



COMMONWEALTH OF AUSTRALIA

# Official Committee Hansard

JOINT STANDING COMMITTEE ON TREATIES

**Reference: Treaties tabled on 25 June and 16 September 2008**

MONDAY, 10 NOVEMBER 2008

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**JOINT STANDING  
COMMITTEE ON TREATIES**

**Monday, 10 November 2008**

**Members:** Mr Kelvin Thomson (*Chair*), Senators Birmingham, Cash, Farrell, Ludlam, McGauran, Pratt and Wortley and Mr Andrews, Mr Forrest, Ms Hall, Ms Neal, Ms Parke, Mr Simpkins, Mr Trevor and Ms Vamvakinou

**Members in attendance:** Senators Birmingham, Cash, Farrell, McGauran, Pratt, Mr Forrest, Ms Hall, Ms Neal, Ms Parkes, Mr Simpkin, Mr Thomson

**Terms of reference for the inquiry:**

To inquire into and report on:

Treaties tabled on 25 June and 16 September 2008

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**Committee met at 10.03 am**

**CHAIR (Mr Kelvin Thomson)**—I now declare open this meeting of the Joint Standing Committee on Treaties. As part of the committee's ongoing review of Australia's international treaty obligations, the committee will hear evidence on two treaty actions—one tabled in parliament on 16 September 2008 and one tabled in parliament on 25 June 2008. We will be hearing from witnesses representing various government departments, the National Association of Forest Industries and also Dr Andrew Macintosh from the Australian National University. I thank witnesses for being available for this hearing.

I should remind witnesses that these proceedings are being televised and broadcast by the Department of Parliamentary Services. Should this present any problems for witnesses, it would be helpful if any issues could be raised at this time. We will now take evidence on the agreement between Australia and the Republic of Finland on social security. I call representatives from the Department of Families, Housing, Community Services and Indigenous Affairs; the Department of Foreign Affairs and Trade; and the Department of the Treasury.

[10.04 am]

**HUTCHINSON, Mr Peter Anthony, Manager, Agreements Section, International Branch, Department of Families, Housing, Community Services and Indigenous Affairs**

**STAWYSKYJ, Ms Michalina, Manager, International Branch, Department of Families, Housing, Community Services and Indigenous Affairs**

**MASON, Mr David, Executive Director, Treaties Secretariat, International Legal Branch, Department of Foreign Affairs and Trade**

**MILTON, Mr Ben, Executive Director, International Law Section, International Legal Branch, Department of Foreign Affairs and Trade**

**MURRAY, Mr Nigel, Manager, Contributions Unit, Personal and Retirement Income Division, Department of the Treasury**

#### **Agreement between Australia and the Republic of Finland on Social Security**

**CHAIR**—Although the committee does not require you to give evidence under oath, I should advise you that this hearing is a legal proceeding of the parliament and warrants the same respect as proceedings of the House and the Senate. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. If you nominate to take any questions on notice, could you please ensure that your written response to questions reaches the committee secretariat within seven working days of your receipt of the transcript of today's proceedings. Thank you again for coming along, and I invite you to make an opening statement.

**Ms Stawyskyj**—The treaty action proposed is that Australia enters into a new social security agreement with Finland. As you will note from the national interest analysis, this proposed agreement was signed on 10 September 2008. This new agreement is an important addition to Australia's expanding network of social security agreements, which stands at 21 currently. As with Australia's other social security agreements, this proposed agreement is a shared responsibility agreement that will address gaps in social security coverage for people who have moved between Australia and Finland, help people to maximise their income and allow greater choice in where they live in their retirement years and strengthen Australia's bilateral relationship with Finland.

More specifically, the proposed agreement will allow people living in one country to lodge a claim for a pension from the other country, will help people get pensions from both countries by totalising to meet minimum qualifying periods, overcome restrictions on portability of payments for people residing in either country and provide avenues for mutual assistance to ensure people are paid their correct entitlements. The agreement covers age pension, and Finland will reciprocate through their national pensions act and earnings related pension scheme. The agreement also includes provisions to avoid double coverage for seconded workers, avoiding paying into both countries' pension or insurance schemes. These provisions are similar to those in some of our other agreements.

In August 2008 FaHCSIA sent a letter and information to 19 Finnish community groups, 20 key welfare organisations and all state and territory governments advising them of the new agreement. Treasury consulted eight employer groups separately. Comments on the new agreement were invited. No concerns were raised.

In conclusion, this agreement will bring benefits to individuals and to Australia. It is consistent with the principles underlying Australia's existing agreements and will further strengthen the network of agreements that Australia has established. Subject to the views of the committee and the timely completion of necessary treaty and legislative processes in each country, we expect to implement the agreement with Finland on 1 July 2009.

**CHAIR**—Thank you.

**Senator McGAURAN**—I know we have these agreements in place in many other countries but, just to clarify it for me—I will read from the notes—there are 2,395 Finnish born pensioners living in Australia that we are paying the pension to and there are 78 over in Finland that we are paying the pension to. What is the new arrangement on top of that?

**Mr Hutchinson**—Under the current arrangements, once you are granted an Australian age pension the social security law generally provides that it is payable indefinitely overseas—anywhere, in any country. But, if you leave Australia before you reach pension age and you are no longer residing in Australia, you cannot claim an Australian pension from abroad in the absence of a social security agreement. So Centrelink is paying, as you said, approximately 2,400 Finnish born people an age pension. A small number of those are actually in Finland, so those people would have been granted their age pensions in Australia and subsequently decided to retire back in Finland.

The agreement will cover people who perhaps came out to Australia in the fifties and sixties from Finland, as a lot of migrants did, and may have stayed for 10 years and worked on the Snowy River scheme, and decided to go back to Finland well before they reached retirement age. It will enable those people who have worked here for various periods during their working lives to claim an Australian pension without having to return to Australia to reside. On the other side, it will allow all those Finnish born residents of Australia to claim a part-Finnish pension in respect of their periods of work and residence in Finland.

**Senator McGAURAN**—Sorry—the 2,395 are residing in Australia not in Finland?

**Mr Hutchinson**—I think, off the top of my head, that figure is the total number of Centrelink age pensioners who were born in Finland and 78 would be the number who are being paid in Finland. The 78 who are being paid in Finland are not necessarily Finnish born. It likely that most are, but that is just the number of pensions that Centrelink pays to people in Finland.

**Ms Stawyskyj**—It expected that something like 400 Australian pensions will be paid into Finland as a result of the agreement, but that some 1,800 people will receive a pension from Finland. These are additional pensions that would not have been paid without the agreement.

**Senator McGAURAN**—So a Finnish born now Australian citizen can obtain a full Australian pension plus claim part of a Finnish pension—is that right?

**Ms Stawyskyj**—If they are entitled to one, yes.

**Senator McGAURAN**—And vice versa? If you are living in Finland and you are claiming a full Finnish pension, is Australia generous enough to top it up?

**Mr Hutchinson**—The situation is that the person receiving the Australian pension can claim the Finnish pension. If they are an Australian National or a Finnish national, they will be able to claim a Finnish national pension under the agreement. As Ms Stawyskyj said, there is estimated to be quite a number of people who will be entitled to a small Finnish pension. Those Finnish pensions will be taken into account in Australia under the income test. Whether it affects their Australian pension will depend on the amount of the Finnish pension and the amount of the person's other income.

**Senator McGAURAN**—So we still have the tapering effects.

**Ms Stawyskyj**—All of those are included in our assets and income test.

**Ms PARKE**—I came in a little late, so I am not sure if you already answered this in the beginning part of your statement, but I am just wondering: how many of these agreements does Australia have with other countries?

**Ms Stawyskyj**—We currently have 21 agreements and another is to be implemented on 1 January, so that we will bring us to 22. That is with Japan.

**Ms PARKE**—Are we negotiating with any other countries?

**Ms Stawyskyj**—We currently have agreements under negotiation with a number of countries and we have also been approached by a range of countries to commence agreements.

**Mr FORREST**—Can you provide us with a list of those?

**Ms Stawyskyj**—Yes.

**Mr FORREST**—Not now, but—

**Ms Stawyskyj**—Yes, we can provide the list. I can give you the list of the ones we have commenced negotiations with. We are negotiating with Poland, the Czech Republic, the Slovak Republic, Latvia and we have commenced some discussions with the former Yugoslav Republic of Macedonia and we have had a preliminary exchange of information, which is not a formal negotiation, with India.

**Mr FORREST**—What about the 21? You do not have to read them out, but can you supply them later?

**Ms Stawyskyj**—Yes, we can give you a copy of the 21.

**Mr SIMPKINS**—So if we concluded negotiations with the Czech Republic then the cheque will be in the mail!

**Mr FORREST**—I am still not quite sure about the duplication and how Australia has less of an administrative load with all this. Can you just explain that again. What do we get out of this in terms of reduced administration? I cannot see that there would be any.

**Ms Stawyskyj**—It is not reduced administration; there is some administration, obviously, in pension payments and claims and that is paid through the Centrelink system. A social security agreement provides access to pensions in reciprocal way between countries. For example, as I mentioned, when the agreement comes into effect some 1,800 people who were born in Finland and moved to Australia and still have an entitlement to claim some pension in Finland will be able to claim a Finnish pension, and that will assist their income and their standard of living.

**Mr FORREST**—It will reduce the Australian contribution.

**Ms Stawyskyj**—It may reduce the Australian contribution because our age pension system is related to an income and assets test. If the pension amount is significant, it can affect the amount of pension Australia pays but overall, generally, our social security agreement exchange is very favourable in terms of money coming into Australia in pensions that are paid to foreign nationals who have moved to Australia.

**Mr FORREST**—Do these 21 agreements include Italy?

**Ms Stawyskyj**—Yes.

**Senator BIRMINGHAM**—Very briefly and quite unrelated to Finland, has the agreement with Greece just come into effect?

**Ms Stawyskyj**—On 1 October this year.

**Senator McGAURAN**—A long awaited agreement.

**Senator BIRMINGHAM**—Indeed, what is the take-up to date?

**Ms Stawyskyj**—We did ask Centrelink for some of the figures before we came.

**Mr Hutchinson**—The most recent figures, and it has only been in force for just over a month, are that Centrelink have got almost 5,000 claims for Greek pensions that they have received and forwarded to Greece for processing. At this stage, only about 60 claims for Australian pensions have been received. That is not particularly surprising given people in Greece are lodging claims and the Greek funds are collecting them. I think Centrelink are expecting a large batch in the very near future.

**Senator BIRMINGHAM**—How quick do you expect the turnaround with the government in Greece to be in the processing of those applications?

**Mr Hutchinson**—It is very hard to say. I must admit I know the Greek social security system has been under reform. They have been rationalising their funds from something like 70 to a much smaller number, so they have been undergoing major reforms already in their system. This

does not come at the best time for them. We have been urging people in Australia to be patient in terms of not expecting a very rapid turnaround on their claims.

**Ms Stawyskyj**—Some of the people who arrived in Australia some time ago may have partial records or records that need to be verified, so the process of verification in Greece may take a much longer period of time than perhaps in Australia because of the nature of the records and the way in which payments were made.

**CHAIR**—Thank you very much for coming today.

[10.19 am]

**GILBERT, Mr Shane, Strategic Adviser, National Association of Forest Industries**

**HANSARD, Mr Allan, Chief Executive Officer, National Association of Forest Industries**

### **Kyoto Protocol**

**CHAIR**—Although the committee does not require you to give evidence under oath I should advise you that this hearing is a legal proceeding of the parliament and warrants the same respect as proceedings of the House and the Senate. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. At the conclusion of your evidence would you please ensure that Hansard has had the opportunity to clarify any matters with you. If you nominate to take any questions on notice, could you please ensure that your written response to questions reaches the committee secretariat within seven working days of your receipt of the transcript of today's proceedings. I invite you to make some introductory remarks before we proceed to questions.

**Mr Hansard**—The National Association of Forest Industries welcomes the invitation to assist the Joint Standing Committee on Treaties with its inquiry into the Kyoto Protocol, its implementation and matters relating to its successor agreements. I would like to say upfront it is my intention to table this statement and the associated documents.

NAFI accepts that human induced climate change is a threat to the world's economy, society and the environment. NAFI equally accepts that there are significant opportunities to reduce and abate Australia's greenhouse gas emissions at least cost to all Australian people. It is clear to NAFI that the longer the world delays united and coherent action to reduce and abate greenhouse emissions, the greater will be the burden we all will have to share. NAFI has positioned itself to actively participate in the current Kyoto Protocol through the article 3.3 and 3.4 review process.

NAFI has advocated its policy position to Australian governments and has released the strategy entitled 'Playing a greater role in Australia's future'. This strategy is attachment A of the package of documents I leave with the committee today. I draw the committee's attention to pages 12 to 15 of the strategy dealing with the opportunities for Australia's forest industries to absorb greenhouse gas from the atmosphere.

It will be of no surprise to this committee that Australia's forest industries can deliver at least 20 to 25 per cent of Australia's greenhouse gas emissions reduction target of 20 per cent by 2020. Members can see how this figure is derived at table 1, page 13 of the NAFI strategy and NAFI welcomes the fact that the recent Treasury modelling and the current forestry rule set in the Carbon Pollution Reduction Scheme support what NAFI has been saying to the Australian government, and publicly.

I now turn to the successor legal instrument to the Kyoto Protocol. It has to be said that the Kyoto Protocol was a point in time legal instrument to begin to address the systemic issue of climate change. The world economic order is changing. The current order of the United States,

Japan, the European Union and China is likely to change in the next 15 years or so to be the United States, China, the European Union and Japan. I hasten to add these changes are predicated on there not being further external shocks to the world financial system.

The inherent flaws in the implementation of the Kyoto Protocol are the facts that the world's largest emitters and the world's largest populated nations are effectively standing outside the Protocol's legal obligations. That said, the successor agreement to the Kyoto Protocol must correct this and the United States, China and India must be full partners in the world's efforts to control climate change.

NAFI strongly advocates to the Joint Standing Committee on Treaties that the Australian government take a strong position to Poznan next month and to Copenhagen the year after. The Australian government position must argue for the full inclusion in the successor agreement of the United States, China and India and as importantly, the inclusion of an expanded rule set for forests and forest products in the eventual international emission trading scheme.

In relation to the forest and forest products rule set for the successor agreement NAFI recommends the committee make recommendations urging the Australian government to adopt a rule set for the purposes of the negotiations within the UNFCCC framework. We are asking for a number of key issues to be addressed. They are outlined in the statement that I will be providing to the committee and include importantly the recognition of carbon from harvested wood products and the continuation of the harvest sub rule for all forests.

NAFI is preparing a submission to government on this rule set in preparation for the UNFCCC COP 14 meeting in December and will provide a copy to the committee once it is finalised. With this rule set in place Australia's and the world's forests will achieve their true potential in the effort to control climate change. This rule set will also act as a strong incentive to achieve sustainable forest management and conservation of the world's tropical forests.

Simply put, with the NAFI advocated forest rule set included in the successor to the Kyoto Protocol that also includes an international emission trading scheme, the parties to the agreement will have the opportunity to use that market to achieve sustainable management of the world's tropical forests and increase the world's forest estate. This will be a major achievement and has the potential to compensate the failed efforts in ratifying a forests convention that would regulate the outcomes achievable via the market based international emission trading scheme in the successor agreement. I am sure members can see the opportunity for Australia to take a leadership role in the forthcoming Poznan and Copenhagen negotiations.

Finally, it is important to point out to the committee that the successor agreement to the Kyoto Protocol must be based on the best available science. NAFI is concerned about recent reports published by the Australian National University including the report entitled *Green carbon: the role of natural forests in carbon storage*. NAFI is aware that this committee may receive this report in evidence during the committee's deliberations. NAFI and the broader scientific community are deeply concerned about a number of aspects of this report including its scientific basis. NAFI has raised these issues in writing with the Australian National University. For the sake of completeness, NAFI tables its concerns including its critique contesting the adequacy of the science underpinning the ANU report in attachment B. This concludes NAFI's evidence.

**CHAIR**—Thank you very much. I have three things I would like to ask you. The first is what you want the Australian government to be arguing for at the forthcoming negotiations. What are you saying about forests in a carbon trading scheme? Do you want forests in?

**Mr Hansard**—Yes, we are asking for full inclusion of forests, particularly our production forests. That is our production native forests and our production plantation forests. We have made that clear in representations to the Australian government for the Carbon Pollution Reduction Scheme.

**CHAIR**—The second thing is in the past, the argument against the inclusion of forest industries has partly been based on the question of measurement of carbon storage in forests, soils and so on. Do you think that it is now sufficiently advanced that we can satisfactorily measure what carbon is being stored in various forests? How do you think that issue of the science of the measurement has been progressing?

**Mr Hansard**—The development of the accounting for carbon, as I said, has been developing and still will develop into the future. I think the government should be commended in relation to the development of the national carbon accounting system. It is a very comprehensive accounting framework that the government intends to use to underpin our emissions trading scheme and underpins our national accounts at the moment. The national carbon accounting system is internationally recognised. We understand that there are endeavours to take that framework overseas to other countries that may wish to use it to underpin their schemes. We think therefore the rigor that has been put into the national carbon accounting system provides a sufficient framework for forestry to be included in an emissions trading scheme and we have made that statement to the government also in relation to the CPRS.

**CHAIR**—You mentioned there is concern about the ANU report and there has been this issue around about green carbon and the role of natural forests in carbon storage. You have provided a copy of the critique and we appreciate you doing that. Do you want to say what your objection or disagreement with that report is?

**Mr Gilbert**—We have distributed the critique in the folder. If you go to the bottom of page 1, quite clearly, our concerns are that there is no outline of the methodology used for the data collection. The research appears to have been conducted with an objective in mind and that has been publicly stated in this parliament by representatives of the Australian Greens and outside of this parliament in recent speeches, even in the last two weeks, the effect of which would see a cessation of all native forest logging. The consequences, for the benefit of the committee, are that demand for 12½ million cubic metres of roundwood currently sustainably sourced from native forests in Australia would be shifted to the international market. The equivalent or the conversion factor for that will end up being about 100,000 additional hectares of tropical forest being logged which do not have the sustainable standards of forest management that we do in Australia. We have the world's best.

People have to understand this connection. If there is a cessation of logging in native forests, as has been purported, then that would simply exacerbate the deforestation of tropical forests in the Congo, Indonesia and Brazil. From a triple bottom line perspective there would be 30,000 families in this country without a breadwinner spread across New South Wales, Victoria, Tasmania and, to a lesser extent, Western Australia. It is a major issue for this nation and that is

why we brought it to this committee today so that a committee such as this can start to understand what is involved here. There is a much better way of dealing with this issue and that is through the market based approach of the Kyoto Protocol and its successor in relation to tropical deforestation. It is important to apply what has to be in the public interest and that is the test of the scientific basis underpinning such statements that are made in the parliament and publicly. There are other issues of concern, which we have detailed in that paper. If you wish, I could go through them in some detail, but they have been provided to the committee. The essential message is, as I have put to you, we do have to have a proper scrutiny. This is a major national public policy issue.

**CHAIR**—I am happy with the response you have provided.

**Mr FORREST**—I want to follow up on your question, Chair. Professor Garnaut recommends an opt-in process. I gathered from your response to the chair, you want compulsory participation. Did I hear that right?

**Mr Hansard**—We agree with Professor Garnaut in relation to opt-in basically because forests, whether here or internationally, whether they are plantations or native forests, have an inherent profile and structure. They are also subject to natural disturbance. That is outside our control. Unless we can have an approach to the Kyoto Protocol that recognises these inherent characteristics of forestry, we will not be able to get the full value out of our forest and forest products industry in relation to the carbon benefits they can provide. So in providing an opt-in what that actually does is to recognise that all forests are different. They do sequester carbon. Forest products also contain carbon. However, depending on the rule sets they may put an unjustifiable burden on the forest owners and the forest product producers if they are included in a scheme that is mandatory.

**Mr FORREST**—I want to pursue your criticism of the ANU's report. In your submission, attachment B states:

... a false assumption is made that unmanaged forests will reach maximum carbon storage capacity in perpetuity and natural disturbance events have no impact ...

You are talking about the destruction of forests by bushfire, are you?

**Mr Hansard**—Yes. What the ANU report assumes is that you do not have natural disturbance affecting your forest system. As we know in Australia, that is quite a courageous assumption because our forests are affected by fire, pests and diseases. We see it particularly in our forests in reserves all the time. They are declining because of these natural disturbances and we are not necessarily managing effectively to minimise the risks of these natural disturbances. So the ANU taking natural disturbances out of the equation is not necessarily a true and valid assumption to make.

**Mr FORREST**—But how can you incorporate it—a statistical approach?

**Mr Hansard**—You can include it statistically because you can work out basically the fire frequency in relation to these things. But in a carbon sense you really need to include the fact

that there is risk of fire and that fire can decrease your natural carbon stocks. Yes, they do recover, but not having that in your assumptions is a shortfall.

**Mr Gilbert**—I would take you to page 39 and the concluding comments of the *Green carbon* paper. You do not have it, but if I could just refer to it for the benefit of the committee. In conclusion, it says:

In considering the role of natural forests in the climate change problem, we must avoid the temptation to take a reductionist approach in which all we see is a measure of carbon with a fungible, market value.

It goes on to say:

Much of what distinguishes natural forests from industrialized forests cannot be measured let alone assigned a market value.

Those are the opening two sentences of the conclusion of the report, and yet we have the calls in the parliament for a cessation of logging in native forests, which is such a dramatic land use change for this country to accept based on those same statements from that report.

We have taken issue with it and raised the question, as is properly the case, with the Australian National University in writing and we are seeking a review of that particular report by the Australian National University. To date, there have been exchanges of letters between us and we are hoping that there will be some review based on the concern of the industry about this report. Should that not prevail, and given the importance of the advocacy of this particular report—published by the ANU and partly funded by the Wilderness Society—we would ask that a committee of the parliament, either of the Reps or of the Senate, have a look at it.

**Ms HALL**—I understand the problems you have with this report and your questioning of the report. Is there any report or study that has been undertaken that proves a contrary position?

**Mr Hansard**—Yes, there are. There are a number, and I can table this—

**Ms HALL**—I would like information on who funded those too.

**Mr Hansard**—Yes. The greenhouse accounting CRC published this report. It was funded by the Forest and Wood Products Research and Development Corporation, which is a government and industry funded body. We will table this for the committee, but on page 11, figure 10, it shows the comparison between leaving our forests as they are versus sustainably managing them for their carbon and wood products. It clearly shows that the best carbon outcome is actually where we manage our forests for wood products sustainably, because what we are doing is creating a carbon store in the forests but also creating an additional carbon store in the wood products that we produce.

**Ms HALL**—So you would be happy for the ANU to review the paper that you have there?

**Mr Hansard**—Absolutely, yes.

**Ms HALL**—You think it has the scientific veracity to stand up to that?

**Mr Hansard**—Absolutely, yes.

**Mr Gilbert**—That is why we say, if it was open to a committee of either the House of Representatives or the Senate to have a look at, we would be there and would participate most fully.

**Ms PARKE**—You have just stated that, when assessing the carbon storage capacity of utilised forests, the timber products produced by the forest should be taken into account. Can you tell us what timber products NAFI considers should be included in the assessment of the carbon storage of a utilised forest. Can you also tell us the difference between the amount of carbon sequestered in living trees and that sequestered in timber products.

**Mr Hansard**—We would advocate for the carbon in all wood based products to be included. That is solid products as well as paper products. The reason we say that is that you need to look at the true life cycle of wood products and the carbon life cycle. We will start with the tree. When we harvest a tree, it is turned into wood products and those products have a life in use. Depending on the nature of the product, the life can vary. There is a short life for paper through to quite a long life for house framing, tables and things like that. The science is starting to show that we should look further than just the life of the products; we should also be looking at what happens to those products when they have finished their life. The science is showing us that wood products, including paper, are largely stored in landfill where that carbon is locked in for a significant period of time. So thinking back again to the true life cycle of carbon, we need to look further there. The conclusions are basically that, if we produce wood products, we are looking carbon up in those products, be it paper or timber products, for a significant period of time, and this should be recognised in our rule sets for dealing with emissions trading.

The other thing about using wood products is that we are substituting these products for higher emission based products, such as steel and aluminium, that not only create more emissions but also often use fossil fuels. What we are talking about here is changing the paradigm and moving our economy more on to a renewable footing.

In addition to the carbon stored in the products, as I have mentioned, we are still store carbon in our forests. We have a growing industry. In relation to native forests, we only harvest less than one per cent of the total native forest area and we replant that every year. In addition, we are planting around 80 million to 100 million new trees each year in plantations in Australia. So we are increasing our plantation base and our ability to store carbon in forests but also, importantly, in the products we produce.

**Ms PARKE**—Can you clarify: what is the difference between the amount of carbon sequestered in a living tree versus the amount that is in a timber product?

**Mr Hansard**—There is more in a living trees.

**Ms PARKE**—What sort of the difference is there?

**Mr Hansard**—I will give you an example. Say you have a 10-year rotation, the amount of carbon in those trees could be to about five times greater than what we would get out of a harvest in any one period of time. It must be remembered that we have a growing stock and then

we are sustainably harvesting that growing stock each year and we are planting it back. So we have a flow of carbon coming out into wood products and we are still maintaining that large carbon store in the forests. Does that answer your question? We can take that on notice and get you some figures, if you would like.

**Senator McGAURAN**—How is the carbon lost in a dead tree, just as a technicality?

**Mr Hansard**—How is it lost—

**Senator McGAURAN**—In a dead tree. If it is five times greater in a living tree, how is it lost?

**Mr Hansard**—In dead trees? Do you mean trees that are lying on the ground?

**Senator McGAURAN**—Yes, or in the product you want us to measure—the table, for example.

**Mr Gilbert**—It is decomposition. As the tree rots, it emits carbon dioxide. That is returned to the atmosphere. It sits under the current rules set by the Kyoto Protocol of 100 years as the global warming potential of a carbon dioxide molecule. From a carbon perspective, and taking a production plantation perspective, it is always better to have fast-growing plantations to continue to sequester or absorb carbon from the atmosphere, break the carbon down, put it into wood, release the oxygen into the atmosphere—we can quite clearly account for that—and, when that is harvested, replace it with a new plantation doing the same thing.

Can I add to the answer that Mr Hansard gave and take you to page 13 of the NAFI industry statement that is in your pack. You will see a table where we have derived the 20 per cent of Australia's greenhouse gas abatement target by 2020. That covers where the carbon will come from—including plantations and native forests—and the very important questions that were asked in relation to carbon in harvested wood products and wood waste for renewable energy. That totals 81 and, on the trajectory that has been announced by the government on the 2050 trajectory from a 2000 baseline, the forestry and forest industry sector will be around 20 per cent of the nation's abatement efforts. So it is big, not small, and we want to leave the committee with that impression. Not only that, with the additional attention that will be received from the CPRS—and then, by definition, should we arrive at international ETS with the United States, China and India accepting responsibilities equally—the role of sequestration could well be as high as 25 per cent in Australia.

**Ms PARKE**—How much of that carbon is released when the tree is cut down?

**Mr Hansard**—When the tree is cut down, basically the large proportion of the tree is transferred into wood products. There is some wood that is left on the ground, and if that remains on the ground it will decay, as Mr Gilbert said. However, what we would like to do is work with the government to develop rules so that that wood could also be used. What could we use it for? We could use it for producing biofuels and we could also use it for generating electricity. Because this is a renewable resource—we plant back what we harvest—that is again setting the economy on a far more even renewable footing and taking the pressure off our use of fossil fuels. Did you want to add to that?

**Mr Gilbert**—I think that is fair enough. We have to understand that the national forest policy of Australia that then Prime Minister Keating took through COAG in 1992 has been fully implemented. We have regional forest agreements for native forests and around 80 per cent of the old-growth forest is already in conservation reserves. Of that which is not, and a decision is taken to cut that tree, the carbon that is in the wood once the tree has fallen is still embodied carbon. So, if it appears in this desk and it stays around for 100 years, it has the same effect as if it was in a standing tree. Under the current rules, that is not recognised. That is actually part of how the original negotiations for the Kyoto protocol came about at a late hour in 1997. Here we have an opportunity with the CPRS in its legislative framework to correct these sorts of issues. That would amount to around five million tonnes of carbon dioxide equivalent a year which is currently not counted.

**Ms PARKE**—So you are saying that there is five times the amount of carbon in a living tree and, if you convert it to wood products, it is the same thing as if it is this desk. But are you saying that the rest of the carbon is wasted somehow?

**Mr Gilbert**—I think the point you are getting at—and correct me if I am not understanding it correctly—is as follows. If you look at a tree, it has a trunk, lots of big branches and lots of leaves, and underneath it has roots. If you count a whole lot of it, that is your total carbon content. If you look at a tree when it is cut—as you would know if you have seen what happens with logging—a portion of the trunk, the best log, goes off to a sawmill or a veneer mill, and that produces the lovely furniture that we have in this room. Most of it is from Tasmania. Importantly, after that there is wood that is twisted, which cannot be put through a sawmill. That goes off to make woodchip and paper. Unfortunately, we do not have enough domestic processing in Australia to utilise that, but we soon might. On top of that, you have the heavy branches, for which there is currently no market.

On page 13 you see that, if COAG accepts the proposition that wood waste can be used for renewable energy, we will then have a market for that particular wood, which is currently left and wasted. If we do have that market put in place through the regulations, which I think are going to COAG next week, then there will be an additional three million tonnes of carbon dioxide equivalent each year which will be abated through that mechanism—that is, heavy branches are not lying in the logging coupes rotting but are burnt for renewable energy.

**Senator McGAURAN**—Which releases carbon.

**Mr Gilbert**—It releases carbon but the forest is regrown.

**Senator McGAURAN**—I think you are down at the bottom of the barrel now.

**Mr Gilbert**—I am quite happy to take that further if you wish.

**Senator McGAURAN**—You are being very efficient within your own industry. Let us put it that way. Do I take it that in your minds 100 per cent of climate change is attributable to man-made carbon emissions?

**Mr Hansard**—No. If you read the Stern report and other reports like that, they tell you that the natural system does also emit carbon as well. Is that your point? Man is not the only one that

emits carbon. Natural systems emit carbon. If you leave forests too long and let them decay, they emit carbon.

**Senator McGAURAN**—True, but to what point climate change? Can you give me a rough percentage? Is it 100 per cent?

**Mr Gilbert**—I will try to get to it this way. As you know, this is not an easy piece of science to try and explain. It is true what Mr Hansard said: there is a natural carbon cycle. On top of that we have human induced carbon emissions which have exceeded the capacity of the world to absorb them. We have virtually taken half of the world's forests out. The natural lungs, the sequesters of that carbon, are no longer there. On top of that we have gone on to be heavy users of fossil fuels, which has increased emissions of carbon into the atmosphere.

**Senator McGAURAN**—Yes, yes.

**Mr Gilbert**—I am coming to your point. The target of 450 parts per million is a target that the nation aspires to if it can get there. But before the measures that are involved in the Kyoto Protocol and its successor actually start to take effect, the world may go up from 450 to 550 parts per million before it starts to come down again. We are talking here roughly of the order of about 100 out of 550 that is human induced. Of that, in relation to Australia's obligations, we are saying 20 per cent.

**Senator McGAURAN**—Thank you. You are very good on the detail. I ask this question of everyone who comes through. I just want to know to what extent they think climate change has been created by man's carbon emissions. It would have to be 100 per cent, given the way you have submitted it. If it is natural emissions, that has been going on since the dinosaurs. The current climate change that we are apparently enduring is 100 per cent man-made. Is that your belief? It has to be.

**Mr Gilbert**—The human induced component—

**Senator McGAURAN**—Component?

**Mr Gilbert**—There is a natural carbon cycle. I just do not have figures from the Garnaut report with me. It is laid out in there. It shows what the level of carbon in the atmosphere was pre the industrial era. It shows what anthropogenic or human induced emissions have actually raised the carbon level up to. The science is that we have got the carbon cycle out of equilibrium. If a molecule of carbon dioxide has a global warming potential of 100 years then the radiating effect of trapping the heat—

**Senator McGAURAN**—Are you saying to me that climate change is 100 per cent man made? You are.

**CHAIR**—You are being repetitious, Julian. I think you should find someone else—

**Mr Gilbert**—I am quite happy to answer. It would not be 100 per cent because there are natural events which also have emissions. But as a scientist I can say to you that, when you look at the science that gave rise to the global concern of climate change, it is largely irrefutable that

the effect of anthropogenic emissions is a major cause of the climate changing. I do not want to go through precautionary principle because I am sure you have heard it many times as a committee but, if we do not do something about it, I think we will be held to account later on.

**Senator McGAURAN**—If I ask that question you immediately think I am a cynic and you come back at me—

**CHAIR**—You keep asking. There will be other opportunities to ask the question, Julian. I suggest

**Senator McGAURAN**—I have asked a similar question of the CSIRO and the Bureau of Meteorology. They all duck and weave just like this. Just look at the *Hansards*. When put in a corner, they will not say man is the contributor.

**CHAIR**—We will leave it there. Other members of the committee want to ask questions.

**Ms HALL**—In your opening statement you refer to the successor agreement to Kyoto and that the United States, China and India must be full partners in that agreement. Would NAFI argue that, unless they are full partners in that agreement, Australia should not be a party to it? What is your position on that?

**Mr Gilbert**—Australia must be part of the system. It must be in the negotiating process. It must continue to show leadership, from our perspective. Climate change is a systemic issue; it is not a fad. It is not a matter of if but when the world does accept its formal responsibilities. There is a great opportunity now with recent events in the United States. Even if the United States had not elected who they did, there was still a commitment from the Republicans to do something about it. China is wanting to be a major world citizen and to show leadership and cooperation. It has already indicated that it wants to play its part. We will soon hear what China says when it comes to the negotiating table about whether or not it will bind itself and shift from the category of a developing nation to a developed nation and accept legally binding obligations. There is the same story with India. For the simple fact that 40 per cent of the world's population is in those two countries they cannot stand outside an international agreement, a legally binding instrument, to replace the Kyoto Protocol when it the world is looking at them and saying, 'You need to step up because the world economic order is changing and is changing quite quickly.' As Mr Hansard says, it is changing from the United States, Japan, the EU, and China to, in 10 or 15 years, barring another external shock, the United States, China, the EU and Japan. So we cannot see how the American congress will let through legislation for an international emissions trading scheme which does not recognise the more strategic and changing role in world economic affairs of China and India.

**Ms HALL**—And if they did stand outside and refuse to enter an agreement?

**Mr Gilbert**—We will continue working with the government, supporting it in its endeavours to bring China, India and the United States into an international coherent framework for addressing climate change.

**Mr Hansard**—If I could also add to that, I think China's and the US's involvement will largely be determined by what sort of outcome we get in relation to a successor to Kyoto. You

would have to agree with that because they are all at the table in Poznan, they will all be at the table in Copenhagen and they are in the discussions. So the more effective we can be in getting a better rule set in relation to a successor to Kyoto the more likely we are to see participation by the developing countries. A key to that, as we know, will be the role going forward in relation to forests. Again, key to that is getting that rule set right; hence us appearing before you here today to seek your support to get that appropriate rule set put into a Kyoto successor.

**CHAIR**—Thank you very much for coming along and for your evidence. We will have a resolution to take this as an exhibit later on.

[11 am]

**MACINTOSH, Mr Andrew Kerr, Associate Director, Centre for Climate Law and Policy, Australian National University**

**CHAIR**—Although the committee does not require you to give evidence under oath, I advise you that this hearing is a legal proceeding of the parliament and warrants the same respect as proceedings of the House and the Senate. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament. If you nominate to take any questions on notice, could you please ensure that your written response to those questions reaches the secretariat within seven working days of your receipt of the transcript of today's proceedings. I invite you to make some introductory remarks before we proceed to questions.

**Mr Macintosh**—I do not have any introductory remarks other than to say that I am not a doctor, so you do not have to refer to me as that. I do not have any other opening statements to make. To be honest, I am not quite sure about the committee's scope of its inquiry. I was just asked to attend, and here I am to answer your questions, so without further adieu.

**CHAIR**—There are now about 380 parts per million carbon in the atmosphere and that is rising, and there were 280 parts per million in preindustrial times. Different figures get bandied about about safe and dangerous levels of carbon in the atmosphere. Where do you think we need to draw the line and why?

**Mr Macintosh**—The first thing to note is that it is a subjective matter. There is no technical definition of dangerous climate change or dangerous anthropogenic interference with the climate system. There is no objective marker. In terms of my personal value set, I suggest that 450 CO<sub>2</sub> marks the point of dangerous climate change, and there are arguments now that it is significantly lower than that—400 or possibly even 380. We really do not know where we are going to start to run into major impacts—things like the slowdown of the Atlantic thermohaline circulation, collapse of the Greenland icesheet and these sorts of things which I would regard as clearly dangerous.

**CHAIR**—Just to flesh that out a little bit more: if you say 450 is a significant number, why would you regard going beyond that as risky or dangerous?

**Mr Macintosh**—Beyond 450 parts per million CO<sub>2</sub> you are talking 500 to 550 CO<sub>2</sub>e and beyond that point you start to get a significant risk of those major impacts—the collapse of the Greenland icesheet, which could contribute between two and five or even seven metres of sea level rise; collapse of the west Antarctic icesheet, which would be another five metres; the slowdown or even the collapse of the thermohaline circulation; major species loss; threats to water in many countries in highly populated areas, including parts of India; and those sorts of impacts. There is a whole list, and I think I would bore you if I went through them all. But beyond about 450 you are talking temperature increases in excess of two degrees—more like 2½ and beyond, with a possible range extending out to eight degrees. I think on anyone's measure a temperature increase of eight degrees would be considered dangerous.

**CHAIR**—I was going to ask you about temperature increases because beyond two degrees Celsius is described as a dangerous level of climate change. So how do those various estimates of parts per million carbon in the atmosphere tie in with this idea of containing the rise in global temperatures to two degrees Celsius?

**Mr Macintosh**—450 parts per million CO<sub>2</sub>E. At the moment we are at about 380 or 385 CO<sub>2</sub>, which equates to about 455 CO<sub>2</sub>E. That is the accepted measure of about a fifty-fifty chance of keeping temperatures below two degrees. You are talking about major ranges of uncertainty here. People say, ‘Keep it below two degrees or keep it to 450,’ and say that they equate to one another, but that is not quite true. Those relationships have been derived through subjective probability analysis. At 450 parts per million CO<sub>2</sub>E it is expected we will have a reasonable chance of keeping temperatures below two degrees.

**CHAIR**—You mentioned other estimates and concerns being expressed. There was one from Professor Joachim Schellnhuber who is director of the Potsdam Institute for Climate Impact Research in Germany. He told the *Guardian*:

... that only a return to pre-industrial levels of CO<sub>2</sub> would be enough to guarantee a safe future for the planet.

He also said that we have to start thinking about whether it might be not enough to stabilise carbon levels but instead we might need to think about ways in which we can reduce them. Do you have a view about that?

**Mr Macintosh**—I personally do not think we are going to be able to keep the concentrations to 450. I think we are headed for at least 600 parts per million of CO<sub>2</sub>E and as a result I think it is absolutely crucial that technologies are devised and distributed that allow us to draw down carbon from the atmosphere. One of the major problems with that is at the moment people are looking at geoengineering as the main solution—things like ocean seeding, possibly even pumping sulfur dioxides into the atmosphere in order to shield us from solar radiation, these sorts of options. I think they are extremely dangerous and it would be pretty problematic if that were our final solution. I would like us to find something that is safer than those sorts of things to draw carbon from the atmosphere. To get back to your original question, yes, it is absolutely vital that we derive technologies that allow us to draw down carbon.

**CHAIR**—The final thing I would invite you to comment on is the question of the IPCC work. For example Tim Flannery said:

... the IPCC ‘works by consensus and ... has representatives from the United States, China and Saudi Arabia, all of whom must assent to every word of every finding.

Therefore he says that the IPCC’s most recent work is inadequate on issues like Arctic Sea ice, ice sheet loss, sea level rises, melting of permafrost and things like that. Do you have a view about the adequacy of the IPCC’s work?

**Mr Macintosh**—I think there is no doubt that the IPCC tends to be conservative but as a scientific body that is what we expect of them. I would not be critical of them. Yes, it looks like their projections on things such as Arctic Sea ice are going to be out by a considerable amount, but again I come back to the point that they are a scientific body and it is extremely difficult to

sit 1,000 scientists in a room let alone three and get them to agree on anything. It is quite an amazing process that they actually get anything out of the IPCC.

**CHAIR**—Are you familiar with the book by David Spratt, *Climate Code Red*, and the idea that the Arctic is melting with knock-on effects for Greenland, the West Antarctic ice sheet melting and so on and sea level rise could be much greater than the predictions that have been put forward previously. That is also suggesting that the IPCC work is too conservative. How do you see that?

**Mr Macintosh**—I would come back to the point where I would say, yes, they are conservative. There are not only issues about Arctic sea ice. Carbon cycle feedback is another issue where there is a decent argument that the science is too conservative and that the natural systems are moving far faster than what is projected in the Working Group 1 report, but it is just the process that is in place and there is no point in being overly critical of it. We just have to be mindful of the fact that the IPCC's projections can often be quite conservative and make policy on the basis that things could be far worse than the IPCC is suggesting that they are.

**Mr SIMPKINS**—Do you have any science qualifications?

**Mr Macintosh**—No.

**Mr SIMPKINS**—How are you influenced or how do you receive your guidance on climate science?

**Mr Macintosh**—I read the science literature and I read the IPCC reports. I take them at face value being a person who is not qualified in science and I act on that basis. It is much like if you were to go to a doctor and ask, 'Am I sick?' I take a sceptical viewpoint of what is presented to me but then try to back up what I am told by other evidence and then make judgements on that basis.

**Mr SIMPKINS**—So would you describe yourself as an expert in the science of climate change?

**Mr Macintosh**—No.

**Mr FORREST**—Just to pursue Mr Simpkins's question, you have to form a judgement as a lawyer the same as the rest of us have to do with disparaging arguments between scientists. In effect, you form your own judgement. There is no legal way for you to do that, you just have to make a judgement.

**Mr Macintosh**—That is right. That was what I was saying before about dangerous climate change. There is no formal scientific point where we hit dangerous climate change; it is a subjective judgement that everybody has to make and no one person's opinion is necessarily better than another person's. With scientific judgements, I simply make decisions on what is in the published literature and what has veracity in terms of being supported by other evidence.

**Mr FORREST**—I will stick to engineering. It is a bit more objective.

**Mr Macintosh**—This is the problem with climate change—it is extremely uncertain and we are forced to make decisions in the face of uncertainty, which can be quite difficult. I think there are people out there who are quite sceptical about the greenhouse effect and to them I ask, ‘Are you willing to bet so much on being wrong?’ I am willing to accept that it might not be the case and that we might have got this very wrong, but the consequences of making the decision that there is not climate change and acting on the basis of that are far worse than if we act on the basis that climate change presents a threat.

**Senator McGAURAN**—To what extent, if any or wholly, is the current Australian drought related to climate change?

**Mr Macintosh**—From what I understand, it is a contributor, possibly a minor contributor, but the major impact is the southern oscillation index. El Nino is the major driver of the drought that we have experienced over the last decade.

**Senator McGAURAN**—That is a good answer. Would you agree that there is a perception that the current drought is directly related to climate change?

**Mr Macintosh**—Definitely. I think climate change has been a contributor to the severity and the length of the drought, but as I said before it is the normal cycle that has probably been the major cause. I also agree with the notion that most people have that the major cause of the drought being climate change. There has been a slight misunderstanding about that point.

**Senator McGAURAN**—I heard the Prime Minister of Russia make a point—please do not think I admire him at all—that a two degree increase in temperature is not going to worry Russia. He was right. In Siberia they will be thankful for it, quite frankly. I am not so sure that Greenland will be too upset either. Was named Greenland because it was once green. Where is the measure that two degrees is a worry per se?

**Mr Macintosh**—As I said before, there is no science to support the notion that that is dangerous. It is a subjective value judgement that the impacts that are associated with two degrees of warming constitute danger given people’s beliefs. If a scientist comes to you and says, ‘As a matter of science two degrees is dangerous,’ I would disagree and I would say, ‘As a matter of your personal subjective judgement, given your values, you consider it to be dangerous.’ It just happens that I would agree with that argument, but it is a subjective judgement.

**Senator PRATT**—Western Australian scientists are looking at what two degrees means in the south-west of WA and it is certainly dangerous. That subjectivity does depend on where you are on the globe. Would that be right?

**Mr Macintosh**—Yes, it depends on how you weigh certain impacts. Do people here consider that three, four or five metres of sea level rise dangerous? Those are the sorts of questions you have to ask yourself. Is two degrees a dangerous consequence or a dangerous outcome?

**Senator PRATT**—It would certainly be dangerous in Western Australia.

**Mr Macintosh**—The other thing that is somewhat misleading about this two degree target is that it is almost impossible to hit two degrees. If we go for a 450 or 550 outcome, the range of uncertainty is enormous. You are talking about a range of eight degrees. If we happen to get those low-probability outcomes then the consequences would be catastrophic according to anyone's opinion.

**CHAIR**—Thank you for coming along and for your evidence. Is it the wish of the committee that the document presented by the National Association of Forest Industries be accepted as a submission to the treaty? There being no objection, it is so ordered.

Resolved (on motion by **Ms Neal**, seconded **Mr Forrest**):

That this committee authorises publication of the transcript of the evidence given before it at public hearing this day.

**Committee adjourned at 11.15 am**