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SENATE

ECONOMICS LEGISLATION COMMITTEE

Reference: Carbon Pollution Reduction Scheme Bill 2009 and other related bills

FRIDAY, 29 MAY 2009

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**SENATE ECONOMICS
LEGISLATION COMMITTEE**

Friday, 29 May 2009

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

Participating members: Senators Abetz, Adams, Back, Barnett, Bernardi, Bilyk, Birmingham, Mark Bishop, Boswell, Boyce, Brandis, Bob Brown, Carol Brown, Bushby, Cash, Colbeck, Jacinta Collins, Coonan, Cormann, Crossin, Farrell, Feeney, Ferguson, 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, Sterle, Troeth, Trood, Williams and Wortley

Senators in attendance: Senators Cameron, Eggleston, Fielding, Fisher, Hurley, Pratt and Xenophon

Terms of reference for the inquiry:

To inquire into and report on:

Australian Climate Change Regulatory Authority Bill 2009; Carbon Pollution Reduction Scheme Bill 2009; Carbon Pollution Reduction Scheme (Charges – Customs) Bill 2009; Carbon Pollution Reduction Scheme (Charges – Excise) Bill 2009; Carbon Pollution Reduction Scheme (Charges – General) Bill 2009; Carbon Pollution Reduction Scheme (Consequential Amendments) Bill 2009; Carbon Pollution Reduction Scheme (CPRS Fuel Credits) Bill 2009; Carbon Pollution Reduction Scheme (CPRS Fuel Credits) (Consequential Amendments) Bill 2009; Customs Tariff Amendment (Carbon Pollution Reduction Scheme) Bill 2009; Excise Tariff Amendment (Carbon Pollution Reduction Scheme) Bill 2009

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Committee met at 10.47 am

CHAIR (Senator Hurley)—I declare open this hearing of the Senate Economics Legislation Committee into the Carbon Pollution Reduction Scheme Bill 2009 and related bills. The provision of 11 bills has been referred to the committee for inquiry and report by 15 June 2009. In April this year the Senate Economics Committee reported on the provisions of the exposure draft of the legislation to implement the Carbon Pollution Reduction Scheme. This inquiry will focus on the major changes to the exposure draft legislation, especially the amendments announced by the government on 4 May.

These are public proceedings, although the committee may agree to a request to have evidence heard in camera on their determination 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 the witness should state the ground upon which the objection is taken and the committee will determine whether it will insist on an answer having regard to the ground which is claimed. If the committee determines to insist on an answer a witness may request that the answer be given in camera. Such a request may of course also be made at any other time.

[10.48 am]

SPEDDING, Mr Max, Secretary, Australian Landfill Owners Association

CHAIR—Welcome. Do you have an opening statement you would like to make?

Mr Spedding—Thank you for the opportunity for our association to appear before this committee of inquiry. I have been directly involved in the waste industry since 1988. I was managing director of SITA Environmental Solutions, Australia's third largest waste service provider from 1995 to 2001 and I am currently Director of Sustainability for Veolia Environmental Services, Australia's second largest waste service provider. I am also secretary and spokesperson for the Australian Landfill Owners Association. I am a board member of the Waste Management Association of Australia and I am the chair of their National Landfill Division.

The Australian Landfill Owners Association, or ALOA as we call it, is the peak representative body of the landfill owners from across Australia. ALOA, through its 23 member companies, operates 61 landfills across Australia. These sites receive 15 million tonnes of solid waste, or 70 per cent of all the waste landfill in Australia nationally. ALOA members also provide waste collection, waste treatment and resource recovery services and employ over 12,000 people nationally. ALOA members have been active in reducing greenhouse emission from operations over the past two decades. In fact the waste sector is the only sector covered by CPRS that has recorded a reduction in greenhouse gas emissions over this period. This reduction, being 12.6 per cent, has been achieved through a combination of initiatives, the first being the increase in landfill gas capture and combustion; the second, the rationalisation of smaller sites and to better manage regional sites and, third, the reduction in the amount of organic waste landfill.

Basically on our industry data the waste sector now accounts for less than two per cent of Australia's national greenhouse gas emissions. Today Australia's largest landfills employ international best practice technologies to minimise their environmental impact. This includes capturing methane generated from landfill organic waste to produce renewable energy.

ALOA supports the government in its attempt to reduce Australia's greenhouse gas production and supports the introduction of an emissions trading scheme as the core initiative to achieve this goal. The introduction of an emissions trading scheme has been described by the minister of climate change as the most significant economic and structural reform undertaken in Australia since the trade liberalisation of the 1980s. ALOA concurs with this view and is committed to working with the government to ensure that a fully functioning scheme is actualised by 2012.

ALOA is pleased with the changes made to the exposure draft legislation, including the complete removal of legacy waste from the scheme. These changes have brought the treatment of the waste sector in line with other covered CPRS sectors. By removing legacy waste and delaying the start date of CPRS, ALOA is now confident that we will have sufficient time to plan for and appropriately implement reforms that will accelerate the rate of greenhouse gas reduction in our sector. In respect to the changes to the legislation our chairman, Colin Sweet, recently said:

This is a fine example of the industry and government working together to ensure positive outcomes for both the environment and the Australian people.

Now that these major changes have been addressed in the revised draft legislation, ALOA now intends to continue to work with the government to resolve several smaller yet equally important issues concerning the implementation of CPRS and the waste sector. The first of these pertains to the measurement of methane gas emissions from landfill. It is important to understand that the production of landfill gas emissions is dependent on a wide range of factors: waste type, design, construction materials, capping, operating procedures, rainfall, et cetera, and these will vary from site to site. The current greenhouse gas and energy reporting, or NGER, techniques for estimating the amount of methane gas emission from landfill is expected to have a margin of error of plus or minus 30 per cent. This is obviously unacceptable under CPRS and, as a consequence, the landfill industry is working with the Department of Climate Change to establish more accurate estimation methodologies that are acceptable to both the industry and the government.

Further, let me say that whilst an emissions trading scheme should certainly be Australia's core strategy for combating climate change, it should not be the only mechanism to be applied in the waste sector. There is reported to be over 600 landfills in Australia. Of this number only 10 per cent, around 60, are expected to be covered by CPRS. ALOA estimates that this will leave around 30 per cent of the waste sector's emissions residing outside the scheme. As such, ALOA calls on the government to establish a set of complementary measures, maybe transitional in nature, to help combat greenhouse gas emissions from the smaller, uncovered sites. These measurements ought to include, but not be limited to, the introduction of gas capture and flaring incentives for sites that will not be covered by the CPRS, the further regionalisation and closure of smaller sites and the further diversion of uncontaminated organics to composting facilities.

In conclusion, please let me reiterate that ALOA is pleased with the recent changes to the CPRS legislation which saw the removal of the contentious legacy waste emissions and the postponement of the scheme's implementation. ALOA again is staunchly committed to working with the government to reduce greenhouse gas emissions from landfill and the waste sector.

CHAIR—I think you were saying that 30 per cent of emissions will be from legacy waste sites and will not be covered by the CPRS.

Mr Spedding—As to the 30 per cent that I am speaking of, current records indicate that we have 614 landfills in Australia. Out of that we expect that only 60 to 80 will in fact exceed the threshold of 25,000, and maybe even with the corrected 10,000 threshold in some situations. Basically we have a situation that we think somewhere around those 80 landfills will account for perhaps 70 or 80 per cent of the emissions. It is a little difficult to get all this information at this stage but it is that sort of figure. The 30 per cent that I mentioned is 30 per cent of emissions from landfills that are actually not in the scheme. In other words, they will be below the 25,000 threshold and at the moment they are sitting out there. Some will have gas collection systems, others will not. There will be no incentive on those to actually increase the gas capture, where there is a major incentive on those who are in the scheme because of the cost of each permit. What we are saying is that we would like to see some complementary measure introduced either as a transitional measure or like the old greenhouse friendly incentive arrangements to pick up those sites that are not covered by the scheme.

CHAIR—I realise it is difficult to generalise, but it does take some time for the methane emissions to stop from an open landfill site, doesn't it?

Mr Spedding—Between 30 and 50 years. This is where we have the difficulty with the legacy waste. At the moment there are about 200 million tonnes in the ground that are actually generating gas. That will continue for 20 to 30 years time. That was a legacy issue that was addressed in the original legislation. Our difficulty was that it was a retrospective issue. How could we go to our current customers and charge them for the past? Basically, if you look at a typical landfill the date for coverage of legacy waste was 2018. In 2018 a landfill would have had half of its emissions being from new waste and half from old waste. The cost of the permit would have been something like \$20 a tonne, made up of \$10 for legacy waste and maybe \$10 or so for the new waste. It is not difficult to apply the cost of that to the customer and say to the customer: you are bringing new waste in, reducing organic content and instead of paying \$10 you will pay \$8. Therefore you get this incentive to drive change. But nobody is going to do anything about the waste that is already in the ground because it is in the ground. Then the question came: who is going to pay for it. If we had gone to our customers and said, 'Just to stay open we have to pay this and therefore you have to pay', that is an acceptable approach but it does leave a lot to negotiation because the customers with market strength would not have paid and perhaps a bit more would have been loaded up onto the smaller customers, so there would have been inequity produced.

The legacy waste is an enormous amount of money. There is 15 million tonnes of organic type waste landfill per annum. We believe that the cost was around \$10 a tonne, so that is \$150 million a year that was going to have to be recovered from the market, covered from you for your house as well as recovered from industry. By eliminating legacy waste from the scheme we have really not diminished the scheme in any way because that emission will be captured because when you are capturing the emission from the new waste you will capture the emission from the old waste because they are in the same landfill. When you put the well down and you start pumping the well you get the new and old together. We are very pleased that this has been removed. It was going to cause an enormous amount of inequity between old landfills, which had a cost, and new landfills did not have a cost, so you would have had this difference. Old landfills would have been forced to close early to try to reduce their cost. We had this impost that was going to be passed to the community and to industry in one form or another, and this has been removed. I do not believe that it is going to have any effect on the amount of gas that we collect going forward.

CHAIR—I remember in South Australia there was quite a bit of discussion about capturing methane and using it to generate energy, but I am not aware whether that did eventually occur in South Australia. Is there any advance on that?

Mr Spedding—There are some very good examples where this is occurring. At the moment about 25 per cent of the gas generated in landfill is actually captured and generates electricity. One of the most notable sites is operated by the Hanson quarry group in Melbourne. They have a contractor that you probably know well, coming from South Australia. That company is called LMS, or Landfill Management Systems; it is John Falzon's company based in Adelaide. On that particular site they have landfilled about 1,800,000 tonnes and they are now producing four megawatt\per hour. They have a four megawatt plant on the site and they are generating over 100 kilowatt hours for every tonne of waste that goes into the landfill. That is the best performing

landfill that I know of in Australia. Within the Veolia group we have two landfills, one at Woodlawn and one at Ipswich that have both been designed to generate power.

Senator XENOPHON—I have spoken to Mr Falzon about the scheme and I am aware of the operations of LMS. As I understand it, whilst your association is pleased that the government has exempted legacy wastes it seems that for the very good abatement work that LMS and other similar operators are doing there is nothing in it for them. They will be going backwards; won't they?

Mr Spedding—Without a doubt. The situation today is the landfill gas operator has four sources of income. He has income coming from the landfill operator; he has income coming from the sale of the electricity itself at normal tariff rates; and he has RECs, the renewable energy certificates. That is what he has going forward—

Senator XENOPHON—Does that include the NGAS certificates?

Mr Spedding—Then today we have NGAS.

Senator XENOPHON—That is the New South Wales scheme?

Mr Spedding—That is the New South Wales scheme that applies not only in New South Wales but applies everywhere on the east coast of Australia because the power networks are linked. If you generated—

Senator XENOPHON—But it applies in South Australia as part of the network; doesn't it?

Mr Spedding—Yes, but it does not apply to the Northern Territory or to Western Australia. They have—

Senator XENOPHON—South Australia is not part of the east coast the last time I checked.

Mr Spedding—I am sorry. We certainly believe that when we are talking about Australian Rules football.

Senator XENOPHON—Point taken.

Mr Spedding—But the Northern Territory and Western Australia are not linked into the network on this side of the world. They have access under Greenhouse Friendly to something equivalent to NGAS. About 40 per cent of these companies' revenue comes through NGAS or through Greenhouse Friendly, so they get paid for the power; they are paid generally something from the landfill operator and they get paid for renewable energy certificates. But they will lose NGAS under the current scheme.

Senator XENOPHON—It seems illogical to me. Do you have a view on that?

Mr Spedding—That is right. The people who actually created this 12 per cent reduction over the last 10 years are the two companies, Energy Development Limited and LMS, and both of those that actually created all the good work are going to be penalised. Both the companies are in

jeopardy because of the loss of this revenue. In my discussions with Parliamentary Secretary Combet the government has planned to introduce a transitional arrangement to replace NGAS.

Senator XENOPHON—What is your understanding as to how long for?

Mr Spedding—In my discussions I believe it was for five years.

Senator XENOPHON—What will happen at the end of the five years, though, because the operators will not be economic, will they?

Mr Spedding—Within the five years one would expect that the RECs will be more significant because they are escalating.

Senator XENOPHON—So you replace one form of assistance with another?

Mr Spedding—Yes. But in my preamble I believe that we really do need to address this issue of these transitional arrangements with some complementary schemes, and CPRS itself is a good core instrument. But in our sector we need to have something extra. I know that in discussions with LMS yesterday they would like to attempt to have credit created out of the legacy waste. I personally have some difficulties with that, but I certainly do not have any difficulty with the need for the transitional arrangements to smooth over the loss of NGAS. I believe that Mr Combet is in fact looking at that at this point.

Senator XENOPHON—That could be a potential amendment to the legislation as you understand it?

Mr Spedding—Yes.

Senator EGGLESTON—When was your group invited to appear before this committee?

Mr Spedding—We did not make a submission and we had not proposed to attend the hearing. I was called three days ago and asked whether we could make a submission. When I was asked to do so I said that we would be more than happy to make the submission, so we were contacted on Wednesday.

Senator EGGLESTON—By the secretary, I presume?

Mr Spedding—Or by one of the secretary's staff, yes.

Senator EGGLESTON—I understand your organisation is a splinter group, or a subgroup, from the Waste Management Association of Australia; is that true?

Mr Spedding—No. They are totally different groups. As I mentioned, I am on the board of the Waste Management Association. The Landfill Owners Association is an independent body and fully registered as an association. It has a very narrow focus, and that is to look after the interests of the landfill owners. It is unmistakably a lobby group whereas the Waste Management Association is a professional body with over 1,000 members covering the industry from resource recovery through to collection. They are totally different. The Australian Landfill Owners

Association has a different board and a different group of members and, as I mentioned, there are only 23 members.

Senator EGGLESTON—Do your views on the CPRS differ in any way from WMAA? Do you have different positions on any issues?

Mr Spedding—I do not believe so.

Senator EGGLESTON—Would you like to comment on why ALOA which has a handful of founding members Boral, SITA, the Brisbane City Council and more than 50,000 tonnes of waste annually and not WMAA with 1,000 members is appearing today? Why not the big group rather than the small group?

Mr Spedding—As I said, we believe that we are the peak body representing the landfill owners. Can I say that in my role as the sustainability director of Veolia I have to address every part of the waste management system from collection through to treatment through to resource recovery and landfill? This is the situation that we have for the Waste Management Association. The Waste Management Association has great difficulty generally formulating a policy that it can get all of its members to agree to. About one-third of the Waste Management Association members are councils. Another one-third are consultants to the industry and the landfill owners are only about one per cent. You will get a situation where the landfill owners can agree on a policy within 24 hours to go through the bureaucracy. The Waste Management Association may take one or two months. ALOA was formed primarily to get a very reactive group established that could represent the landfill owners.

There is obviously competition within the groups in the Waste Management Association. We have a group who are supporting alternate waste treatment facilities at the expense of landfill. We have a constant rivalry between the composters and the landfillers and if you put all of these people in the same association and say, 'Let us have a policy on landfill.' Everyone gets a vote and generally what gets voted on is so watered down that it is meaningless. That is the reason that I am here today. One of my colleagues—

Senator EGGLESTON—Democracy has its weaknesses, but there we are. I note your industry has been a beneficiary of some last-minute changes to the ETS which I will run through. How long have you been requesting these changes be made? When did you first approach the government about making these changes?

Mr Spedding—In my position as a director of Veolia I met with Senator Wong in June last year. We made submissions at that point specifically with respect to measurement. At that point the green paper had not been released. As soon as the green paper was released we made submissions to it and we have been following the debate through from pre-green paper, green paper and white paper. There was then a series of workshops that came out of the white paper, so we have been very active. ALOA was formed in December to respond to the white paper. It was formed two days after the white paper was released and responded the next day to the white paper and we have worked through quite aggressively since that time.

Senator EGGLESTON—It seems to me though that there was a bit of a delay in listening to the points you were seeking to make. What reasons were you given for them not being taken more notice of and implemented earlier?

Mr Spedding—I think the issue is that on the official government figures the waste sector is three per cent of the national greenhouse gas emissions. We were a very noisy three per cent but we did not get any priority. There were other sectors, stationery power, coal and agriculture that were probably a bit further up the pecking order than us. We had to wait. It did not prevent us making our position heard. We submitted to the economics committee on the exposure draft initially. We tried to present evidence but could not be fitted in. We did submit to the climate change committee and we were well received and, as soon as Greg Combet was appointed as parliamentary secretary for climate change, within a week or two of that announcement we had an appointment to meet with him in his office in Newcastle and we have been pleased with the development since we have had a chance to put our case.

Senator EGGLESTON—I do not think you should be modest about three per cent emissions. After all, Australia only produces 1.4 per cent of world emissions and the government thinks that is very significant. But are there any problems that remain for you?

Mr Spedding—Yes, there are, as I mentioned in my preamble. Basically we have a situation under NGER, the greenhouse gas reporting scheme, the methodology that is used to determine the emissions is not an actual measurement; it is a modelling exercise. It is recognised by both NGER and by industry that at best it is 30 per cent accurate. Thirty per cent accuracy is hardly appropriate for CPRS. A typical large landfill could be acquitting \$2 million to \$3 million in permits a year. If you are a third out it is another million dollars. One way or the other, it is a lot of money. We would like to get closer. The Waste Management Association is working very closely and I am the chair of the working group that is working with the DCC on this to develop some further refinement of the modelling to try to get us closer to reality. We have a program with DCC to work over the next three years to refine measurement so that by the time we get into CPRS with the auctioned permits in 2012, we believe that we will have removed a major part of this inaccuracy which is in the estimation. That is one part.

The second part is the issue that Senator Xenophon has just mentioned, that we have a sector if you like that was producing electricity that will be affected significantly by the loss of NGAS or Greenhouse Friendly. We would like to see some transitional arrangements put in place so that we, as an industry, can move forward and these companies do not end up failing as a result of the changes.

Senator EGGLESTON—That is very important, I agree. It is a bit hard to estimate emissions in general terms and the voiding of them, so that is a very good point you make. Do you think there will be an increased cost to ratepayers and local governments as a result of these changes?

Mr Spedding—Yes, without a doubt.

Senator EGGLESTON—How do you quantify that?

Mr Spedding—Senator Fielding knows the answer because we have been through this on the back of an envelope together. But—

Senator EGGLESTON—I would appreciate your giving me some information about that.

Senator FIELDING—You are actually saving me some questions here, so keep going.

Mr Spedding—Now that legacy waste has been removed from the legislation the cost of waste once the scheme commences will increase by about \$20 per tonne. It is currently about \$50 and it will go to \$70. That \$20 per tonne is based on a \$30 per tonne permit. There will be about one-third allowance because gas is collected and two-thirds of that will be recovered from the customer so as to be able to acquire permits and then to acquit them as the gas is generated over the next 20 or 30 years. To a householder, each household in Australia generates about half a tonne of waste. You may have three garbage bins in your house and the three garbage bins amount to one tonne, but the bit that goes to landfill is about half a tonne. If the price of waste goes up—

CHAIR—Is it half a tonne per month or per annum?

Mr Spedding—Per annum. What we expect is that that half a tonne per annum per household will go up by about \$10 a tonne now that legacy has been removed. It was going to be double that, and that is 20 cents a week, so \$10 a household is quite insignificant.

Senator EGGLESTON—But when you add in all the households it is quite a lot of money; isn't it?

Mr Spedding—Yes. If you look at all of the waste it is about 15 million tonnes and, if it is going up \$20 a tonne, it is \$300 million a year that is going to flow through into the community as a result of CPRS, notwithstanding that the industry is collecting gas.

Senator EGGLESTON—It is \$300 million extra cost though that will flow through; isn't it?

Mr Spedding—Yes.

Senator PRATT—What kind of price points make gas collection viable? I understand it is probably quite variable, depending on the nature of the site that you are dealing with and the nature of the waste that is there.

Mr Spedding—The point where landfill gas collection and generation of electricity becomes viable is generally with a landfill of about 150,000 tonnes per annum, because you need that size to generate the gas. When you have got three megawatt of capacity of installation on site at that point you have got the economy of scale to pay for the connection cost to the grid and then the general maintenance, because when you are generating power you have to generate it in phase and link it into the system. This means it needs to be constantly monitored. To be able to set up that monitoring system you need about three megawatts. Generally speaking, large regional sites or certainly metropolitan sites of over 150,000 tonnes have the economy of scale to allow for generation. As soon as you get to that point you are generating and with a normal return on investment.

Senator PRATT—Will a carbon price bring on a few more sites? I understand that there are those that will—

Mr Spedding—Without a doubt. The cost of collection of gas is about \$5 per tonne of CO₂ equivalent. We are going to be acquitting permits at anything from \$20 to \$40 by 2012 once the auctions start. Without a doubt the cheapest thing the landfill operator can do is collect the gas.

Senator PRATT—I will ask about the current debates in relation to organic waste. I know that there are different streams of thought in terms of where organic waste can be composted versus using it in mantles so that it can become gas. If organic waste is removed clearly it will not have the carbon liability attached to that material, but it might undermine some of the liability of the gas collection, I would expect.

Mr Spedding—Generating power, yes. This is a wonderful debate and we could be here for hours on this. The Victorian government has just committed \$10 million to what is called the VARRI project to determine what is the break point of this. But in essence if we look at municipal solid waste, what is in your garbage bin in front of your house, it is about 30 per cent food, about 15 per cent paper and about 15 per cent green waste. If we remove that organic material from the waste stream we remove more than half of the gas generating capacity. But the difficulty is that if we take that material and we put it into a composting arrangement, if we do not produce compost that can be used on the land repeatedly and sustainably—in other words if it is contaminated in any way—we have not actually created a value and a sustainable system.

What we need to be very careful about is that we take clean, uncontaminated organics out of the waste stream and put it into composting and produce clean, uncontaminated compost that can then be used in agriculture. When we put it into agriculture we get increase in production, we get less water use and we get carbon sequestered in the soil, which helps in the long term. But this only occurs if we have got clean material. The difficulty is—and this has happened all around the world—where we have attempted to remove these organics invariably mum or dad or the kids, whoever takes it from the kitchen to put it into the green bin, do not get it right. They have a green fade between the kitchen—

Senator PRATT—We are going to have to learn to get better at that.

Mr Spedding—and it gets into the wrong one. Then as soon as that happens everything becomes contaminated so the organic processing is lost.

Senator PRATT—I want to ask about state government waste levies. I am not quite sure if they impact on the private sites as well as your member associations. I am sure they do in some instances. I wanted to ask about how that intersects with overall viability in terms of environmental mitigation and things like greenhouse gases? I do note that Western Australia has just announced a very new large levy that is going straight into government revenue.

Mr Spedding—It is \$28, yes, and without any consultation, so the industry is in a little bit of stress over that. The issue is that generally speaking when levies were introduced primarily in New South Wales initially, they were meant to cover externality costs, those costs that are not covered in the price, not covered in the permit, not covered in your registration on your truck.

The productivity commission looked at this a couple of years ago and came up with a figure of seven or eight dollars. What we believe as an industry is—and we have made a submission to the new national waste policy inquiry that is in Minister Garrett's area—that we need to have a

national policy on levies. What we would say is that the levy should include externality costs and, until CPRS comes in, it should include the cost of carbon. That means that when CPRS comes in in New South Wales where the levy is \$58 and CPRS comes in and it is \$20, then the levy should be reduced by \$20 to compensate for one of the externalities that has now been taken out of the levy package and is being treated separately. Our view would be that we need clarity on what those levies should be. Quite frankly, at the moment they are just arbitrary taxes.

Senator PRATT—Wouldn't we in effect be double taxing at some point because the CPRS will federally and the state governments might just be taking a tax that in some cases goes to environmental outcomes in waste management; in others it goes straight into general revenue?

Mr Spedding—Yes. And some is hypothecated. The hypothecated ones get very confusing, but if they are hypothecated as part of market attempts to create market change it is acceptable, but they should have time limits and they should have some accountability.

Senator FIELDING—The cost issues have been covered a bit from there. It is still an increase but obviously with the legacy issues being finally agreed to that does make a bit of sense. Is your understanding that the legacy waste being excluded is in line with what the Europeans have done at all?

Mr Spedding—The Europeans at the moment do not have any emissions trading applicable to the waste industry. There is a current review in the union at the moment and they are looking at making more sectors covered, or bringing more sectors in, and waste is for the first time being considered. But we are on our own here. This is the first country in the world to consider putting emissions trading over waste. I said this to the climate change committee, that we really do need to make sure we get it right because there will be a lot of people who will copy us. Legacy waste is the one thing that has prevented other countries taking waste on board; how do you deal with the modelling of the waste emissions in the future and what do you do with the past? We have a good understanding of the modelling now. We have not got it to a point where it is accurate, but structurally we have now got something we can live with.

Senator FIELDING—I was down in the Latrobe Valley area and was told in a statement yesterday that the only thing worse than making the wrong decision with this is making the right decision too late. Obviously it has taken us a while to get there in relation to the legacy waste. I know you have seen me on it and have lobbied pretty hard, so good on you for that. The issue still remains about the transition, I think. The measurement is still a very major concern. There still is substantial cost there so if you have any more information I would be glad to hear it.

Mr Spedding—NGER put out a revised determination for the waste sector two weeks ago and we were given two weeks to comment, but we had seen all the documentation before it was released. We have commented and I have a meeting with DCC on Tuesday where I believe that the bulk of our comments will be taken on board. We have a situation on measurement where there is a certain amount of science that needs to be completed so as to get more factors brought into the equation. The bulk of the work will be done this year, 2009. NGER has committed to doing an annual review of the determination for the waste sector so that we can bring this technology and science to bear on an annual basis, so we will get improvement between now and 2012 when we have to start acquitting permits. I am comfortable that we are going in the right direction. We do want to get to a direct measurement at some time in the future, but as there is

no international expertise and technology that we can use yet—it has not yet been developed—we will have to wait and live with what we have got.

Senator EGGLESTON—You mentioned that you were only three per cent of emissions. But as I understand it you expect to have a bigger profile in the Australian carbon trust initiatives; is that the case?

Mr Spedding—I do not quite understand the differential between the two. If we look at the official figures, the waste sector is listed at 2.8 per cent of the national emissions based on CO₂.

Senator EGGLESTON—Given that there is an interaction between your work and council pick-ups, the council picks up the waste, do you see these Australian carbon trust initiatives as being cost effective, or not?

Mr Spedding—I would have to take that on notice.

Senator EGGLESTON—I would be grateful if you would and get back to us quickly, because we have a very tight reporting date.

Mr Spedding—I will certainly take it on notice and respond quickly.

CHAIR—Thank you very much for coming in this morning and giving evidence.

[11.30 am]

BURN, Mr Peter, Director, Policy, Australian Industry Group

Evidence was taken via teleconference—

CHAIR—Thank you for participating in this hearing. Do you have an opening statement you wish to make?

Mr Burn—Very briefly. The Australia Industry Group welcomes this further opportunity to appear before this committee. At a broad level our group supports a market based approach to climate policy, one that addresses the concerns of trade-exposed industries of all sizes and in all sectors. As I understand it you are particularly looking at the changes of 4 May?

CHAIR—That is right.

Mr Burn—Our group welcomes the changes announced on 4 May: the temporary increase in assistance to emissions-intensive, trade-exposed industries; the increase in the allocation; the bringing forward of expenditure under the Climate Change Action Fund; the delay by one year of the start of the scheme; and the fixed price period for the first year of operation. We also supported the inclusion of the 25 per cent upper cap, bearing in mind the very strong conditions that were attached to that, including the agreement for a ratification review. We also supported the carbon trust initiative.

In welcoming the changes we restated our position in support of passage of legislation this year. We noted and made it clear in our media release that we would continue to develop and pursue proposals that would address the ongoing concerns of members, and we would do that with all political parties. Then we called on all political parties to come together to ensure an appropriate scheme is developed and passed this year.

CHAIR—It might seem like an apparent contradiction; you say you want the scheme delayed until 2012 but you want the legislation passed. Is this to enable certainty for planning? Why is that the case?

Mr Burn—There were two reasons. In our policy that we came out with in February we stated that we thought the scheme should be delayed until 2012. The reason for that was that we doubted very much the ability to solve the administrative issues before us by the previous start date, the middle of next year, in time for that to go ahead.

Then there was also the issue of the impact of the global financial crisis on investment, availability of funds, business certainty and the like. But we wanted legislation passed this year in order to address the concerns that members have been putting to us, and have continued to put to us, that uncertainty over the direction of climate policy is disruptive to business planning and causing investments to be withheld in some sectors.

CHAIR—I note that you also continue your opposition to the current renewable energy target but want greater abatement opportunities. Can you explain that as well?

Mr Burn—There are two separate questions there. The issue about the renewable energy target is that we would support complementary measures if they occur at a cost of abatement that is lower than the reasonable expectation of permit prices. All the evidence we have seen, including from the Productivity Commission, from the Wilkins review and from the cost-benefit study that the Commonwealth released not that long ago indicates that the renewable energy target scheme would impose greater costs of abatement than would apply under an emissions trading scheme, so that was a natural consequence of that principle applying to that high cost abatement measure.

The issue about extra abatement essentially is that if there is scope under the Kyoto framework for genuine abatement that is not currently included in that framework and that is genuine abatement, we ought to make sure that it is because it is very likely that Australia is very well positioned to take advantage of those opportunities; soil carbon is one of those ideas, for example. They would help lower the cost of abatement. That is the key resolution of any implication that we might be pulling in different directions there, but we are not; we are after low cost abatement.

Senator EGGLESTON—Could you just tell us when you were invited to appear before this inquiry?

Mr Burn—Do you mean this current appearance?

Senator EGGLESTON—Yes.

Mr Burn—I find it very difficult to answer that question for this reason: I do not think I have spoken to anyone about it. The people who have spoken to it are two personal assistants within our organisation, so I cannot really tell you when we were first approached.

Senator EGGLESTON—But I presume it was fairly recently?

Mr Burn—Yes. It was recent, yes. I do not know that it was any more recent than anyone else who is appearing.

CHAIR—It is a very recent inquiry.

Mr Burn—We have appeared before this committee before on this subject matter—

Senator EGGLESTON—Yes, I know, but we are talking specifically about this inquiry. I am very interested in when you were invited to appear.

Mr Burn—I do not have the date, unfortunately.

Senator EGGLESTON—One of the comments you just made was that Australia should have an appropriate scheme. I just wonder what that means to you. The current scheme appears to have a lot of problems. What do you regard as an appropriate scheme and, if this scheme is not

appropriate, would it not be wiser to defer the legislation setting up the scheme until we have dealt with all the issues and have some idea what other countries are going to do?

Mr Burn—Can I answer the last part of that question first? We think that we will not know what other countries are going to do for a long time. We think that there will be a lot of uncertainty about what other countries are going to do when we enter 2010, when we enter 2011 and when we enter 2012. This is going to take a little while—or a long while—to sort out. The issue that we face is that there is a strong political will and popular will to have Australia act on climate change. In view of that we assess that business needs to know for investment certainty reasons and business planning reasons—it needs to get a better picture of what that policy direction will be in order to make investments. This applies in for example the renewable area; it applies in the electricity generation area; it applies in a whole lot of areas. Anything basically anywhere near a carbon emission in which there is a long-term investment needs to know this stuff. We think that there is plenty of time this year. Our position is that we ought to have legislation this year. It is only the end of May; there is plenty of time to sort it out. We have been talking about it for a hell of a long time—

Senator EGGLESTON—We have. But one of the things that you said was that you thought it would take a long time before we knew what the rest of the world was doing. Yet we have got a proposal for a country which produces 1.4 four per cent of the world's emissions and one per cent of the world's gross national product to involve 75 per cent of its economy in a scheme which is predicated on other countries having emissions trading schemes. At this stage there is no evidence at all that major trading partners in this region, like China, Japan, Korea, Thailand, Indonesia or India are going to have an ETS at all.

Mr Burn—We think that is a very, very good point—

Senator EGGLESTON—It is a good point.

Mr Burn—I would have gotten to this in my perhaps overly long response, and I apologise for that, but my response is however that we do not know what other countries are doing but we ought to, and we can, design a system that accommodates the range of possible outcomes from Copenhagen and subsequent international forums and that provides strong protections for trade exposed emissions-intensive industry or indeed trade-exposed industries more broadly, and that it is not beyond our wits to devise a scheme that caters for that range of possible international outcomes and offers appropriate protections to trade-exposed businesses, which is essentially the problem of where other countries get to, and we think there is plenty of time to sort that out this year. We think that we have been talking about this for a hell of a long time and that we know basically where that direction is going.

Senator EGGLESTON—We agree with you; there has been a lot of discussion about it and we do agree that Australia should be doing something about carbon emissions, but I find it very difficult to believe that we can have this sort of Utopian, suit-all-situations scheme. I put it you that it might be wiser to just let things go through until after the Copenhagen conference and then we can see what an appropriate scheme, as you said, would be for Australia's needs. It might not be a CPRS; it might be a carbon tax which is very simple and effective and does not involve depending on other countries' developing an ETS, which seems to be unlikely.

Mr Burn—Our investigation of carbon tax is that the simplicity benefits are very much overstated. You have exactly the same measurement problems, exactly the same reporting issues, exactly the same issues involved as for trade-exposed, emissions-intensive industries and indeed trade-exposed businesses generally. Much of the complexity revolves around measurement and reporting and the majority of the complexity revolves around the issues that would be common to a carbon tax or an emissions trading scheme.

But the other issue is that our assessment is that there will still be plenty of uncertainty over the direction of international policy after Copenhagen, that Copenhagen is not somehow going to see the lifting of the veil and the future revealed, rather it will be much more incremental and post-Copenhagen we will be faced with more or less the same degree of uncertainty around the direction of international policy as we currently face and that the year after that we will perhaps have a little bit less and the year after that a little bit less again. At no stage in that time frame do we expect there to be a clear picture about it. The key thing for us is that we develop a framework that can deal with the range of possible outcomes of international negotiations and offer protections for trade-exposed businesses.

Senator EGGLESTON—I do thank you for that answer because I agree there will be a lot of uncertainty for a very long time and that seems to me to be a very good reason for business to be very cautious. I do wonder what you mean when you talk about certainty. How can there be certainty for business when the government has not defined what activities will get assistance, for example? Do all of your members think that this scheme should be implemented now instead of taking a precautionary principle and just waiting a while and seeing what the rest of the world does so that Australia is not left out on a limb and Australian businesses are not unnecessarily burdened by additional cost?

Mr Burn—I totally agree that we do not yet know the details of the regulations and the definitions of activities and a fair few other things about the current proposals. I totally agree with that. But we think that our estimate, being fairly closely involved in discussions and in dealings with the department and with businesses involved in discussions in the ET framework, is that those things are able to be settled well before the end of the year, which of course is the time line that we are interested in here. I am sorry, now I have forgotten the other part of the question.

Senator EGGLESTON—To go specifically to some of the changes, you talked about emission-intensive, trade-exposed industries, but under these changes there is only going to be a five per cent increase in coverage for a period of five years from 90 to 95 per cent, from 60 to 65 per cent and then five-yearly reviews. Five per cent in many quarters is not regarded as a very sufficient additional coverage. What is your opinion?

Mr Burn—I just wonder if coverage is the appropriate term. What the five percent will do will be for those activities raise the overall allocation to 94 and a half per cent—

Senator EGGLESTON—That is what we are talking about, yes.

Mr Burn—The 10 per cent increase for the lower threshold will raise it to 66 per cent. Is that adequate? That is a different issue, but it is better than what was on offer before. That is why we welcomed the changes, of course.

Senator EGGLESTON—Again, that comes back to this question of deferral. Wouldn't it be better to defer until we know more and then we can review these criteria in the light of what we learn about what other countries are doing in Copenhagen. After all, this problem of increasing carbon emissions we understand has been around for a long time. Surely there is no imperative to rush into a solution before we are certain of where we are going.

Mr Burn—We are not scientists but as we understand the scientific evidence it is that the sooner the world can act, the better, and that we are on a growth path where every little bit of effort in one part of the world is an effort that will help the rest of the world as a genuine global response. We are not complacent about the climate change threat. We agree with the issue that the costs of not acting on climate change at a global level are greater than the cost of acting on global climate change. I do not think very many people seriously dispute that.

The other issue for us about urgency is the business certainty argument. We think that in order to secure ongoing electricity supply in Australia we need to make investments very soon. That has been quite apparent for some time. The key dates must be getting very close now. In that sector and in a range of other sectors investments are being withheld because of a lack of certainty over the direction of climate policy. We think those issues are very important issues for business, so that all efforts ought to be made in Australia now for those reasons.

Senator EGGLESTON—With respect, I think the only certainty is uncertainty of cost burden. I come back to a question I asked you before and that is: do all your members agree that this scheme needs to be implemented now or is there a significant group who feel it would be more prudent to wait?

Mr Burn—We are a very big organisation and not all members agree with every policy we take. We have a diversity of views. We consult very closely with members and we seek to address their substantial concerns.

Senator EGGLESTON—Can you give us any percentages?

Mr Burn—We have been through this argument for a long time and we have been addressing those substantial concerns. We think that the certainty issue, which is raised by a lot of members, ought to be addressed and, for us, that the substantial concerns of all members revolve around the trade exposed. If those issues can be addressed within the design of the scheme, then the substantive issues that give rise to concerns of members will be addressed.

Senator EGGLESTON—You seem to be giving a very qualified answer. I asked you a simple question and that was: do all your members support your position that this scheme should be implemented now?

CHAIR—It is as divided as the Liberal Party room, presumably.

Senator EGGLESTON—The Liberal Party room has a view that perhaps we should be a little more prudent and we have set a series of criteria. You have come here with a point of view claiming to represent the entire membership of your organisation. It seems to me that you, in fact, are avoiding answering the question of whether or not all your members support you, or giving any specific percentage indication of what degree of support you have that this scheme

should be proceeded with now and not delayed until there is more certainty about what the rest of the world is doing.

Mr Burn—I should just correct that. I am not here speaking on behalf of all of our members. I do not think that I said I was. I am here representing the Australian Industry Group view. If you want me to I can elaborate on how that view is arrived at.

Senator EGGLESTON—Yes, you should. Our understanding was that you represented the group.

Mr Burn—That is right, the group.

CHAIR—That may have been Senator Eggleston's understanding.

Senator EGGLESTON—Maybe you should have represented the divergence of views in the group.

CHAIR—Senator Eggleston, I think you should allow Mr Burn to answer.

Mr Burn—I imagine it is like a senator would face about representing the electors in a state, that there is a diversity of view.

Senator EGGLESTON—You have come down on one side of the argument.

Mr Burn—I think the parallel holds. I can quite happily go through the process that we go through on policy generally and specifically about climate change policy, if you would like me to do that.

Senator EGGLESTON—You have put a point of view which is that this scheme should be proceeded with at this time when I find that very difficult to believe, given the uncertainties that I have gone through which relate to the detail of this scheme. I find it hard to believe that people who are involved in your organisation, who are intelligent, experienced businessmen, would want to take a leap in the dark, into the unknown, and would not prefer to wait until there was more certainty, as would arise from waiting until after the Copenhagen conference.

CHAIR—Senator Eggleston, we have had quite a few business people in front of us in the previous inquiry who said just that and did not agree with your point of view.

Senator EGGLESTON—I am not sure that is the case. It is very good of you to reply for the witness. It simply shows the witness is on thin ice, I suspect, but I will leave it at that.

CHAIR—I think you are badgering him with a question that he is trying to provide an answer to and is not succeeding. Senator Fielding has some questions.

Senator FIELDING—Mr Burn, I am wondering whether you could share with us what your modelling shows about the direct and flow-on costs of the CPRS on businesses? What has your modelling shown?

Mr Burn—Our own modelling is very rudimentary. We are not modellers internally, but we do draw on all the material that is available to us. This material goes back to the material in the Shergold report, in Garnaut and the Treasury stuff. We have kept a very close eye on the modelling that has come out since then by various sectoral organisations and the like. I would not want to mislead you to say that we have information that is substantially more advanced than is in the public domain already. We look in a very practical way at emissions intensity and costs arising at different carbon prices across a range of business sectors. It is just an arithmetical impact, if you like, if you assume it in intensity measures of say X tonnes of CO₂ equivalent per million dollars of sales, for example, then at different carbon prices you can just simply plot a linear graph and you can modify that to take into account different forms of setting assistance to trade-exposed, emissions-intensive businesses. We would like to see more of it released.

The issue then is the gap between that sort of general stuff and the very long-term modelling that Treasury and the like have done; I think that some of the sectoral and regional analysis that has come out is very interesting in filling in those gaps. I must say we have not done any specific modelling.

Senator FIELDING—You would know what the cost of electricity would be to medium-sized businesses or their follow-on costs?

Mr Burn—In relation to the material that is in the public domain our rule of thumb is that there would be a 33 per cent increase in wholesale electricity prices in 2010, roughly, across the country and then roughly a doubling of wholesale electricity prices by 2020. That is a rough rule of thumb of where we have come to.

Senator FIELDING—With the CPRS scheme that is now in bill form, are businesses in Australia worse off or better off than businesses under the European scheme? Can you tell us which businesses are worse off and which are better off?

Mr Burn—That is a difficult question. I do not know exactly which businesses are better off or worse off. Under the European scheme, for example, high electricity using businesses would have felt the impact of the scheme being imposed on electricity generators, without offsetting compensation. That is basically where a majority of our members are, incidentally. Many of those businesses would be much better off under an Australian scheme because of the inclusion of scope to emissions, that is, electricity related emissions in the arrangements for emissions-intensive, trade-exposed businesses. You can go on.

I think you have spoken to the waste people just previously. The European scheme does not cover waste. Even though it is not what you would call a trade-exposed business, it is a business that will have a shift in cost impact that will not be experienced in other countries, but fortunately for them they are not really trade exposed. Nevertheless, that is an example of where a cost impact is worse than in Europe.

It is very difficult to assess how it weighs out overall between different schemes. We, and others, are trying to work through how the current propositions for the Americans would play out. It is not yet clear for us, and for others who are working on this, where that balance comes out. It is a very important question, but a very complex one. Our issue about the question of uncertainty surrounding that and the difficulties is that what we have got to do is get our scheme

right, in that it has to offer strong protection for trade-exposed, emissions-intensive businesses. We have got to look after our own house because it is very difficult to work out all the ins and outs of various other countries' schemes. They are all moving feasts, in any case.

Senator FIELDING—To be absolutely frank, you are not giving me a lot of confidence with this at all. There is a lot of this sort of saying, 'We'll know a bit more when the regulations come out and we'll be able to know exactly and with certainty.' My concern is the only thing worse than making the wrong decision is making the right decision too late. Sometimes it is the detail that comes out afterwards that starts to really bite you.

I am hearing, for example, that the electricity industry in Australia is more exposed than the electricity generation under the European system and what is being proposed in the American system. That would be a big concern because that is flow-on costs to businesses. You are saying that there is still a lot of uncertainty and what not, but you are still saying to just go for it because you need certainty for investment going down the track.

Mr Burn—No, that is not it at all.

Senator FIELDING—I get nervous about putting businesses and jobs at risk for the sake of rushing it through rather than having a look at what the rest of the world are doing through Copenhagen. You are saying that Copenhagen is important, but not that important. We have got the Prime Minister saying that is extremely important and we must rush in and do something before then. You are not giving me much confidence.

Mr Burn—Thank you. The issues about electricity and the flow-through costs are very important. We think that in working out measures for trade-exposed businesses their electricity use ought to be included in the assessment of their impacts.

The essential problem for competitiveness, of course, is for trade-exposed businesses. We think that the inevitable uncertainties can be addressed by having strong protections for trade-exposed businesses and protections that are linked to the carbon price. For example, permits are linked to the carbon price clearly, so those protections would move in line with movements in electricity prices, costs of direct emissions and the like. We are not confident that a sufficient degree of certainty in all the measures for trade-exposed businesses can be worked out before the end of this year. I realise they are not yet worked out, but we think that we ought to do it. One of the reasons that we ought to do it is that a lot of our members are telling us that they are withholding investment and that their business planning is being disrupted by the lack of certainty over the direction of climate change policy. In addressing those concerns of members and meeting those real concerns about major decisions, for example, relating to the investment in electricity generation in the largest state in the country, then we think that is a very important consideration in all of this.

Senator FIELDING—You can give certainty to investment under any arrangements. What you are saying is, 'Just pass this one because they need the certainty.' I think that you are negating the benefits of actually discussing whether we have got the scheme right. Do you hear what I am saying?

Mr Burn—I do know what you are saying, but you misunderstood me. I think that we have not yet got the scheme right, but we have plenty of time before the end of the year to get it right. Our timetable is that we are seeking the passage of legislation this year. It is not yet June and there are a lot of smart people around the place who are all capable of sorting it out before the end of the year.

Senator FIELDING—It has taken a heck of a long time to get some commonsense on legacy waste and just a simple change like that, so I do not place much weight on the fact of passing something and letting the government of the day work out the regulations. I think we need a bit more certainty than that.

Mr Burn—We were pleased with the announcements on legacy waste. We have a lot of members in the waste sector and, of course, a lot of our members supply waste. There was a collective sigh of relief that commonsense had shone through and a solution was worked out. We take that as a source of hope for the rest of the issues to be sorted out.

Senator FIELDING—Okay.

CHAIR—Senator Pratt.

Senator PRATT—I wanted to ask your view on what the implications are of not passing this scheme in the near future?

Mr Burn—The implications of not passing the scheme; that is a very difficult question to answer. One of the implications that flow immediately from what I have been saying is that areas of uncertainty would persist and those areas are barriers to investment, so I will not go through all of that again.

Another area that I have not spoken about is that we do think that for some time there has been a popular will and a political will at different levels of government to act on climate policy. Even though an emissions trading scheme is in prospect, we are already seeing a proliferation of other regulatory measures. One of our fears is that there will be a further proliferation of other regulatory measures if a scheme is not introduced.

We saw a dynamic emerge prior to the 2007 election that had all of the states working together to devise a scheme. The dangers that we see in having higgledy-piggledy regulation across the country in this area that matches the higgledy-piggledy regulation in a whole lot of others areas are very substantial, and I am sure everyone is familiar with that. All our advice from people who are informed about best practice regulation is that a nationally consistent market based system is best. The best model for Australia is to go down a market based system that is nationally consistent and that removes the need for a whole lot of alternative measures that will raise the cost of abatement and make regulation of greenhouse gas emissions more expensive than under an ETS and more expensive than it needs to be. That is a key medium and longer term consideration for business.

Senator PRATT—In that context you understand that clearly in the global environment a carbon constrained future is coming and that if we do not take this path there is a legitimate fear

that we will have a plethora of other arrangements that we will need to be put in place to meet whatever our international obligations are.

Mr Burn—We think that is a very substantial risk. In fact, it is not something which is hypothetical, it is something that is happening now and we have already got a plethora of other things.

Senator PRATT—I wanted to ask about the Australian Industry Group's views about our skills gaps that we are going to need to address in order to have Australia reduce its emissions. Is the group going to be involved in training and skills building networks and so on?

Mr Burn—That is a very important area for us. As you know, we are very active in the whole skills area and this is an important element in our overall skills outlook. Yes, there is a need for skilled people in a whole range of areas that are relevant here. The relevance is very broad, whether it is plumbing, electrical work or consulting on energy efficiency. There is a whole range of areas without a clear growth path and we need to make sure that market forces, balancing supply and demand, work properly and that there is some foresight about the supply of skills, which sometimes can have quite a lead time in developing.

Senator PRATT—How many AIG businesses are going to be directly liable for permits under the CPRS and how many of those are likely to receive assistance under the ET program?

Mr Burn—We have tried to get a grip on that. We did a recent survey and 14 per cent of companies surveyed said that they expected to have a liability. That comes out at around about 1,500 members, so clearly that is not right because it is many more than it is estimated to have been. In other words, we do not really have a grip on it. We know very well that there are a lot of businesses that are involved in steel, paper, aluminium, plastics and refining. There are people who import synthetic gases. A whole range of our members are involved but we have not really got a cross-membership reliable gauge on that area.

We also should mention that we have got a lot of businesses in the construction sector whose direct liabilities come about because they are also mine operators. We do not know about where the liability will fall yet because there is an option to change it between operational control and financial control, which would be worked out between the parties. Some of those businesses are also in the direct liability camp.

Logic suggests to us, and indeed this would be supported by the survey, that the majority of our businesses would not be directly liable but the majority of our business would have substantial flow-on costs arising from electricity, fuel and other inputs.

Senator PRATT—Yes. I also asked about how many businesses might be getting assistance, but I imagine that is difficult to break down.

Mr Burn—The interesting thing is that 14 per cent said that they thought they would have a direct liability and a different 14 per cent said they thought they would be eligible for some form of assistance. Some form of assistance is believable because the Climate Change Action Fund, for example, would presumably—we have not seen the details—be available for businesses

without a direct liability but who would nevertheless have a cost impost. It is a bit crazier than it sounds, but it is not quite as crazy as it sounds.

Senator PRATT—I wanted to ask you about the Climate Change Action Fund. That is currently being designed to give priority to helping businesses that are missing out on free permits. I would like to ask you what features of the Climate Change Action Fund would you like to see?

Mr Burn—We are not sure where it is going to be. We have argued that it ought to be focused on businesses that are trade exposed, because that is where the key competitive issues lie. There is an indirect benefit if the Climate Change Action Fund can generate low-cost abatement anywhere in the economy because that would have an across-the-economy benefit. We are aware that it is a broader impact.

We think that there are substantial benefits to be gained from the information, and that is part of what the general proposals are and they are only very general. We think that the idea of energy efficiency audits is a very good idea where people have not yet done them and that there is a lot of low-cost abatement that can be done that just flows out of that. There are some fantastic good news stories around the place on what an energy efficiency audit can do to a company that has not done one before and has not acted on it. The lighting improvement can only be picked once, of course, so many businesses, particularly more emissions-intensive businesses who are much more likely to have attended to their low hanging fruit will not have those same low cost abatement opportunities. Nevertheless, there is a substantial one-off gain across the economy, broadly, through the services sector, manufacturing, farming, mining and the whole works of businesses that have not yet acted.

We also think that the capital grants element that is floated in the white paper is a very good initiative. Businesses would put up some money and get some money to make investments in abatement and then these could be spun off as demonstration projects so that there would be flow-on benefits from that. In many ways it is a very exciting initiative.

Senator PRATT—Thank you.

CHAIR—Senator Eggleston has just one more question.

Senator EGGLESTON—I would like to ask you what your view is about the fixed price permits for the first year and limited permits at \$10 per tonne for year one. Do you think that this makes it difficult for business to invest in renewable technologies when users of coal are paying only \$10 a tonne for their use of that as an energy source? Is this not going to mitigate against the development of renewable energy sources of energy?

Mr Burn—The substantial incentive for investment in renewable energy is the long-run price curve for carbon. It is not really what the price will be in 2011-12 because no-one seriously makes an investment looking only at that term. We are talking about investments that live for 20-plus years. If anyone looks at that price curve, that is what the key driver of renewable energy will be and that is why even the renewable energy target scheme is proposed to be phased out, because it is recognised that that is the driver of investment in renewable energy.

One-year price caps' impact on that is very much at the margin. The benefits that we see in easing the transition across the economy, notwithstanding that there is a marginal impact on renewables and other abatement incentives—there is marginal impact there—the balance is clearly in favour of that initiative. We argued for a start in 2012, relative to where we were seeking to have the scheme adjusted, which meant that the emissions price would have been zero—

Senator EGGLESTON—My point, with respect, is that a year is a very short time and it may be that the transitional period may have to be extended quite considerably, and that might have an impact on investment in renewable energy. I think there are so many uncertainties about this. One consequence will have to be that transitional arrangements will have to be extended. Therefore, as I said, to some degree that mitigates against anybody being very interested in investing in renewable energy while that price is fixed at \$10 per tonne.

Mr Burn—I should say that we are seeing an incredible activity in renewable energy.

CHAIR—Thank you for your time with us this today.

Proceedings suspended from 12.17 am to 1.19 pm

SULLIVAN, Mr Damian, Manager, Equity in Response to Climate Change Program, Brotherhood of St Laurence

THWAITES, Mr John, Chairperson, Advisory Group, Equity in Response to Climate Change Program, Brotherhood of St Laurence

CHAIR—Thank you for coming in this afternoon to help us with our inquiries. Do you have an opening statement that you would like to make?

Mr Thwaites—Yes, I have a brief opening statement. The Brotherhood of St Laurence has had a long seventy-year history of working on behalf of low-income families, particularly in Victoria but in other states as well. Some two years ago, the brotherhood determined that climate change would be a major factor for low-income families around Australia. Out of that, the brotherhood convened a number of workshops and worked with other welfare groups, energy efficiency experts and others to determine the best response to climate change.

In a sense, low-income families are impacted most because, first, they often live in housing that is of low quality; that particularly applies to renters. One figure bearing this out is insulation. In Victoria, around 80 per cent of owner-occupier households have full insulation, whereas only 27 per cent of private rented properties have full insulation. Obviously, if you do not have insulation, you will be more impacted by heatwaves. As we saw with the recent heatwaves over summer, a number of deaths resulted. So we are talking about very serious impacts and, if you are in an uninsulated house, you are most impacted. That is the first factor.

The second impact on low-income households is structural economic change; for example, rural areas where there is ongoing drought will be impacted. The third and, I guess, the most relevant to today is the impact of mitigation strategies and a cost of carbon. The reason that low-income households are most impacted is that low-income houses spend a greater proportion of their income on utilities and energy than the rest of the community; in fact, they spend about twice as much in proportional terms as higher income households.

Having convened all of these workshops, we reached an agreement with KPMG that we would jointly prepare a report on an energy efficiency scheme for low-income households. The conclusion from all of the workshops that we had was that energy efficiency was the best long-term way to protect low-income households not only from climate change but also from a CPRS and mitigation strategies. The reasons for that were essentially that low-income people, themselves, do not have the capital to buy energy-efficient appliances or to put in a more energy-efficient building fabric or insulation. They do not have that money themselves, yet energy efficiency is the best way for them to be protected against rising electricity prices because it means that they consume less electricity.

The second point about it, which is critical, is that, as the carbon price rises, the benefit of energy efficiency increases; whereas the benefit of compensation cash compensation does not increase, unless the government continues to increase it in proportion to the rise in the price of carbon. The third point, which is an important benefit, is that taking part in reducing their emissions rather than just getting a cash handout, makes low-income households part of the

solution to climate change, just like the rest of the community. We all have an interest in being part of the solution to climate change, whether we are middle income, upper income or, indeed, low income; so there is an equity issue there as well.

The report—I will not go through it in detail; we have given you all a copy—set out a recommendation for a national energy efficiency strategy that would cover 3½ million households Australia-wide; that is all Australian households with a health benefits card. In very broad summary, the recommendation was that around \$2,000 worth of energy-efficiency initiatives should be made available to each of those low-income households. That would include insulation but also, very critically, a home visit that could determine what was most needed in a home. Once again, the overwhelming experience—the brotherhood has had a fair bit of it in working with low-income households—is that, if you are going to get energy efficiency into those homes, a home visit and some assistance will be needed.

Welfare households are more used to taking part in rebate schemes and in managing the process themselves. Low-income households, particularly households that are tenants, are unlikely to participate in such a scheme without real assistance. I think this is an internationally recognised factor. It was recognised in the UK. That is why they have introduced a scheme whereby low-income households are helped into energy efficiency through what is called the Warm Front Scheme by having a home visit that can determine what they need. That was the essential recommendation.

In terms of compensation overall, we certainly strongly support the Australian government's commitment to compensate low-income households, as we strongly support the CPRS, because we all have to take action to mitigate greenhouse gas emissions. However, we believe that over time we have to move to more of the funding from a CPRS going into supporting energy efficiency rather than just having cash compensation. That will benefit not only the households but also the government because, once you put the energy efficiency in, you get more and more benefit as the carbon price rises; whereas with the cash scheme, as I indicated, you have to keep ramping it up year upon year as the price rises.

We do have one, I guess, concern about the cash compensation. That is that it is essentially based on an average household within a category or an income class. The nature of households is such that there is a huge variety of electricity and energy use—not always the fault of the householder. We believe that some groups are particularly at risk that potentially will not be adequately covered by cash compensation. Those groups are people who have high levels of energy consumption. That may be because they are tenants in very inefficient houses with very inefficient appliances that the landlord has put in place. It may be people who are located in geographic areas that are not serviced by natural gas, so they have higher bills for electric hot water, for example, than do others across the rest of the country. It might be people who are located in remote or Indigenous communities where there is very poor infrastructure or who have limited energy choices. It might be people with old and inefficient appliances that consume energy very inefficiently. One area that the brotherhood has been quite involved in is fridges. Old fridges consume enormous amounts of energy and, if you are stuck with one of them, you are stuck with big bills. It might be, as I have indicated, people living in substandard houses. It might be people who have particular health and disability issues and for that reason need to have air-conditioning, which they cannot really afford on their sort of income. They are going to be

vulnerable, and the cash compensation at the low levels is fairly low and is unlikely to cover that. Finally, it might be people with very large families.

There is a significant group of households that we would say are at risk because of their high bills and, as the price of electricity goes up, they will be most at risk. Just to summarise: we support the cash compensation and we support the commitment, but we say that there ought to be an ongoing and greater commitment to ensuring that energy efficiency is placed in low-income households.

CHAIR—Thank you. While I am not necessarily disagreeing with you on any of those points, in relation to renters in particular, I think low-income families are also characterised—certainly in parts of South Australia that I know well—as ‘high turnover’, moving in and out of rental accommodation quite frequently. Would it not be better, if there were some sort of scheme to encourage improvement in housing, to do it via the landlord rather than the tenant?

Mr Thwaites—In essence, it has to be both. The way it would work is that, even if the tenant wants an upgrade, the consent of the landlord is probably needed anyway; therefore, it does involve both the landlord and the tenant. The Energy Efficient Homes Package, which has been introduced and which provides insulation, we are pleased, now recognises that, in rented premises, the initial contact may come from the tenant; so it does not have to be done via the landlord. We are concerned about that package in that we do not believe low-income tenants or, indeed, landlords will apply to get into the scheme in sufficient or equitable numbers without some program to encourage them into it and probably having some element of a home visit to help the tenant. The classic issue is getting the landlord’s consent. It can be quite complex and, for a poor, potentially uneducated tenant who is nervous about their relationship with the landlord, it is pretty challenging to go to the landlord and say, ‘Can you sign this?’ That is why we are certainly arguing for not only an energy efficient homes package but also, more generally, compensation going forward, as there needs to be a scheme to assist tenants into more efficient households.

CHAIR—Would you see this visit as being regular or a one-off?

Mr Thwaites—Basically, it would be a one-off to deliver the package. It might be two visits. In the UK, they have an insulation scheme that covers all low-income people. They get a home visit early on, which is usually followed up by a visit at the end of the process. The great benefit of that is that, as well as identifying what is needed, the tenant is given some assistance in how to operate whatever efficiency measures are being put in place. They can be quite simple instructions. We certainly do not argue for an expensive or highly paid energy editor going into homes. This is the sort of thing that can be done with about two weeks or even one week’s training. It is a great opportunity for employment programs too. It could be used as part of an employment program to teach people who have been unemployed the skill of coming in, checking for gaps and where you might need blinds or curtains—those sorts of things. Very simple measures can make a huge difference.

CHAIR—You say that the cash compensation is low and does not meet the needs. I think the government says that it overcompensates for what they expect electricity price rises to be. Do you agree with that?

Mr Thwaites—In most cases, it may. We have somewhat of a difficulty with this. As I understand it, we got the latest figures only yesterday, so it is a bit hard. But if you look even at the first page of those figures regarding, say, a single person under low-income—

CHAIR—Are these the cameos that were released by the Department of Climate Change yesterday? I do have a summary, so please continue.

Mr Thwaites—These are some cameos that were introduced by the department yesterday. If you are a single person on an income of, say, \$10,000, your total assistance is \$351 and the average cost of living impact of CPRS is \$256; and, for a middle-income family on \$35,000, the total assistance is \$430 and the average cost of living impact is \$398. The differences between the compensation and the impact of CPRS are fairly small. That may well be the average. But, apart from the average, you will have people in circumstances—if they are in rural areas or areas without gas, if they have higher bills because they have very inefficient appliances—where this may not cover it. There are certainly other areas in the proposals that are well and truly covered. For example, a self-funded retiree couple on \$60,000 gets total assistance of \$2,673, which is more than adequate by any means. The point we are making is that, at the low end particularly, there will be people who, because of their circumstances, have particularly high bills. They are the ones, I guess, who are most at risk.

The brotherhood's concern is whether, in the long term, as the carbon price ramps up, all future governments be able to keep ramping up the cash compensation by that amount. This government has done the right thing in committing all of these very substantial funds now, but we are concerned that a future government at some stage may not continue to ramp it up at that level. By contrast, once you put energy efficiency into a house, it lasts well into the future and you get the pay-off forever.

CHAIR—Are you proposing that the government scrap or scale down its cash payment in exchange for doing an energy efficiency audit?

Mr Thwaites—We are not proposing that now. We understand that this is in place and we know that would not happen. We are saying that in the future the government, as it considers how to spend the proceeds of the auctioning of CPRS proceeds, should consider allocating more of those to compensating low-income households via energy efficiency. We are saying that we are satisfied with the package as it is—that is the government's decision and we understand and support that—but in future we would be recommending that a higher proportion of the CPRS revenue funding go to energy efficiency.

Senator EGGLESTON—When was the brotherhood first invited to appear before this committee in connection with this hearing regarding this particular reference?

Mr Sullivan—Perhaps a little over a week ago, but I would have to check that.

Senator EGGLESTON—That is fine. Mr Thwaites, I think you know a little bit about the political process. Is that the case?

Mr Thwaites—I have had some experience, yes.

Senator EGGLESTON—I gather that you were once the Minister for Environment and Water in Victoria. Is that true?

Mr Thwaites—That is correct.

Senator EGGLESTON—So obviously this is something that you would regard yourself as having a bit of knowledge about. I think the point that has come out of what you have said already is that low-income earners are potentially the biggest losers under the CPRS; they will be the ones who will have to pay higher electricity charges and increased costs for consumer goods. Also, according to some reports, quite a number of people will be put out of work by this scheme. Do you see low-income earners as being those who are most at risk under this scheme, if implemented?

Mr Thwaites—I think I said that low-income earners are most at risk from climate change, which includes the impacts of climate change. Because they live in what generally is poorer housing, they will be more impacted by heatwaves, for example. That is why the brotherhood has taken a strong stance in support of mitigation—that is, abatement reduction of emissions—and it supports the CPRS. We have said that any carbon price, whether a carbon tax or a CPRS, will have a bigger proportional impact on low-income people because they spend more of their income on energy than do high-income people.

Your question though is: will they be most impacted by the CPRS as it is? The answer to that is that, in most cases, they will not be, because the government has agreed to compensation. If there were no compensation package, that would be correct and I would be saying that. But, because the government has agreed to substantial compensation, low-income earners are substantially compensated. However, I have indicated that, in particular areas, there are some who are most vulnerable and we need to ensure that, in the future, they will have the protection of energy efficiency.

Senator EGGLESTON—The CPRS seems to have particular impacts in certain industries. The Minerals Council of Australia will be giving evidence next. They say that the introduction of this scheme will result in quite a lot of unemployment in the mining industry directly and many more people will lose jobs through the scheme's indirect effects. It seems to me that we should all have concerns about this scheme because of its impacts at lower income levels. I am not sure whether other schemes, such as carbon taxes and so on, would have quite the same impact, because they would not necessarily lead to the mining industry, in particular, putting off so many people or energy-exposed industries, such as cement and oil refining and so on, going off shore, as we have heard they will. Today we are supposed to be talking about the amendments to this bill. Leaving aside for the moment whether the CPRS is the model that will most impact on low-income earners, you have said that the protection of low-income earners depends on the government maintaining compensation. Why do you, by implication, suggest that might not happen? Is it because governments do not have a good track record of maintaining compensation?

Mr Thwaites—There are a number of reasons. One is that, by comparison, energy efficiency is locked in forever; once you have done it, you have locked it in forever. However, if you are relying on compensation increasing, you have to rely on a government, year upon year, making a decision to increase it—

Senator EGGLESTON—And to index it.

Mr Thwaites—and to index it. It is reasonable to say that governments of all political persuasions have not always agreed to commit to indexing things in perpetuity. It is really a statement of the obvious in that regard. We are satisfied that the government, under this scheme, has made very strong and good commitments to compensation, but we are saying that the best form of long-term protection for vulnerable low-income people would be energy efficiency. That is why we are supporting that.

Senator EGGLESTON—I suppose one could say that the history of the pension would be a good example of the failure of governments to ensure that elderly people on pensions are given adequate spending power. That is an example that springs to mind; the history of taxation of superannuation is another. So of real concern is the need to ensure that compensation is maintained if this scheme is introduced. Have you had any discussions with the government about incorporating your six-point plan in the amendments to this legislation; and, if you have, how did they go? Was the government sympathetic to that idea?

Mr Thwaites—We have had numerous discussions with the government over the last 12 months about what we are proposing and, to a reasonable degree, it has been implemented in the Energy Efficient Homes Package. We were very pleased that the government committed some \$3 billion to the insulation package. We are now working with the Department of the Environment, Water, Heritage and the Arts to ensure, as far as possible, that low-income rental households get reasonable and equitable access to that. We will keep advocating on behalf of low-income households to achieve that.

Senator EGGLESTON—Have you modelled other formats for carbon mitigation schemes to see what the impact on low-income earners would be?

Mr Thwaites—When it was first modelled, we had some work done by Peter Brain at the National Institute of Economic and Industry Research, NIEIR. That looked only at the impact of a price on carbon, whether a carbon tax or a CPRS. That came down with fairly similar figures, which is not surprising: whether it is a carbon tax or a CPRS, the parties that are liable to pay that carbon price generally will pass it on. So, from our point of view, we cannot see any difference in the impact on low-income people of a carbon tax on the one hand and a CPRS on the other.

Senator EGGLESTON—What about the fact that the CPRS is predicated on the concept of there being an international market for carbon and an international emissions trading scheme and that, unless Australian industry can trade off its carbon taxes within an international market, those costs will have to be borne by Australians? At this stage, there is very little evidence that our major trading partners—the Chinese, the Japanese, the Koreans, the Thais and the Indonesians—will go down the pathway of an Emissions Trading Scheme. So we may end up with a very expensive scheme that will have quite severe flowthrough effects to the people at the bottom of the ladder, who are the unemployed and the low-income earners that you deal with. I would have thought, in reality, given that possible scenario, some other model, such as a carbon tax, might be more acceptable to your group.

Mr Thwaites—I guess I would say a few things. The first is that, simply as I have stated, the work that we have done has indicated that any price on carbon, whether through a carbon tax or a CPRS, will be passed through and will have the same essential impact on low-income people. There is nothing in the work that we have done that would indicate that a different type of scheme would have a different impact. The work that we have done indicates that what is most relevant is the price of carbon itself. So, obviously, carbon at \$40 a tonne will have a bigger impact than carbon at \$20 a tonne. That is the fundamental thing that we found.

It is not my role really to get into debate about those aspects, because we are really here on this topic. However, I would say that the brotherhood has also done a lot of work on the jobs issue and recently convened a summit on green jobs. Out of that, the brotherhood is working with a number of organisations, including employer organisations, to promote more jobs as a result of the action that we take to become more sustainable. We support the initiatives of a number of organisations, including not only some employer organisations but also those that are more from the environmental side, that have indicated that we can create half a million jobs through being more sustainable. In this area alone, our plan, if it was fully implemented, could create around 40,000 jobs. Certainly the insulation package, we believe, will create many jobs for people who might not otherwise have a job. We actually see that, if action is taken in a smart way, it is a good way out of the job problems that we have at the moment.

Senator EGGLESTON—You can say that, but the insulation package will come to an end. The mining industry, in toto, talks about job losses of around 125,000. Job losses in mining directly and of associated jobs and those that will go if we lose the car industry and the oil refineries and so on all mount up. It is pretty hard to believe that those jobs can be compensated for in any realistic way. Wouldn't it be more prudent for Australia to defer a emissions trading scheme until we see whether other countries will go ahead with such schemes, because that would offset the costs of the carbon, or just have a simpler scheme, which might be more beneficial to the people that you represent?

Mr Thwaites—In fact, the brotherhood has taken the view that we need to move more quickly and not more slowly. That is because we believe that the people we represent are most at risk if Australia and the world do not move. Our concern is that, if we do not start getting our society and our economy in a position to work in a more carbon constrained way, it will be the low-income people who suffer the most. One of the reasons for that—linked to employment, of course—is that, if a sudden action occurs some years down the track, people then are more likely to be thrown out of work. However, with the way we see the scheme operating now, there is a fairly slow start, which allows time for adjustment and new jobs to come in. On that basis, we have taken a supportive position regarding the CPRS.

Senator EGGLESTON—Some people believe that the CPRS will not work, because there will not be an international trading scheme in carbon. However, you are welcome to your views; I do not agree with them. With that, I conclude.

Mr Thwaites—Thank you.

Senator PRATT—Clearly, we are in the middle of a political debate at the moment about whether this scheme goes ahead.

Mr Thwaites—Yes.

Senator PRATT—We have international negotiations coming up, which you would think would see Australia take on a carbon liability, but at this point we still have some insecurity about the compensation measures that are provided for in the scheme passing the parliament. That has implications, therefore, for how we would share the costs for carbon around the community and the economy. What do you think the implications of that might be, particularly for low-income households?

Mr Thwaites—Are you asking about the implications of a delay?

Senator PRATT—The implications of having a carbon liability but no architecture for compensation for low-income households.

Mr Thwaites—If there were no compensation, low-income households would be much more vulnerable and disadvantaged because a higher proportion of their income would go on electricity bills. That is why we support a compensation package.

Senator PRATT—With the current political scenario, it is certainly possible that Australia could agree to having a carbon liability, in the face of needing to do something about climate change internationally, but be without the tool that would provide that compensation to low-income households, isn't it?

Mr Thwaites—I am sorry; I really do not follow your question. I do not quite understand what you mean by 'carbon liability'.

Senator PRATT—We might agree to a target. We are going to Copenhagen to negotiate and reach an agreement about what Australia's contribution to reducing emissions might be. That is the first issue. Secondly, we are waiting for this particular scheme that we have before us, which we are discussing today, to pass the Senate. In the course of our evidence, one issue that has come out is the notion that we will have to do something to meet that carbon liability. Also, a plethora of different policy responses will come out because we do not have a comprehensive package that addresses things such as industry compensation, household compensation and a capacity to cap and trade our emissions in order to have a cohesive package across the economy. I suppose I am asking you: what are the implications of having to start again from scratch, when looking at our policy response on this issue?

Mr Thwaites—As I have indicated, the brotherhood has supported action, and it supports such action being taken now and a CPRS going through. Our concern would be that, if that does not happen, there is continued uncertainty and, if other schemes that did not provide compensation were put in place, low-income people would be most impacted.

CHAIR—Does the Brotherhood of St Laurence have any view about the voluntary effort and the changes that we have seen in this series of amendments about rewarding people who do make a voluntary effort and put electricity back into the grid? Was that part of your discussion?

Mr Thwaites—I think the short answer is: no, we do not have a view. The brotherhood is involved in a number of schemes, including the Solar Cities scheme with the Moreland Energy

Foundation, that certainly have a voluntary component. So we support voluntary action, but we have not come to any particular view about those amendments.

CHAIR—Which are part of this investigation. Thank you very much for appearing before the committee this afternoon.

[1.55 pm]

FISHER, Dr Brian, Chief Executive Officer, Concept Economics

HOOKE, Mr Mitchell Harry, Chief Executive Officer, Minerals Council of Australia

PEARSON, Mr Brendan, Deputy Chief Executive, Minerals Council of Australia

CHAIR—Welcome. Mr Hooke, do you have an opening statement?

Mr Hooke—I do. The Minerals Council of Australia welcomes the opportunity to appear today before this inquiry. It is Friday afternoon and it has been a pretty intense week for us, as I am sure it has been for you, so let me come directly to the point. We cannot support the passage of this legislation in its current form. The changes announced to the legislation on 4 May do not address the central flaw in the proposed Emissions Trading Scheme. The decision to embark on full permit auctioning from the outset of the scheme is what we consider to be the essential and fundamental flaw. The proposed changes are at the margins and they will not materially improve the environmental outcomes or reduce the economic impact of the scheme.

Under the changes, instead of being hit with \$10 billion in carbon costs over the first five years of the scheme, the sector will face an impost of \$9 billion. The proposed one-year delay amounts to little more than a temporary stay of execution for thousands of mining jobs and billions of dollars of investment, including in breakthrough low-emissions technologies. The changes marginally raise the level of support for the now infamous emissions-intensive trade-exposed industries, but that shielding is still below that provided or proposed by other nations, severely undermining our international competitiveness. In addition, those changes are simply irrelevant for nine out of 10, or 90 per cent, of Australia's minerals exports, which receive no shielding and, therefore, will face the highest carbon costs in the world—again, that our competitors do not face. Business's need for certainty is not served by the kind of certainty that this scheme will deliver. While we welcome the government's recognition that the CPRS needs amending, change must be directed at the underlying fundamentals and not just at tinkering at the margins. In summary, the proposed changes fall well short of transforming the CPRS into a well-designed emissions trading scheme capable of delivering economic and environmental benefits over the longer term.

The minerals sector shares the government's assessment that the introduction of an ETS is one of the most substantial structural changes to the Australian economy in its history. But, despite the scale and gravity of this reform, the community in general and the Senate in particular will have to make their decisions on this 'once in a generation' reform without the benefit of any detailed forecast of the scheme's short- and medium-term impact from Australia's premier economic agency. The government claims that its Treasury modelling is the most comprehensive ever attempted, but there are fundamental and unexplained gaps in the Treasury analysis. The modelling can tell us what the employment shares will be in 2050, when I will be 93-year-olds, but it cannot tell us what the impact will be on output or employment in major sectors of the Australian economy in 2015 or 2020. Treasury officials have admitted themselves that the

limitation of Treasury's modelling is that it does not capture all of the transitional elements—code for 'jobs'—in the medium term.

That is why we commissioned Dr Brian Fisher, one of Australia's most respected economic forecasters, to assess the employment impact of the CPRS on the minerals sector and the communities in which we operate. The parameters of that work were clear. Our goal was simply, to the extent possible, to assess the impact on output and employment in our sector, using the same assumptions, economic projections and technology assumptions that Treasury used—again, to the best of our knowledge, given that Treasury has not made available the full assumptions and the full detail of its modelling. We would like those assumptions to have been 100 per cent but, as I have said, we were not able to get hold of them. We are confident, however, that we have gone pretty close to mimicking what Treasury did. The results are clear from our perspective.

The CPRS will have a savage impact on employment in the minerals sector over the next two decades. We estimate that 23,500 mining direct jobs will be lost from the industry by 2020 and 66,500 will be lost by 2030, if we apply a conservative multiplier effect—and the Minerals Council did this, not Dr Fisher, because his multiplier effects were located in the regions. So I have taken the liberty of just putting a conservative multiplier effect of two-times on that, which means that the total jobs lost in those communities in which mining is occurring will be somewhere in the order of 70,000 by 2020 and up to 200,000 by 2030. Queensland is projected to bear the largest job losses of any state or territory, with about 11,500 projected job losses by 2020 and over 34,000 by 2030. New South Wales is the second highest, losing 4,200 direct jobs by 2020 and 14,600 by 2030. Western Australia accounts for 3,500 and a bit over 5,500 respectively. Victoria will lose 1,200-plus by 2020 and nearly 6,000 by 2030. South Australia will lose just under 2,000 and just over 3,000 respectively in those two periods of time. Tasmania will lose about 1,050 by 2020 and 2,500 by 2030. The Northern Territory is projected to lose 150 direct jobs and 540 by 2030.

Some have suggested that these jobs will simply be absorbed by so-called green jobs. The first point I would make is that we need to develop all clean energy technologies, if we are going to get anywhere near meeting the world's projected demand for energy. By the way, I might add that we consider clean coal jobs to be green jobs. But it is not a substitution racket. Let us be clear: imposing a cost on carbon imposes additional costs on the Australian economy; Australia will be less competitive and, by definition, output will be lower. The Treasury modelling concludes that output will be lower; in fact, Treasury has indicated, in informal discussions, that our output numbers are fairly close to theirs. I am not an economist but, if output is lower and there are fewer jobs, the economy in aggregate is smaller. Nobody is suggesting that you can have additional costs without decreasing output. So, even if we have new technologies, they will be more costly than what we already have. Hence, even a non-economist can come to the conclusion that the only way to maintain similar levels of employment in a higher cost economy is for real wages to fall.

I now address the practical side of the substitution theory. Under the conservative projections in our study, there will be 8,000 to 9,000 jobs lost by 2020 in the mining and minerals processing region, which stretches from—let us take an example—Gladstone to Mackay and west to communities like Blackwater, Moura and Moranbah. These are real jobs in real mining operations in real communities. On the other hand, the recent Climate Institute study identified

83 permanent jobs that will be created between Proserpine in North Queensland and Brisbane. Furthermore, that Climate Institute study is highly problematic, highly speculative and somewhat fanciful. It goes to the perspective of aggregating all of the expected jobs that might arise from all of the anticipated projected and/or expected projects that might have anything to do with renewable technologies. A comparable exercise would be if we were to take ABARE's analysis of all the committed, constructed, promised, thought about, may-be-coming and on-the-drawing board projects that they do and then run a jobs analysis out on that; it would have much the same degree of integrity and credibility. That means that in that vibrant economic region of the country, the central Queensland region, one green job would be created for every 100 lost in the minerals sector and associated sectors.

We have been absolutely committed to finding a solution to managing climate change. We share the government's objective of getting to a global protocol that covers all major emitting nations, we share the government's objective of the development and deployment of low-emissions technologies and we share the government's objective of a market mechanism for discovering carbon pricing in the marketplace. Where we differ is the importance that we put on the alignment and the calibration of those three fundamentals. We do not consider that the current scheme proposed goes anywhere near to being aligned with what is being developed globally in terms of equivalent market mechanisms for determining carbon prices and, in particular, those in the design and deployment of emissions trading schemes; nor do we see that those three fundamental pillars of an effective response to managing climate change are anywhere near aligned.

We have proposed an alternative approach to the third of the pillars, an emissions trading scheme: we do what is being done by other nations that have introduced market mechanisms for carbon prices in the form of an emissions trading scheme, which is to adopt a phased approach to the full auctioning of permits. That will establish a carbon price signal without putting the economy into reverse; it will reward firms that reduce their emissions; and it will raise sufficient revenue to ensure that low- and fixed-income earners are not economically disadvantaged. There is no need for special treatment or compensation for certain sectors. We are simply not in the business of being in a GST-foodfight for compensation for particular sectors; we are in the business of trying to get the design of this scheme right. We want the burden of the new scheme to be spread evenly across the economy and we want it to be done in such a way that we do not blow off both feet in our attempt to lead the rest of the world to the land of Nirvana.

In conclusion, the sector agrees that Australia has both a responsibility and self-interest in taking a leadership role in forging a global solution to climate change. The fundamental issue here is that we want to set an example in the leadership stakes globally for others to follow, not a leadership example of what not to do. If we act hastily and adopt a poorly designed emissions trading scheme, the adverse economic impact will be severe, the environmental impact will be negligible and no-one will follow our lead—in fact, they will laugh at us. If we can make the transition without forsaking jobs, our competitiveness or our living standards, other nations, we hope, will follow our example. Our investment in a scheme that the rest of the world will follow will be an example of demonstrable and effective leadership. Thank you.

CHAIR—Thank you.

Senator EGGLESTON—Thank you for appearing. We regard you as very important witnesses. I am very interested in the question of the impact on employment around Australia. Although you have mentioned a certain amount about this, could you comment on what you see as the national impact on employment in the minerals industry, particularly in regional areas?

Mr Hooke—I addressed a lot of that in my opening statement.

Senator EGGLESTON—I said you did, yes.

Mr Hooke—I think the fundamental issue is that, in the short term—the ‘short term’ being over the next decade—we expect the direct losses to be somewhere in the order of 23,500. By 2030, those job losses will increase to 66,500. The reason we see an increase the further out we go is that we do not expect that other nations will come on board in terms of adopting the same kinds of disciplines that we expect here in Australia. Treasury’s assumptions—Dr Fisher will correct me if I get this wrong—are that China will come on board for the global solution by 2015, India by 2020 and the poorer developing economies by 2025. That therefore means that they will have some degree of pricing discipline; but they will not have anywhere near the degree of our pricing discipline, even if that assumption were to come to fruition. Therefore, we will be at an even greater competitive disadvantage as we get further out; hence the impact will be much more severe here in terms of self-inflicted harm. That is why the job numbers escalate.

In terms of the regions, I went through those in my opening statement. We are more than happy to table our report, which goes to the heart of all of the regional and remote Australian jobs and where they will be lost and the multiplier effects. In those regions, the multiplier effects roughly can be anywhere between two and 11 times, depending on the extent to which the mining and minerals operations are predominant in those regions and the extent to which they are emissions intensive.

Senator EGGLESTON—I would be grateful if you would table that report. You also mention that China, Japan, our regional trading partners, and India are unlikely to introduce an emissions trading scheme, yet that is one of the fundamental predications on which this proposal by the government is based. For that reason, if these other countries do not come on board, it seems obvious that Australia will be bearing a higher cost from the Emissions Trading Scheme and the price of carbon if it cannot be traded off. Given that scenario, what do you think will be the impact on investment in Australia?

Mr Hooke—We are operating in a global economy, the minerals sector globally is probably one of the most globally integrated sectors and there is no shortage of global resources; therefore, Australia has to be very careful that it does not get carried away by its own rhetoric about our comparative advantage in the endowment of natural resources. In addition, we have seen significant rationalisation and consolidation of the minerals industry globally over the last decade—so much so that the top five companies in any of the product sectors is doing somewhere between 40 and 80 per cent of the business and probably more of the inventory. That means that these guys will strategically deploy capital where there is the best opportunity to realise it.

What Australia is doing, wittingly or unwittingly, is increasing the sovereign risk associated with those investment decisions. If we impose a tax or a price on carbon that, in effect, becomes

a tax, because we do not have the technologies to adjust, if our competitors are not facing the same kinds of costs and if we saddle our industry with costs they cannot either adjust to or absorb, you do not need to be either a Philadelphia lawyer or an economist to know that they will move their activities to where they do not have those costs. That is known as carbon leakage. That may well be, in an economic sense, a most efficient way to go; but essentially, to correct one externality, we are intervening with another that goes straight to the bottom line if we do not have the technologies to adjust and if we do not have the profit to adjust. The day before yesterday, one of our member companies at the Minerals Week seminar put on the record that, had this scheme existed in the preceding five years, it would have knocked 65 per cent of their pre-tax profit and he made the statement that his headquarters in London would have shut down their operations here in Australia.

Senator EGGLESTON—Thank you. That is one example. Are there any other specific examples of industries where you think companies might reconsider their future in Australia if this scheme is introduced as is?

Mr Hooke—Across the minerals sector, there has been a lot of attention and focus on coal. But this is not just a coal story; this is across the board. The gold industry will be looking at a \$700 million hit to the bottom line over five years. Then there is anybody who is in the business of smelting and refining across all of the minerals, which are emissions intensive activities. Much is made of the assistance to ‘big polluters’, but I would make the point that 90 per cent of Australia’s minerals exports—and we are predominating exporting, as you know—will receive no shielding from the full impact of this scheme, while their competitors will face no impacts.

Senator EGGLESTON—You have mentioned an alternative model, which you said would be much more acceptable to the minerals industry and impose less of a burden on the Australian economy. Have you discussed that with the government as an alternative?

Mr Hooke—Tirelessly—tirelessly. We went through it in discussion long before it became anything like a public document. We have been through it on account of its alignment with what the rest of the world is doing. Much is made about the European Union introducing an emissions trading scheme. They have started off auctioning permits at two per cent. They will not be to 20 per cent of permit auctioning by 2013 and they will not get anywhere near full auctioning of permits until 2027—and the parliament is currently considering extending that because of the debate that is going on in Copenhagen. They do not cover all gases. They have left methane out of the equation, which is the bugbear and the problem we have with the coal industry because its major issue is how to account for the fugitive emissions of methane as they go through the normal processes of mining. New Zealand has an emissions trading scheme and it starts off with zip—no auctioning of permits.

The fundamental problem we have is: why are we auctioning permits? It is about raising revenue. It has nothing to do with the environmental integrity and effectiveness of the scheme. The much celebrated and recognised Eileen Claussen at the Pew Centre in the United States, who had a lot to do with setting up the Kyoto protocol, has said, ‘You do not need to auction permits to get to the environmental effectiveness and integrity of the scheme.’ Auctioning permits is only about raising revenue, so we are going to go through this kind of foolhardy process of hitting business with an \$8½ billion slug to the bottom line to redistribute two thirds of that back out through the community. Before Senator Cameron gives me a hard time, like last

time, about whether we do or do not support compensation to low-income and income-disadvantaged households, I will say that of course we do. But the impact on those householders can be measured. It can be a measured transition to a low-emissions economy. This is all about a structural adjustment. What we are saying is: do not take a baseball bat to the Australian economy and our businesses to try to get there. Everybody else is working through a measured transition to a low-emissions economy; why is it that Australia thinks that we are somehow unique?

Senator CAMERON—Dr Fisher, have you seen any of the newspaper reports that detail your Concept Economics report?

Dr Fisher—Yes, I have read some of those reports.

Senator CAMERON—Were you happy with how your reporting was delivered?

Dr Fisher—I am neither happy nor unhappy about the way I am treated by the media; in fact, I let most of these things go over my shoulder.

Senator CAMERON—Let me put it another way: do you think the reporting accurately reflects your analysis?

Dr Fisher—I think it depends on which reporting we are talking about. I have read some reports that I consider personally to be quite scurrilous; others are moderately accurate. I think the key here is that all of these analyses are complex. In this work, we have attempted to mimic, as best we could, the Treasury assumptions.

Senator CAMERON—No, I will come to that. Let me take you to some of the reportage and ask you to comment on it. For instance, in the *Australian* on May 22, the headline is ‘Carbon plan will cause jobs carnage’. Does that reflect your report?

Dr Fisher—I am not sure that I can comment on what is in the mind of the editor of the *Australian*; I do not think I am in a position to do so.

CHAIR—I think that is a fair enough response, Senator Cameron. Asking for comment on a media story is a bit difficult for a witness.

Senator CAMERON—The witness has delivered an analysis that has been reported generally. I understood that there would be some professional pride in terms of having your report accurately reflected. I would have thought you would have been interested in how it is being reported, but you seem to be saying that you are not. Is that what you are saying—you do not care?

Dr Fisher—I have been in the business of doing analysis on public policy issues for most of my life. Virtually every report that I have released over that long period of time and which has been of interest to the public has drawn comment from the media, both positive and negative. Obviously I am interested in the way in which this material is disseminated, but in the final analysis I do not judge myself or the quality of my work on the basis of media reporting.

Senator CAMERON—Let us go to the report itself. The report was commissioned by the Minerals Council.

Dr Fisher—Yes, that is correct.

Senator CAMERON—They paid you to do the report?

Senator XENOPHON—I do not think you gave the witness a chance to answer.

Senator CAMERON—I thought he nodded.

CHAIR—I think he said, ‘Yes, that’s correct.’

Dr Fisher—No, I do not think we need to go into that. Whether they have paid me or not is another question.

CHAIR—They thinking about it already, are they?

Senator CAMERON—Dr Fisher, is the cheque in the post?

Dr Fisher—I certainly hope so.

Senator CAMERON—The report was commented on extensively by Mr Hooke in an opinion piece in the *Australian*. Did you read that opinion piece?

Dr Fisher—Yes, I did.

Senator CAMERON—Were you happy with how that opinion piece portrayed your report?

CHAIR—Again, I think this is difficult, particularly as Dr Fisher does not have a copy of the article in front of him.

Mr Hooke—I was very happy with the way my article—

CHAIR—Senator Cameron, if you could ask specific questions, perhaps we might—

Senator CAMERON—Let me go to the key issue here. Mr Hook portrays your report as being a shedding of 23,510 jobs in the minerals sector by 2020 and more than 66,000 by 2030. You have done this analysis, but you do not purport that is the position without qualification, do you?

Dr Fisher—What these jobs represent, just so that we are quite clear—

Senator CAMERON—I am not asking what they represent; I am asking—I do not have a lot of time—whether you qualified that statement in your report. It is a simple ask.

Dr Fisher—Of course I make statements in the report about what these numbers mean; of course I do.

Senator CAMERON—So you qualify them?

Dr Fisher—What I do in the report is to state specifically how we have derived the numbers and exactly what they mean.

Senator CAMERON—So Mr Hooke, in his article, did not go to the fundamental qualification that you made in your report, which is that that is the number of jobs lost compared with what would otherwise have occurred. Is that correct?

Dr Fisher—I think that is a question for Mr Hooke. My report is 47 pages and I imagine that his opinion piece is 750 words. I think that is something that Mr Hooke needs to address.

Senator CAMERON—I respectfully disagree with you. You have come here as a witness. You have done the report. The person who paid for the report has portrayed it in a certain manner. I am asking: is that portrayal accurate? That is what I am asking you: is that portrayal accurate?

Dr Fisher—We have calculated that there will be 23,510 jobs displaced out of the minerals industry by 2020 as a consequence of the implementation of the proposed CPRS in the form that we modelled it, as best we could model it using the Treasury assumptions.

Senator CAMERON—But, when you say that these are jobs that will be displaced from the industry, doesn't that give the impression that miners could lose their jobs?

Dr Fisher—Yes, miners will lose their jobs.

Senator CAMERON—But don't you then qualify your statement, in your modelling and all your charts, in that the number of jobs lost has to be compared with what would otherwise have occurred?

Dr Fisher—That is correct. That is exactly what I have done.

Senator CAMERON—Thank you. That is good. So it is qualified; it is different. I now move to some other parts of your modelling. You may want to take this on notice: could you tell us what reference case you have used? I cannot find it in your report?

Dr Fisher—The reference case is the projection from the model of the size of each one of those industries that would exist had the CPRS not been put in place; that is a forward projection of the size of each one of these industries. As best we can, without having seen the documentation of the Treasury modelling, we have lined our model up so that it approximates what we believe the Treasury modelling does.

Senator CAMERON—So, in most cases, many of the outcomes in your analysis are pretty close to those in the Treasury analysis. Is that correct?

Dr Fisher—I cannot say to the committee that is 100 per cent the case, because I am not able to see the documentation of the Treasury modelling. But, as far as I can determine, using the sort of model that the Treasury has used, mimicking as best we can the sorts of assumptions they have used, we would expect, for example, the output impacts in 2020 on each of these industries to be much the same as we have reported in this report. We cannot compare that with the Treasury modelling, because the Treasury did not report those numbers.

Senator CAMERON—The Treasury modelling is a public document; you have seen the report.

Dr Fisher—The Treasury report is a public report but, unfortunately, the documentation is not public.

Senator CAMERON—Table 6.11 in the Treasury report would be a close approximation of what you have tried to do in table 3 in your report. Is that correct?

Dr Fisher—Perhaps I can be reminded of table 6.11.

Senator CAMERON—It is the gross output by sector by 2050.

Dr Fisher—By 2050?

Senator CAMERON—Yes, and you have done 2020 and 2030.

Dr Fisher—My results for 2050 would probably be different from the results that we see there; but we cannot know, because we do not know exactly what trajectories they have used.

Senator CAMERON—Looking at this, the advice that I have received is that there is a generality of agreement between most of the sectors except minerals, which is the one that you have been paid to look at—right? Let me just go to this issue. You have an appendix A in your documentation. That appendix A says that you have rebalanced your input and output tables. Why would you need to rebalance the input and output tables? If they do not add up, you have to rebalance them. What factors are you using to rebalance and why do you need to rebalance?

Dr Fisher—We have looked not only at the national level but also at the state level, and then we look at the impacts on a statistical division level. As a consequence of the need to look at those sectors in lower and lower disaggregations, certain inconsistencies arise in the ABS statistics and the Monash database that we use at the level of the statistical division versus the level of the state versus the federal or national level. Rebalancing in an IO table is a standard process of dealing with those inconsistencies, and that is exactly what we have done.

Senator CAMERON—Could you take on notice to provide me with the technical details of your rebalancing?

Dr Fisher—Yes, I can provide that. But, frankly, I am—

Senator CAMERON—As long as you are prepared to provide it, I am happy with that. I now go to the Queensland analysis on page 28 of your report. You have job loss in the Mackay area

of 5,060. You do this basically for the whole of the nation where mining is taking place. In this analysis, what flexibilities did you factor in at the sectoral level? It seems to me that, at the national level, you factored in some flexibilities; but at the state level you do not factor in abatement, carbon capture and storage or technological change. What did you factor in to get these numbers?

Dr Fisher—Here, we have basically taken a CGE model similar to the one that the Treasury has taken and calculated the impact on the minerals industry at the national level. That national impact takes account of technological change, productivity improvements, carbon capture and storage and whatever other assumptions have been embedded—as best we can—in the Treasury modelling. Those effects are then smeared across every state and statistical division—

Senator CAMERON—Is ‘smeared across’ a technical term?

Dr Fisher—Everything is smeared across. Then we calculate, as best we can, the impact on the jobs in a particular statistical division. There is no doubt in my mind that the analysis at the statistical division is less statistically reliable than the analysis at the state level, which is less statistically reliable than the analysis at the national level.

Senator CAMERON—So there are limitations to this analysis. Is that what you are saying?

Dr Fisher—The reason for that is that, as we get further and further down to the disaggregated level, we get more and more statistically unreliable data from the ABS because of collection issues.

Senator CAMERON—So doesn’t that make these numbers somewhat statistically unreliable?

Dr Fisher—They are the best that can be done with the material that we have from the ABS to date. If it is necessary to do better than that, it would be necessary for those who fund the Australian Bureau of Statistics to provide it with more money so that it can collect better data.

Senator CAMERON—You have read my mind. I am just coming to the ABS. The ABS does not provide or support state level or substate-regional level input-output tables, which is not because of finances but because of small sample size and poor statistical analysis accuracy. That is what they have put to me in terms of not supporting that. But you say that it is simply about money and not about accuracy. Is that what you are saying to me?

Dr Fisher—No, I think there is a misunderstanding between us. Basically I am saying here that the information that we are reliant on to do these calculations at the statistical division level is about levels in employment; it is not about OI tables per se but about levels of employment. For example, if you take—I will not mention any particular industry—a minerals industry in Queensland that has a head office in Brisbane and mines in various statistical divisions in North Queensland, you will find that more jobs than probably are likely are allocated to the Brisbane head office. Those numbers, as far as the ABS is concerned, simply do not line up with various mineral company official annual reports. So there are some issues here. This is not the fault of the minerals companies and it is not the fault of the ABS; it is the mere fact that we do not have enough accurate data.

Senator CAMERON—Do you agree with the analysis that David Gruen from Treasury put forward at the last estimates, which says that, in terms of some of this modelling and analysis, you have two options: one is to do the modelling and analysis and the other is to ask your uncle. So you are better off doing the modelling and analysis, but it is not particularly accurate in some areas. The further you go down at a regional level, the less accurate it becomes. Isn't that a real proposition?

Dr Fisher—I think it is certainly the case, as I said before, that the data at the statistical division level is less accurate.

Senator CAMERON—I do not have a lot of time left, so I will ask you another few questions. Clive Palmer, an entrepreneur in Queensland, is developing a mine called China First. Apparently, the mine is going to be a 1.4 billion tonne mine. He is investing \$6.55 billion into the Rockhampton area. There will be 6,000 construction jobs; 1,500 operational jobs; and, in his estimate, 45,000 jobs across the economy. On 23 May, Mr Palmer said:

I don't think the CPRS is going to have enough of an impact to present insurmountable problems.

Were you aware of this development when you did your analysis of Mackay?

Dr Fisher—These sorts of proposals have been around for a long time. I would have the following things to say. First of all, the implied multiplier that has been mentioned with respect to the total number of jobs is, in my view, not credible. In our report we quote the international literature on the sorts of multipliers that you would expect and they are not in the order of magnitude that Mr Palmer believes. But Mr Palmer, of course, is quite capable of looking after himself with respect to his own numbers.

The real issue here is that potentially there will be new projects, but there will also be a lot of old type projects that no longer exist. What we have tried to do here is to balance what will happen to the coal and every other industry in the minerals industry in a new policy environment. There is no doubt that, if you are faced with a regime that taxes methane—which, as a greenhouse gas, is 21 times more potent than carbon dioxide—at the rate that is potentially suggested, there is no doubt that any gaseous mine will become less competitive; and it will become potentially radically less competitive than mines, for example, in Indonesia. As a consequence of that, jobs will be lost from those mines in Australia.

Senator CAMERON—But you have to go back and then contextualise your answer on the basis of the number of jobs that will be lost in your answer now compared with what would otherwise have occurred. Is that correct?

Dr Fisher—That is correct, but the point is that—

Senator CAMERON—I want to move on.

Dr Fisher—I need to put that into context. The point is that, whenever a cost is imposed in Australia that is not imposed elsewhere—for example, in Indonesia, a major thermal coal producer—we will become less competitive, and not even Mr Palmer will put a new mine in Australia when he can make more money in Indonesia.

Senator CAMERON—With the greatest of respect, you cannot talk for Mr Palmer. He is on the public record. You are an economist and he is an entrepreneur. It is his money, he is making the call and he disagrees with you. I am afraid you cannot come here and speak for him.

Mr Hooke—He said on the record that he was not speaking of Mr Palmer. I think that is way out of line, Madam Chair.

CHAIR—Senator Cameron, one more question.

Senator CAMERON—I will want to put on notice a number of questions in relation to your modelling, but I have a general question. In relation to free permits, Mr Hooke has said that allocating permits without charge will not make a scheme less environmentally rigorous than if all permits are sold. I am not an economist, but I have always been advised that the whole argument for putting a price on carbon and, therefore, permits is to send out a price signal. So, if you give them away for nothing, what happens to that price signal? Do you agree with Mr Hooke's argument? It seems to me that turns the whole basis of the economic fundamentals of a market based scheme on its head.

Dr Fisher—I can give a quick answer to that. Approximately 95 per cent of the international literature supports the view expressed by Mr Hooke and Eileen Claussen, whose reference he quoted in his statement.

Senator CAMERON—You mention 95 per cent. How much literature is out there on this?

Dr Fisher—There is more literature on this particular issue than a kangaroo dog could jump over. This is something that is being debated—

Senator CAMERON—That is another technical term, is it?

Dr Fisher—Yes, that is a technical term!

CHAIR—We are running short of time.

Dr Fisher—This issue is being debated long and hard. The reason that most economists put that point of view is simply that, whether or not the permit is given to you, you still face the same opportunity cost; basically, your costs as an operator are still the same. Whether you are transferred a permit is a matter of an income transfer; it is not an efficiency question. As a consequence of that, the vast majority of the literature on this matter says that it makes no difference.

Mr Hooke—The allocation is the \$64 billion question. It is the cap nationally and the allocation to the companies and it then becomes a question of the scarcity value of permits deriving the price in the market.

Senator XENOPHON—I direct this question to either Dr Fisher or Mr Hooke: in their submission to this committee, Frontier Economics have advocated an intensity type scheme that they say would smooth out the carbon price, give greater certainty for investment decisions and mute the effect of electricity price rises, at least in that transitional period of five to seven years.

Do either of you have a comment with respect to that as an alternative approach that would still—

Mr Hooke—I am sorry; who advocated that?

Senator XENOPHON—Frontier Economics.

Dr Fisher—I think I might have said previously to this committee and to others in this place who have talked about this issue that there are merits and demerits for intensity targets. I personally do not think that sort of arrangement is very practical in the sense that, if we are talking about an economy-wide scheme, it needs to be linked to international schemes. Under the United Nations Framework Convention on Climate Change, we have a particular approach. That approach is not particularly compatible with intensity type targets, although it could be made to work with them.

Senator XENOPHON—So you see it as being inconsistent to have a hybrid scheme with an intensity approach and a cap and trade.

Dr Fisher—I think it adds serious administrative complexity. With an intensity type scheme, I would be afraid that we would end up with more bureaucrats in the Department of Climate Change administering such a scheme than people out in the real economy basically doing the work.

Senator XENOPHON—There has been a concession that, at least on a transitional basis, it would mute the price effect of electricity for the first few years, which is a key factor, isn't it, for a lot of industry?

Dr Fisher—But, if our aim was to do that, we could do it with other instruments. We need to set up a scheme that is viable in the long term. Basically, my personal view is that a cap and trade scheme of the type that has been talked about in the design of the CPRS is the type of scheme that we will end up with in some form or another. I think hybrid schemes—

Senator XENOPHON—Is the current CPRS design your preferred model in terms of the architecture of the scheme?

Dr Fisher—I think in the end that is where we will end up. The exact design is up for debate, I believe. However, I do not think we are going to end up with an intensity target type sectoral arrangement, because it is just administratively far too complex.

Senator XENOPHON—Because I have been attending at another committee, I am not sure whether you have been asked about the Productivity Commission's recent report. Have you been asked about that in the context of your evidence today?

Dr Fisher—No.

Senator XENOPHON—The Productivity Commission's annual report in relation to assistance to industry was quite critical of the free permits proposed to be handed out under this

scheme. They said that they are too expensive and wasteful and they will make other firms bear the burden of reducing emissions. The Productivity Commission states:

Policies that counteract carbon leakage will most likely transfer the abatement task to other sectors ... This will impose additional costs on other firms that must buy permits to emit greenhouse gases.

Is the commission right or half right, from your point of view, regarding economic efficiency in terms of the allocation of these permits?

Dr Fisher—I think this goes somewhat to the debate we had just a moment ago about the allocation of permits. There is a large literature on the impact of the allocation of permits. Most of that literature says basically that allocation is a distributional rather than an efficiency issue. The questions that the commission has raised, in my view, really go to the heart of the design of the scheme and not necessarily to the allocation of permits.

Mr Hooke—Yes, I share that view. We are back into a GST-foodfight. We are back into arbitrary determinations—

Senator XENOPHON—Did you say a ‘GST-foodfight’?

Mr Hooke—Yes.

Senator XENOPHON—Is that takeaway food or food that you consume?

Mr Hooke—That is the point: is it a hot chook or a cold chook; is it a muesli bar or a breakfast bar? Is it an emissions-intensive industry or not an emissions-intensive industry and which part of the industrial activity actually fits into the category? Even then, that only gets you an interview to sit down with the bureaucrats to work out which part is going to be in the scheme. I am trying to make the point that you will get economic inefficiency manifestly extrapolated, the more you try to differentiate and discriminate and put lines on the map. We are saying that, on a phased approach to full auctioning, everybody who is trade exposed and emissions intensive, as per the green paper’s definition, is in—no carve-outs, no exceptions, no nothing.

Senator XENOPHON—But you would concede that the consequences of getting the design wrong here are much more significant than with a GST. This is much bigger than a GST in terms of economic impact. I do not know whether Dr Fisher—

Mr Hooke—I would certainly say that.

Senator XENOPHON—Would you agree with that, Dr Fisher?

Dr Fisher—Yes. Basically, as I said to this committee a week and two days ago—

Senator XENOPHON—You are experiencing a bit of déjà vu.

Dr Fisher—this scheme goes to the heart of changing the entire fundamentals of the Australian economy. If we get the design wrong, we have the potential for that effect to cascade

right through the economy. That is why, in my personal view, it is so crucial that we take enough time to make sure that everybody is satisfied that the design is sensible; otherwise we have the potential to have serious economic consequences that we did not expect.

Mr Hooke—It is another argument for another day, but at the moment we are going down the track of subsidising our imports and taxing our exports, when nobody else does.

Senator XENOPHON—Perhaps I can ask just one final question on this. There is an argument by my colleagues in the coalition that we should wait until after Copenhagen. Are there two aspects in relation to that? Will Copenhagen not principally be looking at the issue of targets rather than design and do you see an argument that we ought to thrash out the issues of the design of the scheme sooner rather than later, because that is an argument that we will have to have? As I understand it, that is the main issue, but at Copenhagen the issue will be targets rather than scheme design.

Dr Fisher—The design of the domestic scheme is something that Australia has to work out itself. We are not going to have any more insight about the optimal design of our domestic scheme as a result of the outcome at Copenhagen. What we will get out of Copenhagen is hopefully some guidance as to where the international community is going on the targets for mitigation.

Mr Hooke—Let us say Copenhagen comes out with targets and the world signs on. We are putting together a system here in Australia. Let us say we did adopt a phased approach to full auctioning—going back to Senator Cameron's questions; it is a shame he is not here to hear the answer to this—the targets determine what your national cap is going to be, which determines what your allocations are going to be to individual companies and then, in a sense, that determines the scarcity value of permits, which then goes to the heart of what a carbon price looks like.

Out of Copenhagen we will get an understanding of what those interim and longer term targets might be, if Copenhagen does not turn out to be to climate change what Doha is to international trade reform, which is highly possible. Secondly, I agree with Dr Fisher that it is what we do at home here. There are a lot of things that you can do in Australia that will go a long way to reducing greenhouse gas emissions, putting the country on a platform of adaptation in a way that does not severely compromise our international competitiveness and becomes what some have called a prisoner's dilemma, that is, that we are captured by our own policies and others are quite happy to piggyback on the misfortune that we are visiting on ourselves.

Senator XENOPHON—Given what you have both said about Copenhagen, does that mean the way the bill is structured at the moment they tie in design with targets and that there would be an argument to split the two so that the issue of design is quite distinct from the issue of targets? As I understand it, they are tied in together in the way the bills have been presented.

Mr Hooke—Our view is that on the current scheme, and the design of it, you have to delay it. You have to delay it because we still have not got the design right. We have argued all along that the issue of delay is defined by the extent to which you get the design right.

Senator XENOPHON—Dr Fisher, is there an argument for splitting the two in the sense that they are linked in together in the legislation?

Dr Fisher—I think it is very difficult to split those things, because the target determines the price of carbon that the economy will face. If the price was close to zero, we would not be having this debate. It is the fact that, over time, the targets will need to tighten to hit the sorts of atmospheric concentrations that people are interested in. As a consequence of that, the price of carbon will rise exponentially over time. Unless you get the design right at the beginning, that rising price of carbon over time is going to start impacting back on the Australian economy.

Senator XENOPHON—Do you not do design before targets?

Mr Hooke—You can do both. I agree with Dr Fisher. If you have a phased approach to full auctioning then you can start pulling the levers tighter and increasing the extent to which you impose the disciplines and higher carbon prices as you go forward. But you need to do that on the basis of what are likely to be agreed targets around the world. As Dr Fisher was saying, the targets will determine eventually what the carbon price is going to be. The extent to which you phase in auctioning is another one of the levers that you can pull, and you want to have that calibrated with the pace of the development and deployment of low emissions technology. Again, if you do not have the technology wherewithal to adjust to the carbon price, it just goes straight to the bottom line and straight to jobs. Every dollar that is not spent on technology that is raised through this scheme is a wasted dollar. Targets without solutions is a wing and a prayer.

Senator XENOPHON—Thank you.

CHAIR—Are you able to stay another five or 10 minutes?

Mr Hooke—Geelong does not start playing until about 7.30 so we are right.

Senator FISHER—I am wondering if I can ask one question?

Senator PRATT—I am happy with that, provided other senators do not mind waiting.

Senator FISHER—Dr Fisher, drawing on your extensive experience in matters economic and indeed beyond our really important mining sector, given the prediction about job losses in the mining sector and the consequent damage to the mining sector, together with the views by others that there will be an increase in jobs in the green sector and a beneficial impact on the green sector as a result of the CPRS legislation, what is your view as to whether or not the economic benefits in terms of predicted jobs and so on to the green sector, should it eventuate, will compensate for the economic damage done by the CPRS across the rest of the economy?

Dr Fisher—The answer to that can be short, but it is also long in the sense that what we have done in the modelling and what the Treasury has done is to make an assumption that, if we take the full economy, for every job that is lost in one place there will be another job of some description elsewhere. The high paid workers in the minerals industry, for example, will be displaced and that is what we have been talking about today, and in the long term there will be a job somewhere else in the economy. That is the way the modelling has been set up. But to make that work what both the Treasury and I have done in the national modelling is to allow the real

wages of workers to fall. We have held total employment constant, but to allow that to occur we have allowed real wages to fall.

What is happening here is that real wages have to be lower than they otherwise would have been to maintain everybody in a job. Nobody is being very forthcoming about that particular assumption. In the debate everywhere it has been dressed up as what is called model closure. Model closure is a technical term for the way in which you make these models work effectively.

Senator FISHER—Both you and Treasury are saying that in order to stop job losses you are going to have to incur pay loss?

Dr Fisher—Yes, reduce real wages.

Senator FISHER—Keep your job by reducing your take home pay?

Dr Fisher—That is correct.

Senator PRATT—With respect to your modelling, how do you deal with the issue of technology change? Is that factored into it or not, in terms of new emissions technologies and emissions reduction technologies?

Dr Fisher—Yes. The best way to get a handle on that is to look at the specification of future technology as set out in ABARE's research report 2006.6, which is the technology specifications for the model known as GTEM, which is the basis on which the Treasury modelling was done. As far as we can, we have tried to mimic that.

Senator PRATT—Otherwise what would have occurred versus a CPRS, you factored the technology change into your CPRS?

Dr Fisher—For example, by 2050 in the modelling you have vast numbers of hybrid vehicles. You have new technology in internal combustion engines and so on.

Senator PRATT—Mr Hooke, you have reported on your website a growth of about 86,000 jobs from 2008 to 2020. Is that the business as usual case that Dr Fisher was using?

Dr Fisher—I am unaware of what is on the Minerals Council website. My reference case is the reference case that is generated by our model.

Senator PRATT—What were the numbers in your reference case?

Mr Hooke—Pretty damned close.

Dr Fisher—I do not know what those numbers are now.

Senator PRATT—If I take 86,000 jobs minus 23,000 jobs I have still got a growth of about 63,000 jobs in that period across the sector.

Mr Hooke—Let us go back and do them, since you have directed the question to our work, which is a bit hard for Dr Fisher. We had the National Institute of Labour Studies give us an estimation of what numbers of jobs we would need to create if we were to maintain market share. As a 2020 Vision project analysis we said, ‘If we were to meet projected global demand by 2020 and Australia was to increase its supply, what level of supply would we need to increase and what would that mean in terms of jobs?’ They came out with a figure of 86,000. Back then it was on about 120,000-plus people we employed. When you put that 86,000 on a projected basis on top of the 142,000, which is an increase over the last five years of some 60,000-odd jobs already, and then you look at what Dr Fisher has done and you say, ‘If there’s an 11 per cent fall relative to the reference case’ and you add the figures together, they are actually not far off being similar.

Senator PRATT—That goes back to the point. What has been reported in the media are massive job losses, but we keep losing the tagline relative to what would otherwise have been the case, which is that 86,000 jobs.

Mr Hooke—That is our work. You asked me how it related to Dr Fisher’s work. I am saying it is approximate. You cannot put words into Dr Fisher’s work.

Senator PRATT—No, but whatever your relative baseline is we are still looking at growth across the sector.

Mr Hooke—With great respect, we are not suggesting this is scorched earth. We know we are going to continue to grow.

Senator PRATT—It is just that when this gets reported in the media that is exactly how it is being portrayed, as scorched earth, without bringing into line the other discussion that we have just had, that we have also projected in other modelling by the Climate Institute that there would be growth of 25,000 jobs in other sectors, which relates to my issue of the technology change and how that is factored into Dr Fisher’s work, which it has been. The claims made in this report relate to the 23,000 jobs that you believe are going to be lost, without the overall context of what is happening in the broader economy being accounted for. That is simply the point I was trying to draw out.

Mr Hooke—I understand that, but before Dr Fisher responds in respect of the question directed to him, I find this debate about dealing with modelling quite interesting. I was listening to Senator Cameron and I was really trying to work out what he was trying to achieve. Whether he was trying to set confidence intervals around the statistical estimates of where the modelling was going or whether it was actually a fundamental issue, and that is you cannot impose costs on industry that our competitors do not face and expect that you are going to maintain the same levels of employment. That is the first point.

The second point is that I do not accept the notion that the Climate Institute’s work is anything like modelling. What they have done is gone and got grab-bag of projects, added them all up, put them on to a speculative platform and said that there will be 2,000 real jobs, 16,000 construction jobs and a few more on a nod and a wink. If we did that with ABARE’s projects that are listed for our industry these figures would actually look much starker.

Senator PRATT—Dr Fisher has already outlined that we are looking at a growth like that across the economy in other sectors as a result of the CPRS. I believe you said something along those lines. Dr Fisher, in your report you cited:

Concept Economics and its authors make no representation or warranty as to the accuracy/completeness of the material contained in this document and shall have and accept no liability for any statements, opinions, information or matters expressed or implied arising out ...

Can I ask you why that statement was necessary?

Dr Fisher—That statement, on the advice of my lawyers, appears in absolutely every publication and document that I give to a client regardless of its content.

CHAIR—Thank you. We have the Climate Change Institute next. I thank the Minerals Council of Australia for appearing this afternoon and for your patience with the extension of time.

[3.06 pm]

CONNOR, Mr John, Chief Executive Officer, The Climate Institute

Evidence was taken via teleconference—

CHAIR—Welcome. I invite you to make an opening statement.

Mr Connor—I did send in a document, *Australian climate policy and its role in a global climate agreement*, which set out our comments in relation to the changes.

CHAIR—Yes, we have that. Thank you.

Mr Connor—I will take that as read and just make a couple of comments. Our focus is on two things. Firstly, we are focussing on a global solution to this global problem, and that we need to have an effective global climate agreement, and in our view the government actually got the national interest test roughly right in that a national interest is an agreement that gets us towards 450 ppm or lower. The problem with the previous white paper was that their targets did not represent their fair share towards that goal. It was very significant to us that we went to that 25 per cent target.

Secondly, we are focussing on a just and fair transition to prosperity in the emerging clean energy economy globally. It was important to us that, whilst we did not like the delay, the fixed price and the extra assistance, we did have the extra transparency that was gained by the changes, in particular in relation to the Productivity Commission or other examination of the real or proxy carbon prices and of the progress towards world's best practice in energy and abatement efficiency. That is an important context for that transition.

It is important to comment about the conditions connected to the 25 per cent. We do think that is a fair reflection of the sorts of conditions that we are going to need to get to 450 ppm or lower. It is a tough challenge and it will require a peaking of emissions before 2020.

I will take it as read, but finally I will say that we do think it was a significant achievement to have a settlement across a broad cross-section of business, welfare, labour and environment groups and that passage of this legislation will help continue the momentum towards an international agreement. Showing that we can get such legislation through will be an important signal internationally, but perhaps even more importantly we do think it is economically responsible. There are reports in the paper that there are important investment decisions being held up because of uncertainty about the scheme and the broad direction. I will leave it at that and I am happy to answer questions.

CHAIR—Thank you. Senator Xenophon has some questions.

Senator XENOPHON—Welcome back. This must be your third or fourth—

Mr Connor—It is getting a bit bewildering which committee I am appearing before.

Senator XENOPHON—You are not alone in that feeling. Even members of the committee feel like that. Firstly, can you clarify whether you are satisfied that these targets will get us to 450 parts per million? Secondly, there are a number of other climate change scientists who are saying that 450 parts per million may not be enough to deal with this problem and that we actually need to be looking at a lower target?

Mr Connor—It is our position that we need to be looking ultimately towards a lower target. Indeed, it is our view that we should be looking at 400 ppm or lower. I think the task is to get to 450 ppm by the end of the century and then keep going.

I have just made some comments about dancing the dance of the pure. In some sense, the 450-350 sorts of discussions forgets the critical importance of peaking emissions. The physical fact of the pollutants that are being put into the atmosphere means that to get anywhere near those goals we need to peak the emissions before 2020 and we need to peak the concentration levels of gases globally at around 500 ppm before 2030. With the aerosols taken in we are about 440 ppm now. We can focus on the 450-350. In our view, we do need to get down to those sorts of things over time, but the urgency at hand is to peak them, which is why Copenhagen is so important.

Senator XENOPHON—The coalition is saying that we should wait until Copenhagen before we pass this legislation, and there are some environmental groups or environmentalists who are saying that is probably a sensible approach. Can you just clarify: is it the view of the Climate Institute that we should deal with the legislation now or can you see some merit in waiting until after Copenhagen?

Mr Connor—We put our view before the other committee. It is our view that passing this legislation now will be of assistance. It will send important signals to the international negotiations that an advanced country can actually tackle these elements. In fact, it will help us to move on to other issues we need to look out. How do we encourage biosequestration? How do we pick up some of the outstanding issues of energy efficiency? I would like a razor sharp focus on the activities of our negotiators, and the positions the government is taking in these negotiations, uncluttered by the ongoing bloodletting and drama around the CPRS. We think that is important. The Investor Group on Climate Change went public on this in the last couple of days. We do know that as a result of this delay there are significant investors out there holding back investments in clean energy and other technologies.

Senator XENOPHON—I just have a couple more questions. You think there has been drama so far with the CPRS, but I think there is a lot more to come in the coming weeks.

Mr Connor—I agree with you there.

Senator XENOPHON—One of the arguments put is that an emissions trading scheme is a means to an end, and the end is to reduce greenhouse gases below dangerous levels. Firstly, do you agree with that and do you also acknowledge that this scheme does not really comprehensively address all of the other complementary measures that could be undertaken that could be very significant in terms of biochar, energy efficiency and renewable, which of course is under the MRET scheme? Are you concerned that there is a narrowness of scope or rigidity with the current scheme because there is a whole range of other measures that ought to be taken simultaneously?

Mr Connor—We have said repeatedly that we need to see this in the context of a full policy suite and that we need to recognise that the CPRS, particularly with the cloaking of some of the price signals across sections of the economy—I am thinking, for example, of the excise offsetting for petrol—that we will need additional measures. The CPRS is a medium to long-term price signal which is affecting investment decisions, particularly for long lived investments. We have been crystal clear that in our view we need other things, particularly shorter term investment signals, such as the 20 per cent by 2020 renewable energy target. We do not want that either stuffed around in terms of timing or too stuffed full of alternative technologies, which is not going to drive the renewable energy. We do think energy efficiency is critical.

I congratulate COAG for a number of the steps that it made about a month ago, but there are still untapped areas in particular existing commercial buildings that we need to get on with and work out how we drive the financial incentives and other information signals that we need to tackle those. We do think the government's announcements in the budget were very significant, both in relation to carbon capture and storage and also the Solar Flagships program, because from our perspective it is critical to have a mixed portfolio approach to our investments in clean energy so that we aim to hit 2020 with a mixed portfolio of clean energy options at commercial scale, because one of two of those may or may not fail. I think it is important we do that. Importantly, all of those add up. Emissions trading is a very effective tool that sends a long-term signal. It sends a long-term signal for innovation. If we do not have it then we have to have a ute load of other regulations to fill the gaps across various sectors.

Senator XENOPHON—Finally, this is out of left field. I do not know if you saw the media reports of suggestions by Steven Chu, the Obama Administration energy secretary. I think it was reported a couple of days ago in the *Australian*.

Mr Connor—The white painting?

Senator XENOPHON—Painting rooves white could abate emissions by billions of tonnes and it would be equivalent to taking all the cars in the US off the road for many years. What do you make of that? Is that something that is worth looking at? Is that another approach that we should be looking at to reduce greenhouse gases? This is a suggestion from a Nobel Laureate.

Mr Connor—I would hardly like it to be used as an excuse to defer further considerations.

Senator XENOPHON—No, I am not saying to defer it. Is it something we should be looking at as well?

Mr Connor—We are going to need to look at everything. I think you said biochar there as well. It is very important that we do not slip into silver-bulletism in this debate. Biochar should not been seen as the only part of a suite of biosequestration options. It has unfortunately been portrayed a little bit in that way. I am not being demeaning of the coalition when I talk about that. We are going to need to look at everything.

Senator XENOPHON—On the basis of what Mr Chu has said, would you recommend that we all paint our roof white sooner rather than later?

Mr Connor—I will have to take that on notice. I will have to have a look at that closely. I did see those comments.

Senator XENOPHON—If you could. I was intrigued by that and I would appreciate what the Climate Institute has to say about that.

Mr Connor—Sure.

Senator XENOPHON—Thank you.

CHAIR—Think of the job creation in the white paint industry. Mr Connor, we had some evidence from the Minerals Council of Australia. I am crudely rephrasing it, but the gist of it was that green jobs would imply a decrease in wages as compared with jobs from the mining sector, particularly in regional areas, which I think was also the implication. Would you agree with that?

Mr Connor—Not necessarily. I caught the tail end of that discussion. They are talking about assumptions in models and about how those general equilibrium models operate. It is my understanding, in all scenarios and work that we have had done with equilibrium models from Monash University some time back, even if we were heading towards being carbon neutral by 2050—and we did a carbon neutral of 60 per cent by 2050 and 40 per cent by 2050, which was way back before Bali in 2007—in each of those scenarios we continue to triple the economy and wage growth continues across the economy. The economy and wages continue to grow even with significant cuts in pollution. I do not accept that. It has perhaps been the result of some successful union and other representation that those salaries have got to where they have been and I am sure that we will see healthy growth in other areas as well.

CHAIR—I do not know if you heard this, but the Mineral Council's submission was quite critical of your estimates of the jobs creation and just said that it was every possible job cobbled together to create the sort of green jobs creation that the Climate Institute was talking about.

Mr Connor—That is 'Mr Candle's and Horse's Hooke's' description. Yes, I heard that. We are explicit in our report and publication that this is not modelling. What we did was commission a very respected energy sector consultant, McLennan Magasanik and Associates, to compile for us a list of business proposals that are out there on the table. These are real proposals, not models. In fact, we delight in the fact that this is actually not models but real businesses working up real proposals on how they are going to move forward once we get climate legislation through with both renewable energy and emissions trading. They were extremely conservative in the way in which they pulled the job numbers together. The methodology of all of that is stated in a report which is publicly available and I am happy to contribute to the Senate. They came up with those conclusions. And this being just the renewable energy fraction of other clean energy and low carbon jobs growth that we will see when we get the price signals and regulatory instruments coming into place that are so imminent before senators.

CHAIR—Indeed. I think Mr Hooke said he regarded clean coal jobs as green jobs so they presumably were not included in your counting?

Mr Connor—They have not been. I would consider them that, too. There are a certain number of gasses, and the transition of those jobs will be important as we put the price signals

on and do the transition. Indeed, many of my good friend Paul Howe's members in the Australian Workers Union will be working on constructing solar dishes, thermal wind towers and the like. Those are jobs. The spectrum of people involved in creating a cleaner economy is vast. It is from hard yakka to high tech. They are there now and they are growing now.

CHAIR—Thank you. Senator Eggleston.

Senator EGGLESTON—When were you first invited to appear before this committee on this particular reference?

Mr Connor—I forget exactly when I got the invitation. I am not quite sure what you are driving at.

Senator EGGLESTON—I just want the date. That is all.

Mr Connor—I will take that on notice. I do apologise having to do this by telephone by I was asked to present on climate change to a Commonwealth parliamentary seminar here in Sydney. I had agreed to that previously. Therefore, I wanted to honour that and that is why I am here. I am not quite sure of the relevance of the question.

CHAIR—Senator Eggleston is making a political point. The committee is not at all unhappy that you are here via teleconference and thank you for your participation.

Senator EGGLESTON—We are holding the hearings before the closure date for submissions, and that is very curious. You say in the document that I have before me that the biggest initial impact of the CPRS will be driven by the medium and longer term investment signals that it sends, and this underscores the need to get effective legislation through this year. Mr Hooke, in his evidence, suggested that the passage of this legislation would be a deterrent to future investment in Australia. If we accept that to be the case, would you not perhaps feel that rather than just deferring the starting date of this legislation it might be wiser to defer the introduction of any legislation in Australia until after the Copenhagen conference when we see what other countries are doing?

Mr Connor—I completely reject the suggestion that this legislation is deferring—and I cannot recall the exact formulation that you put—

Senator EGGLESTON—Deterring investment.

Mr Connor—The delay in implementing the legislation is what the investors are saying is deterring investment. I can point you to quotes. We know that there are power companies with their debt guarantees coming up and they are cast into significant uncertainty right now. I would also take you to the Prime Minister's taskforce, the Shergold report, which said that 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. There is already 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 \$1.8 billion to \$3.5 billion to 2017. That was way back in 2007. I think this has been having significant impacts across investment for some time.

Senator EGGLESTON—I have heard those opinions, but other people think the only certainty is uncertainty because our CPRS is predicated on the concept of an international emissions trading scheme and carbon market and there is no evidence that our major trading partners in this region, such as China, Japan, Korea and Thailand, will be engaging in setting up an ETS. We are not sure what the United States is going to do. Australia is leaping forward with a scheme that is very costly and involves 75 per cent of our industry, when we represent only 1.4 per cent of emissions and one per cent of the world's gross national product. Perhaps the other side of the coin has some validity, does it not, that we are walking into uncertainty?

Mr Connor—No. With respect, I disagree with your characterisation as well. Japan is considering an emissions trading scheme working up—

Senator EGGLESTON—With respect, that is not my information, and nor is it the case in China.

Mr Connor—I know that South Korea is. It is also incorrect to say that there are no carbon prices being faced by competitor countries. Yesterday we released a report on global climate action and I will make that available for the committee. It goes through China, India, South Korea, Indonesia, South Africa, Brazil and Mexico.

Senator EGGLESTON—What I talked about was emissions trading schemes, not carbon prices, and that is in fact the issue.

Mr Connor—No, the issue is competitiveness. The claim that many have made is that we have competitor countries that are not imposing carbon prices.

Senator EGGLESTON—It is not carbon prices that I am talking about. It is ETSs. The view is that this emissions trading scheme will reduce our competitiveness.

Mr Connor—I do not agree with that.

Senator EGGLESTON—The other question I want to go to is that of jobs. You may be able to produce a long list of so-called green jobs, but the fact remains that if we lose jobs in the mining sector and other sectors like cement and oil refineries, while you may create jobs you are not going to replace the value to the economy that those larger industrial areas would have provided. While you may be able to find jobs in the green sector, by no means is it going to mean that our economy will be anywhere near as strong, and that Australians in general will suffer. What do you say to that?

Mr Connor—I comprehensively dismiss the notion that there is evidence to that effect. In fact, I was interested to hear Mr Hooke actually acknowledged that 'we know we are going to continue to grow'. I wrote that down a moment ago. It is the reality that they have been portraying—this is one of the oldest tricks in the book—a reduction against a reference case as an absolute reduction. The unions themselves have done their own analysis of the MCA study showing that jobs in Queensland, for example, will grow 120 per cent.

Senator EGGLESTON—They are green jobs, of course, but what I am talking about is the value of the mining economy to this country.

Mr Connor—Senator, you asked me the question. These are mining jobs that we are talking about. If we stick with your proposition about value, that value is going to continue to grow. It may be a result of the model that people are pointing to, but the models that I have seen and been involved with show that overall growth and overall income growth will continue with significant carbon pollution reductions.

Senator EGGLESTON—There may be carbon pollution reduction, but the models and information that I have had do not support your thesis. Thank you very much.

Mr Connor—Thank you.

CHAIR—Senator Pratt has some more questions.

Senator PRATT—I wanted to ask about the implications of a failure to pass the current carbon pollution reduction scheme that is before us, if it is not legislated for this year?

Mr Connor—I pointed out earlier to Senator Xenophon that it is threefold. It would send important signals to the international community that an advanced economy like ours can enable passage of this legislation and such reforms. I do think it is economically responsible, as I have been outlining, that there are investments being delayed or deferred. I do think it is time we moved on. We have spent considerable time on this. We do think this is a strong platform of a framework, that we should be moving on and there are other untouched issues that we need to deal with, which I touched on earlier.

Senator PRATT—I would like to ask you about the European experience. There were a lot of dire predictions about the impact of their scheme, and as a result a lot of concessions were made. Nevertheless, the dire predictions continued. Did any of those actually occur once their scheme was introduced?

Mr Connor—I do not have in front of me the exact detail. I do recall a quote from Tony Blair that most of the analysis shows that costs of these sorts of things are often overstated by a factor of at least three when we look at those. I do have a table somewhere which shows the actual experience of reforms. We are generally in a situation where these costs are inflated or overstated compared with the reality.

Senator PRATT—I would be interested in that information, if you are able to provide it to the committee.

Mr Connor—Certainly.

Senator PRATT—In fact, my next question was: do you believe businesses could be overstating the costs of the CPRS?

Mr Connor—We are quite firmly of the view that that is the case, and indeed that and in fact the emissions trading assistance is in excess of what is genuinely needed in terms of the threats of carbon leakage. I previously provided to this committee some work that we had commissioned on this area. I have to apologise, it may have been the other committee. It was some work that we had from MMA. I can forward that in again to double check.

Senator PRATT—There is a lot of work going on in this area, so it is not surprising. I would like to ask you what sectors you think are going to do best in our transition to a low carbon economy? Where do you think the green jobs are going to be?

Mr Connor—There is a range of clean energy and low carbon jobs. I am not sure if they are all necessarily green. Many of them are some of our traditional areas. Steel making will have a role to play. You would need to look to Professor Garnaut's tables. For 25 per cent there is a growth across just about every sector of the economy. There are questions perhaps around aluminium and that is one more of the kind of energy sources. That is why they particularly need to have investments in clean energy and things such as renewable energy. The geothermal and Solar Flagships, for example, are directly relevant to their future in this country. In our view, it is across quite a significant spread of the economy that the benefits will flow and in many areas it will probably be barely noticed.

Senator PRATT—You have hinted in your answer to the skills base. Clearly, there will be a need for some new skills. Would you argue that people who have jobs in perhaps the mining and energy sectors at the moment are going to continue to have jobs that utilise their skills, whether it is in their sector or moving on to other sectors that also use those skills? Is that right?

Mr Connor—I do not pretend to say that this is going to be a seamless transition. Jobs growth will slow in areas and grow in other areas. People may have to move around. There will need to be skills retraining and that is one of the reasons why we have worked with the ACTU and with ACOSS to highlight issues of the skills packages that we need. We do need skills focus on that. I think New South Wales has quite a good package starting to emerge about that. I stood with the manager of an engineering firm from Portland just recently. We were talking about that. This is a firm based on the wind towers and the blades down in Portland. He said, 'We've been bringing in bakers, butchers and farmers, and with some reskilling they are quickly put to work.' We do need attention to that. It is important that we focus on that, but it is certainly achievable.

Senator PRATT—What are the prospects, in your view, of securing a 2012 global agreement on climate change, and has the new US Administration's approach improved those prospects?

Mr Connor—It would seem pretty clear that we are going to head towards an agreement in Copenhagen. Indeed, when you look at the conditions that the government set out for the range of targets, arguably we are already at a situation as it describes for the 15 per cent reductions for Australia. In our view, our focus has been one which is effective in actually achieving a peaking of emissions before 2020 and heads us on track towards 450 ppm or lower. The chances of that are strengthening. It is still a very challenging prospect and that is why it needs great attention to detail. That is why we need to have Australia putting on the table targets like 25 per cent. That is why Australia also needs to be clearer about how we are going to assist with the financing. That is going to be the other side of the coin that is going to swing the agreement with developing countries, strong targets and financing to clean up their development pathways. Remember that is actually a good investment because that will be into our neighbouring economies enabling them to grow, which has been the basis of much of our prosperity of late.

Senator PRATT—What can Australia do to give us the best chance of securing that global deal? Clearly that is one of them. Another, as you have already said, might be passing our carbon pollution reduction scheme. What is it that Australia should be doing?

Mr Connor—I have a policy director heading over to Bonn right now. The next two weeks is a very important two weeks for the negotiations. They are negotiating for the first time on the actual text of an agreement. This is where it is down in black ink. The issues there will look at targets, both medium and long term, 2020 and 2050. They will need to look at the financing that I have mentioned. They will need to look at technology transfer. If we are investing in both a carbon capture and storage institute, if we are investing in the Solar Flagships, how are we going to link that into technology transfer and transfer of a number of other technologies into developing countries? They are things that are keenly focussed on, as is how we interact with forests. There is a range of key measures which, if the government is serious on going for that 450 ppm or lower, it will need to be putting in the hard yards, and we are going to be watching it very closely.

Senator PRATT—There is a lot of talk in Australia that we are acting alone and therefore we are going to have a disproportionate impact on our industry and jobs here. I would like your understanding of what action other countries, developed and developing, are taking?

Mr Connor—I am happy to provide an update of a document. We have just finalised a global climate action report. The point that we make here is that in many ways the low carbon economic train is globally leaving the station. We have China and South Korea already aggressively chasing technological and competitive edge in low carbon markets. China, for example, is emerging as one of the world's clean energy superpowers. It overtook Japan as a leading producer of solar PV cells and has attracted the third largest share of global annual renewable energy investment in 2008. That is over \$15 billion. In many ways, if Australia does not get on board this train soon, we will be left behind. Our tragic history is one of coming up with the good ideas, but allowing that to go overseas for jobs and profit. We have seen that in solar technology and other technologies.

CHAIR—Thank you for joining us this afternoon to discuss this issue and for your time.

Mr Connor—Thank you for allowing me to appear by telephone.

[3.42 pm]

TONI, Mr Paul, Program Leader, Sustainable Development, World Wildlife Fund Australia

CHAIR—Welcome. Do you have an opening statement that you would like to make?

Mr Toni—I have not prepared one.

CHAIR—We can go straight into questioning.

Mr Toni—I would just as soon go straight into questions.

CHAIR—You have stated that you are in support of the higher targets. Can you explain your position on the full range of changes that we are considering today?

Mr Toni—Certainly. We welcome the decision of the government and the opposition to support a much higher target. The main game in resolving this social and political problem is to get an international agreement. An international agreement that is effective will not emerge unless countries such as Australia offer to make very deep reductions indeed. Twenty-five per cent represents a good step on the road to those deep reductions. While wealthy countries, such as Australia, are not willing to commit to deep reductions in the medium and long term, an international agreement that is effective will not emerge.

CHAIR—What do you think of the reduction in implementation of the scheme until 2012?

Mr Toni—I could not say that the WWF considers that a good thing. Our view is very strongly that this scheme should be implemented as soon as possible. However, I think the main consequence of the fixed price, the postponement for a year, and indeed the global recession buffer and the additional money for energy efficiency is that it will quite significantly mute the near term signal to foster transformational low emissions technologies, not just garden variety low emissions technologies like wind but really significant low emission technologies like geothermal, marine or very large scale solar.

These are really the technologies that within the next 40 years Australia will probably have had to shift to. I say that even if the reduction target stays at the range of 60 per cent, though I suspect that is unlikely given the signals that are coming out of the US and the EU, the Australian energy sector will have to be pretty close to zero by 2050, and so we need some new technologies that really transform that sector. To do that we need to start today.

As Australia has in the past in terms of energy, we are amongst the most respected technologies in the world in marine. We are unquestionably the leaders in geothermal. We need to accelerate the demonstration and deployment of them quickly. This postponement will discourage investment, to some extent at least, in those at a time when we should be investing immediately.

CHAIR—The Australian Industry Group broadly supported the thrust of these amendments, but were unhappy that the renewable energy technology target was still in place. They were saying that it would be better to achieve what we wanted to do through one scheme rather than having a variety of other complementary measures alongside of it, because it creates a complexity and cost for business. You were just talking about the importance of renewable technologies. How do you see the renewable energy target sitting alongside CPRS?

Mr Toni—A renewable energy target is absolutely critical. It will not be addressed by CPRS in the near term, and I will explain why in a minute. Frankly, the easiest way to have a simple scheme is to remove all of the various elements of it that mute the price signal, most of which are for the benefit of existing business and all of which need to transform.

A renewable energy target is necessary for two reasons. One is that we are going through a colossal scale industrial restructuring if we are to remove greenhouse gasses from our waste streams. The world has gone through several already, of course. We went through one with the industrial revolution. We went through another one at the end of the nineteenth century and after World War II. It is not going to be the end of the world. In each case living standards improved despite the fact that costs went up in some areas and down in others. But the scale of the endeavour is so large that it needs management and it needs government to foster it actively. I will give you two examples of why this is so. There has been a worldwide shortage of both wind turbines and drill rigs. This has massively inflated the prices of wind turbines, such that the price is actually going up instead of falling, as it usually does with most technology. That is simply a supply issue. You cannot get them. Even if you want to pay an enormous amount of money for them you cannot get them.

It is the same with drill rigs. You cannot get drill rigs. This is starting to free up now, but in speaking to a big gas company the other day they were saying how difficult it has been to get a single rig recently. This is of great consequence to Australia because one of our most respected low emission technologies is geothermal, which requires a lot of drill rigs.

If you want to move in a smooth transition then you do need some clear government policies that show you will foster these industries. It is not enough to just leave it to the private sector and hope that a forward price does it. You need some management and a market quarantine for just those technologies, otherwise as the economy goes up and down other industries will cannibalise their skilled labour, their materials and the equipment they need for infrastructure.

The disadvantage of the RET is that it does not quarantine sections of the RET for transformative industries, so the majority of it will be wind. The advantage of the RET is that it allows a market dynamic to take place so that the more efficient producer of the different technologies will, with all things being equal, succeed.

CHAIR—Joe White Maltings has introduced a water recycling plant. They have said that is one of the things that is not taken into account in the CPRS because it uses power. Are you concerned that that may not be an isolated instance? Are there other issues like that within the CPRS that may need finetuning?

Mr Toni—It is very likely that there will be a number of things that need finetuning. That is the nature of imperfect human society. I must say that I am drawing partly upon the European

experience where there was a tremendous amount of debate about the introduction of the scheme on both sides of the equation, both amongst the environmental and civil society groups and amongst the industry. The scheme that was introduced has worked reasonably well as a second generation scheme. This is a third generation scheme, which will be better. Hopefully, in the fullness of time there will be a fourth generation scheme that is pretty close to very good indeed.

CHAIR—Senator Eggleston.

Senator EGGLESTON—I am interested in knowing when you were called to appear before this inquiry?

Mr Toni—I think it was about Wednesday last week, but I am not quite sure. I am pretty sure it was sometime last week.

Senator EGGLESTON—You obviously quite strongly support the CPRS model and its early introduction. What advantage do you see in the delay of a year of the introduction? If you support it strongly why not introduce it now?

Mr Toni—To be very frank, I cannot see much advantage in a delay of a year. We are reluctantly supporting it.

Senator EGGLESTON—Are there any other comments you would make about any of the other changes that have been made? For example, is the further EITE assistance meaningful?

Mr Toni—I think it is very meaningful. I think that the claims that are being made by industry are very exaggerated. I find it extraordinary that so many major corporations, who have been on notice for a very long time and have been preparing for this for a very long time, can claim that they will not be able to innovate to deal with this. That is a very surprising proposition.

Senator EGGLESTON—Is it mainly the fact that this has now become a real possibility instead of something in the far distant future that has led them to express concern about the cost economics of their industries?

Mr Toni—In 1994 Prime Minister Hawke proposed a \$5 or \$10 carbon tax. That was postponed to allow industry to adjust. All of the major companies have been represented at most of the UN discussions. Certainly by 1990 everybody was conscious of the problem.

Senator EGGLESTON—Some people were a bit critical of the fact that there will be an unlimited number of permits issued at a fixed price of \$10 per tonne for the first year and that auctions for permits will begin in 2012-13. What do you say about that? Would you rather see auctions instituted immediately?

Mr Toni—In an ideal world I would. As I said, the WWF is supportive generally of the proposals that the government has put, particularly in view of the target.

Senator EGGLESTON—Do you have a comment on the issues to do with the Timor Sea, the clarification on coverage of activities occurring in the Joint Petroleum Development Area and Greater Sunrise area?

Mr Toni—No, I do not have any comment on that.

Senator EGGLESTON—Thank you.

CHAIR—Senator Pratt.

Senator PRATT—I wanted to ask about the implications of not passing the scheme at this stage in terms of our global climate negotiations and our contribution to securing a global deal but also in terms of the economic implications of that decision if indeed the rest of the world is moving ahead.

Mr Toni—It is impossible to say what the Australian reputation is, but my impression from working inside, admittedly, an environmental organisation that operates on a global level is that Australia is a country that is viewed as getting a special deal at Kyoto and then squandered the opportunities that it got under that deal. WWF is an unusual beast in that it takes its culture from every country rather than having its own culture, and so I suspect it is very likely that those views represent the views of people in government and people in the wider society of other countries.

It is very important that Australia be seen as willing to address this problem in a very substantial way at the negotiations at the end of the year. I know there has been a bit of criticism about the target, but I think the target that has been adopted by both major parties is good and people will recognise that Australia is an energy intense country, but they will also recognise that it is a wealthy energy intense country that is highly efficient and will be able to meet the challenge. It is a long way of saying that I think it is very important that the legislation be in and that the target be recognised in that legislation.

Senator PRATT—We know that lots of other countries are, in fact, taking action, but there is a lot of complaining that we are ahead of the pack in what has been going on in Australia. You have indicated in your answer about the importance of our technology strengths and where we can be a global leader in a range of renewable energies. What happens if we do not have an appropriate policy architecture to drive that massive change that is required and other countries do? Are we going to get left behind and be stuck with old technology and higher emissions?

Mr Toni—Yes, that is a real likelihood. Countries such as America and Germany who have moved first to address pollution have always benefited, because addressing pollution often actually improves your production processes anyway and makes you more efficient. Secondly, you identify new economic opportunities.

Economic modelling is a very crude thing. It is a series of opinions about every major service and goods and how they are transacted in an economy are related to each other and what the impact is. It is not a very sophisticated thing. The modelling for this legislation was very good indeed, but it is good over a horizon of maybe five years, provided you do not have a global economic crisis. Over the long term it starts to not be meaningful, particularly as it does not take into account the process of renewal that occurs in every economy. It looks at the cost, but it does not look at the benefits.

In 1890 no doubt the Pony Express owners were complaining about the fact that cars were coming along, predicting that it would be the end of the world, that wages would go down, that there would be a lot of unemployed people. They did not foresee all of the economic opportunities that emerged from a new industry. I would be very surprised if we are not seeing exactly the same process now.

Senator PRATT—I think the creation of this problem that we have now started was the chopping down of all trees in the UK. They started using coal and, as a result, they had a great industrial revolution, for which we are now paying the consequences. You have talked about the prospect of an agreement solidifying. Can you talk to us about what you think the new US Administration's approach is to these issues and how its participation is improving the prospects of an agreement?

Mr Toni—It seems from where I have sat that the administration is showing extraordinary engagement and recognising that it is a tremendous economic opportunity as well as the need to address an environmental problem. I would be very surprised if there is not an agreement at Copenhagen. I would be amazed if there was not an agreement. The question will be how effective it is. From where we stand as a country the more effective it is the better off we will be. We have abundant energy of all sorts. We have industries that have grown up around abundant energy and they will remain extremely competitive in a world with an effective climate agreement.

Senator PRATT—I wanted to ask you about the dire predictions of many over the impact of the European emissions trading scheme and caps they had in place. They had a number of dire predictions. In your view, did the predications actually occur or were such claims overstated at the time?

Mr Toni—Some of the predictions were close to the end of the world, and it has not happened. I was in one of the stakeholder group meetings and I was told about a steel mill that had closed in Germany. I asked the name, because I said I would go out and check with WWF Germany whether that was the case. I was not provided with the name. I think a lot of it is simply exaggeration.

There is a better way of assessing this. I have a report by the Economic Policy Institute in Washington, which did an analysis of the before and after costs of pollution regulations in America, including some that are directly parallel in terms of capturing emissions from industrial plant. Without exception they found that the costs were exaggerated by a factor. I can only remember the maximum, which was 2,700 per cent. I cannot remember the minimum.

Senator PRATT—If businesses are exaggerating their costs, we listen to them and we continue to give them more and more concessions are we in danger of having them lock themselves into the old way of doing things and old technology rather than maintaining a transformative effect?

Mr Toni—Yes, definitely.

Senator PRATT—How would you characterise that risk in Australia?

Mr Toni—It is quite high. We already have a very large coal based electricity sector that needs to innovate very quickly. It needs investment now. Most of the power companies will not build another coal power station. They will build lower emission. But they need the investment certainty to do that. There is an example sitting right here in front of us of the need for this legislation so that innovation will take place.

Senator PRATT—Why do you think the coal industry is arguing these issues the way they are in terms of their approach being to simply ask for more compensation?

Mr Toni—That is a rational thing for a company to do. The obligation of the officers of the company is to make as much money as possible for the company shareholders.

Senator PRATT—It might not be in the company's long-term interests if it fails to be able to adapt and transform itself as the rest of the world changes, might it not?

Mr Toni—Unfortunately officers of companies rarely have the incentive to think about the long term. It is short-term return that is in their own interests, because they receive remuneration as a result, but also it is because that is what the markets generally want. They do not want long term. They want now.

Senator PRATT—Particularly in the current climate. Thank you.

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

[4.06 pm]

PASCOE, Mr Owen, Climate Change Campaigner, Australian Conservation Foundation

CHAIR—Welcome. Would you like to make an opening statement?

Mr Pascoe—I will go through a brief opening statement. Thank you very much for the opportunity. Being a Friday afternoon I will attempt to be brief, though of course this is a very serious and important issue that we are discussing today, and I imagine some of the senators will have distances to travel this afternoon as well.

ACF believes that the government's announcement on 4 May that Australia will reduce carbon emissions by 25 per cent by 2020 as part of a global agreement improves the chances of a good outcome at the critical UN climate negotiations later this year. A target of 25 per cent boosts Australia's credibility and ability to push for a strong international agreement. The stronger target moves Australia from being an international climate laggard into a position that could help negotiate a successful outcome. It should be noted that a 10 per cent increase in the target is a significant improvement and, if implemented, it would cut more than twice the greenhouse gas emissions than are predicted to be reduced by the 20 per cent renewable energy target.

We have also welcomed the coalition's support for the stronger 2020 target. However, we believe that the opposition should be backing improved climate legislation this year. The commitment to a 25 per cent target by the coalition in the context of an international agreement represents bipartisan support for the minimum credible Australian position this year. However, it is ACF's view that the proposal to delay the vote on the emissions trading scheme until next year would weaken Australia's negotiating impact at the crucial UN talks in Copenhagen in December. ACF's position is that the legislation should be improved and passed this year. Our support for the legislation is qualified and we reserve our right to make a final call as we continue to assess the legislation throughout its parliamentary passage towards a final vote.

We remain committed to having Australia's emissions cut by at least 40 per cent by 2020, in the context of a global agreement, or at minimum an unconditional national target of 30 per cent by 2020. ACF rejects the proposed unconditional five per cent domestic target and also the conditional 15 per cent target as totally inadequate. We oppose the proposed one-year delay to the start of the trading scheme, the large and proposed increased payment to big polluters, and a low fixed starting price of carbon at \$10 per tonne. ACF will oppose any attempts to further delay the start of the scheme or to increase compensation to the big polluters. To this end, senators may be aware of a report we commissioned from Risk Metrics recently that showed that, following the changes as of 4 May, free permits worth \$16.4 billion would be handed out to our most polluting industries and coal power generators over the first five years of the scheme. That would include \$565 million worth of free permits for Rio Tinto in just the first full year of the scheme.

That is a very large figure. If the \$16.4 billion permits were actually auctioned rather than given away that would be enough to fund at least 30 large scale solar plants, based on the government's budget announcement. That is enough to put a solar plant next to every coal-fired

power station in Australia. To this end, we have been calling for the assistance to the big polluters to be limited and for 20 per cent of the CPRS revenue to be put into renewable energy and low emissions technologies to help boost our moves towards a low carbon economy.

ACF has made several proposals to improve the environmental effectiveness of the emissions trading scheme, including a submission to this committee and a submission to the draft legislation. They include increasing the targets; making the assistance to emissions-intensive, trade-exposed industries conditional; and providing at least \$1 billion per year for international financing, and that is to help developing countries cut emissions and prepare for the impacts of climate change. As I have just stated, 20 per cent of the revenue is to go to renewable energy technologies, and at least \$1 billion per year to build resilience to climate change, to provide stewardship payments for example to land managers in rural Australia. Another important issue of course is the flexibility in the scheme, particularly moving forward over the next few years; we must have a system that does not set a limit on the most action that Australia would be willing to take by 2020.

We also propose that quantitative limits be reinstated for international permits so that there is not an unlimited inflow of international permits. We propose that we do remove the assistance for coal-fired generators. We support Professor Garnaut's views in that area, that there is no public policy benefit to delivering that \$3.9 billion in assistance. More specifically we have made a number of suggestions for amendments to the exposure draft legislation on which we have put in a submission to the department on the exposure draft and we are happy to make that available as well.

We have also been highlighting the issues with the proposed fuel tax rebates through the CPRS system which is totalling around \$2.7 billion per year, which is of significant concern. One point in there is that the proposal is to actually use diesel rather than petrol as the benchmark there, which actually implies an implicit subsidy to petrol users of about 0.8c per litre which would result in a subsidy of about \$150 million per year to petrol users. That bill to provide those fuel tax offsets will actually provide a financial incentive to encourage more driving rather than reduce carbon pollution from transport. That is all for my opening statement today. I am happy to answer any questions.

CHAIR—You have suggested a number of amendments and adjustments that could be made to the proposed CPRS, but I take it, given your support for something that happens this year, you are in favour of the existing system going through and adjustments if they need to be made can be made at a later date; is that right?

Mr Pascoe—We think there are several opportunities to improve the bill. As at the 4 May announcement we have said on balance that we would offer our qualified support for the legislation. However, we will be using every opportunity we can to push for further improvements. There are certainly a number of areas where improvements could be made.

CHAIR—Although you said there is bipartisan support for the 25 per cent target, the indications are that instead the legislation will be deferred and we will not get any target. What is your view of that?

Mr Pascoe—We are not in favour of delaying the vote on the CPRS. We think it should be improved and passed this year. That would be the strongest way to send a good signal to the international negotiations that Australia is committed to making a significant effort in climate change to limit greenhouse gas emissions. It is one thing to commit to targets but we certainly need policy mechanisms to deliver those targets for that to be a really strong signal internationally.

CHAIR—You were running through some of the changes that you might like to see. What about in terms of voluntary emissions. Do you now think the government's measures will start to cover that aspect?

Mr Pascoe—Yes, there is that one area in which there could be some significant improvements. We certainly welcome the investigation and recommendations of this committee in that area. I believe the recommendation is that the minister must consider voluntary action under the legislation. We have called for all voluntary additional actions by households, businesses and governments to be able to reduce emissions above and beyond Australia's national targets. That includes commitments for example by companies to go carbon neutral and actions by state and local governments. There must be the opportunity and the requirement for those actions to be considered, additional to the target. We certainly welcome the 25 per cent target as a significant step forward. However, if we are going to get into that international leadership position we need to create a system that is able to reduce emissions by at least 40 per cent by 2020.

Senator PRATT—What is your view with respect to what sectors will do best out of our transition to a low carbon economy? I know the ACF has done some work in this area. Where will the green jobs be?

Mr Pascoe—We released a report last year with the ACTU looking into the opportunities to create green-collar jobs in Australia. We looked at six industries in particular: renewable energy, energy efficiency, sustainable water systems, bio-materials, green buildings, and waste and recycling. Looking not only in the areas of climate change but also in the broader areas of sustainability we found that with the right policy settings those six industries could be generating \$243 billion in investment in Australia by 2030 and employing 847,000 workers, so there are significant opportunities there. These industries are already employing around 112,000 people right now in Australia and they are predicted to grow. By getting the policy settings right through a strong emissions trading scheme, through industry policy and other mechanisms we can really see these areas grow and start putting us on the path to a low-carbon future.

Senator PRATT—Do we place that at risk if we do not take action, if we are locked into a carbon-constrained future because we have to meet an international obligation but we do not have a framework that helps us meet that?

Mr Pascoe—That is right. We found that 500,000 additional jobs would be created by the right policy settings. You could certainly argue that those 500,000 potential jobs will not be created unless we get this right. We need to absolutely move forward and bring these policies that we need forward as quickly as possible.

Senator PRATT—I wanted to ask about the ACF's position on developed countries demonstrating that they have a mechanism to deliver on their target commitments and that relationship between developed and developing countries and targets.

Mr Pascoe—Just in general?

Senator PRATT—Yes.

Mr Pascoe—We hear that the benchmark we often look to is the IPCC range, which was also agreed through the Bali roadmap process. To achieve emission stabilisation at around the 450 ppm level we need to see the developed countries cut emissions by between 25 per cent and 40 per cent by 2020 off 1990 levels. That is certainly a benchmark that we have continued to hold to throughout this debate. We do see that developing countries do need to take actions which should be supported and financed by developed countries, but we do need to see a deviation from business as usual in developing countries if we are going to get to the stabilisation scenarios that we need to see to protect the planet and Australian icons like the Great Barrier Reef and the Murray-Darling Basin.

Senator PRATT—What are the implications of the world failing to secure a global agreement to reduce and stabilise its emissions?

Mr Pascoe—Certainly the stakes are very high this year and going forward if we fail to reduce emissions. If we continue on the pathway that we are currently on for emissions projected forward, we will see the loss of the Great Barrier Reef. The Great Barrier Reef really is already at a tipping point and we really need to act urgently if we are going to protect it. We will also see significant reductions in the agricultural output of the Murray-Darling Basin. It is putting at risk I believe about 90,000 jobs in agriculture in Australia and about 60,000 jobs directly linked to the Great Barrier Reef. Not only those jobs but those Australian icons, our way of life, the things we would like to pass on to our children and grandchildren, are all at risk if we do not get a good international agreement on climate change.

Senator PRATT—If we do not reach a strong global agreement now and climate change keeps happening we are going to have to do something more drastic clearly in the future, are we not, unless of course the climate change sceptics are right? What does that do to the costs that we confront at the same time as we manage, I suppose, those impacts of climate change?

Mr Pascoe—Sure. Reports such as the Stern review and the Garnaut review all found that it is better to act now than act later, that we would be reducing the cost of action if we act now rather than delay on a macro sense. Certainly leading into the international negotiations this year the targets that we are talking about are very important. There has been some significant work done in the US in regard to whether we achieve strong 2020 targets versus targets slightly after that, 2025, 2030. They have really found that our chances of actually stabilising emissions at 450 parts per million or below significantly decrease if we do not get those strong 2020 targets in. That again is referring to that 25 per cent to 40 per cent range that was discussed in Bali and elsewhere.

Senator EGGLESTON—When were you called to this inquiry, can you recall?

Mr Pascoe—I beg your pardon?

Senator EGGLESTON—When were you invited to appear before this inquiry today for this hearing?

Mr Pascoe—I believe it was late last week.

Senator EGGLESTON—Do you see any benefit at all in the deferral of this legislation, the implementation date, first of all?

Mr Pascoe—We do believe that the best outcome for the climate would be to improve and pass this legislation this year.

Senator EGGLESTON—How would you improve it?

Mr Pascoe—There would certainly be several areas where we are seeking improvements in the legislation. A key one there is of course the targets. We remain committed to achieving a cut in Australia's emissions of at least 40 per cent by 2020. We would certainly reduce the significant and increasing handouts to the large polluting industries, the emission-intensive, trade-exposed industries, and divert more of that resource into the technologies of the future such as renewable energy and energy efficiency and other industries which help us get to the targets that we need.

Senator EGGLESTON—Don't you feel that if those emission-intensive, trade-exposed industries are protected there might be loss of jobs and an adverse impact on the economy, or do you not feel that?

Mr Pascoe—We have certainly acknowledged that there is a need for some transitional assistance to particular industries. However, we do believe the claims made are over-exaggerated, that the risk of so-called carbon leakage is overstated and that there can really be strong jobs growth if we get on a pathway to a low-carbon future. Research from the CSIRO last year found that we could be creating nearly three million jobs over the next two decades on a pathway to being carbon neutral by 2050.

Senator EGGLESTON—Do you think those three million jobs would have the same economic benefit if you are losing jobs in industries like mining, refining, cement production and so on?

Mr Pascoe—I believe we can certainly get a very strong economic benefit out of the green-collar jobs and jobs in clean energy. We can create the export industries of the future. Not only is that important for Australia's economy on a GDP basis, but it is also important for our economy as well in terms of cleaning up pollution and creating sustainable livelihoods, good liveable cities and the sort of quality life that people are looking for.

Senator EGGLESTON—You would not support the five-yearly reviews, or do you, of the EITE assistance?

Mr Pascoe—We certainly do not support the five-year notice period provided to EITEs. We believe that is certainly way too long. A five-year notice period really does make it difficult for us to move with new developments in climate change science, in international developments and in new technologies that are coming forward. As I believe the previous speaker was outlining, we have seen in other pieces of environmental legislation that the costs after the fact are actually found to be a lot less than predicted. We certainly would not want to lock in assistance which turned out to be overgenerous, more than was necessary to compensate these industries.

Senator EGGLESTON—What about protection for low-income earners from the impact of higher fuel prices, consumer goods, transport costs and so on?

Mr Pascoe—Certainly. We do believe that there should be assistance to households. However, we think that should be aimed at helping them transition to a world where carbon is priced, so that can be in the form of work that has been put forward I believe this morning by the Brotherhood of St Laurence and others of a nationwide rollout to help low-income households improve their energy efficiency. That would create that long-term benefit that households would need to respond to the carbon price. Merely providing cash handouts does not necessarily move us in the direction that we need to go in.

Senator EGGLESTON—Do you think having fixed-price permits for the first year is a reasonable step to take?

Mr Pascoe—No, we do not. We think the market should be operating fully and we support a market operating from 2010. So, no, we do not think a fixed price for permits is the way to go. Certainly we should allow the strengthening mechanism to operate and to provide that carbon pricing. We need to encourage investment in clean energy and energy efficiency. A \$10 carbon price really does not provide the incentive that you need to see off the mark.

Senator EGGLESTON—You talked about green exporting industries. What examples can you give of that?

Mr Pascoe—There are opportunities in terms of clean energy and in terms of biomaterials, those sorts of industries that we have talked about in the green-collar economy and in the *Green Gold Rush* report. There is certainly Australian expertise in renewable energy which we have already seen exported overseas. A lot of the leaders in the solar energy at the moment were trained and operated in Australia before moving their companies overseas due to lack of investment in Australia. We do believe solar thermal technology, for example, could be an export industry. There are more opportunities but I do not have all those facts in front of me, unfortunately, today.

Senator EGGLESTON—You would see that compensating for industries that might move offshore?

Mr Pascoe—We have certainly seen from Treasury modelling and other things that the aggregate impact on the Australian economy of cutting emissions by 25 per cent is really quite small. It is 0.1 per cent of GNP. It is barely measurable really in terms of the overall scope of economic modelling. On that basis we do not see there being significant costs to the Australian economy of moving in this direction towards a low-carbon future.

Senator EGGLESTON—We were told earlier today that that modelling was predicated on wages dropping, that the same number of people might be employed but at much lower wages. Were you aware of that?

Mr Pascoe—I have not seen the scale of the wages drops that were predicted. I do believe there were facts in there about the overall level of household income increasing over that time, continuing to grow as we move forward.

Senator CAMERON—On that point, the Treasury modelling does show continued wages growth and the adjectives that were used by the previous senator just do not reflect the modelling. This fear factor that wages will collapse, your jobs will disappear, everything is going overseas; that is just not the reality, is it?

Mr Pascoe—That is not the sense I have got from my reading of the Treasury modelling. I do not have those figures in front of me, so I cannot comment on the exact nature of those figures, but I do understand that they did show continuing growth in household income.

Senator PRATT—What do you think might be the implications for employment and wages in companies that have a looming carbon liability that they fail to address?

Mr Pascoe—There are major changes afoot and this is absolutely a huge opportunity for us to really imagine a new future for Australia where we are protecting our environment, where we are protecting the industries of the future and we are creating a society that is strong, has good, well-paying jobs, has a healthy environment in which to function and has good, clean, liveable cities. We absolutely need to go out and grasp those opportunities. Industries that fail to acknowledge their carbon liability and find cleaner ways of operating will be left behind.

CHAIR—You can understand that many companies will be fearful, particularly in the current global environment, that if they get a system imposed on them that requires heavy penalties for carbon emissions they might not survive and there may be people that are not confident that we will be able to develop those renewable technologies fast enough in the next 10 years to compensate for that.

Mr Pascoe—I can certainly see why industries whose operations are based on the status quo modelling of operating where they do not continuously improve their energy efficiency and do not move into the new fields of clean energy would certainly be worried about their existing business. You would certainly be worried if you were a coal-fired power station owner. The way the trends are happening both in Australia and internationally is that we are moving away from coal-fired power stations towards cleaner sources of energy, so that certainly would be a concern. In terms of employment growth in those industries, there are a lot of numbers being thrown around on jobs and industry impacts. But my understanding is that the global financial crisis is leading to some significant impacts for those companies and that outweighs the effect of the carbon price at this stage.

CHAIR—Which renewable energy source would you see as the most prospective if we were to reduce even by 25 per cent but certainly 40 per cent within the next 10 years? Where would we go? Which renewable energy source would be the one that could replace our coal-fired generators?

Mr Pascoe—I think you are going to need a mix of renewable energy technologies. I think solar thermal and geothermal are the ones that really have a massive potential to provide—

CHAIR—Do you see geothermal as being developed in the next four or five years?

Mr Pascoe—Yes, definitely. We have drilling going on already in South Australia and other places—

CHAIR—Drilling is a long way from operating, though.

Mr Pascoe—That is true. There are some small operations that are just beginning to kick off, but there needs to be more work and more development put into those areas, but they have massive potential. Geothermal is not an ancient technology but it is certainly not a new one, either. Iceland uses geothermal power for a large percentage of its energy. That is more based on its volcanic resources there. But I think we could have several geothermal plants up and operating by the middle of this decade in Australia. Industries we have talked to are very confident that before 2020 they would have significant plants operating. I think the learning curves of these industries are showing that as we put more investment into them the amount of learning that happens and the reduction in costs happens quite quickly. We can certainly do a lot more to help develop these industries.

Senator PRATT—We have talked about your views about needing to pass this legislation and make a contribution to the global agreement and get on with the transformation. What can you tell us in terms of your membership and your communication across the community about a mandate, if you like, to the parliament to get on with this?

Mr Pascoe—The views amongst the environment movement on this legislation are mixed, as you may have heard from some of our colleagues at the Senate Select Committee on Climate Policy. ACF has formed the view that on balance this legislation should go ahead as of 4 May, although we reserve our right to make a final call as the legislation progresses through the parliament. There are those out there that hold the view that it is better to wait in the prospect of getting a better system in place, though the views of the ACF and a significant portion of our membership and a significant portion of Australians are showing that they want action to get moving. They want to see this legislation improved and passed this year. They believe that the time for action is now and delaying by another six months is not guaranteeing a better outcome.

CHAIR—Thank you for giving evidence again on this subject and for coming in late on a Friday afternoon.

Committee adjourned at 4.36 pm