of Professor Garnaut's principled approach to assisting EITEIs in those circumstances?

Dr Betz—Professor Garnaut has a very different formula for allocating free permits or cash to these industry by which we would look at what would have been the price if no country had a carbon price compared to everybody having a carbon price, and finding the difference. This is a very different approach. It would mostly likely have many fewer permits and less cash transferred.

Senator BUSHBY—But it would still be reasonably equitable, it seems.

Dr Betz—Yes. The difficulty of this approach is in modelling that. This is based on modelling of what would be the price. Being an economist and knowing some of these models I know that they are all based on an assumption. So the difficulty is in practically implementing it. The idea would be good. It would be a good approach but the implementation is a bit questionable.

Dr MacGill—I might make one more comment. I think there is a difference of principle in the Garnaut approach, which is very much that this is not an issue of compensation but an issue of transition and supporting transition. That is an important principled difference.

With regards to the current draft legislation there is considerable discussion, as there has been in the white and green papers, about the idea of carbon leakage. But I do not think there has been enough attention paid to what we mean by that. Is it the idea that industry goes to places which do not have a carbon price? Or is it the idea that they go to places that do not have a carbon price and we see increased emissions? You may see very different outcomes depending on how you test this. The example we heard discussed before was the aluminium smelter. Aluminium smelting around the world is currently heading, for a range of reasons, to places with low emission, low cost, gas fired electricity, with significantly less associated emissions than aluminium production in Australia, and to other places with hydro and renewables and so on.

Regardless of whether they have a carbon price in the Middle East or Africa, aluminium made there will have far lower emissions associated with it than making it in most places here. So in terms of supporting effective international action, if you bring in a policy which says, 'We're not only going to protect existing trade exposed emissions intensive industry here, but put in provisions to invite them to come,' it sends a terrible message for effective international action, because in a carbon constrained world you probably do not make aluminium from conventional coal fired generation in Australia.

Senator BUSHBY—They could always come down and add to the aluminium refinery in Tasmania, which largely runs on hydro.

Dr MacGill—Absolutely.

Senator CAMERON—I am not sure who will want to answer these questions. I have read that dealing with climate change covers the full spectrum of the scientific, economic, social and political disciplines. You have gone to some of the social areas and have raised the question of achieving high levels of social consensus. I think it was Dr Twomey who was dealing with this area.

Dr Twomey—No.

Senator CAMERON—How do you get a social consensus in the country if you cannot achieve a political consensus at the leadership level to get this legislation through? Forget all the economic arguments and all the other arguments about the design of the scheme; if you cannot get a social consensus, how do we deal with this? Have you thought about that?

Dr MacGill—I think that is the key question. It is not a question that we have an answer to but it is one that we desperately need to have answered. Our centre does work with the social sciences, and one of the experiences that we in engineering and economics have in trying to understand these issues of social consensus and political science is that a lot of it does not look very scientific. I think it is very important that we face that quite directly, because one can imagine all sorts of reasons put forward as to why we cannot get effective action here or in many other parts of the world: is it the large polluters that run Canberra? Is it the fact that the public is not really ready to make the changes that might be required in their own lifestyles? I do not know what the answer is, but I would certainly agree that that is the key question.

Dr Betz—I think the emissions trading scheme could be designed in a way that could at least try to get more consensus from all the different societal groups. For me the major issue there

would be that the polluter pays—raising revenue and using the revenue by, for example, giving it to energy efficiency measures in low-income households. Then you could get a picture that this instrument makes the big polluters pay and that the ones who are vulnerable to higher emission prices are being helped but also are contributing to emission reductions. It would be easier to achieve societal consensus for such an instrument than for an instrument that is seen to be giving free permits to big polluters but at the same time passing on the costs to poor households.

Dr MacGill—I would like to add to that. One thing that did strike us in the green paper for the CPRS was its very strong focus on the issue of households. It was very welcome and it has been missing in some of the other schemes we have seen around the world. Unfortunately, I think the process of getting between the green paper and the white paper and beyond has raised more of these equity issues as a perception has emerged—and I think it is a reasonable perception—that some large, key stakeholders are really starting to drive the agenda in Canberra. I think that is a very significant issue for public support.

Senator CAMERON—As to some key stakeholders driving the agenda I must say that I have not met a happy key stakeholder yet. We have had the mining industry and the coal industry come to us and say: ‘This is terrible. You can’t put these imposts on us. It’s going to cost jobs.’ We have had senators here running a parochial agenda and saying, ‘This is going to cost jobs in the mining industry,’ and then a political agenda starts to run. And you are saying, ‘Well, make the polluters pay.’

The government in their approach have tried to spread the pain. The government have said, ‘Okay, we’re all in this together. It is an international issue. It’s a national issue. We will take steps and will design the scheme to try to make sure that no one group, no one industry, is absolutely carrying the whole cost of the international quest to reduce carbon.’ But if you reduce it to ‘polluter pays’, there will be some who will carry the cost. There will be bigger implications for some regions and some industries. Isn’t better for us to try to deal with it nationally, jointly, not just in a purely market based polluter-pays approach?

Dr Betz—Can I come at it again from a European perspective. You can go for strong targets and have a balanced approach, and that might be okay, but look at what happened in Europe—and I think that is what needs to be avoided. Europe went for very small targets in the first three years, but still had a lot of free permit allocation. So the costs were on the consumer, the windfall profits were with industry and there was no benefit for the atmosphere. That was really the worst outcome, and that needs to be avoided. I can understand that there needs to be a balance at the beginning and you need to buy industry support for the scheme by lowering the burden on them. But over time these things need to be phased out and the polluter-pays principle would need to be in place. Although there is money foreseen for households—and I think they wanted it 50-50; 50 per cent goes for household from the revenue and 50 per cent for industry—how will it be used for households? It will be used through social security schemes which exist and will not be used to improve their energy efficiency. I think there could have been a better approach that would make households contribute to emissions reduction.

Senator CAMERON—The government has made a big investment in providing insulation for houses. Is that not a practical way to try and deal with the problem?

Dr Betz—Yes.

Senator CAMERON—I am not saying that it is all the government will ever do, but it is an example of what you are talking about.

Dr Betz—Exactly, that is what I am talking about. If I am a low-income household, I could get more money based on social security assistance, but I could also get a lower electricity bill where there would be savings. One saving would not have an impact on the atmosphere and the other would. It might depend on the reserve and the approach taken there.

Senator CAMERON—I want to come back to the polluter-pays issue because it is an important part of your submission. I am not arguing that the polluter should not pay; I am trying to be a devil's advocate in terms of how this would work. I used to work in the electricity industry in a power station. I have worked in coal communities and power communities and I know what happens there and how important they were the social infrastructure. I am also aware of the pollution that is now starting to have a huge impact. You say the polluter pays and the power industry has to shoulder the total burden of its pollution. They have said to me, 'We designed our stations 30 years ago, this is what we have and there is no alternative to these stations in a short period of time.' If you say the polluter pays, that will make them totally incapable of maintaining their business and totally incapable of providing power. What is the other option? The argument they are putting to us is that if they cannot run a profitable business, they will go out of business. Where do we go?

Dr MacGill—If there are no alternatives to these power stations then introducing emissions trading will not put them out of business. They will very effectively pass on those costs to the end users because the end users have no other options. So there is a contradiction there. I want to pick up more generally on polluter pays. One of the issues with transition is that sometimes it gets forced upon us—the global financial crisis—and sometimes it is a conscious policy choice, microeconomic reform or an effective action on climate change. You need some principles and then you have a messy, complex transition and all sorts of potentially very disadvantaged parties. But the polluter pays is the starting point. A revenue stream is created when the polluter pays and that revenue stream can be used to support the sorts of transitions that some parts of the Australian economy will require.

The risk when you move away from that principle of polluter pays is: are you supporting transition or are you effectively helping them not have to change? That is a very important difference in transitioning an economy. So, on the question of transition, we would totally agree—it is the critical challenge. But the principle of polluter pays creates the starting point: 'We are going to have transition; now let's work out how to do it.'

Senator CAMERON—The government's scheme does have a big element of polluter pays, and I think that payment is worth many billions of dollars. That is then being divided up in terms of support for community and support for a transition process for industry. Isn't that a reasonable way to go about it?

Dr MacGill—There are many ways to look at that. One of the risks you face when you try to work on some politically negotiated solution of who sees a carbon price and who does not is the challenge that poses for governance. The example we sometimes use is a company that understands the importance of change will see innovation opportunities—ways they could change their business—but what they also see is that some large polluters appear to be getting

special deals in Canberra. What happens then is the governance process means that basically all parties have to focus a little bit more on that than on the question: 'How do we actually make money and create a business out of this transition?'

You referred to specific regional issues and implications earlier. I think Queensland is a good example. One of the great development stories in Queensland over the last five years has been coal seam gas. At least one of the drivers of coal seam gas, both for Australian electricity generation and potentially for LNG exports, is this view that gas plays a key role in climate change. So there are opportunities as well as adverse impacts. We do not pretend there is an easy answer, or that government can find a straightforward way to manage this, but the principle of polluter pays and a governance process that is clearly robust to all stakeholders against unreasonable influence from large polluters are really key.

Senator CAMERON—I was smiling, because you are saying there are no easy answers and you have given us two pages here. But I am sure this will equate to a lot of trees somewhere down the track. You have done a good job in simplifying the arguments. I am not arguing that you are providing simple solutions or simple arguments. Thanks.

CHAIR—I think Senator Furner has some questions to put on notice. If you could just take them away with you and provide a response to the committee, that would be good.

Senator FURNER—Firstly, in part 25 of the bill the scheme provides for five-yearly built-in reviews. I would like to know what you consider should be reviewed with respect to that.

Also, the proposed system provides for gateways and allows the government to set a wide range between the upper and lower limits. The OECD has indicated that that is possibly the best solution in that particular policy challenge. What do you think about gateways?

Lastly, David Pearce from the Centre for International Economics provided evidence to this committee the other day that we need a carbon price to work out whether other policies like large-scale biochar are cost-effective. I wonder whether you agree with that position at all.

CHAIR—If you could take those on notice. Thank you very much for coming in this afternoon.

Committee adjourned at 5.09 pm