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STANDING COMMITTEE ON RURAL AND REGIONAL AFFAIRS
AND TRANSPORT

Reference: Carbon sink forests

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**SENATE STANDING COMMITTEE ON
RURAL AND REGIONAL AFFAIRS AND TRANSPORT**

Thursday, 24 July 2008

Members: Senator Sterle (*Chair*), Senator Siewert (*Deputy Chair*), Senators Heffernan, Hurley, Hutchins, McGauran, Nash and O'Brien

Participating members: Senators Abetz, Adams, Arbib, Barnett, Bernardi, Bilyk, Birmingham, Mark Bishop, Boswell, Boyce, Brandis, Bob Brown, Carol Brown, Bushby, Cameron, Cash, Colbeck, Jacinta Collins, Coonan, Cormann, Crossin, Eggleston, Ellison, Farrell, Feeney, Fielding, Fierravanti-Wells, Fifield, Fisher, Forshaw, Furner, Hanson-Young, Hogg, Humphries, Johnston, Joyce, Kroger, Ludlam, Lundy, Ian Macdonald, McEwen, McLucas, Marshall, Mason, Milne, Minchin, Moore, Parry, Payne, Polley, Pratt, Ronaldson, Ryan, Scullion, Stephens, Troeth, Trood, Williams, Wortley and Xenophon

Senators in attendance: Senators Heffernan, Joyce, McGauran, Milne, Nash, O'Brien, Sterle

Terms of reference for the inquiry:

To inquire into and report on:

The implementation, operation and administration of the legislation underpinning Carbon Sink Forests and any related matter

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Committee met at 9.09 am

CHAIR (Senator Sterle)—I declare open this public hearing of the Senate Standing Committee on Rural and Regional Affairs and Transport. The committee is hearing evidence on the committee's inquiry into the implementation, operation and administration of legislation underpinning carbon sink forests.

I welcome you all here today. This is a public hearing and a *Hansard* transcript of the proceedings is being made. Before the committee starts taking evidence, 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.

The committee prefers all evidence to be given in public but, under the Senate's resolutions, witnesses have the right to request to be heard in private session. It is important that witnesses give the committee notice if they intend to ask to give evidence in camera. 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.

On behalf of the committee I would like to thank all those who have made submissions and sent representatives here today for their cooperation in this inquiry.

[9.11 am]

de JONGH, Mr David, Senior Forest Policy Adviser, National Association of Forest Industries

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

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

CHAIR—I welcome representatives from the National Association of Forest Industries. I invite you to make a brief opening statement and then the committee will ask questions.

Mr Hansard—We thank the committee for the opportunity to appear before it in relation to the implementation, operation and administration of the legislation underpinning carbon sink forests and related matters. NAFI's position on the legislation is unequivocal. For the following reasons NAFI supports the intent of the legislation and the intent of the Environmental and Natural Resource Management Guidelines. NAFI notes that this legislation and the guidelines were largely developed by the previous coalition government and implemented by the current Labor government.

We think that this legislation and related guidelines are timely given the significant focus on climate change and the development of policy to address climate change, both domestically and internationally. Only last week the government released its green paper on the development of a carbon pollution reduction scheme for Australia. A key outcome of the green paper is that forestry is Australia's only carbon positive industry. In recognising this fact, the government have also identified the significant role forests can play in assisting carbon-polluting sectors to move to a low carbon emissions trajectory.

The government is on record as setting an emissions reduction target of 60 per cent of 2000 levels by 2060. Though the government is still discussing how it will meet the 2060 target, and what trajectory will minimise the impact on our economy, whatever trajectory is chosen will mean a significant reduction in emissions. On a straight-line estimate this will mean that we will have to reduce emissions by around 397 million tonnes by 2020—from the government's estimated business-as-usual emission levels of 837 million tonnes. There is a growing recognition that to achieve this magnitude of reductions in a low-cost way we need to provide clear economic signals not only to reduce emissions but also to increase the ability of our landscape to sequester carbon.

This legislation sets up arrangements for farmers, landowners and investors from other sectors to invest in rural and regional Australia in order to increase the sequestration capability of our landscape through the establishment of carbon sink forests. But it does this in a way that recognises the fact that increasing trees in our landscape needs to be achieved in a way that integrates carbon sink forests with existing land uses, and it recognises the economic, social and environmental benefits in doing so. How do the legislation and guidelines do this?

Firstly, the legislation and guidelines acknowledge that new thinking and action is required if the Australian government is to meet the challenges and opportunities of climate change, renewable energy, water sustainability, infrastructure, regional development, indigenous forestry and skills shortages. Secondly, the legislation and guidelines will ensure that investment in carbon sink forests complies with applicable laws at Commonwealth, state, territory and local government levels. Thirdly, the legislation and the guidelines ensure that the use of land for carbon sink purposes will be fully integrated with competing land uses within a regional natural resource management context. Fourthly, the arrangements for carbon sink forests are consistent with the objective of the assistance provided by the Australian government for other sectors of the economy, including primary industries.

NAFI will be providing a written submission to the inquiry on this issue for your consideration. NAFI has followed the debate on the legislation in the Senate and, rather than anticipate questions from the committee, I and my colleagues here are happy to address any issues that senators may wish to raise.

CHAIR—Thank you, Mr Hansard. Mr de Jongh and Mr Gilbert, do you wish to make a brief opening statement?

Mr de Jongh—No.

Mr Gilbert—No.

Senator JOYCE—I see that you strongly advocate measures proposed for this carbon sink legislation. Is that your position?

Mr Hansard—Yes.

Senator JOYCE—You talked about regional development in your opening statement. Can you explain to me how regional development can be promoted when prime agricultural land is taken out of production to be put into a carbon sink which stays there in perpetuity in place of the usage of the land for such things as the growing of horticultural crops or sugar cane, which actually employ people in the local area? Can you explain to me how that works?

Mr Hansard—As I said in my opening statement, we see this as legislation that will facilitate the integration of carbon sink forests with existing land uses.

Senator JOYCE—So by integration, you are saying that we will be able to do both on the same piece of land.

Mr Hansard—I think farmers are realising that that is possible. We see it in a lot of instances where farmers are integrating trees into their production processes. It is possible. I think climate change has really brought this into focus for the farming community—they realise that they are in an emitting sector and, like every other sector in the economy, they have to pull their weight in relation to climate change and emissions. Forestry does give them the opportunity to grow trees on their farm, integrated into their production process, to assist in offsetting the emissions from their production processes.

Senator JOYCE—Just so that I do not presume knowledge, Mr Hansard, have you ever owned agricultural land or a farm?

Mr Hansard—My family has.

Senator JOYCE—So you would be fully aware, then—and I say this for the purpose of the *Hansard*—that if you have a tree in the middle of your farm, nothing grows around it. How are you going to balance up that you are not going to get carrots and gum trees growing on the same plot of land?

Mr Hansard—On hot days I often see cows sitting under trees in the paddocks. That says something.

Senator JOYCE—It certainly does—

Senator HEFFERNAN—Yes; it says that you are stupid—

Senator JOYCE—but it does not say anything about the debate we are having at the moment.

Senator HEFFERNAN—That is a stupid answer.

CHAIR—That was out of order, Senator Heffernan. I would like you to retract that.

Senator HEFFERNAN—Yes; it was out of order. I retract that.

Senator JOYCE—Obviously you believe that there is a great gain to be made in the development of carbon sinks. Can you see any value in just prescribing that, if you truly want this integration, prime agricultural land that is currently substantial to the economic structure of certain areas be exempt and that only certain agricultural land that is not essential to the economies of regional areas be used? The argument has been put forward that this will only be used on less arable land. Would you have any worries if we were to say, ‘Well, let’s move this so that on prime agricultural land you cannot use this exemption,’ or do you want this to be used on prime agricultural land?

Mr Hansard—In this case I think we need to let the market determine it.

Senator JOYCE—But the market is not determining it because you are getting a specific tax advantage that other people are not getting. In fact, it is completely against the principles of the market.

Mr Hansard—I beg your pardon; could you repeat that?

Senator JOYCE—I am saying that you are getting a tax advantage that is not available to a person who is growing another crop, say cattle—you mentioned cattle under shady trees—or wheat. You are getting a specific tax advantage that is not there for other people.

Mr Hansard—They do not get tax advantages?

Senator JOYCE—They do not get the tax advantage that you get.

Mr Hansard—Senator, I would like to refer you to this government document—*Trade and Assistance Review 2006-07*.

Senator JOYCE—Are you saying that I can get an MIS type of advantage from growing sheep?

Mr Hansard—I would like to table this document as evidence. I refer the committee to table 2.5b—'Estimated budgetary assistance by industry grouping, 2006-07'. I will run through the table there. It has three headings: budgetary outlays, tax concessions and total assistance. It then runs through categories for agriculture and forestry. Please bear with me because this does answer the question. It says: 'Dairy cattle farming, \$20.4 million; Grain, sheep and beef cattle farming, \$98 million; Horticulture and fruit growing, \$36.9 million; Other crop growing, \$16.8 million; Other livestock farming, \$6.4 million; Fisheries, \$8.1 million; and Forestry and logging, minus \$5.2 million.'

Senator JOYCE—That is an interesting point, Mr Hansard. That is the tax concession as—

CHAIR—Mr Hansard, continue answering the question and then if senators wish to raise a point of order or a question with me they may. Please continue your answer to Senator Joyce.

Mr Hansard—This table demonstrates that the tax concession as reported by the government is negative for forestry and logging—

CHAIR—Senator Heffernan, what is your point of order?

Senator HEFFERNAN—What have you read out? Are they claimable tax deductions? You have not actually defined what you are reading out.

CHAIR—What is your point of order?

Mr Hansard—I can answer that; please let me. At page 2.3 of this report—

CHAIR—Take as much time as you need to answer the question.

Mr Hansard—At page 2.3 of this report it outlines how this table is constructed.

Senator HEFFERNAN—Could I just ask you a couple of questions? Are they tax deductions for expenditure or subsidies? Ninety-eight million dollars is not much of a subsidy—

Mr Hansard—Can I please answer it? I am trying to.

CHAIR—Yes, you can. Senator Heffernan, there is no point of order. Mr Hansard, continue answering.

Mr Hansard—I will go to the ‘tax concessions’ heading. It refers to tax concessions, industry or activity specific; direct financial exemptions; deductions; rebates; preferential tax rates; and referrals.

Senator HEFFERNAN—Can you then take me to wheat. You just said wheat. What was that?

Mr Hansard—Grain, sheep, beef, cattle farming?

Senator HEFFERNAN—Yes.

Mr Hansard—\$98 million.

Senator HEFFERNAN—See, that is meaningless twaddle, because we spend something like \$450 million, which is a direct tax deduction, on fertiliser. What is it that you are reading out? Wheat farmers claim over a billion dollars in expenditure to put a crop in.

Mr Hansard—Senator, this is the trade and assistance review—

Senator HEFFERNAN—Well, it is meaningless.

CHAIR—Senator Heffernan, you did ask Mr Hansard what he is reading from. Senator Heffernan, it is not Mr Hansard’s fault that you were reading when Senator Joyce asked his question and you were not paying attention. Mr Hansard is answering your question.

Senator HEFFERNAN—I am trying to get to what it is that that \$98 million refers to. If you could explain that I would be grateful.

CHAIR—Senator Joyce has the call.

Senator JOYCE—Mr Hansard, you have quoted there that—

Mr Hansard—Senator, I refer you to this document. For the technical aspects of this document, I refer you to the Productivity Commission or Treasury, who put this together.

Senator HEFFERNAN—But do you know what it means?

CHAIR—Under a previous government you have tabled it.

Senator HEFFERNAN—You’ve got no damn idea, have you?

Mr Hansard—Senator, I can only refer to—

Senator HEFFERNAN—It is meaningless.

CHAIR—Senator Heffernan, Senator Joyce has the call. I must say that, due to our private meeting, we have started late. We are on a tight timetable today. So, Senator Joyce, you do have the call.

Senator JOYCE—Mr Hansard, because you have quoted that the advantage that the timber industry gets of about \$5.2 million—

Mr Hansard—Our industry pays the government \$5.2 million.

Senator JOYCE—You pay the government \$5.2 million?

Mr Hansard—Yes, Senator, that is what I am saying. That is what I cannot understand about your question. We do not get the level of tax concession that these other sectors do get.

Senator JOYCE—What exactly are you saying, Mr Hansard—that you pay the government \$5.2 million?

Mr Hansard—Senator, I am referring to this document—

Senator JOYCE—No, I want to know what you understand by that document, Mr Hansard.

Senator HEFFERNAN—This is crap!

Mr Hansard—I am not referring to anecdotal evidence; I am referring to—

Senator HEFFERNAN—The MIS is a billion dollars.

Senator JOYCE—Mr Hansard, I want to clearly understand—

Mr Hansard—I am referring to information by the government.

Senator JOYCE—So, are you saying that the tax advantage that the government gives the timber industry is \$5.3 million or that the money that you pay the government is \$5.3 million?

Senator HEFFERNAN—You are a joke!

Mr Hansard—Senator, I am referring to a government document that is reporting this.

Senator HEFFERNAN—But you do not even know what the document means.

Senator JOYCE—What does it mean, Mr Hansard?

Senator HEFFERNAN—You cannot even explain the document.

Mr Hansard—Senator, this means that in the year—

Senator McGAURAN—He is haranguing the witness.

CHAIR—Thank you, Senator McGauran. Senators—

Senator JOYCE—I just want to get to the bottom of this, Mr Hansard. We can wind up the inquiry now if you say that you are prepared to accept \$5.3 million as the tax consequence of MISs, because that will be the end of MISs tonight—they will be over—because the advantage you get is immensely bigger than that. So, if you want to sign your name to that figure, go right ahead.

Mr Hansard—Senator, I am reporting what the government has reported here. It says that, in the year 2006-07, taxation concessions attributed to forestry and logging were a total of minus \$5.2 million.

Senator HEFFERNAN—That is logging—

Senator JOYCE—I will tell you how it works, Mr Hansard. You get the deduction, times it by between roughly 13 per cent and 15 per cent, and that is the tax advantage that you get from it. It is going to be a lot more than that number. Anyway, let's go on to another issue.

CHAIR—Senator Joyce, we will have to wrap up. Senator Milne has some questions. We may be able to come back to you, Senator Joyce.

Senator JOYCE—That is fair enough; I will defer to Senator Milne. I have had a fair go and have made a complete goose of myself, Mr Hansard.

Senator MILNE—One of the issues for us is the displacement of food-growing crops with plantations and the impact that that will have, particularly in relation to water. I would like to first start with the average rainfall. What sort of rainfall distribution would you expect? My assessment is that, above 600 millimetres, you will get competition with dairying and below 350 millimetres you will not get returns on your carbon from your trees, so you are not going to put them there. So is it fair to say that it is between 400 millimetres and 600 millimetres that you would be expecting these carbon sinks to be established?

Mr Hansard—I will start off. Basically these plantations will go in a mixture of places. That will be where farmers see there is an advantage to do it—and that could be right across the landscape. We hope it is, because this is really an advantage for farmers to decrease the emission associated with their production activities. But in a commercial sense for those investors who want to invest in carbon sinks that will be a market based situation. They will match the growth of their trees with the rainfall, the soil type and a lot of other things in choosing where they go.

Senator MILNE—That is the point of my question. This is a scheme to allow investors to get a 100 per cent tax deduction up front and then benefit from the emissions trading scheme as advertised. That relies on the carbon growing in those trees. There is no point in growing them in an area where there is not enough rainfall to sustain them. That is why I make the point that it is unlikely that you would get any below 350 millimetres. My question is: would it be likely that these trees are going to be grown in the 400 millimetres to 600 millimetres rainfall zones—and isn't that the Murray-Darling Basin?

Mr Hansard—Again, I think there would be trees put into areas of between 400 millimetres and 600 millimetres. I might refer this to Mr Gilbert.

Mr Gilbert—I think you have touched on a very important point. As a lot of senators here would know, water quality and quantity are very important issues. Forestry, MIS forestry, state government forestry plantations and the plantations from this particular measure can live side by side in an integrated fashion in the landscape. What I am going to do today is table for the benefit of the committee a subset of the forest industry's development strategy that NAFI will release within the month. An item in that strategy is a policy outcome where we integrate plantation forestry on known salinity hazard areas on the western slopes of the Murray-Darling Basin to reduce the watertable in those areas to lock the salt in the soil.

It is this type of innovative solution that marks the future of plantation forestry in this country, whether it is driven by salinity, water quality or climate change. This particular document, which I will leave for you, as I said, is coming out within the month. You will all receive a copy. It identifies the salinity hazard areas as mapped by the Murray Darling Basin Commission. It is in an area well known to Senator Heffernan. It is around Tumut-Tumbarumba. We have identified within that rainfall zone above 600 millimetres—where the hazards are and where the forests will go—that there are 100,000 hectares of potential available land. Not all that land will be accessible but, from a forestry perspective, we can put the plantation in those salinity hazard areas, lock in the salt and reduce the salinity that will flow into the top end of the catchments—into the Murrumbidgee. Importantly, the plantations will be located within the economic working zones of existing processing mills. These are the future win-win scenarios that are available.

Senator HEFFERNAN—Are you talking about carbon forests?

Mr Gilbert—I am talking about plantations in general, a subset of which will be types of plantations—

Senator HEFFERNAN—Can I tell you that you are wrong—

Mr Gilbert—Yes, you can, Senator.

Senator HEFFERNAN—because every person that is promoting the CO2 company want to go out on the plain.

Mr Gilbert—You can tell me I am wrong but I would like you to prove me wrong.

Senator HEFFERNAN—You are not going to go up there.

Mr Gilbert—I would like to table this document, if I can. This is the future. Climate change, yes, will produce a major driver for reforestation within Australia. There is no doubt about it. MIS is there and has produced significant wealth for this country after governments withdrew their funding for plantation development. If we had not, through the 1992 national forest policy, leveraged the private sector into plantation establishment in this country, we would be reliant on governments. They have pulled out from plantation development; the pressure would be back on native forests. The whole objective of that measure with MIS was to leverage the creative

capacity of the private sector to put plantations in when governments pull out. So the incentives are there. These industries can live side by side. Some agricultural industries are finding it tough competing in corrupted world markets on price, heavily subsidised by their competing countries. Sugar is one of those.

CHAIR—Please table that for the committee.

Senator MILNE—You have talked about one side of the coin, which is salinity recharge areas and land vulnerable to erosion, but you have not talked about the other side of the coin, where you put in plantations in areas of wetlands, ephemeral watercourses and river flats, where there is likely to be a negative impact on environmental flows into the Murray-Darling system. So, given what you have said, would you agree to areas being zoned as unsuitable because of the negative environmental impacts, particularly in terms of water? Secondly, the guidelines assume that state governments have in place the hydrological impacts and measurements in relation to the uptake of water from these plantations. In fact that does not occur in Tasmania. I can say that for a start. I do not know what the case is in other states, but these guidelines are a joke in Tasmania because we do not have land clearing regulations, hydrological impact statements or anything else. I particularly go to this issue: do you concede that whilst you can have some benefits in salinity recharge areas there are significant disadvantages in other areas when there is significant water taken out of the river system by the establishment of these plantations?

Mr Gilbert—We completely support the intent of the guidelines before this committee—guidelines 1, 2 and 3. That means that at the catchment level, the farm level and the regional landscape level all the competing land uses have to be considered side by side. The legislative framework for that is, in part, held by the Commonwealth, mainly by the states, and also by local government. If, for example, a catchment management authority in New South Wales under the new natural resource system decided that having plantations in a situation as you described was not in their interests, those plantations would not be going in there. If on the other hand the catchment management authority in the Murrumbidgee decided that they want a modicum of plantations in the top end of the catchment to improve water quality for salinity reforestation, then that would be their decision, not ours. As an industry we have to comply—as we do—with all the laws of the land. That is where that decision will be taken; not by us.

Senator MILNE—I understand that but I asked you whether you would accept zoning. I wanted to ask about management of forests for cutting down. One of the issues here is that people assume that carbon sink forests would be there in perpetuity. We are talking about plantations, not forests. Nor are we talking about perpetuity, because that is not in the legislation. Would NAFI expect that areas established under this scheme—managed for harvest—could be cut down?

Mr Gilbert—Under the Kyoto rules, the only way a forest could be cut down would be after the effect of the global warming potential of a molecule of carbon dioxide had ceased, and that is 100 years. So the carbon sink forests would need to be there for that period—

Senator MILNE—For 100 years?

Mr Gilbert—otherwise the purpose of taking a molecule of carbon dioxide out of the atmosphere and storing it in the trees would not work.

Senator MILNE—So NAFI would support an amendment to this legislation?

Mr Gilbert—We are just being consistent with existing laws.

Mr Hansard—Can I answer that?

Senator MILNE—I am asking Mr Gilbert: would you accept that?

Mr Gilbert—It would be consistent with existing laws. That is what I have said.

Senator MILNE—No, that is not what I asked. I said: would you accept the amendment for 100 years, which you just said would be required?

Mr Gilbert—When the Australian government puts in place its emission trading scheme it will have federal legislation to give effect to it. There will be rules associated with that legislation which relate to forestry's role in the emission trading scheme. We will abide by those rules as well.

Senator MILNE—That is not answering my question.

Mr Hansard—Basically, to obtaining the taxation deduction, you have to state your intent to the tax office that you are undertaking this for carbon and that you will not fell the trees.

Senator HEFFERNAN—Who would do that?

Mr Hansard—The person that is seeking the taxation deduction, as I understand.

Senator HEFFERNAN—Can I just go to this point on your behalf, Senator Milne? There are three ways of coming at this. You talk a fantasy of the landowner putting it in his lucerne paddocks in a 24-inch rainfall area, but most of this will be taken up by promoters on behalf of investors. That is exactly what is going to happen. I have already identified several retired MPs, including in the opposition Michael Baume and Ian Campbell, as well as a whole range of other people who want to get in on this river of gold. The point is: how do you protect, without an instrument that is identifiable on the title, the status of the land? How would you do that?

Mr Gilbert—How would you—

Senator HEFFERNAN—Come on; you are the technician.

Mr Gilbert—If I understand your question—

Senator HEFFERNAN—I will give you a touch and feel example.

Mr Gilbert—Please do.

Senator HEFFERNAN—Say you come along to me, because you have a whole lot of people that want a tax deduction, and you say, 'Man, have I got a deal for you; I'm on a lease.' Michael

Baume is talking about leasing country out in the western division, as he called it. There are no salinity issues in the western division but, to his credit, he is talking about mallee, which would be really good at this job in the Riverina—and good luck wherever you are going to put it in the Riverina. There is lots of mallee country out there. He is talking about putting strips across properties—every few hundred yards you put a 50-yard strip. To protect the integrity and management of the property in a practical sense, if you did that you would have to actually survey the country.

CHAIR—We have one minute left.

Senator HEFFERNAN—This is important. You would have to survey the country. You would then have to register that land on the title to protect the contract because, if I sell my farm to you after I have done all this and then you search the title and it is not registered on the title, as far as you are concerned you have no legal obligation at all to worry about the bloody trees, and the tax commissioner may well sue the person who contracted to me. If I have sold it to you and it is not registered on the title as an easement, tell me how I get out of it.

Mr Gilbert—Thank you. That is a very good question. Page 67 of the bill deals with the issue of what is required in terms of disclosure between sellers.

Senator HEFFERNAN—So tell me how they deal with it.

Mr Gilbert—I refer you to page 67.

Senator HEFFERNAN—No; just tell us how they deal with it.

Mr Gilbert—That is going to take five minutes, and I will come back to it if I can. In relation to the felling, that is contained on the second page of the provisions of this bill, where felling is a prohibition.

Senator HEFFERNAN—With great respect, is it going to be registered on the title so that when you buy my farm it is identified on the title as an easement, the same as a gas pipeline, so that you know the legal status of that land, beyond a contract that was made 25, 30 or 50 years ago?

Mr Gilbert—It is a very valid point you are raising.

Senator HEFFERNAN—If this does not happen, it is a—

CHAIR—Senator Heffernan, Mr Gilbert wishes to answer. You have 30 seconds, Mr Gilbert.

Mr Gilbert—I will get it in 30 seconds. When the carbon rights legislation was designed in 1998 in New South Wales under the then Carr government and then subsequently harmonised by the other state governments, it was to allow the separation of the land right, the forestry right and the carbon right—and probably in 10 years time we will have a salinity right, the way things are going in the Murray-Darling Basin. It was done that way to separate those rights from the title of the land and allow them to be securitised and sold in financial markets, such as carbon will be. We identified it then and it is now happening in that way.

Senator HEFFERNAN—But will it be registered on the title?

Mr Gilbert—It will not be an encumbrance to the title.

CHAIR—Thank you, Mr Gilbert. Unfortunately, time is up. I wish to thank you very much, Mr Gilbert, Mr De Jongh and Mr Hansard. For the public record, I wish to declare that I have an interest in a product that is under an MIS.

Senator JOYCE—Does it involve the forestry industry?

CHAIR—No, it does not; it involves olives—and the product is on the shelf.

Senator JOYCE—I appreciate that you have done that. Thank you very much.

[9.44 am]

POLGLASE, Dr Philip John, Research Program Leader, CSIRO

CHAIR—Welcome. Do you wish to make a brief opening statement before we go to questions?

Dr Polglase—It might be helpful if I say a few words just to introduce myself and the work that my team has done, in the context of this inquiry. I am a research program leader with the Division of Sustainable Ecosystems, and for the last five or six years I have been leading an active and quite large team in research concerning integrating plantations and forests of all shapes and forms into Australian agricultural landscapes. We have provided the technical underpinning to help people—in natural resource management agency bodies, or forest industries, or other investors—to make decisions to help integrate trees and, as far as possible, as far as we are concerned, to minimise the negatives and maximise the positives. But it is really about empowering people with the technical and scientific knowledge to know what they are doing, for whatever decisions they make. So, for example, if it is about salinity control, it is about identifying areas. It is very much about trying to better predict expected rates of growth in carbon sequestration, because that is a key input, of course, into economic models. I could go on, but it is really the scientific underpinning on the impact that trees have in particular regions and localities in Australia, and providing spatial tools for people to help inform their decision making. So we do not presume to prejudge outcomes or to tell people what to do. It is really saying, ‘Here are the scientific tools and the evidence,’ and hopefully it is helpful to them in meeting their objectives.

CHAIR—Thank you, Dr Polglase. I will go to questions.

Senator MILNE—Dr Polglase, do you agree that a plantation is not a forest?

Dr Polglase—Actually, I probably do not, on balance. I am unaware of—

Senator MILNE—Is a monoculture a forest?

Dr Polglase—Well, planted forests by definition are just that—trees that are literally planted by people; that would be the most common definition. It is an interesting distinction that you make. My opinion would be just one of many, I dare say, and it is not meant to be definitive. But planted forests are normally differentiated from natural forests by the way that they are established, and planted forests, by definition, are planted. But they can be, actually, not monocultures. Direct seeding would be an example of a mixed species plantation—it is planted but, in my mind, it is a forest.

Senator MILNE—Okay—

Dr Polglase—If I can just finish off my answer: to me, a forest is more a matter of scale. One tree is not a forest, but if it is planted over many hectares then, to me, it probably is a forest.

Senator MILNE—So do you agree that a forest, the stated intention of which is to be a carbon sink, should be in the ground for 100 years or thereabouts—if not longer?

Dr Polglase—In Australia, the green paper has suggested that we follow Kyoto rules, which do have a requirement for permanence. As far as I am aware, if the requirement for permanence is, for whatever reason, not met, then you simply incur a liability. So if you earn a credit for sequestering carbon and, for whatever reason, that forest is no longer in existence, then you therefore earn a liability. But the intent is, yes, under Kyoto rules, to require permanence.

Senator MILNE—That actually links the two questions I am trying to ask, which I am sure you understand; I am getting to the point of biodiversity, of resilience, of ecosystem maintenance and so on. The legislation, as it currently stands, does not require biodiversity and does not require a length of time for the trees to be in the ground. What I am asking you is: in an ecosystem sense and in a carbon storage sense, do you regard it as being desirable that you have a biodiverse forest and a specification about a length of time that it be in the ground?

Dr Polglase—I will answer the second question first. The answer is: I do not know, because that is really a policy question. I do not know that you can require permanence. What is permanence? Let us go back to your opening question, ‘What is a forest?’ It is a large area, which does not live forever at a tree scale. They are always disturbed, and fire is a natural part of that. So—in answer to your question—I think structural diversity is imposed by fire and disturbance.

Senator MILNE—Yes.

Dr Polglase—So that is not a bad thing. And I think that when we talk about permanence and we say, about a forest, that you must have it for 100 years, that is a nonsense at a tree level. Every tree cannot live for 100 years. So what you get is an average.

Senator MILNE—Yes, but it builds soil carbon—you know what I am saying—as opposed to taking it away for harvest. However, if you want biodiversity, structural diversity is a good thing. That also is imposed by trees dying naturally from old age, drought or fire et cetera. Those sorts of disturbances build biodiversity. Then, when you say start to count your carbon, you say, ‘Okay, what is the average amount of carbon for a disturbed ecosystem or a disturbed forest?’ That is what the permanence would be. It is not the theoretical maximum. To me, a sensible way to count the carbon in a biodiverse forest would be to assess the average amount of carbon for a disturbed regime over 100 years.

Senator MILNE—Can I ask about rainfall? Given your experience and given that the whole purpose of an emissions trading scheme is for people to build the value of their carbon product, you therefore would want to plant your plantations in an area where you get maximum carbon growth and, therefore, maximum carbon credits. In your experience, what rainfall zone would be most attractive to an investor in a carbon sink forest?

Dr Polglase—Again, without wishing to duck the question, I do not know what is more attractive financially, because we do not do those analyses. But, of course, the faster the tree or the forest grows, the more carbon is stored.

Senator MILNE—That is the proposition I am putting.

Dr Polglase—But I do not then extend that into a financial model. With regard to water, the National Water Initiative is now developing a framework for regulating and licensing intercepting activities, including plantations, bores and dams of overland flow. The intent there is to bring overallocated catchments back into allocation, no matter what the land use change is. That would include plantations, farm dams, bores et cetera. I expect that there would be an intersection of carbon policy with water policy, and no catchment that is overallocated or approaching allocation would be expected to remain that way. The purpose of the National Water Initiative is to bring all those catchments into allocation. That should regulate any substantial land use change.

Senator MILNE—What is the expected time frame for doing that? The issue here is that, in some catchments—and I could cite you some in Tasmania—some of the plantations will have to be cut down because of the level of interception that has led to reduced town water supplies and so on.

Dr Polglase—In Tasmania?

Senator MILNE—In Tasmania, yes.

Dr Polglase—That is not my understanding, but I would stand to be corrected.

Senator MILNE—The Prosser River, for a start.

Dr Polglase—My understanding is that Tasmanian catchments are not overallocated with respect to water, but there may be some issues with regard to summer flows.

Senator MILNE—Yes, with regard to town water supplies. Anyway, coming back to that, what is the projected time line for looking at the catchments? It would seem to me to be sensible that this does not apply until we know which catchments are already overallocated; otherwise, you are going to get into a situation where people plant in that catchment and then find that it is overallocated, and then all sorts of retrospective actions will occur. When can we expect the National Water Initiative to identify issues in catchments across the country?

Dr Polglase—They are developing the framework and not doing the work. My understanding is—again I probably need to go back and check it—water-sharing plans are required by the National Water Initiative no later than 2011. That is my understanding.

Senator MILNE—Since this effectively is law now, we are going to have several years of people effectively planting plantations. Going back to this issue, I know that you have said you will not comment on the amount of money, but certainly the principle stands that, if you have enough water, you are going to grow trees and optimum volumes will be grown. I have asked you about rainfall limits. What level of rainfall is most desirable for an area of plantation in order to maximise your carbon and, for that matter, to maximise your plantation?

Dr Polglase—I would repeat my answer that maximum growth leads to maximum carbon.

Senator MILNE—Yes, that is right. So what rainfall range is most desirable?

Dr Polglase—That is related to rainfall. Trees grow least in low rainfall and then faster in—

CHAIR—Do you have a rough annual rainfall figure, just to assist Senator Milne?

Dr Polglase—My answer is that growth is highly correlated to rainfall across—

Senator MILNE—Yes, I know. Is it between 400 millimetres and 600 millimetres, essentially? Above 600 is good, 400 to 600 is fine and less than 350 is bad.

Dr Polglase—If you want to put it that way, yes. That is what I am saying. There is a direct linear correlation between—

Senator MILNE—That is what I am asking. Since you have had a lot of experience advising people on where to grow trees, I am trying to get the rainfall issue here. That is the critical issue for this committee in looking at competing land uses. We have been told that these carbon sink forests will vegetate all the desert areas of Australia, which seems to defy logic. I am trying to establish that, below 350 millimetres, you are not likely to get much uptake of this. Is that correct?

Dr Polglase—I do not know, but speaking personally I suggest you are right.

Senator MILNE—So we are talking about areas at least above 350 millimetres and probably above 400 millimetres. Do you agree that in Australia that will set up land use competition with food production?

Dr Polglase—I cannot agree because I do not know. That is not something we have investigated.

Senator McGAURAN—I have a technical question because I am more interested in the mechanics of the legislation. Following on from Senator Milne's fine point about where to grow I would add: 'What to grow?' As you advise people on tree growing and are an expert in that area, what is the best tree to grow—the Australian tree or the European tree?

Dr Polglase—I understand the question and where you are trying to go. With apologies, I cannot give those sorts of answers because we do not advise people where to grow or what to grow. We give people the tools to make those sorts of decisions. We say, 'If you're in this part of the world or in this part of Australia'—

Senator McGAURAN—Can you tell us what the best carbon eaters are?

Dr Polglase—Sorry?

Senator McGAURAN—Which trees are the carbon eaters—European trees or Australian or trees?

Dr Polglase—I was going to say, it depends on rainfall. Research we have done recently estimates rates of growth for trees suitable to particular regions. So in the very high rainfall areas we would use a high-rainfall suitable species. If you are in the 400- to 600-millimetre rainfall zone there is a whole range of species that have been looked at but typically you might use a range of eucalyptus, as well as pines and even mixed species—environmental plantings, which are more conservation type plantings. It has become clear to me when I talk to people in my travels that there is no single model, no single answer, no single investment model. It is very much a matter of horses for courses, and people have their own objectives and ways of doing things. When they come to us, we say: ‘Okay, what are your objectives? Here’s the information we can give to help you to achieve your outcomes.’

Senator McGAURAN—Which is the biggest carbon eater—the pine tree or the blue gum?

Dr Polglase—I cannot answer that.

Senator McGAURAN—But you are from CSIRO!

Dr Polglase—It all depends on where it is planted, rates of growth, rainfall—

Senator HEFFERNAN—Can I assist you, Senator McGauran: the mallee tree has a big root system—it makes a bloody good fire—and they will thrive in that 400-millimetre country. The CO2 company is suggesting that it is going to grow a lot of mallee. Have you blokes plotted the carbon-sinking history of a mallee tree to tell us what happens after the first 15 years and then the next 15? When does it start to go backwards? Have you done that sort of work, or are we all just going to have a good guess at it?

Dr Polglase—We have done a little bit. My understanding is that CO2 Australia has most of the relevant data for that.

CHAIR—They will be here later today, Senator Heffernan, so you can ask the question of them.

Dr Polglase—The problem is in the last point you raise, the longer term time frame. A lot of the new forestry we are seeing in these lower rainfall zones is new plantings, generally less than 15 or 10 years old. So we are a bit constrained scientifically.

Senator HEFFERNAN—Let me assist you further. I have 10,000 acres of gum trees in the lower Lachlan that would be 60 or 80 years old and they are all dying. Would you agree that we are about to take a voyage into the unknown?

Dr Polglase—I absolutely agree, and I think that you are alluding to risk. I think risk management includes matching species to sites and climate variability—drought impacts as opposed to long-term climate change impacts. I expect risk management would be a very important part of an investment.

Senator HEFFERNAN—The idea that, as someone recently said to me, we are going to go out, plant in the western division and get a salinity credit—where we do not need a salinity credit, by the way—is a fantasy. I would also have 20,000 or 30,000 acres of one of the toughest

plants they say exists, saltbush, which is all dead, and that is related to 10 years of drought. So you can fantasise as much as you like about how much carbon, how you are going to be contracted to do all this and how you are going to save the planet. In my view we would be better off focusing on the 2½ million hectares in the lower Gulf that gets plenty of rain. It ought to be planted out rather than mucking around out here in 10-, 12- and 14-inch rainfall country, where there is a better than fair chance that you will lose the stock.

CHAIR—Do you have any other questions on that?

Senator HEFFERNAN—I still would like to pursue the principle of protecting the carbon sink and understanding the science of the life of the carbon sink. Is there a complete science document or, as Senator McGauran has said, are we just guessing about how much carbon certain species will put in when they start to slow down? As Father Time takes care of us we slow down too! But is that science done?

Dr Polglase—I would have to say science is never done, but I know what you are getting at. There are two things you need to do. The first is to be able to predict expected rates of carbon sequestration. If you have a greenfields situation and you are an investor, have a business model, want to buy land or whatever, you say, 'I need to know the expected rates of growth within certain areas.' It is impossible to forecast accurately because it depends on droughts and rainfall during the forthcoming decades, so you say, 'Here's an average rate of growth.' That is one thing. You can then say, 'It depends on pines or eucalyptus, but generally this is the expected rate of carbon sequestration.'

Senator HEFFERNAN—You will not be doing it with pines because they will just cark it in 15 years anyhow.

Dr Polglase—The second thing is monitoring. You make your forecast, your modelling predictions, and then the climate eventuates, but the important thing when you are trading carbon is to measure it cheaply. That is when you start to wrap tapes around trees and measure their heights to try and calculate their manifested carbon balance. So the two things are the forecasting and the measurements. In terms of the science, we have a reasonably good idea of expected rates given certain assumptions about the future. The science is less clear about how we cheaply and accurately measure the carbon that has been sequestered in a year or is sequestered every five years.

Senator HEFFERNAN—What you are saying really is that this is a very incomplete exercise, where people are about to take contracts—and there are a whole lot of carpetbaggers out there waiting to get in on this, and good luck to them. When I take the contract with you, the contractor, who is investing on behalf of Senator McGauran, because he is paying too much tax, you really cannot give me a definite figure of what you are going to pay me, because we do not know what the carbon history of the tree is going to be until it does it.

Dr Polglase—I am very keen personally to avoid unrealistic expectations but, based on the best available evidence and from a lot of trials that we have measured across a lot of species and sites to calibrate models, I can say, 'Here's what the evidence to date shows us.' I cannot guarantee you what the future rates of carbon sequestration will be, because I do not know the future climate with certainty. It is up to you to—

Senator HEFFERNAN—As you say, it is related to the weather. We know the CSIRO has done some good work on the 50-year snapshot, certainly for southern Australia, which is pretty gloomy. Put that in against this as well and this could turn into a 20-year farce in places.

Dr Polglase—In some places, probably. But Australia is a big place and what we have done—

Senator HEFFERNAN—I appreciate that. I know where I would be sending them if I was in charge.

Senator MILNE—When you talk about monitoring carbon on the block, does that include soil carbon?

Dr Polglase—In the early nineties I did a lot of work with the then Australian Greenhouse Office on impacts of plantations on soil carbon change. We concluded it was a very, very small change compared to what is stored in vegetation. Because it is so hard to measure, it should be basically accepted as an almost zero change.

Senator MILNE—That is something we need to clarify, because you could get a 100 per cent tax deduction up front and sell the carbon rights, then agriculture comes into the scheme in 2015 or 2016 and then the owner of the block will be applying for additional carbon rights on soil carbon.

Dr Polglase—But our research did suggest that the change in soil carbon as a result of plantation establishment was very small and almost impossible to measure.

Senator MILNE—So, on the basis of evidence, it sounds like agriculture ought not to be in for a windfall gain in terms of soil carbon with agriculture coming in in 2015.

Dr Polglase—Well, that is a related argument.

Senator MILNE—I am just interested to see where that is—

Dr Polglase—I understand. There are others in CSIRO who are better qualified about the agricultural impact on soil carbon than I am to talk about that. My research addressed the question of a change in soil carbon when you plant trees on previously cleared agricultural land, and the change in soil carbon was very difficult to measure. So we were suggesting, 'Forget about it.'

Senator JOYCE—Would it be fair to say that bigger trees and heavier trees equal more carbon than smaller trees and lighter trees?

Dr Polglase—Heavier trees, yes; bigger trees, no—because there are differences in tree density. So heavier trees, more carbon, yes; but bigger trees, not necessarily.

Senator JOYCE—So going back to Superfetch timber or whatever they call it now, it is the weight of the carbon that is sequestered on the land that gives you a better carbon sink. That is what you were trying to create?

Dr Polglase—Yes.

Senator JOYCE—So you have to find the climate, the soil and the geography that has the propensity to grow that type of tree. Therefore—and just pull me up when I say something wrong—it would make more sense that, if you are going to be compensated or getting an income stream for the creation of a carbon weight, then you are going to try to pick the country that has the greatest propensity to grow heavy timber, and that would most likely be on better country.

Dr Polglase—You grow more carbon, but I cannot make any comment about the merits of any financial model, because obviously it is a matter of costs and revenues. What is the cost of growing that carbon? I don't know.

Senator JOYCE—It might be that they say, 'Waddi trees are heavier,' but waddi trees take about 1,000 years to grow if you want to go out to the desert. If I am looking for a quick income stream I am going to look for the area that grows heavy timber quickly, so I am going to go to prime agricultural land.

Dr Polglase—That is up to the investor to balance the cost of growing carbon with the expected returns, and that is something I cannot comment about.

Senator HEFFERNAN—It would be fair to say, would it not, that the higher the carbon costs the better the quality of the land use?

Dr Polglase—The higher the carbon sequestration? Yes.

Senator JOYCE—Just so that people get an understanding, how many metres of organic matter make a metre of coal? I think about 100 metres of organic matter used to make a metre of coal, and it compresses over time.

Dr Polglase—I am sorry, I don't know.

Senator JOYCE—Are you aware—I am just trying to compare the relevance of it—how many cubic metres of carbon was extracted by the Chaiten volcano when it erupted?

Dr Polglase—No.

Senator JOYCE—I am trying to get something comparable here. Let's go then to another form of modelling. We just heard evidence from the previous witness that said that there was minimal tax advantage gained by the timber industry through MISs, and they quoted a figure somewhere in the vicinity of \$5.3 million. The question I am posing is: do you believe that, seeing their tax advantage is so minimal, if we removed MISs as a mechanism, the timber industry would still be putting in timber like they are at the moment?

Dr Polglase—I am sorry, Senator, I cannot comment. I have not done any research in that area at all.

Senator JOYCE—Okay. With regard to carbon sequestration, was it part of your sphere of study to talk about the comparatives of carbon from the establishment of forests to carbon being

sequestered in soil or how it compares with the innate effects of ocean to gassing and issues such as that?

Dr Polglase—No. Our research focused simply on the forests component, assuming an equilibrium condition, if you like, under farmland—so a steady-state zero baseline—and then the increase in carbon when trees were planted upon that.

Senator JOYCE—Would it be fair to say that what we should be doing—if people were really super serious about this, if this were the way to go, if this is what they want to do—is planting the trees and then, to completely reverse the process, we should be just digging a huge hole, burying the trees in it, and planting them again.

Dr Polglase—Well, yes—there is a form of that: biochar. They are talking about growing trees and converting them to charcoal and burying that under agricultural crops—biochar—and there are a few companies doing that. That is an emerging technology. I do not know much about it. But that is essentially what you are saying. The other forms have been: growing carbon and putting it in rocket ships and blowing the carbon into outer space, or putting it down abandoned mines—

Senator HEFFERNAN—That sounds like a good scheme; I might get on to that.

Dr Polglase—The best way to use forests to reduce emissions is actually through energy substitution—so bioenergy, whether it be for power generation or something else. The CSIRO is looking at ethanol production. But there is no question: you get more bang for your buck when you use the carbon produced to substitute for fossil fuels—that is how you get the biggest carbon emission reduction.

Senator JOYCE—I would like to ask one further question because I am trying to encapsulate a line of questioning in one single question, because I think it revolves around this. If I said to you: ‘Dr Polglase, I want you to go out there and grow a big, fat tree as quickly as possible, and I am going to give you a few places to go and grow it. You can try to grow it in the Simpson desert. You can grow it somewhere out in the Western Division, west of Bourke. Or you can go up to Tully and, on some prime agricultural alluvial land, grow it there. You have 10 seconds to answer the question of where you are going to grow it,’ what would your answer be?

Dr Polglase—I am going to cheat a little bit and say that what has come from my research is that Australia is a really big place.

Senator NASH—That research was spot on the money, wasn’t it!

Dr Polglase—I know that is a bit of a surprise! But one example of the results—just to provide context—is this: nine million hectares in rainfall zones less than 800 millimetres, at equilibrium, when the trees have grown up, would offset about 25 per cent of Australia’s 2005 emissions. That is just a number, okay?

Senator HEFFERNAN—Yes, but there are 2½ million hectares in the lower gulf you could put them in.

CHAIR—Keep going, Dr Polglase, because we are running out of time.

Dr Polglase—What I am saying is: nine million hectares, if you spread it across Australia and manage your risk—if you are asking me as an investor then I would spread my risk and try and get maximum biodiversity outcomes and minimise the downsides, and I would spread it across north, south, east and west.

Senator JOYCE—Because you changed it around, I will change my question a little bit. When you were growing that big fat tree, and trying to get the biggest bang for your buck through an income stream from the carbon credit you were getting, do you have to factor in, anywhere in that argument, what it is doing to the regional community—or is that completely irrelevant to how fast the tree grows?

Dr Polglase—That is a question for policy and regional bodies and legislators, et cetera.

Senator HEFFERNAN—Has CSIRO done work on the carbon sequestration of perennial grasses or lucerne et cetera? One of the salinity arguments was: you have got to plant trees to fix your salinity. But we have discovered on the slopes that if you plant lucerne it does the same job. Have you done the work on perennial grasses, deep rooted species et cetera in the carbon offset arrangements?

Dr Polglase—I have not, but others in the CSIRO may have.

Senator HEFFERNAN—Could you provide that for us?

Dr Polglase—Yes.

CHAIR—Thank you, Dr Polglase.

Senator MILNE—Brendan Mackey at the ANU has done some work showing that one hectare of undisturbed forest in the southern forests of Tasmania sequesters 5,500 tonnes of carbon. When you compare that with planting out a plantation in a similar climate zone, in terms of fast reduction of emissions, would you agree it is far better to protect your standing forest stores than to plant out plantations?

Dr Polglase—I certainly agree wholeheartedly that the importance of natural forests in both carbon and water balances has been lost a lot in the water and carbon debate on plantations, because native forests simply dominate. The work you refer to was partly based on research that I did—my PhD on mountain ash forests. The numbers were actually exaggerated, but we can go in for another argument. But, certainly, globally and in Australia, protecting existing forest sinks from wildfires and—

Senator MILNE—Logging.

Dr Polglase—Logging is a slightly different argument. But I would certainly agree and encourage policy people to think more about native forests and their role in carbon and water cycles in general in Australia. It is exceedingly important.

Senator MILNE—Yes, but I asked the question about comparing protecting a hectare of standing carbon store with giving a tax incentive for a hectare of plantation. How many hectares are we talking about planting out over what period of time—just give me a ballpark figure—compared with saving a hectare of standing forest or native vegetation types at various locations?

Dr Polglase—A hectare of native forests in productive areas is a current store of carbon that has been sequestered over the previous 80 or 100 years; therefore it is not sequestering much annually, but it is a store.

Senator MILNE—That is the point I am making. It is a store; it sequesters—

Dr Polglase—So a new plantation would take that many years of growth or whatever to catch up. Personally I do not make the comparison because you have a store; you have a native forest that provides certain functions. Is there an opportunity for new forests in agricultural landscapes to contribute to a range of NRM outcomes and economics if that is possible? How do we know? How do we decide where those trees go? How do we manage the system? Can you get a win-win, if you like, in answer to your question?

Senator MILNE—I am just making the point that if you allow the destruction of standing stores and clearance of native vegetation at the same time as you give a tax deduction for planting out plantations, you are likely to end up with a carbon loss to atmosphere in the next critical 10 years—is that not the case?

Dr Polglase—I know what you are saying, and Australia has suggested in the green paper that they follow the current Kyoto commitments.

Senator MILNE—We know what the problem is with that account.

Dr Polglase—Article 3.4 is not included, so it is an accounting issue.

Senator MILNE—I know. The atmosphere does not understand account issues.

Dr Polglase—I think I know where you are going and I do not disagree.

CHAIR—On that, Dr Polglase, thank you very much.

[10.17 am]

NEWTON, Ms Kris Anne, Chief Executive Officer, Horticulture Australia Council

SWADDLING, Mr Stuart, Chair, Horticulture Australia Council

CHAIR—Welcome. Do you wish to make a brief opening statement before we go to questions?

Ms Newton—I just want to give a brief overview of horticulture in Australia as it currently is. Horticulture Australia Council—HAC for short—represents the horticultural industries, which include fruit, vegetables and nuts, and lifestyle or amenity horticulture—nursery, garden, flowers and so forth, and turf. We are worth about \$8 billion a year. There are probably some 30,000 businesses in horticulture nationally. We are the second largest and fastest growing agriculture sector. In 2006-07 exports were worth \$763 million. We employ around a third of those employed in agriculture.

We operate in an extremely competitive environment, and some reviews that are currently underway—the ACCC grocery price inquiry, for one—are looking at parts of the competitive supply chain in which we operate. The fresh produce market is dominated, as you will know, by the two major supermarket chains and they have significant market power. Labour costs in horticulture are, on average, around 50 per cent of the input costs, which is high. Those parts of the horticultural industry which have been able to mechanise—olives, wine and so forth—have done so. However, unfortunately, most fresh fruit and vegetables, in particular, need to be hand-picked—that is just how it is.

We have been seeing the impacts of climate change for quite some time, and I do not have to tell anybody here about what is happening in the lower Murray-Darling Basin, in particular. That is one example of a fair swag of Australia that is being impacted by drought and climate variability. However, this tax initiative we are seeing may offer some opportunities—particularly in the lower Murray-Darling Basin, for example—for growers to offer real value in terms of providing environmental services back to the broader community while retaining viable and sustainable regional communities, farming families and infrastructure.

As I think the last witness said in their evidence, there is still some significant research that needs to be done in the area of carbon sequestration, carbon sinks, soil carbon versus planting carbon—and I will remind the committee that horticulture already has many thousands of hectares of permanent plantings scattered all over the country which are in themselves a carbon store and carbon sink. But we would make the point that, if this were to be a valuable initiative which did not take existing high-quality agricultural land and therefore food production out of the system, it would need to be linked very clearly at the policy level with water buyback and with changes to the entire policy format for drought and other disaster relief, including exceptional circumstances and particularly the exit packages in the lower part of the basin. I am happy to answer any questions.

CHAIR—Thank you, Ms Newton. Mr Swaddling, do you wish to make a brief opening statement?

Mr Swaddling—No, I am comfortable with that statement, thank you.

CHAIR—We will go straight to questions. Senator Joyce.

Senator JOYCE—Thank you very much. Do you feel that the current position of MISs—and this incentive works on the same principle—has put pressure on horticultural land in certain areas?

Ms Newton—That is certainly the belief, although research conducted by the horticultural research and development corporation, HAL, Horticulture Australia Ltd, showed no general pattern of resource pressure—'resource' meaning land and water pricing and so forth. While it did show up in some areas, there was no nationwide pattern that was clear.

Senator JOYCE—Has your group also done studies or does it have a view, even if it is only anecdotal, on the effects of forestry and the capacity for river systems to get the water that they formerly got? Would you have any concerns, for instance, if a large, tax-inspired forest were to set up upstream from you; would that have an effect on how you do business?

Ms Newton—I do not believe that we have the evidence as yet to make a statement about that.

Senator JOYCE—We have heard before in evidence that there is a belief by some in the timber industry that there is the capacity for interaction between forests and horticultural land. I know this is a very obvious question—and I am not being ridiculous; I think it is important to get it into the *Hansard* for people who will read it—but is there a capacity to grow horticultural products in an area where, for instance, there is growth of Australian eucalypts? Can you grow one underneath the other? Are they compatible in the same field? I think there is an obvious answer to that.

Ms Newton—Yes is the short answer, I think, but obviously a lot more research would need to be undertaken for the technical aspects of that. I should point out that Horticulture's NRM Strategy, under the Horticulture for Tomorrow umbrella, has been working on a range of NRM research and practices for quite some time. In fact, we believe we are at the leading edge of this in Australia. One of the things that that has shown is that, for example, with the integrated pest management, most of our progressive growers, rather than relying on chemicals to eliminate pest issues, will use native vegetation in very close proximity, and retained wetlands are actually an advantage.

Senator JOYCE—Yes. Close proximity is one thing, and I understand exactly what you are saying there. Having the hills or swamps with trees is one thing, but to have gum trees sitting in the middle of your cabbage patch is something completely different.

Mr Swaddling—Absolutely. Whether it was possible would depend on the density of the plantings of either the commercial crop or the eucalypt.

Senator JOYCE—You can only have one or the other. You cannot have them both in exactly the same location. If you look at wheat and barley, wherever there is open country there is a crop; wherever there is a tree, there is no crop. Of course—

Senator HEFFERNAN—There might be a cow sitting under it.

Senator JOYCE—Yes. Horticulturally, it is even more so. The capacity to hold moisture for the growth of the crop is absolutely fundamental, otherwise the crop does not grow.

Ms Newton—And harvested in many cases. I should point out that many growers do use wind breaks and other protections for frost, wind et cetera. So that is possible.

Senator JOYCE—And chemical drift and a whole range of other things—absolutely. Do you think there is the possibility where we could prescribe the legislation to say, ‘If you want to grow trees, that is fine, but you can’t grow them in these types of areas’? If they grow them in the middle of your cabbage patch, for want of a better term but to paint a picture, they will be in a tax-inspired advantage that forces your growers out of a job, because ultimately you will start losing economies of scale. How many of your growers would disappear before the packing house would say, ‘We have no reason to be here anymore because you don’t have the quantity of product to make us viable’?

Ms Newton—I am not clear about your assumption, Senator. It sounds as though you are suggesting that a tax-inspired investment regime which might plant forestry, as you describe it, could have the say over someone’s land rights on their own property.

Senator JOYCE—No—I am talking about when it comes to selling. As land comes on the market, someone says, ‘I’m going to get an up-front tax deduction—it says so under the legislation—for the capital expenditure involved in the planting of forests. I’ve got a billion-dollar tax problem.’ Tell me the area where you live, Ms Newton.

Ms Newton—In Canberra.

Senator JOYCE—I do not know—

Mr Swaddling—Say, the Hawkesbury Valley.

Senator JOYCE—Say I buy half of the Hawkesbury Valley and, after buying half of it, I have my tax deduction, but your growers, the ones that are left, will have a huge problem because they will be below the critical economies of scale.

Mr Swaddling—Absolutely.

Ms Newton—I can see that happening. On the other hand, I would have to say that in the lower Murray-Darling Basin, for example, where we have significant numbers of people who have already identified, through their own water budgeting and business planning practices, that they are basically not viable in the projected environment to come—and they are on soldier settlement, in many cases, which is a relatively small area of land—that may well be a positive outcome, a win-win all round—

Senator JOYCE—But it might not necessarily be a positive outcome. A hectare of trees uses about 2.6 or 2.5 megalitres of water, so it might not necessarily be the outcome that the environment is looking for to get water back into the river.

Ms Newton—A hectare of planted trees initially will take some water—there is no question about that—but a hectare of planted forestry type trees will take a great deal less than a productive hectare of citrus, wine grapes or whatever. It depends but, on average, we work on about 10 or 12 megalitres per hectare for productive horticultural plantings, permanent plantings. There is a distinct difference. The difference there is that, in our view, it would enable a grower who was, for example, willing to exit the industry to sell some of their water back for the environment, have an income stream from that, cease farming, engage in environmental plantings on their property, remove productive—

Senator JOYCE—Ms Newton, as your horticultural people leave the industry, what happens to the Australian consumer with regard to the price of product at the shop?

Ms Newton—Unfortunately, that is one of our difficulties at the moment. Horticultural growers, as you know, are price takers, not price makers. They are rarely able to pass on increases in production costs to the consumer.

Senator JOYCE—Coles and Woolworths certainly do it for them, though, don't they?

Ms Newton—That may well be the case, and there is an inquiry about that at the moment. Growers rarely ever benefit from whatever happens in the supply chain between the consumer and themselves, at the farm gate. While I think I understand where you are coming from—are we going to see food shortages in Australia because there are going to be large numbers of—

Senator JOYCE—Quite obviously, if you start taking out agricultural or horticultural land, Australians are going to eat horticultural product from somewhere else. You are intrinsically going to make your own position weaker and weaker.

Ms Newton—It is an issue. Nevertheless, we are facing that issue with the drought whatever we do, it appears. So, whether or not somebody comes and plants something else on that property is probably irrelevant to the decision about whether or not that property is, in the new environment, a viable horticultural productive capacity.

Senator JOYCE—So, you would agree with that, Mr Swaddling, that really what your people are looking for is the capacity for an easy exit from the industry that would be provided by this?

Mr Swaddling—It is certainly not an easy exit. It is simply that there are some that are not viable. As it stands at the moment some of them will simply go bankrupt and that land will then be purchased, perhaps by the people that we do not want to purchase it; whereas, if there is an opportunity to exit the land with dignity, this tax deduction, if it is combined, could certainly help that happen in a more structured way.

Senator JOYCE—It is very important, and that is really agreeing. That is saying that you want this to go forward because it gives some of the people that you are involved with the capacity to exit the industry and get a better price for their land on the way out.

Mr Swaddling—No; as it stands it does not help them. It would have to be altered. From my reading of it, it would not apply to them at this stage because, to comply with the EC, they have to leave their land. We are suggesting that, rather than have them leave their land and sell their water rights, it would be better if they were to sell a majority of their water rights so that they could go back into the environment. A small allocation of water would allow them to grow trees, which would benefit the environment and there would be perhaps a very small income stream from the carbon sink value. But just as importantly, they would be allowed to remain in the community in their family home, so it would provide a structure for some of those people who will get out of the industry one way or the other.

Senator JOYCE—Just so that I am clear—and I am painting it in simple pictures so that the issue makes sense—you are saying that you want the farmers to have the capacity to remain and also to carry on some form of horticultural farming and, at the same time, to use some of their portion of the land for an advantage by using this scheme. Is that what you are saying?

Ms Newton—That may well be an option for some; however, for those who have already decided that they are nonviable in the future, they will need to—as Stuart has said, under the current EC rules—not only stop farming to exit the industry, but leave their farm. For most of our people in the lower part of the basin—

Senator JOYCE—They do not want to leave their farm.

Ms Newton—No. They do not want to leave the property, because the property also holds the family farm and, under current state government regulations, the local councils are not able to excise the family farm off the block that was productive horticulture and they are not allowed to rezone them into lifestyle blocks either, so we are caught.

Senator JOYCE—So we are saying that we want an amendment to the legislation so that the family farm, and something that adjoins the family farm, can be separated in such a way that the person can still maintain their house and their structure there and they can sell the rest off.

Ms Newton—They can sell or they can choose to provide environmental services, whatever option suits their circumstances.

Senator JOYCE—All I was really trying to do was get to the point.

CHAIR—Thank you, Senator Joyce. Has your council had any involvement in Kununurra at the top end of WA?

Ms Newton—Yes.

CHAIR—I had the pleasure of visiting the Rewards Group the week before last and seeing what they have done, and I just want to clarify this. There is an assumption amongst committee members that all MISs are bad and it is all about trees, but for other committee members the Rewards Group have a huge mango and grapefruit investment up there, which is an MIS and in which 287 Australians have invested. I think it is a very good news story. Would you like to tell the committee about what is happening up there, in the council's view?

Ms Newton—You are quite right. Much of the corporate involvement in horticulture is through the MIS system. HAC has a particular policy view about the MIS tax incentive structure: we do not agree with it because we believe that, as Senator Joyce alluded to earlier, it can create distortions in the system, particularly focusing on input costs rather than outputs of productivity. Nevertheless, many of the leading lights in horticultural corporate activity are certainly under the MIS banner, and we have no problem with corporate investment in horticulture.

CHAIR—Okay. We have cleared that up, on the record. Senator Milne.

Senator MILNE—I am interested in what you are saying about those farmers who are no longer viable because of climate change and water issues. Certainly, adaptation is one of the issues that the country has to come to terms with, and I am interested that you did not mention the potential for renewable energy as another farm crop, essentially, to allow communities to be viable and people to stay on the land. At the other end of the scale we are concerned that, for example, viable dairy communities have become unviable because of MIS plantations, and I can cite Preolenna in Tasmania as a classic case, and there are some areas in the north-east of Tasmania as well. The concern here is that, when the plantation companies move in and buy up half the valley, then the dairy processing factory says, ‘You have to either put storage on your property because we’re not sending the truck out there to collect the milk every day, or come in twice a week,’ or you sell out to the plantation companies. Eventually that drives everybody out of the valley, whether they like it or not, which is the point Senator Joyce was making about sugar as well. You get to a point of unviability because of the extra on-farm costs to meet the processor’s requirements or go somewhere else.

So what I want to ask is: do you have lists of the dairy land that has been taken out of dairy production for forest plantations or other categories of horticulture or agricultural production that been taken out for forestry, since the MIS for forestry came in?

Ms Newton—No, I do not, and I have to say that within horticulture the pattern has tended to be more that the MISs and other corporate investors have chosen cheaper land on the outer reaches of what was the traditional horticultural enclave, and Kununurra is an excellent example of that. There are many thousands of hectares of permanent plantings up there, not just the ones that Senator Sterle indicated. However, one of the complaints that many growers have made is that the purchase of previously more marginal land, on the outer fringes of the traditional growing areas, has raised the price of land—

Senator MILNE—Land, exactly.

Ms Newton—and increased competition for the land and the water and so forth. So, rather than the fact that existing horticultural land has been taken over and something else has been planted on it, that seems to have been the major complaint from growers. Can I go back to your earlier point?

Senator MILNE—Yes.

Ms Newton—Clearly, it is in the economics. If a grower, whether in horticulture or dairy or any other agricultural pursuit, is offered a return for their current produce that covers more than

their costs of production and gives them a satisfactory income, then the incentive to sell up to anyone else for any other purpose is significantly reduced, if not eliminated. I think that is something that this committee might want to look at more: the value proposition and the equity of price returns back to growers at the barn gate.

Senator MILNE—I could not agree more about that, and I understand those issues, but equally I am unconcerned about the loss of community viability. On the one hand you have talked about the need—and I totally support this—for people to be able to stay on the land that they live on and in the communities they live in and not be driven off them, but what happens is that, once you lose critical mass, you lose the school bus—

Ms Newton—Absolutely.

Senator MILNE—you lose your postal run, you lose everything and, in the end, you have no community and so the community disintegrates.

Ms Newton—Exactly. It is our concern that, if people wish to exit, there is an alternative that enables them to stay in that community. It is exactly for that reason.

Senator MILNE—Yes, but using a tax deduction for putting in plantations may not be the answer to doing that. That is an issue which needs to be addressed as an adaptation strategy under some framework of legislation. It does not necessarily have to be this one.

Ms Newton—I understand what you are saying.

Senator MILNE—That is where the farming and renewable energy issue is big on my agenda, in terms of taking the transmission lines out to the pre-permanent areas and therefore allowing people to sit on the ground and watch the solar collectors make them an income.

Ms Newton—I would like to add a point to that. It is not just the tax advantage. One of the interests for us is that the thing that horticultural permanent planting growers know how to do best is look after trees. If there were an alternative where they maintained self-esteem—

Senator MILNE—Yes—ecological services. I can totally understand that.

Ms Newton—ecological services to their local community and so forth—then that would be a real incentive for many of our people.

Senator MILNE—But can you also see the way that this is being structured? Whilst it may be pitched as being something individual growers can benefit from, the high probability is, like the MIS in forestry, it will be managed by large investment companies whose interest is not necessarily in individual growers.

Ms Newton—That may well be.

Senator O'BRIEN—Isn't it equally feasible that, just as with schemes devised in Western Australia for wheat growers, managed in the interests of the wheat growers, those arrangements

could be managed for the horticultural properties that you have been talking about, as a need for alternatives in order to remain on their properties and generate income?

Ms Newton—There is the risk and there is the potential benefit on both sides—yes.

Senator O'BRIEN—Do you have any suggestions as to how the legislation might encourage the interests of the members of your organisation as against the larger investment companies?

Ms Newton—To be honest, Senator, we have not had a chance to look at it in enough detail to give you a response to that.

Senator O'BRIEN—If you would like to put something in later, that would be fine.

Senator MILNE—In relation to that, I invite you to give some consideration to having some sort of grant as opposed to a tax. If you are not making an income, you cannot get tax returns. This is in relation to the restoration of forestry and native vegetation, as opposed to planting plantations. That is one of the ways in which individual growers who own land are able to restore the native vegetation on their property for ecological services, much more so than an investment company is ever likely to want to do that.

Ms Newton—Certainly in the lower part of the basin, salinity mitigation would be a really important ecological service rather than a forest, as you say.

Senator MILNE—Yes—that is what I am talking about. Perhaps you could come up with some suggestions.

Ms Newton—We will do our best.

CHAIR—As there are no further questions to the Horticulture Australia Council, thank you very much.

[10.43 am]

DIBLEY, Ms Dianne Elizabeth, Director, Policy and Program Development, Greening Australia

WILLIAMS, Mr David, Chief Executive Officer, Greening Australia

CHAIR—Mr Williams and Ms Dibley, do you wish to make a brief opening statement before we go to questions?

Mr Williams—Yes, thank you. Just by way of background, Greening Australia is one of the largest environmental NGOs. We have some 47 offices across Australia and we have been in existence for 26 years. Our focus in southern Australia is on transforming degraded landscapes on a very large scale through the restoration and expansion of biodiverse and native forests, woodlands and other vegetation systems. Greening Australia's model for landscape-scale transformation is based on strong science, with the express aim of achieving an economically sustainable mix of land uses. Broadly, this equates to a landscape that incorporates approximately one-third traditional agriculture, one-third deep-rooted perennial vegetation based agriculture and one-third permanent biodiverse vegetation systems.

Greening Australia's interest in carbon sinks is quite straightforward. The creation of a carbon market worth potentially billions of dollars can in theory be leveraged to turbo charge existing efforts to halt and reverse the degradation of Australia's environmental assets through the establishment of large-scale carbon sinks that reconnect isolated remnants of biodiverse native forests and woodlands. As a result of the carbon market there will be, for the first time, a revenue stream that is capable of addressing environmental threats at the scale of the threat.

To realise the opportunity, Greening Australia have created a biodiverse carbon offset business and we have recently been approved as an abatement provider under the federal government's Greenhouse Friendly scheme. Greening Australia would urge the committee to recommend that the Tax Act amendments and associated guidelines underpinning carbon sink forests provide a positive incentive to drive the use of biodiverse carbon sinks through mechanisms such as tightening the guidelines or amending the legislation to provide a higher level of tax deduction to biodiverse carbon sinks. As a consequence of establishing the biodiverse carbon business, Greening Australia found it necessary to develop a definition of biodiverse carbon sinks—it is: a planting that restores a self-replacing diversity of regionally native vegetation on land cleared prior to 1990.

The qualities that distinguish biodiverse carbon sinks from other carbon sinks include that the plantings are self-replacing—they self-regenerate after natural disturbances such as fires and storms—they are sourced from native seed to the bioregion in which they are planted; they are situated in local soil, slope and climatic conditions and are suited to those; they are at least 10 hectares in size and more than 100 metres wide to ensure permanency and self-replacement. These are most capable of adaptation to climate change, including hotter temperatures, lower and more variable rainfall, and more frequent fires. They represent the lowest environmental and financial investment risk.

There is no legitimate ecological reason why monocultures of non-native species are needed for carbon sinks. After much research and development, fast-growing, short-rotation and uniform plantation systems have been developed to provide profitable timber products. In contrast, carbon sinks need to be long-lived, low-risk, self-replacing and resilient. Uniformity and fast growth are not the imperatives of carbon sinks.

If the intent of the proposed Tax Act amendments is to ensure that forest sinks deliver real and sustained abatement as part of the national contribution to tackling climate change then it is vitally important, in the face of inevitable climate change, that forest and woodland sinks that are inherently resilient are encouraged through additional incentives. Only biodiverse forest sinks, as articulated above, have the capacity to deliver both mitigation and adaptation, because they are inherently resilient. The reality is that it costs approximately twice as much to plant a 40-odd-species biodiverse planting than a single-species planting. Therefore investors seeking lowest cost abatement will direct their funds towards monoculture plantings. To see the first ecosystem service market fail to maximise environmental benefits would be a perverse outcome. Whilst the environment and natural resource management guidelines in relation to the establishment of trees for the purposes of carbon sequestration do go some way to delivering a balanced mixed land use, they fall short of driving biodiverse plantings as the guidelines rely on ambiguous regional natural resource plans.

We believe the Tax Act guidelines should provide a tax incentive for investment in native biodiverse carbon sinks to clearly favour these over monoculture plantings of native and exotic species. This would lessen the cost differential between the two abatement options and maximise the net environmental effect. I might leave it there. We would like to provide a written submission in due course.

CHAIR—Thank you.

Senator McGAURAN—Could you just go over the very last point you made? Sorry, I missed it.

Mr Williams—If the guidelines and/or the tax act are used to favour—in other words, provide a high level of incentive to—biodiverse native forest, then it will lessen the cost differential and put us on, if you like, a more even cost footing in the choice of monoculture versus biodiverse.

Senator McGAURAN—Now that you have established your business, what is your understanding of the point at which you can take the tax advantage of the plantings and growth and maturity?

Mr Williams—At the point of plantation.

Senator McGAURAN—Is that clear in the act?

Mr Williams—Yes, it is clear to me in my interpretation of it.

Senator HEFFERNAN—So, I am the farmer; you are the bloke with too much money who wants the tax deduction; and Ms Dibley is the carpet bagger who is going to save the trees. I then get too old and tired and cranky. We do all that, and we contract it to Origin Energy, or someone,

who want the offset. The CSIRO have told us that they have got no idea of the sequestration rate, history, timing of the lifecycle of the tree—they have not completed that work. How do Origin Energy know, when they contract with you, what bang they are going to get for their buck?

Mr Williams—Origin Energy, like any investor, will have to make a forecast of two things: one is the carbon yield that they will get out of the plantation and the second is their view on the carbon price.

Senator HEFFERNAN—But surely they are looking to buy a direct offset against the government's program, so they are going to be saying, 'We are going to offset so many million tonnes.' How do they actually know what a tree is going to do?

Mr Williams—Firstly, they have got to form a view on their forecast—and there is poor science around that—and then, once the plantation is in and planted and it is at the five-year verification point, we measure.

Senator HEFFERNAN—When will that science be complete?

Mr Williams—That is a very interesting question, Senator. I think we heard from CSIRO earlier that the science in relation to mixed species planting is poor. The science in relation to forest species growth rates is very strong. A number of organisations like ourselves and CO2 Australia have undertaken various measurement of dry weight et cetera to derive statistical growth curves for native species, but they are few and far between. It needs more work. Indeed, we have an R&D program—

Senator HEFFERNAN—But we are about to embark upon this journey without the work being done, aren't we? There are people lining up with their money now.

Mr Williams—Yes.

Senator HEFFERNAN—So aren't we putting the cart before the horse? Aren't we just guessing?

Mr Williams—We are guessing. There is a government system for forecasting, called NCAT, that provides forecasts in different land types and rainfalls to give forecast growth rates. These are highly conservative and investors are using that as their baseline.

Senator HEFFERNAN—All right. So we do all that—we get the guesswork done and the alleged return to Mother Nature with the carbon—and then I get old and tired or run away from home or whatever goes wrong and I sell my farm to Senator Joyce. He pays me an extraordinary amount of money, because he is going to grow googly gums or something, which he thinks he can get a quid out of. My property is freehold. His solicitor searches the title and says, 'Yes, Bill Heffernan owns that and there are no encumbrances on it.' He buys it and he says, 'We will bulldoze those trees because they are not registered on the title.' How do you protect the trees?

Mr Williams—There are two aspects to this. As I understand it, under the green paper, if a forestry operation opts in to the Carbon Pollution Reduction Scheme then that plantation and the credits applying to it will carry with them a liability if they are felled.

Senator HEFFERNAN—That is right, to the bloke who took the contract.

Mr Williams—Correct.

Senator HEFFERNAN—But he did not take the contract; you did—off me, to him, from Origin.

Mr Williams—Correct, and as a risk mitigation, where Greening Australia acquires land through either freehold purchase or profit upon recontract, we would place a covenant over that land and have that registered in perpetuity to protect.

Senator HEFFERNAN—Der! That is the point that we have been making for weeks.

CHAIR—Who are you saying ‘der’ to, Senator Heffernan? I do not think it is Mr Williams.

Senator MILNE—No, it is not.

Senator HEFFERNAN—The government is not saying, NAFI is not saying, no-one is saying that this will have to be registered—which it will have to be. When Barnaby Joyce buys my farm and his solicitor searches the title and it is a clean title, then no-one has got any legal comeback on him because he has bought a clean block of land with nothing registered on it. If there is a gas pipeline through the thing there will be an easement on the title. So then we go to easement. So then you have to survey the easement. Are we going to do all that?

Mr Williams—We will be doing that in our business and that is so we can go to investors or purchasers and provide certainty that we have our risks managed—

Senator HEFFERNAN—Is that required under the legislation?

Mr Williams—Under this tax legislation? I do not believe it is.

Senator HEFFERNAN—That is just flawed legislation. It is crazy. Wouldn’t you agree? You will not get the sack for telling the truth.

Mr Williams—I do not have a view on whether that should be incorporated in this legislation, but it clearly should be a requirement somewhere through the associated tax act and/or carbon reduction scheme.

Senator HEFFERNAN—And you would agree that it would have to be? We have got the CO2 company—and, God bless them! I hope they all get a quid and die rich—but they are talking about putting strips of trees through, originally, they said, the Western Division of New South Wales and they are going to get a salinity credit as well. But when I pointed out to the person who rang me, who I do not want to embarrass, that there really is not a salinity problem in the Western Division, they said, ‘Well, down around Hay,’ and I said, ‘That is not the Western Division.’ But they are talking about putting strips of trees through people’s farms. I said, ‘What if a bloke wants to move his stock against the grain of the trees; would you have to have registered gateways to go through all these bloody tree lines?’ You would obviously have to

survey it, so you could secure the planting on the title. So you would agree that it would have to be tidied up legally, on the title, to be enforceable?

Mr Williams—A reasonable investor would expect that risk to be managed in some way through some legal mechanism, yes.

Senator HEFFERNAN—Do you know what state governments are prepared to do on this? Is the law silent?

Mr Williams—I have no knowledge.

Senator McGAURAN—Mr Williams, congratulations on one point: you are the first one to come before us and attempt to set down a criterion, which is very good, and that is why you are opening up all these questions. If it is on the first year of planting that you obtain the tax deduction for your investors and if, in the second and third years, half or even 30 per cent is wiped out by rabbits or whatever, do you have a replanting program? Or, post the deduction, do you feel you do not have to do anything more?

Mr Williams—If I can answer that in the narrow sense of Greening Australia's business model, we go to market with a product that says we will guarantee for five years particular survival rates et cetera, irrespective of pestilence, fire, disturbance and so on. Beyond that, the investor is taking some risk. There is a management regime et cetera. But we are now answering this in the very narrow sense of our product. We are really here in a broader policy sense around the tax act amendment.

Senator HEFFERNAN—It is important practical stuff, but if what has happened in the Riverina for the last 10 years happens and it does not rain, and your trees die after five years, it is no skin off your nose; it is skin off the nose of the person who has got the contract. You are not obliged—

Mr Williams—To deal with that risk, we run a pool that plants into five landscapes right across Australia, and we overplant and plant extra hectares to deal with that exact risk. But, again, we are answering the question now in the narrow sense of our business model.

Senator HEFFERNAN—Say there was a fire: would you say, 'We've lost those but those are yours over there'?

Mr Williams—We are planting at scales of hundreds of hectares and, in some cases, entire farms. So scale gives us one protection, and you get diversity—

Senator HEFFERNAN—Could you give me an example of where you have planted an entire farm?

Mr Williams—The property we have just replanted is a property just north of Albany in what is known as the Fitz-Stirling link, an area from the Fitzgerald River National Park to Stirling Range National Park.

Senator HEFFERNAN—So it is a monoculture?

Mr Williams—No. Forty-seven species went back into that landscape.

Senator HEFFERNAN—So did you have to do an environmental plan?

Mr Williams—Are you referring to it being done under any particular regulations?

Senator HEFFERNAN—Just under the environmental act for the state of Western Australia. One of the great fundamental planning flaws in the 2020 Vision forestry strategy was that they gave them an exemption from forestry planning. So we had people in here this morning bragging about the Tumut area but you have got people up there tearing their hair out because all their local streams have been lost because there was no environmental planning associated with the plantation forestry. So have you got an exemption? Is there no requirement to do an environmental plan? Can you plant out an entire farm regardless of where it is?

Mr Williams—There was no requirement to lodge an environmental plan for this property.

Senator HEFFERNAN—Don't you think it is fraught with danger? If the law is silent on environmental planning for broadscale planting, that means you could actually go into a sensitive part of the catchment and plant and not have to put in an environmental plan.

Mr Williams—I made the comment earlier that the quality of the natural resource management blueprints and plans out there at the moment are patchy. Some are inadequate and that raises the risk that you have just outlined; I agree.

Senator MILNE—That is the question I want to get to. When this legislation was introduced the parliament did not have the benefit of the Environmental and Natural Resource Management Guidelines that now are a disallowable instrument, and that comes to my point. I am unfamiliar with the regimes of various catchment management groups around the country—the NRM groups and so on—but in my home state of Tasmania there is no hydrological assessment for any of the catchments in Tasmania; they are starting to do that measurement. We have heard this morning from the CSIRO that it is going to be 2011 before we are going to get any sort of assessment under the National Water Initiative about catchments that are overallocated and so on. We already have tax deduction for Landcare plantings, but that is nothing compared with what this tax deduction will do in terms of monocultures. You mentioned a minute ago the possibility of giving a larger deduction for a multispecies, biodiverse planting as opposed to a monoculture, therefore trying to even up the cost and therefore the incentives. There are so many issues around this and the possibility of getting it wrong. Do you think it is premature to proceed until we have much better data on a number of these ecological issues about water interception, about biodiversity and about permanence and those issues?

Mr Williams—Two aspects there come to mind. Firstly, we are dealing with significant environmental threats on many fronts. We can wait, if you like, to have all the ducks lined up in terms of perfect science, but it will only exacerbate the situation and the opportunity will be lost, particularly around no-regrets actions. Secondly, in relation to the water allocation issue, the reality is that the greater growth rate, the greater the biomass you are trying to create, the greater will be the requirement for water. It is as simple as that. A natural ecosystem will initially, if you compare that to bare earth, intercept water—there is no doubt of that—but, if you look at it

through the lens of the total environmental impact, there is a significant positive. If you look at it through the narrowest of lenses on water quantity, then there is a short-term interception.

Senator MILNE—Okay. It is no secret that I have moved for the tax deductibility to be available for biodiverse plantings and where the plantings are in the ground for 100 years—or longer, obviously. Is that something that you would support?

Mr Williams—I would support a differential incentive to put the cost issue on a more equal footing of biodiverse plantation versus the cheaper monoculture. Whether that is a constriction or a different level of incentive, I think either mechanism could be made to work.

Senator MILNE—What about a mechanism to get some kind of reward for restoration of degraded native vegetation or degraded forest?

Mr Williams—I am unclear as to how that would work through a carbon lens, through trying to issue carbon permits off that.

Senator MILNE—The issue here is that the work the ANU has been doing under Brendan Mackey is to estimate the maximum potential carbon-carrying capacity of an undisturbed native forest or undisturbed native vegetation regime. So you know what the potential of your undisturbed one is, you measure the level of disturbance of your existing vegetation or degraded forest and then you provide incentives to restore that to its maximum potential. There is no ability, under this legislation, to look at restoration issues. Because it is taking the Kyoto view that it has to be cleared at 1990 levels, it seems to me the potential for restoration of degraded natural ecosystems is missing in this.

Mr Williams—I would agree, but I took it as a given that this legislation was to encourage early action in advance of the Carbon Pollution Reduction Scheme as outlined in the green paper. So I agree with you, but we have approached this in the narrower sense, if you like.

Senator MILNE—Where in the legislation does it suggest to you that that is the intention at all?

Mr Williams—That has been our interpretation of this legislation, as it was when it was tabled by the previous government.

Senator MILNE—Can you envisage a situation where a forest industry company could be managing a thousand hectares of plantation for production forestry and 700 of those hectares for carbon at the same time and get both?

Mr Williams—Can I see that? Yes. It is possible. That would mean they were either operating in the voluntary market or, more likely, operating in the mandatory market, which means that, under the proposed scheme, they would have opted in and they would have to account for any harvest emissions. So they would need to balance their timber portfolio as well as their emissions portfolio, if you like.

Senator MILNE—And that is why they would manage 1,000 hectares for timber production and, say, 500 or 700 hectares for carbon. In their plantation rotation, they could make sure that

they had a constant level of carbon from the 500 hectares out of their 1,000, so they would get a 100 per cent tax deduction up-front, the fibre cost and the carbon. So actually this would be a windfall gain for people who want to manage their forests for fibre, and therefore you will not get the maximum carbon sequestration because there will be a managed rotation so that those trees are never in the ground for more than 14 or 15 years. It is just that the rotation will mean there is a constant level of carbon. Can you see that that could be a huge windfall here for plantation companies and not for the environment, since there will be no additionality?

Mr Williams—I understand the point you are making. I do not understand the economics of a balanced monoculture plantation, so I cannot answer your question. But I do understand the point you are trying to get to.

Senator MILNE—And isn't that currently allowed under the government's rules—under the Greenhouse Office rules?

Mr Williams—If that forestry company had opted in, yes, and they accounted for their net sequestration or emissions—yes, as I understand it, they could do that.

Senator MILNE—Okay. You made the suggestion, which is where I am coming from, about rewarding people for ecological services and for planting for biodiversity and building more resilient ecosystems. Apart from the differential levels of support you have suggested you might get for one over the other, are there any other suggestions you would make about all these loopholes in relation to the various state regimes and NRM capacities and all that sort of stuff?

Mr Williams—We would like to see further strengthening around the perpetuity issue, the longevity issue, but we are not necessarily relying on this tax amendment act and guidelines as the only mechanism for ensuring that. We assume there are other mechanisms around land clearing, around the regional plans, around the design of the carbon reduction scheme et cetera, and the sheer market force of demanding the risks be managed for the long-term supply of carbon, that will satisfy those as well.

Senator MILNE—Except that this is a tax amendment and, if you meet the requirements, the tax office will take a simple straight-out 100 per cent tax deduction. These are the requirements, and it will be up to people to take civil action to disprove requirements having been met in terms of catchment management, hydrological issues and all that kind of stuff. In some places they do not exist. In the Tasmanian case, you would meet the Tasmanian obligations because no obligations exist. It does not mean to say that you meet the ecological obligations in terms of land clearance, hydrological assessment, catchments and stuff. Where legislation does not exist, you would comply with the tax act and the guidelines and you could destroy the place.

Mr Williams—I am not disagreeing with you, but I just take you back to our proposed definition of a biodiverse carbon sink being a planting that restores a self-replacing diversity in regionally native vegetation on land clearing.

Senator MILNE—That is your definition—

Mr Williams—Implicit in that is that perpetuity is required.

Senator MILNE—Thank you. That is your definition, but that is not the government's definition.

Mr Williams—No.

Senator MILNE—We are dealing here with what the government defines as carbon sink as opposed to the ethical view that your organisation might take. That is the issue here. All you have to do is comply with the legislation, not with what Greening Australia or anyone else might think. The definition, as it stands, does not incorporate any of those governing considerations that you have just put forward.

Ms Dibley—I suppose the course we are taking really is to highlight the potential perverse outcomes that you are referring to and to strongly argue that the model of our work, which is all about landscape restoration—

Senator MILNE—Yes, it could be taken on board.

Ms Dibley—Yes.

Senator MILNE—That definition could be incorporated, which would solve a lot of the problems.

Ms Dibley—Yes.

Senator JOYCE—You are aware of the legislation that surrounds the so-called TLAB, the tax laws amendment bill, that this inquiry is about.

Mr Williams—Yes.

Senator JOYCE—You are aware of the deduction that is stipulated in 40-1005—and I quote from the legislation:

... you incur capital expenditure that is covered under section 40-1010 in relation to particular trees established in the income year ...

Have you had any further discussions or been involved with anybody about what part of that capital expenditure would be?

Mr Williams—We have had no discussions regarding the wording in the tax act.

Senator JOYCE—So you are probably not much use to me on that one then. One of the questions has been the tax deductibility of the actual purchase of land, which in the legislation itself is not excluded. Nowhere does this legislation talk about not being able to get a capital deduction for the purchase of land, which would be a substantial capital deduction and give a substantial tax advantage to any organisation that wished to purchase such land. I note that section 40-1020 of this legislation specifically refers to 'certain expenditure disregarded', but nowhere in 40-1020 is there any mention of disregarding the purchase of land. Given that land is

definitely capital in nature and the section that talks about areas that are to be disregarded does not include land, would that mean to you that land is included?

Mr Williams—I have not read the detail of the legislation. The information in the memorandum and the information provided on the tax office website currently infer that the land is excluded.

Senator JOYCE—How would they come up with that exclusion of land, given that it is not in the legislation?

Mr Williams—I cannot explain how the tax office prepared their website; I am sorry.

Senator JOYCE—You support the legislation, don't you?

Mr Williams—Yes.

Senator JOYCE—What are your views on the socioeconomic study in regard to the legislation?

Mr Williams—As an organisation, we have not examined the socioeconomic impacts of that. We do not have the resources to do that.

Senator JOYCE—Do you know whether anybody has examined the socioeconomic impact study?

Mr Williams—I have no knowledge of that, no.

Senator JOYCE—Do you know whether there has been a socioeconomic impact study?

Mr Williams—I have no knowledge of that.

Senator JOYCE—If I were to tell you that there has not been a socioeconomic impact study, would you find that surprising?

Mr Williams—Yes.

Senator JOYCE—Do you think there should be a socioeconomic impact study before this legislation goes through?

Mr Williams—I would have thought so; that would be appropriate.

Senator JOYCE—There has not been, and that is one of the surprising things that we found about this legislation. Is your belief in the environmental benefits of carbon sequestration the reason you support the legislation?

Mr Williams—That is right.

Senator JOYCE—Therefore, you believe that there is a substantial advantage in the carbon that will be captured in the creation of these forests?

Mr Williams—Yes. We see significant investment going into biosequestration and through multi-species plantings.

Senator JOYCE—But, as Senator Milne has already pointed out, this can be a rotational harvesting scheme if we wish to work it that way.

Mr Williams—That is unlikely for the multi-species plantings.

Senator JOYCE—But within the legislation we have the capacity to do it.

Mr Williams—Yes. I think we have already covered this point with Senator Milne.

Senator JOYCE—Do you think that is a flaw and should be ruled out?

Mr Williams—It is our view that these plantations should be there in perpetuity.

Senator JOYCE—That means you cannot harvest them, which means you would have to rule it out. I notice you have a tree on your lapel—can you suggest to me what would be the appropriate tree to get the greatest amount of carbon appropriated within timber? How would you get the heaviest amount of carbon? You are looking for the heaviest amount of carbon per acre, aren't you?

Mr Williams—That is not what we are looking for, no. We are looking to restore the landscape using local native species, funded through a revenue stream generated by carbon credits. We are not looking to maximise—

Senator JOYCE—What would be the advantage to the local community of that revenue stream of carbon credits? Say there is a forest on the edge of town, it is growing in weight and there is a revenue stream going back to Rio Tinto or BHP. Tell me the advantage for the local town of that.

Mr Williams—This is a revenue stream from a monoculture plantation?

Senator JOYCE—The weight of the carbon is increasing, so you are developing carbon credits. And a carbon credit is a revenue item that certainly has value, so it would have to be accounted for as value. So this is an increase in an asset, and an increase in an asset is a form of attainment of revenue. You also have the capacity, I imagine, to sell it if you wish. But just tell me what the benefit will be to the local surrounding towns of that increase in that asset and that revenue. What are they going to get out of it?

Mr Williams—As I said earlier, we have undertaken no socioeconomic modelling.

Senator JOYCE—Off the top of your head, give me one benefit to the town.

Ms Dibley—We are saying that we are restoring natural systems and that we are interested in the restoration of degraded native forests. We think that there are large carbon stocks in existing degraded forests that should be also valued. We are saying that, for instance, through private sector investment in this way there can actually be an increase in the National Reserve System. These are public goods. The focus of our work is public good.

Senator JOYCE—So that is the argument you would espouse at the local hotel on a Friday night?

Ms Dibley—I think we could also, if we got into the discussion, talk about the fact that the kinds of plantings we are interested in are quite different to the sorts of plantings that might give rise to the perverse outcomes that we were discussing earlier.

Senator JOYCE—In regard to those perverse outcomes, do you believe that there should be more prescription about the type of country that this form of investment can be placed on?

Ms Dibley—You have to understand that our work, which is about landscape restoration, is in degraded areas. We look at areas of connectivity with places that already have high conservation value. We work often in establishing areas of connectivity between existing National Reserve System areas, for instance. So we do not conduct that kind of research.

Senator JOYCE—Let us talk about your restoration of areas and connectivity—and I am not quite certain what that means, but we will run with it. When you talk about degraded areas, can you please be a little more specific as to what you define as a degraded area? Would you define, for instance, a cane growing area on an alluvial floodplain as a degraded area? Would you describe the Breezer plains as a degraded area? What value judgements do you make in defining something as a degraded area? Is it as broad as, ‘Well, it was like that 300 or 400 years ago and it is not like that now; therefore, it is degraded’?

Mr Williams—No. The planning process we use is called conservation action planning. It looks at the landscape scale. It identifies all major threats and then identifies a range of outcomes and actions. We do not start at the paddock scale in terms of planning ecological restoration.

Senator JOYCE—Is that sort of guideline in this TLAB legislation?

Mr Williams—No, it is not in the legislation. It is inferred from the reference in the guidelines to the regional NRM plans; but, as we have said, they are ambiguous and at times not of high quality.

Senator JOYCE—As I have pointed out, quite a few inferences from this legislation are actually not in this legislation; they are not there.

Senator HEFFERNAN—In my view, he has done a bloody good job in some areas. I am familiar with this from my area. Years ago this was part of our education about land care and what was happening on our farms. I think you have a lot of good work behind you and you have a pretty fair history in that work. The difficulty for this committee is that the legislation does not have your background and is silent on a lot of the stuff that you take as a given. Wouldn't you agree with that?

Mr Williams—Yes.

CHAIR—I thank Greening Australia. Ms Dibley, I commend you on your conduct when Senator Heffernan, to get his point across, referred to you possibly as a carpetbagger.

Ms Dibley—I thought it was quite amusing really because it is so untrue.

Senator HEFFERNAN—Who did I refer to as a carpetbagger—Greening Australia? I withdraw that. They are not carpetbaggers. There are plenty of carpetbaggers lined up, but you are not one of them.

CHAIR—Thank you, Ms Dibley, and thank you very much, Mr Williams.

[11.23 am]

CARRUTHERS, Mr Ian, First Assistant Secretary, Adaptation and Land Management Division, Department of Climate Change

RYAN, Mr Paul David, Director, Land Sector Policy, Department of Climate Change

FLAVEL, Mr Matthew James, Acting General Manager, Business Tax Division, Treasury

CHAIR—Welcome. Thank you very much for making yourselves available at such short notice in response to our changing your time to appear here. I remind senators that the Senate has resolved that an officer of a department of the Commonwealth or of a state shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions asked of them to superior officers or to a minister. This resolution prohibits only questions asking for opinions on matters of policy and does not preclude questions asking for explanations of policies or factual questions about when and how policies were adopted. Officers of the department are also reminded that any claim that it would be contrary to the public interest to answer a question must be made by a minister and should be accompanied by a statement setting out the basis for the claim. Do any of you wish to make a brief opening statement before we go to questions?

Mr Flavel—No.

Senator HEFFERNAN—There are a few things I would like to go through. I have the view that the principle of carbon sinks is great, but the science is far from complete. For a lot of people who are into financial instruments more than they are into the planet, it will be the potential for a river of gold if they go about it the right way—and that certainly does not apply to the previous witnesses. How does the taxation department overcome the problem that came up of MISs—and I know this bears no relationship at all to this principle and this legislation—where they charge several times the real cost to form the tax deduction up-front for the investor? How will you form a view on what is the real cost of plantation costs of a sink?

Mr Flavel—I think the best way to answer that is to refer to the explanatory memorandum, which lays out those components of establishment expenditure which would be considered to be eligible.

Senator HEFFERNAN—But they laid that out for MISs too. What you are dealing with is people who use the tax act to get where they want to go regardless of how you change the rules. Will you concede that, in the MIS arrangements for the plantation forestry, some of the costs—for instance, in the almond industry—were excessive and well beyond the real costs?

Mr Flavel—It is not appropriate for me to comment on MISs.

Senator HEFFERNAN—How would you assess it? Will you go out and have a look? What does the act say?

Mr Flavel—I make the point that structurally MISs are quite different from the arrangement—

Senator HEFFERNAN—Forget about MISs. I am talking about carbon sinks. How are you going to do it?

Mr Flavel—I think it is important because the concern that was raised in some quarters about MISs was essentially because of an arms-length arrangement between an investor and ultimately those who are, if you like, at the coalface, or at the tree face, undertaking the relevant plantings.

Senator HEFFERNAN—It was good for everyone.

Mr Flavel—Part of the structure of MISs, I guess, involves third parties.

Senator HEFFERNAN—Can we forget about MISs and talk about carbon sinks?

Senator O'BRIEN—Can we just get the answer, please? This interchange disrupts the nature of the answer. You have asked a question, and I would like to hear the answer and then a subsequent question, perhaps.

Mr Flavel—I think it is important because the concern in MISs was essentially raised in some quarters about the fees going to third parties—planners and those involved in the process of raising capital that was then ultimately fed through to MIS investment. This tax deduction goes directly to a business which is in the business of carbon sequestration, so it is a fundamentally different structure—

Senator HEFFERNAN—I accept all that. Can we keep the answer short. Let us say I am the business that is claiming from you as the investor, and I am going to lease a farm from Senator Nash, which is owned by Senator Joyce, so I am doing the work for you. How do you know that I am not charging you—have you ever had an insurance job done on your car?

Mr Flavel—Very many times.

Senator HEFFERNAN—If it is not an insurance job you will find it does not cost you nearly as much as it does if it is an insurance job. It is the same person making the quote. That is making the point that, under these arrangements, which are driven by the tax deduction from the investor as a primary, how do you keep a perspective on what is a reasonable cost? Something like spraying might be \$15 a hectare but you might be charged \$35 a hectare. How do you contain that sort of stuff?

Mr Flavel—Ultimately it goes beyond just this deduction to the normal rules that apply for any deduction.

Senator HEFFERNAN—I will tell you how you do it: you do not. You do not go out and inspect every fence that is repaired and claimed under a tax deduction—you just do not do it. That is the cost, which is going to be a problem—the real cost versus the charged cost. That is where one of the corruptions in the capital market occurred with the other mob—because they

accumulated capital in management fees well above the real cost, which gave them working capital.

In this set-up, when you get a contract from Origin Energy, you come to me and I say, 'Well, I'm going to lease a farm from Senator Nash.' For some reason I decide to sell the farm, on which you are contracted to have a carbon sink, and Senator Joyce buys the farm 30 years later. We do not know the science of the sequestration yet. We have put the cart before the horse, because, as the CSIRO said, this is a voyage into the unknown, so I do not know how Origin Energy can reliably contract with the tax office as to how much carbon they are putting away, because no-one knows. Anyhow, Senator Joyce buys my farm on which this contract is held, and he wants to grow marijuana or cotton hoops, or God knows what, and he decides to plough the bloody trees in. He has bought my farm, and his solicitor did the conveyancing, and there was nothing registered on the title. What is his legal obligation?

Mr Flavel—I think the legal obligation is not really an issue for the tax law.

Senator HEFFERNAN—With great respect, it is an issue for the bloke from Origin Energy who has contracted me through the loop. Bear in mind that this might not be five years later. We have just heard from Greening Australia of an obligation for five years, out of a 100-year cycle. It might be 20 or 30 years later, when I am dead and gone and my grandkids, or someone else, are running the farm. If it is not registered on the title, how do you protect the covenant?

Mr Flavel—Again, it is not really an issue for the tax act; this is providing a deduction—

Senator HEFFERNAN—With great respect, you have an obligation to make sure you are not defrauded—right? It is a primary obligation of the tax act to protect the public purse. How do you protect the public purse?

Mr Flavel—I cannot see—

Senator HEFFERNAN—You cannot answer it because there is nothing in the legislation that does it.

Senator O'BRIEN—Can we get an answer? You seem to be answering your own questions—

Senator HEFFERNAN—Well, can you mob answer it?

Senator O'BRIEN—I would like to hear an answer from the witness rather than you, Senator.

Mr Flavel—In substance, this is no different from any other expenditure that might be incurred by a business—for example, a business that incurs expenditure in building a building. That building might then be rented out to various businesses. Compliance with things like safety standards and building codes is not a matter for the tax act. They are dealt with in separate legislation, but they are equally as important.

Senator HEFFERNAN—Wriggle as much as you like. Perhaps I could come to you. Do you fellows deal with this side of it?

Mr Carruthers—Not administration of the tax act.

Senator HEFFERNAN—Well, who does? Who am I supposed to be addressing these questions to?

Mr Carruthers—The Treasury portfolio.

Senator HEFFERNAN—The tax act is going to say that you can legitimately claim a tax deduction up-front to put in trees, into a carbon sink—right? And you are saying that the tax office is pleased to be able to offer the tax deduction to the investor—true?

Mr Flavel—I am not from the tax office. I cannot speak on behalf of the tax office.

Senator HEFFERNAN—Well, you are in charge of the public purse if you are Treasury. Do you, Treasury, have an obligation to protect the public purse?

Mr Flavel—Senator, I am not sure how I could answer that question.

Senator HEFFERNAN—Well, you do. I want to know, in a practical sense, from somewhere in the bloody government, how you protect the integrity of the carbon sink on freehold land without the obvious need to survey it and register it on the title. When Senator Joyce buys my farm, if it is not registered on the title—and it is the same as a gas pipeline easement or a telephone or a power line—how the hell do you protect it without an easement?

Mr Carruthers—The questions have moved on a little here, Senator, from just direct administration of a tax provision to the whole framework in which this is going to operate.

Senator HEFFERNAN—It is all the one question. Without an easement, how do you protect something on the title, if it is a freehold title, if it is not registered on the title, for God's sake?

Mr Carruthers—We began a discussion on this in this committee a couple of weeks ago, on another subject. I mentioned at that time, for example, that each of the states has carbon rights legislation, which allows for the carbon rights to be registered as a right. Just as property rights can be registered, trees can be registered.

Senator HEFFERNAN—That is fine, but I have got a 100,000-acre farm, and I have 1,000 acres of carbon plantings on it. You are dead and I am dead, and my grandkids and your grandkids are arguing over it, and Origin Energy has been sold. Kevin McCann, the chairman, has sold it to someone else. How do you protect the 100-year life of the carbon sink if it is not a registrable instrument on a title? Tell me how you do it.

Mr Carruthers—The states' legislation allows for registering of carbon rights, so it is—

Senator HEFFERNAN—Der, but how do you do that if you do not identify on the title where it is? You would have to survey it.

Mr Carruthers—That is a matter for the parties to the contract, just as, if somebody purchases land, it is for them to register the title, the rights.

Senator HEFFERNAN—Wouldn't it make sense for the Commonwealth to have the bloody brains to put in the legislation the requirement to protect the integrity of the carbon sink for its life with an instrument which is registrable on the title? Otherwise, he can do what he likes. If he has got a freehold title and there is nothing registered on it, he can turn it into golliwogs or boomerangs. It is no skin off his nose.

Mr Carruthers—There are a couple of points there. First of all, the notice of application that is on the ATO website requiring certain information requires the boundaries, the datum, for the forest sink plantings to be declared as part of the tax application. So the Commonwealth, from the point of application, has the record of that, and—

Senator HEFFERNAN—Does that have to be a surveyable document? I have got 100,000 acres, and Michael Baume is going to put strips every 400 metres, 20 metres wide, across my place. How do you know what is there if you do not survey it?

Mr Carruthers—There are quite simple ways that these—

Senator HEFFERNAN—Oh, yes?

Mr Carruthers—Yes, with satellite technology and GPS, that is fairly simple stuff in the forestry industry.

Senator HEFFERNAN—All of that, and then how do you protect that at law if it is not on the title?

Mr Carruthers—It is open to the parties to the contract to use states' carbon rights legislation to do that.

Senator HEFFERNAN—Anyhow, you have not got the answer. That is all I need.

Mr Carruthers—The Commonwealth does not administer property rights in the states; there are state lands departments to do that.

Senator HEFFERNAN—I would have thought they would have learnt from the Murray-Darling Basin that, if ever there was a job for the Commonwealth to have an oversight of, it would have been an Australia-wide policy on carbon sinks, given the vagaries of all the states. If ever there was a lesson to be learnt from the bloody railway line gauges and the rivers in the Murray-Darling Basin, this is another example of that—and you are saying it is up to the states. Golly gee for you.

Mr Carruthers—In terms of property rights.

CHAIR—Are there any other questions of the department?

Senator MILNE—I would just like to go to the guidelines. Mr Ryan, I understand that you have written the guidelines or you are the spokesperson on the guidelines. My issue follows up what has been discussed before on the issue of monitoring, compliance, enforcement and penalties. All of these guidelines—1, 2 and 3—as I read them here rely on it being accepted as

their having been complied with if there is supposedly compliance with state legislation, forest practices codes, catchment management plans and so on. Do you accept, Mr Ryan, that state land clearance legislation is adequate or enforced? Forget the 'adequate'; that is a policy question. Does every state have land clearance legislation, and is it enforced?

Mr Ryan—Every state has legislation for management of vegetation clearing. As to commenting on enforcement, I do think that is not a matter that we would comment on.

Senator MILNE—Okay. So you are putting together guidelines to cover a Commonwealth, tax-deductible practice when you have no ability to in any way monitor compliance with that at the state level, let alone a local level, let alone the catchment level or NRM plans or anything else?

Mr Ryan—The guidelines require the taxpayer to demonstrate that they have complied. But also, specifically on land clearing, the eligibility requirements for forests in the legislation also preclude forests that have been established following clearing.

Senator MILNE—Yes, I understand that. This is forests under the Kyoto protocol. We are talking about reforestation and afforestation on previously cleared land. The point I am making is that all of these things say that, for the purposes of this legislation, all they have to do is demonstrate compliance with state or local land clearance, NRM, catchment requirements and so on, by demonstrating they have got in place a strategy for fire management, a strategy for feral animal management. Whether they actually do anything with the strategy they have got is nothing to do with this, is it? They just have to have a strategy.

Mr Ryan—The guidelines apply to conditions that need to be met at the time of establishment in order to obtain the tax deduction. So that flows directly from the legislation. And all components recognise, as you have said, that there are regulatory requirements and other non-regulatory arrangements in place. So these guidelines have been structured in recognition that they do exist; they do not add to existing compliance requirements.

Senator MILNE—But it is meaningless to say they have to meet compliance requirements if they are not monitored and enforced. For example, Tasmania have no hydrological data on their river systems, their groundwater et cetera; how are they going to comply with anything if they do not have any data?

Mr Ryan—I think, similar to some of the other issues, these guidelines add extra strength to the legislation. Similar requirements do not apply to some other things. So these guidelines have been applied in recognition of what exists, to support this measure. They do not attempt to establish any new requirements, if there are cases where requirements do not exist.

Senator MILNE—So you would get a tax deduction for planting one of these forests in Tasmania if you have a feral animal management plan—including native animals, of course, which are regarded as feral by the forest industry—which allowed the use of 1080 poison on private land; is that correct?

Mr Ryan—I am not able to comment on the specifics, but if the intent here is to—

Senator HEFFERNAN—Management costs are in, aren't they?

Mr Ryan—Management costs?

Senator HEFFERNAN—They are tax deductible.

Mr Ryan—This relates to establishment costs.

Senator HEFFERNAN—Yes. Management costs are in?

Senator MILNE—No, this is about a strategy for feral animal management—that you comply with the tax deductibility requirements if you have a strategy for dealing with feral animals, which the forest industry determined are native animals. So you can get a tax deduction and manage your plantation by poisoning everything in sight.

Mr Carruthers—Senator, perhaps I could comment here. We are speaking here about a specific provision under the tax act and a connection to a climate change objective.

Senator MILNE—That is right.

Mr Carruthers—It is actually an unusual feature to have in the tax legislation a requirement to meet environmental or natural resource management guidelines—and I hope it is seen as a very positive thing in this case. I think there is a question of how far you can take requirements in that, if the principal concern is around biodiversity outcomes or some other aspect of land management, how far can you go through a linkage between the tax act and climate change objectives in dealing with a range of other national land management objectives? If there is a problem to do with, for example, feral pest management, the first principle of public policy is to deal with that in terms of the biodiversity requirements or land management practices or whatever. It is probably not feasible and not effective to seek to add that on top of the tax act. Indeed, I am sure the lawyers would have something to say about how far you can extend reasonableness of tax application.

Senator MILNE—And that is my point entirely—that these guidelines are a waste of time because they cannot be complied with, they cannot be monitored, there is no penalty et cetera. We have a policy decision to offer 100 per cent tax deductibility for the planting of trees when the only requirement is that you have to say when you planted them that your intention at the time of planting them was that they would be a carbon sink. Apart from that, these are here to give a signal that at some point we would like to connect climate policy with biodiversity with tax, but at this point those linkages are somewhat dubious.

Mr Carruthers—Would you mind if I comment on that observation, Senator. I think there are some extra dimensions to this. In saying that it is unusual to have such a requirement in the tax act, for the tax deductibility applicant to set out to document how they have met the variety of relevant environmental and natural resource regulations and codes of practice et cetera essentially makes that a public statement. It is no longer just internal to the enterprise; it is in the public domain and it is linked to the operation of formative carbon markets. The people who are buying the carbon credits associated with those forests typically will have a keen interest in the integrity of the operation, not just the climate change integrity but the broader environmental and

natural resource management integrity of the operation. So, to my mind, I would think that there is actually considerable commercial and environmental leverage to be obtained through these arrangements.

Senator MILNE—Thank you, Mr Carruthers, but that is an opinion. I do not think the coal industry is going to be wildly interested in the public use or public amenity of biodiversity, which brings me to this issue of whether we are farming carbon or trying to get integrated ecological outcomes, which I would have thought is the whole point. So why does the definition not include that these forest carbon sinks must be biodiverse? Why isn't that the definition? It would help us in a whole range of areas if there were an understanding that it was actually for long-term permanence of this planting. Why wouldn't it be a requirement that it be biodiverse?

Mr Carruthers—In relation to any land area, there are applicable conservation and biodiversity regulations that deal with those matters. So, to the extent that governments have made public policy decisions about biodiversity outcomes, these plantings must meet those terms.

Senator MILNE—Yes, but they do not have to be; they can be monocultured. You can get a 100 per cent tax deduction for planting 1,000 hectares of blue gums. There is nothing in the definition of carbon sink that says that it must be biodiverse for the purposes of getting the tax deduction. I am asking you: why not?

Mr Carruthers—Well, Senator—

Senator HEFFERNAN—He doesn't know.

Mr Carruthers—The example was previously made of the tax act in relation to deductibility for buildings. Under tax legislation we do not require that applications for deductibility for constructing a building should meet some kind of streetscape architectural requirements. These are dealt with through other public policy.

Senator MILNE—I understand that, but you are here from the climate office and I would have thought that resilience in ecosystems would be something that you would be concerned with and that in this legislation that is what we would be seeing. Instead of that we have no resilience built in, and in fact there is a disincentive for multispecies plantings, because they cost, as we have just heard from Greening Australia, many times more to establish in relation to anything else.

Mr Carruthers—Senator, I think the intent of this legislation is indeed to achieve the integrated outcome that you describe in terms of climate change objectives, natural resource management objectives and environmental objectives. There is added focus and pressure through this legislation to declare that all the applicable public policy at all levels of government and all the industry codes and whatever are complied with in making a tax deductibility provision. If governments, through public policy, choose to strengthen or change requirements to do with conservation or other matters over time, then these guidelines have built into them the flexibility to require that the standards of the day are met in making an application for establishment costs.

Senator MILNE—Who is going to monitor and enforce compliance? And where are the penalties? Who is doing the monitoring of this? What if they do not comply with Tasmania's land-clearing laws? Nobody else does, so I do not see why this lot would.

Mr Carruthers—The Secretary of the Department of Climate Change, under the legislation, is required to establish whether there are reasonable grounds for believing that those environmental and natural resource requirements have not been fulfilled. If such a determination was made, then the deductibility would be denied by the Australian tax office under the provisions of the legislation. Given the keen public interest in these matters, I am sure that it would not just be the Department of Climate Change that would have its eyes and ears open in determining and assessing conformity with the legislative provisions to see whether there may be nonconformity. I am sure that there will be many interested parties, including the buyers of the carbon credits and organisations like Greening Australia and other public voices.

Senator MILNE—Will there be a new unit put in place?

Senator NASH—I wanted to ask a question exactly on that: about process. I know you said the secretary is only one bloke, but what is the audit process? And I think Senator Milne was about to ask: is there going to be a unit? What is the process?

CHAIR—Senators: one question at a time. Senator Milne has the call. She has acknowledged Senator Nash asking the question. When it has been answered we will go back to Senator Milne to wrap up her questions.

Mr Carruthers—The applicant for tax deductibility is required to provide statements and to make available any relevant documentation—

Senator NASH—No, I understand all that.

Mr Carruthers—to support that.

Senator NASH—But post that—what is going to be the audit checking process? Who is going to do what? I am asking about the sheer practicalities of the audit.

Mr Carruthers—The Australian tax office, under their auditing provisions, will refer applications to the Department of Climate Change, and the Department of Climate Change will have the opportunity, in consultation with other departments, to determine whether there is any reason why that statement and application may not be in conformity with environmental and natural resource requirements.

Senator NASH—What about the ongoing audit process of ensuring that what has been set up is carried on—if it is right in the first place? If you assume that, in the first place, having gone through all those processes, everything is ticked off, what is the ongoing audit process to make sure that everything is carried on in the way that the proponent has said that they will?

Mr Carruthers—We are talking about an establishment activity. I am not sure what particular characteristic we are speaking about on an ongoing basis.

Senator NASH—It is a set period of time, so, unless somebody is checking that those trees have not fallen over or that the rabbits have not eaten them—

Mr Carruthers—So that is the continued life of the trees as distinct from what the feral pest management practice might be over time. The establishment of the trees is connected to the operation of carbon markets. At the present time that is voluntary. But, of course, the Australian government has announced recently, through the green paper, the Carbon Pollution Reduction Scheme proposals, in terms of a formal carbon market. Under those voluntary schemes, in terms of bilateral arrangements between, say, energy companies and growers, in terms of future emissions trading arrangements, there basically is a requirement that what can be credited is the sequestration of the time, and if the trees are destroyed—

Senator NASH—Actually, I am going to stop wasting the committee's time—

Mr Carruthers—then the credits are lost.

Senator NASH—No; just stop there. That did not answer my question at all. I give up.

Senator MILNE—My final question is: in relation to plantation companies, are they going to be allowed to manage an area for both sequestration and harvesting—that is, manage 1,000 hectares, 500 hectares or 700 hectares for carbon and do it on a rotation basis so they have a fixed volume of carbon for the entirety of the time and keep on logging in rotation so they essentially get a windfall gain on their carbon as well as their fibre? Is that going to be allowed? That is currently allowed under the voluntary scheme, isn't it?

Mr Carruthers—The particular deductibility for a particular unit of land under a carbon sink forest is only where the trees are not for felling. If a particular enterprise—

Senator MILNE—Where does it say that in the legislation? Never mind. I am asking about the issue of this management for both.

Mr Carruthers—If a farmer or another entity chooses to plant trees for another purpose—for example, for Landcare purposes or for MIS forestry or for direct investment in forestry, that would be under a different provision of the tax act.

Senator MILNE—But what if I plant 1,000 hectares and I claim a tax deduction of 500 of those for carbon sequestration and 500 under an MIS, and then I manage the lot on a rotation?

Mr Carruthers—There is no rotation where a tree cannot be felled. There is only a rotation where you harvest the trees and you replant. If you cannot fell the tree, then there is no replacement of the tree, under normal circumstances.

CHAIR—Senator O'Brien.

Senator O'BRIEN—Let us delineate this. If a managed investment company put in 1,000 hectares of trees, under the MIS rules, subject to certain conditions, they can claim the deduction up front in the year of investment, as I understand it.

Mr Carruthers—Under the tax act provisions dealing with MIS forestry—which has attached to it a requirement that the trees be felled. But that is not this part of the tax legislation we are dealing with today.

Senator O'BRIEN—I understand that. I just wanted to separate that, because there seems to be a little confusion creeping in. That is a much more advantageous deduction regime in the sense that it is an up-front deduction of the cost of placing the trees in the ground, and there are other matters that can be considered at the same time.

Mr Carruthers—That is right. And there are other commercial returns from the operation—the sale of the wood products.

Senator O'BRIEN—Whereas with this provision the deduction is spread over 14 years and 105 days.

Mr Carruthers—This particular tax provision is structured in two steps. For the first five years, up until the year 2011-12, there is immediate deductibility for the establishment costs. From the point of 2012-13, it goes into a different regime, which is that of deductibility over approximately 14 years—which is the same regime that applies for long-lived horticultural crops.

Senator O'BRIEN—Can you explain the rationale for that differentiation?

Mr Carruthers—Yes. At the present time there is no deductibility for establishment of forest carbon sinks. I will leave my Treasury colleague to remark on this in terms of his authority, but, in my general understanding of the matter, that is a very anomalous situation under the tax act. The tax act ordinarily would provide for tax deductibility—and there is a bit of a history to this, in terms of the ATO having had more than one version of interpretive decisions on this kind of application. So, if you like, this is putting to rights an anomaly in the tax legislation. But, in doing so, the former Howard government took up the issue of providing an initial incentive arrangement with more favourable deductibility provisions for an initial period of five years. That has been taken up by the current government with the same provisions. The idea is for a short period to give an additional incentive through the immediate deductibility provisions—which is more or less the same as the deductibility provisions that apply on a permanent basis for Landcare plantings, for MIS forestry and for direct investment in forestry. For a short period there will be equivalence; after five years there will be a less favourable deductibility situation for carbon sink forests.

Senator O'BRIEN—Is that because there is expected to be an ongoing income stream from a carbon-sequestered forest?

Mr Carruthers—That is basically the logic. We are dealing with a situation of voluntary markets at the present time, and it is appropriate to take a different tax policy viewpoint once we have formalised carbon markets.

Senator O'BRIEN—Presumably the way the market works will determine the value of those forests against different options. We are to consider where the rules that will apply in relation to

those forests might be found. You have talked about state legislation. What federal provisions to your knowledge will apply to the management and arrangements around carbon sink forests?

Mr Carruthers—Of course, from the outset, in terms of establishment cost, the tax act is applying as are the provisions in terms of things like Environmental and Natural Resource Management Guidelines. When it comes to the marketing of the carbon credits, we have already mentioned states' carbon right legislation. There is not federal legislation in that area. The sale of carbon credits at the present time is done under voluntary markets. The Australian government has a voluntary carbon market arrangement at this time that has been in existence for several years, the Greenhouse Friendly scheme. That has a variety of provisions in it that would apply to these carbon sink forests, such as permanence of the trees and make-good provisions in circumstances of loss of the trees.

Senator O'BRIEN—I understand that the Environmental and Natural Resource Management Guidelines would have to be complied with and that they are as promulgated by the minister from time to time. Is that a correct understanding?

Mr Carruthers—Yes, but they are cast in a way that is intended to be durable over time. As I explained to Senator Milne, if there were a change in environmental and natural resource guidelines brought in by Commonwealth or state governments then these guidelines would automatically pick it up.

Senator O'BRIEN—Will the notification at the time the tax deduction is sought identify the location of the forest in terms of size and the necessary datum points?

Mr Carruthers—That is correct.

Senator O'BRIEN—So you are satisfied that the legislation adequately provides for that identification so that it cannot be traded by an entity within itself or another forest?

Mr Carruthers—That is true. Of course, as I have explained to other parliamentary committees at different times, through the National Carbon Accounting System we have a record of the tree cover of Australia at the subhectare scale over more than 30 years, so we know what is happening out there in the landscape in terms of clusters of trees. It is a very simple matter to check the GPS coordinates on somebody's claim against what satellite records show at the point from establishment and out in time.

Senator O'BRIEN—Are they publicly available?

Mr Carruthers—Yes. We release the remote-sensing covers for use, including in easy-to-use form. We expect that the applicants will use them to demonstrate their claim that they are planting on non-forested lands.

Senator O'BRIEN—Thank you.

Senator JOYCE—My question is to Mr Flavel. I will premise things around this question later on. What is required to grow a tree?

Mr Flavel—Presumably one needs land, seed and other inputs to make it grow.

Senator JOYCE—Thank you very much—land, seed and other inputs. We will have that in the *Hansard*. I draw your attention to part 40-1005 of the TLAB, which says that you can deduct an amount for an income year if you incur capital expenditure that is covered under section 40-1010. Mr Flavel, can you explain to me what capital expenditure is?

Mr Flavel—Generally the expenditure on the creation of a capital item.

Senator JOYCE—Such as land—just what you discussed before?

Mr Flavel—Not land, no.

Senator JOYCE—Why not land? It is capital.

Mr Flavel—No, the explanatory memorandum says that expenditure on assets separate from the trees is not considered to be establishment expenditure.

Senator JOYCE—Now we go to something that is very crucial, because this legislation is quite specific. It says further in 40-1010 that this expenditure is covered in relation to particular trees. You have just told me that in relation to the growth of trees it includes land. Also I have noted that in section 40-1020 certain expenditure is disregarded. It talks about draining swamps and clearing land but it does not actually mention land itself. You have brought up the proposition that the explanatory memorandum is superior over what is in the legislation, but of course in this game we know that that is not the case—that if it is not in the legislation it is not in the legislation.

Mr Flavel—The tax law more generally does make provision for the fact that land is a separate CGT asset. Saying that expenditure on assets separate from the trees is not considered to be establishment expenditure makes it pretty clear that land is not available to be deducted under this provision.

Senator JOYCE—That is in the explanatory memorandum, but it is not in the legislation, is it?

Mr Flavel—The explanatory memorandum lays out—I think at paragraph 36—

Senator JOYCE—You are talking about the explanatory memorandum, aren't you?

Mr Flavel—Sure. But this is providing guidance on the way that the law is interpreted. In the cost of establishing trees it goes through and talks about acquisition costs.

Senator JOYCE—So why did you find it necessary to include in the legislation, at 40-1020, things that will be disregarded? Why didn't you also include them in the explanatory memorandum?

Mr Flavel—I presume there are a range of other things that would be excluded by virtue of the fact that they are a separable CGT asset.

Senator JOYCE—Well, it is not there. The next thing is that we have already had a witness come in today and say that about \$5.3 million is the assistance by reason of tax legislation that the forest industry gets. I want to know from you—and you might have to take this on notice—how much is currently nominated as a deduction by reason of timber being grown under MISs. Whatever is nominated under that times somewhere between 15 and 30 per cent—say, about 30 per cent—will be the effect of the deduction. I am sure it is going to be far in excess of \$5.3 million. But I would be happy to limit MISs to a tax effect of only \$5.3 million. Can you answer that or will you take that on notice? Although it is not an MIS it is going to have the same effect.

Mr Flavel—I guess I would direct the committee to the annual tax expenditure statement which is put out, which basically lays out, for a whole range of concessional arrangements, what the effective cost from a benchmark of that is.

Senator JOYCE—If you could get back to us with how much MISs cost I would be much appreciative and so would the committee. You will have an income stream, by reason of the increase and weight, which people will be using as a carbon credit. How do you propose to value that carbon credit and how are you going to deal with that?

Mr Flavel—It goes a bit beyond my expertise, unfortunately, but there are a number of tax rulings around the tax treatment, if that is what you are asking about, of carbon credits.

Senator JOYCE—Just for the purpose of the *Hansard* so that other people can understand this, I have bought some prime agricultural land on which I am now growing some blue gums or *Eucalyptus saligna*. I now have 100,000 tonnes of timber on that land and I will be using that credit to offset things. That is an income stream; how will you tax it?

Mr Flavel—I will take that on notice.

Senator JOYCE—Was your department ever approached to become involved in a socioeconomic study on the effects of this TLAB bill? I am speaking specifically in relation to regional areas that are surrounded by prime agricultural land.

Mr Flavel—Perhaps you could just define what you mean by ‘socioeconomic study’.

Senator JOYCE—Has anyone ever approached Treasury and said, ‘Well, we’d better find out what current income streams are coming from certain areas’—say, around the Murray River or agricultural land around Tully? ‘What will be the effects of the diminution of income by reason of this land now being tied up in a carbon sink? What will be the loss of income in those areas? You guys would know because you do the tax returns and you have all the information; therefore, you can provide us with what the effects on these areas would be if we were to, say, put in a model that removed 10 per cent, 30 per cent or 40 per cent of this arable land to enable it to become a carbon sink.’

Mr Flavel—Not to that extent. I think it needs to be noted though that, at the time the measure was announced, there was simply a voluntary market for carbon offsets—in other words, not a functioning price—in which case it was pretty difficult to argue that there were going to be various sorts of displacement effects in particular regional areas as a result of deductibility.

Senator JOYCE—With the design of this legislation, was there much input from the Minerals Council, any of the major miners or any of the major carbon emitters regarding what they would think would be a desired outcome for effective legislation?

Mr Flavel—I would have to go back and check. Certainly the main parties involved in the consultation process would be those directly involved in establishing carbon sinks, such as specialist companies who have begun to pop up in that sphere, rather than third parties who might be seeking to procure carbon credits from those particular arrangements.

Senator JOYCE—Of course, they would be in close consultation with their market, and their market is the major carbon emitters. It would be more or less a conduit from those major emitters, via those who are going to create the forest, to you. So they are—even though, for want of a better word, you are—the errand boys from the carbon emitters' grocery store coming back with the up-front tax deduction they want to give themselves. The up-front tax deduction for the first five years is a whopper. Do any other industries get such an up-front tax deduction? Apart from MIS, do any other agricultural industries get such an up-front tax deduction—fruit trees, grapes or whatever? I do not know; call it what you like. Can I build a set of cattle yards and get an up-front tax deduction? Is there anything else that gives us an up-front tax deduction like that?

Mr Flavel—Mr Carruthers mentioned, I guess, some analogous ones in relation to planting trees. For primary producers, where the primary purpose is to avoid degradation, the land care provisions allow for the planting of trees.

Senator JOYCE—If I raise cattle, can I build an abattoir in town as a form of capital expenditure and get an up-front tax deduction for its construction?

Mr Flavel—It would be more likely than not that for an abattoir, if we are talking about a building, you would not get up-front deductibility.

Senator JOYCE—What if I decide to grow apples and I plant and grow a heap of apple trees out at Baradine? Am I going to get an up-front tax deduction for planting those apple trees?

Mr Flavel—No. Apple trees and other horticultural plants have a specific provision in the tax act.

Senator JOYCE—Let us say that I am growing wool and I am going to put in a wool shed and yards. Am I going to get an up-front tax deduction for putting in a wool shed or anything like that?

Mr Flavel—Again, if the wool shed is in the nature of a building, you will not get an up-front deduction.

Senator JOYCE—So why do these guys get an up-front tax deduction?

Mr Flavel—I think Mr Carruthers mentioned before that in the examples you have used you actually have commercial markets. If you are talking about apples, there is a world price—or at least an Australian price—for apples. It is very clear, if you go into that business, about whether

you are likely to make a profit or not. We still have a voluntary market for carbon. There is a very weak carbon price. It does not provide much incentive for people to go into that as a business partner.

Senator JOYCE—At this point in time in the economic cycle, do you find that the people that you would see as requiring carbon credits from the creation of forests—because they are minors—are struggling? Are they doing it tough? Do they need some more assistance?

Mr Flavel—I think the state of the terms of trade and the contribution of the resources sector to that are fairly well known.

Mr Carruthers—What we can observe is that, in the absence of tax deductibility in the past several years, you essentially have extremely little activity in establishing forest carbon sinks.

Senator JOYCE—Why is there such a weak carbon market presently?

Senator MILNE—We did not have a price signal for a decade.

Senator JOYCE—I am asking that because this is apparently why they are getting the up-front tax deduction. I want to know why there is such a weak carbon market at present.

Mr Carruthers—The impact of greenhouse emissions into the atmosphere is basically being treated as an externality and is not registering back in market prices. With the introduction of the Carbon Pollution Reduction Scheme, that will change, but if we want to foster forest carbon sinks at an earlier point to start to give us one more option and not wait around, then you need some kind of incentive, but the market is saying that.

Senator JOYCE—The argument is saying that the market is going to be the altar that is going to make everything perfect and everything is going to work out because the market will make it work out. If the market is going to make it work out, why do you manipulate the market by giving an up-front tax deduction? If these people know, from your externalities that are going to come into place, that carbon is going to become a profitable product that is worthwhile being involved with, why do we need to give them more advantage? If you can foresee it, they can foresee it. Shouldn't that be enough? Why does the Australian taxpayer need to work more Mondays and more Tuesdays because major coal companies are getting an up-front tax deduction to take out prime agricultural land?

Mr Carruthers—Firstly, the immediate tax deductibility is for a short-term temporary period.

Senator JOYCE—Five years.

Mr Carruthers—Five years.

Senator JOYCE—Give me five years of up-front tax deductibility and see the damage I can do.

Mr Carruthers—Secondly, we have commissioned a study with ABARE.

Senator JOYCE—I wish I could take call options on ABARE's predictions. I would be a rich man.

Mr Carruthers—We thought the committee might be interested in looking at the economics of the carbon sink forests establishment. I think it will show that basically the establishment of carbon sink forests will only occur in essentially niche situations where it serves the purposes of a broader integrated management of the land by farmers.

Senator JOYCE—Why did you not exclude from your model prime agricultural land and make an exemption? We have so many other examples in tree clearing guidelines and soil conservation guidelines and former western land district guidelines where they have certain prescriptions for certain land. We have them in Queensland where, if you knock over a tree, you almost go to jail. Why couldn't you say, 'This piece of legislation is excluded from these types of prime agricultural areas because we do not want to put further pressure on the price of groceries'?

Mr Carruthers—I think farmers will make their own decisions about economic returns on their land and different production systems, and I think it is very clear that, in these weak, voluntary carbon markets, carbon sink forests simply cannot compete against prime uses of the land.

CHAIR—Thank you, Mr Carruthers. Sorry, Senator Joyce; I will have to go to Senator McGauran. We have gone over time.

Senator McGAURAN—I have just two questions. Is this system modelled on or close to any other system in the world, or is it a world first?

Mr Carruthers—I cannot answer that. I guess this has been looked at in the Australian context. I do not know the answer to your question.

Senator McGAURAN—Could you take that on notice?

Mr Carruthers—Yes, we could make inquiries on the matter.

Senator McGAURAN—It is significant. If this is the first in the world to get up and running then that is significant to those of us writing the inquiry report, I dare say, given all the other factors.

Turning to my second question, I know you said that you are able to audit the claims of the tax claimant—that you can either jump in the car and drive out there or zoom in on it with your satellite. But how do you audit their claim of carbon sequestration, the tonnage? If they put it to you that this plantation eats so much carbon, how are you going to audit that?

Senator Milne interjecting—

Senator McGAURAN—The reason I ask is that we had the CSIRO before and they made it quite clear—that is how I understood it—that the science has not even reach that point. So how would you do it?

Mr Carruthers—Well, the quantity of carbon credits to be sold from a particular planting of a carbon sink forest will be a matter between the grower and the purchaser. As for the tools to quantify that, we have a national carbon accounting system that is doing this now for the forest plantings around the country, both commercial forestry plantings and environmental plantings. Australia has quite an advanced capability in this area.

Senator McGAURAN—Thank you.

Senator HEFFERNAN—Let's say, Mr Ryan, you are Origin Energy; Mr Carruthers, you are the carbon guy that is going to contract with Origin Energy; and I am a farmer, and you come out to me and say, 'I want to put 1,000 acres of forest on your 100,000 acres for a carbon sink, mate.' Do I have to have a development application? You compared it to a building. With a building you actually have to have a development application approval system.

Mr Flavel—From the viewpoint of the Commonwealth Department of Climate Change, I am not in a position to know what pieces of local government or state legislation might apply to any particular unit of land.

Senator HEFFERNAN—Well, you made this motherhood statement, and this is quoting from the guidelines:

Carbon sink forest establishment activities should be guided by regional natural resource management plans and water sharing plans ...

What is that supposed to mean? Do you have to go through a development application process to comply with that or do you just say, 'Yeah, mate, we comply.'

Mr Carruthers—It would depend on the particular catchment as to what the operable provisions are.

Senator HEFFERNAN—Yes, but it is just a vagary. There are no guidelines. There is no 'sign here' and all that. Under what is proposed—

Mr Carruthers—Senator, the tax applicant does need to sign the statement.

Senator HEFFERNAN—Yes, but the Commonwealth is saying:

Compliance with this guideline may be achieved by ensuring that establishment activities are consistent with regional natural resource management plans, for example by identifying:

- strategies for ensuring that individual carbon sink forest plantings account for natural resource management priorities at a larger regional scale ...

What does that mean? How do you go about that? What is the process?

Mr Carruthers—The applicant is required to establish what environmental or natural resource regulations or codes or whatever are applicable to the particular location in which they have the intention to establish the trees.

Senator HEFFERNAN—You don't know the answer, in other words. You don't know the answer. It goes on:

- potential cumulative environmental impacts of carbon sink forest activities at a catchment scale.

In cases where establishment of carbon sink forests would represent a significant interception activity in a catchment that has been identified as fully allocated, over-allocated or approaching full allocation, water access entitlements must be obtained.

How do you do that?

Mr Carruthers—There will be a regulatory requirement—

Senator HEFFERNAN—So it is not out there yet—this is something to be built?

Mr Carruthers—This is—

Senator HEFFERNAN—My first question is: would you have to go through a process of development application approval to make sure that if that were the case you knew it before you started? This is if you planted the trees and discovered all this after the event. The difficulty is that the enactment side of it is all laid out in the various state government acts. Do you agree with that?

Mr Carruthers—Commonly.

Senator HEFFERNAN—In each state, the registration of carbon rights leads to a different piece of legislation requiring different agreements. So, if you are a national operator in the carbon sink market, every model you had would have to be different in every state—do you agree?

Mr Carruthers—That seems to apply in most areas of commerce in Australia.

Senator HEFFERNAN—Areas of legislation that could fall into conflict would be everything from mining and exploration legislation, the National Water Initiative, local and state government planning, emergency services legislation, national greenhouse, trades, state and vegetation legislation—there are about 20 pieces of legislation that are in conflict with the Commonwealth. Do you understand that?

Mr Carruthers—For any activity taken out on a piece of land, the person concerned is under an obligation to conform with the laws of the land—

Senator HEFFERNAN—Earlier you said that the—

Mr Carruthers—and in some cases there will be a number of requirements that apply to the individual.

Senator HEFFERNAN—Earlier you said that the biodiversity side of this would be done by other means. They were your words. What are the other means?

Mr Carruthers—There are various—

Senator HEFFERNAN—Well, tell us what they are.

Mr Carruthers—State legislation—

Senator HEFFERNAN—Well, tell us what they are.

Mr Carruthers—to do with endangered species or a variety of areas.

Senator HEFFERNAN—You do not know. Could you provide it to the committee? You made the statement. You said, ‘She’s right, mate; it’s ticked off by other means.’ What is the other means?

Mr Carruthers—I said that there is in place a range of legislation for a variety of public policy purposes, such as conservation, which will be applicable in the various situations and that, basically, the applicant needs to comply with all the relevant legislation and guidelines that apply to that land.

Senator HEFFERNAN—But no development approval is required. The point that Senator Joyce made with MISs is that they were given an exemption from environmental planning. Where is the enforcement of an approval process here? A lot of the land has already been acquired; people are already out on the plains. They said, ‘You wouldn’t need environmental approval out there; we’ll just put them in.’ What is the approval process? Who has the lead form, the lead agency? What is your connection between the states to see that the states have got it right? In Civic here the other day they gave a development approval for a building, but, oops, they made a bureaucratic mistake which is now going to be a lawyer’s feast. Where is the protection here? You have not brought anything to the table to say: ‘Here is the other means.’ You have just said ‘the other means’.

Mr Carruthers—The individual concerned, irrespective of tax deductibility, has an obligation under state laws et cetera to conform with those laws.

Senator HEFFERNAN—How do you conclude when the state government in New South Wales, for instance, does not know the answer, because there are still MISs going in? What the mob at Tumut said this morning is that stacks of forestry is going in there. There is no environmental planning around it. All you have to do is buy the land and plant the trees—as long as you do not plant out three- and four-class streams. There is no study on the impact of the run-off. This gobbledygook here, which is well intended, is nicely phrased and a lovely motherhood statement, and I agree with it—

CHAIR—We are running short of time. In fact, Senator Heffernan, we have gone over time. Could you get your questions to the department officials in the shortest possible time; we would appreciate it.

Senator HEFFERNAN—What is the process for enforcing this? ‘In cases where establishment of carbon sink forests would represent a significant interception activity in a catchment’—who is going to identify that?

Mr Carruthers—There is a major national initiative on water management underway at the present time, which is focusing on—

Senator HEFFERNAN—Does this have to go on hold until all that work is complete?

Mr Carruthers—No. Any planting will be subject to the law of the day.

Senator HEFFERNAN—But the law of the day is silent on this. You say the study is underway now. Mate, I am asking questions I know the answer to. The work is not done. This is a giant foray into the unknown with guesswork, because we have not established this sort of work. I agree—I have been saying this about plantation forestry for ages—that they should buy a bloody water licence because, at 40 inches, they intercept 2½ megalitres per hectare per year for nine years of the normal growth of a 15-year cycle. I agree with all of that. But you are not equipped to do it. You are handing out the tax deductions—and I have got people ringing me; the CO2 mob have rung me and have now emailed me to say that they are going to have a forestry right. That is good stuff. In Western Australia, we are going to have—

CHAIR—They will be here and we can put the question to them. Anyway, Senator Heffernan, can we get to the questions.

Senator HEFFERNAN—Do you understand? You are not equipped to do the task that these Environmental and Natural Resource Management Guidelines in relation to the establishment of trees for the purposes of carbon sequestration set out?

Mr Carruthers—I think you are retracing some ground that Senator Milne covered earlier on. I explained that, in some ways, this comes in on top of whatever the laws of the land are that apply—

Senator HEFFERNAN—But there are people in the market now to buy.

Mr Carruthers—To an exceedingly small extent.

Senator HEFFERNAN—Yes, right. So there are ones who are in the market now and—oops!—later on you come along and say, ‘No; that was a bit of a sensitive area there. Bear in mind the 40-year science says it is all going to be ratshit anyhow.’ How do you retrospectively deal with people who are in the market now?

Mr Carruthers—I think the answer to that was contained in the answer I gave to Senator Milne earlier, and that was: we have several factors operating here. Firstly: the applicant under the tax act is required to conform with all relevant state legislation of the day.

Senator HEFFERNAN—And the relevant state legislation—

Mr Carruthers—If I could just finish—

Senator HEFFERNAN—is incomplete. It is meaningless.

Mr Carruthers—Could I please finish, Senator.

Senator HEFFERNAN—Righto.

Mr Carruthers—Secondly, the buyers of the carbon credits, in this kind of voluntary market, do have an interest in the integrity of the product that they are buying. I think you will find that that is typically the case. Thirdly, there will be a range of interests out there who will be keen to see that there are consistent integrated solutions being achieved with forest carbon sinks and land and water management more broadly.

Senator HEFFERNAN—Yes, yes. Please—I surrender. That sort of bureaucratic, meaningless gobbledegook—I surrender on that. But can I say, for the person who is acquiring the carbon credit for the sink: there have been no witnesses today who have been able to tell us how you would certify that the carbon credit that they have acquired actually, over an extended period of time, would turn out as an assessable event—no-one. You would be the first one.

Mr Carruthers—Do you mean the tonnes of carbon?

Senator HEFFERNAN—Yes. What if half your trees died—if you were out there on the plains with CO₂ at Hay and you planted 20,000 acres of trees and half of them died? Go up to see the sandalwood plantations, the MIS at Kununurra; if you fly over you will see that half the trees are dead. The mob that acquired—

CHAIR—Some of them are alive and well and looking very healthy.

Senator HEFFERNAN—The mob that acquired the carbon offsets are really only worried about the licensed bit of the carbon offset for their credit system. They are not worried about the health of the trees; that is someone else's worry. And I presume that—

CHAIR—You are on to your last question, Senator Heffernan. We have gone 20 minutes over.

Senator HEFFERNAN—There is no science. No-one has come along today—not even the CSIRO—and said how you could monitor that. And you cannot either. All you are saying is, 'It is state.'

Mr Carruthers—I have not said that in relation to the estimation of carbon sequestration.

Senator HEFFERNAN—Well, we do not know the answer, do we?

Mr Carruthers—I have said that Australia in fact has quite a strong capacity in that area.

CHAIR—If you have the answer, great; if you do not then we will have to wrap it up. Thank you very much and thanks for your time.

[12.37 pm]

BULINSKI, Dr James, Manager, Carbon and Innovation Services, CO2 Australia Ltd

GRANT, Mr Andrew, Chief Executive Officer, CO2 Australia Ltd

CHAIR—Welcome. Do either of you wish to make a brief opening statement before we go to questions?

Mr Grant—Given the loss of time I think it might be more profitable if we move straight to questions, so I am happy to field them.

CHAIR—Thank you very much.

Senator HEFFERNAN—Congratulations on your initiative, and I am very grateful to your Mr Harley Whitcombe for his email today. I want to put on the record that I provided the right set of rules for, and am in favour of, carbon sinks.

Mr Grant—Thank you.

Senator HEFFERNAN—I see you deal with the issue that I have been raising of the forestry right and carbon sequestration right. Would you like to explain that to the committee? We are looking for a model for the industry and you may have a model that suits.

Mr Grant—What is critical to quality credits is accreditation. Our business model is that we are accredited both under the New South Wales Greenhouse Gas Abatement Scheme and the federal government's Greenhouse Friendly scheme. In fact, the ACCC in their recent guidelines around carbon credit creation recommended that any credits be verified under such a scheme. So one of the accreditation requirements is that you have to demonstrate and address the question of permanence. Under the New South Wales scheme, we do that by undertaking a forestry right and a carbon sequestration right which is registered on title, runs with the land, cannot be removed and is for 150 years.

Senator HEFFERNAN—So you agree with what I was saying earlier?

Mr Grant—Yes. Furthermore, under that scheme the trees are protected by a restriction on use which is administered by the Crown. If those trees are damaged or removed or you have not fulfilled your accreditation responsibilities, there is civil liability as a director of a company. So the responsibilities are incredibly onerous and significant. To meet them it is critical that you have substantive legal documentation and points of proof that are maintained.

Senator HEFFERNAN—Congratulations on that. I raised the problem earlier of when I sell my farm to Barnaby because I have had it and he is only young and fired up. Is it registered on the title when he buys my property?

Mr Grant—Yes. In fact, we were the first company anywhere in the world to register a forestry right and a carbon right using digital data.

Senator HEFFERNAN—To do that, do you actually survey the—

Mr Grant—Yes.

Senator HEFFERNAN—That certainly does away with all my rantings of the morning, if we can adopt your model for the industry.

Mr Grant—Thank you.

Senator MILNE—To clarify something you just said to Senator Heffernan: is your model currently required under New South Wales legislation, or is it just something you have organised—

Mr Grant—It is certainly required under our accreditation that the rights are created, registered on—

Senator MILNE—Under which accreditation?

Mr Grant—Under the greenhouse gas abatement scheme and the federal government's Greenhouse Friendly program.

Senator MILNE—So, providing that occurs, those same requirements will be in this?

Mr Grant—We would welcome Greenhouse Friendly accreditation or a Carbon Pollution Reduction Scheme requirement.

Senator MILNE—Okay. I just wanted to know if it was under New South Wales or under the Commonwealth.

Mr Grant—It is under both.

Senator HEFFERNAN—When I think, 'I'd like to get into the carbon market,' and I am the farmer, and you come along and say, 'We are the boy for you,' and you have got blokes out there who are getting paid too much money and want the tax deduction, do you have to—to comply with that business that I was talking about earlier, the water interception et cetera—go through some sort of development application process?

Mr Grant—We do, yes.

Senator HEFFERNAN—Would you like to inform the committee of your Australia-wide experience of how you would actually fit into it, so you would not get trapped after the event, where they would ring you up and say: 'Oh, you put that forest in there. Now you have got to buy a water licence and it will cost you \$2,000 a megalitre.'

Mr Grant—It would be imprudent to invest money without getting the necessary approvals beforehand. So part of our site assessment and due diligence in planning application requires securing all of the appropriate approvals before the sink is established. New South Wales has a discrete piece of legislation called the Plantation and Reafforestation Act, and it stipulates all the environmental approval assessments and the regulatory approvals that are critical. There is a government department that administers that, so every planting on every property has to go through that approval. In Victoria, South Australia and Western Australia it will vary, but it is a variation on a common theme. In the case of New South Wales, the landholder has to undertake that application.

Senator MILNE—Tasmania does not have that, does it?

Mr Grant—We have no experience in Tasmania.

Senator HEFFERNAN—Would it assist the industry if it were harmonised?

Mr Grant—Most definitely. The difficulty with the guidelines is that if you get too specific in them they become unworkable, because the reality is that across the states we have these—

Senator HEFFERNAN—Yes. I guess that is why, as I criticised earlier, it is a sort of a motherhood statement.

Mr Grant—The reality is that I am not sure you could improve them. I chair a natural resource management council in Victoria, and you would have to accelerate the administration of catchment management across Australia, which is something the federal government has been endeavouring to do for the last 10 years. So it is work in progress.

Senator HEFFERNAN—Given the science on climate change and the gloomy forecast for southern Australia, what is the legal obligation for your investors and their obligation to the person who has bought the carbon offset into the sink, in the event of an act of God, as it were, with a 10-year drought and so on?

Mr Grant—It is called a ‘carbon depletion event’. To create a carbon credit you have got to demonstrate that there is a net increase in the biomass of your estate. So the trees have got to have grown. If there is a decrease in the amount of biomass, you have got to make good. You either have to demonstrate that the trees that you have brought to account are continuing to sequester carbon or you have got to find replacement certificates. And there are penalties if you do not.

Senator HEFFERNAN—So, in theory, that obligation would rest with the person who is managing the trees or owns the land, or with the person who took the contract—

Mr Grant—It varies from scheme to scheme, but under the New South Wales scheme the onus is on the accredited party who created the credit.

Senator HEFFERNAN—That is you fellows.

Mr Grant—Yes, that is us. Under the Greenhouse Friendly program it is a shared responsibility between the buyer and the seller.

Senator HEFFERNAN—Just for the benefit of the committee, how much planting have you already done?

Mr Grant—By the end of this year it will be about 8,500 hectares across Australia.

Senator HEFFERNAN—And how is the tax legislation that has recently been introduced going to assist you in a way that you were not assisted before?

Mr Grant—The situation was that, if you planted a tree for forestry, the provisions of the tax act relating to forestry applied, and the capital costs were deductible. If you planted a tree and you were a primary producer and the purpose of the tree was for landcare-type activities, all of the costs were deductible. If you planted a tree for the purpose of a carbon sink, not only were there no deductions but there was no depreciation of the capital asset.

CHAIR—Thank you, Mr Grant.

Proceedings suspended from 12.45 pm to 1.47 pm

CHAIR—Welcome back. We will now go to questions from Senator Milne.

Senator MILNE—The whole idea of a tax deduction is to give an incentive to people to plant carbon sink forests, but now that there is a price signal as a result of the Carbon Pollution Reduction Scheme, which has included the planting of plantations in the market, why is there a need to continue with a tax deduction? That is the first question. Secondly, surely we should be trying to get resilience in ecosystems and ecological biodiversity outcomes as well. So ought we not restrict the tax deduction to those plantings which have biodiversity and other ecosystem services, given that the market will probably fix the straight-up plantations for sequestration?

Mr Grant—The answer to the first question is simple. The tax treatment of the capital costs is a minor one. So the numbers that we run on our business would suggest that, for the cost of establishing the sink, the net benefit is about a 15 per cent reduction in cost. So it is not a driver—far from it. It is in effect minor assistance. And we get no other assistance of any other kind. If you look at mobilisation of climate mitigation technologies, every other aspect of climate mitigation gets support from government, and biological carbon sequestration does not get any. The federal government announced \$500 million for geosequestration; the Victorian government announced \$170 million; we get zero. In fact, all of the landscape repair work is funded through the government purse, and this challenge is associated with performance and value for money in those arenas. So I think there is great opportunity in that regard.

In the second area, we would welcome other economic and commercial drivers that would sponsor additional ecosystem uplift. The reality is that there are none of those at the moment, and it is an additional cost if you bias the design of your program and implement it around that. We do it anyway because we think it just enhances the quality of what we offer. But, at this point in time, if you look at it from pure economics, it is an extra cost. I think Greening Australia pointed that out.

Senator MILNE—Yes, which is what I am saying here. Given that there is now a price signal in the market, why would you not have tax deductibility for plantations which are just solid carbon but give tax deductibility for those which are biodiverse and have other ecosystem outcomes which actually bring them on to the same sort of cost ratio? Otherwise you divorce carbon from biodiversity.

Mr Grant—I do not think you do. I do not see it as a zero-sum gain in biodiversity. If you take the case of our business model, we have got a narrow group of native eucalypts that we plant that bring a whole suite of biodiversity values—rich, varied and diverse. The issue with financials is that a sink has an economic life of, say, 50 years. It takes a number of years before you even get moderate income in the form of generating carbon credits, and all your capital costs are up front. So it is a very tough industry and it is hard enough as it is. The market is not mature. The market is yet to be convinced of the merits of this as a technology and as a business opportunity. It is a tiny, fledgling industry that needs every help it can get. If you want to promote biodiversity then it is not a matter of either/or. Look at other incentives that can be offered to further drive that.

Senator MILNE—You say that the market is not mature, but now that the big emitters like the coal industry and the aviation industry are in, there is going to be a major driver, which is less cost to them to plant out a carbon sink to offset their emissions or to implement efficiency measures to bring down their emissions at point of source. In most cases it is going to be a damn sight cheaper for them to invest in sinks than it is to make other changes. That is why I am saying the drivers are already there; you are included in the market. My view is that we should get rid of the tax deductibility for MISs rather than bring another MIS into the system.

Mr Grant—I do not think they are comparable, firstly. As I said, based upon our numbers, the tax deductible value is about a 15 per cent reduction in the price, so it is minor in the context of the cost. The reality of the market is simple. We have a green paper which gives a nominal outline of scheme design. We have an indicative starting date of 1 July 2010. We do not have legislation, we do not know what the penalty prices are and we do not know what the level of reduction is. Industry has not mobilised at all to any great extent in this area. It is more than likely that, in the first phase of the scheme, reduction targets might be around meeting Kyoto targets, and with the provisions for banking you might find that the level of investment by big emitters is minor. We do not know. We are on a journey of discovery. But it is certainly not here and now.

Senator MILNE—We have heard a couple of times today that you cannot cut these trees down, but in fact I cannot see why you cannot. All you have to say in the beginning is that you do not intend to. If you do, where is the penalty?

Mr Grant—As we understand it under the legislation, the first point of proof is that you have got to demonstrate that you are carrying out a carbon sequestration business. To gain confidence in the tax office, it is our view that to demonstrate you are carrying out a carbon sequestration business you have to be accredited. To be accredited you have to meet permanence requirements. I think it would be extremely risky to submit and incur the capital costs not knowing that you are going to get a positive review from the tax office. So I find it implausible that someone would rush out and invest a whole lot of money in sinks, where you get a 15 per cent cost reduction, when they have the other 85 per cent exposure. All they are risking is whether they get that small

deduction. It is certainly not attractive to us in that regard and I have seen no other evidence of it. So I think the reality of meeting the requirements of the tax act is such that you need to be accredited.

Senator MILNE—Okay, but the issue here is about weighing up how much you would get for selling a tonne of fibre against how much you would get for selling a tonne of sequestered carbon, especially in the first 15 years of the scheme. So, in my view, I could go out and get the tax deduction and put it in and say my intent was to have that as a carbon sink—and I may well register the carbon credit on that in the first 15 years, but that is not worth much. After 15 years, if the price of fibre is \$100 a tonne and the price of carbon is \$10 or \$15 a tonne, I might decide to cut it down. Obviously, I would have to make good on the carbon that I had contracted to somebody, but, since it is not going to be much in that first 15 years anyway, I do not have to pay back the tax break I got. That is the point I am making here. There is no penalty for making good on the tax break if I cut the trees down, is there?

Mr Grant—I think that is an economic question rather than a tax question, but the present situation is that, if you plant a tree for pulp and paper, the tax treatment is superior—

Senator MILNE—I understand that—absolutely. That is why I do not like those either.

Mr Grant—So I can see no logical reason why you would pursue an inferior economic outcome. It just does not make sense. Under carbon accounting rules, both national and international, if you harvest, that equals a total admission, a total loss of the sequestered carbon—and all of the modelling suggests that future carbon prices will be much greater than they are now, so it would be a foolish, loss-making enterprise. So, again, I do not see the motivation for pursuing that line of endeavour.

Senator MILNE—I guess the issue for me is that if you get it under a MIS you are obliged to cut the tree down but, if you get it under a carbon sequestration forest, you have got 50c each way depending on the relative prices of carbon and pulp.

Mr Grant—None of the other species that we grow commercially have any other commercial application because, as best as we can tell, the mainstream forestry species are poorly suited to the accreditation requirements—again, risk, permanence, carbon depletion—and their viability is poor. So I see the likelihood of switching—

Senator MILNE—Are you saying you would not get accredited for blue gums?

Mr Grant—The issue with blue gums is that they are a short-rotation, fast-growing ‘racehorse’ species, and carbon sequestration is a marathon. You have got to maintain the plant for a minimum of 100 years under New South Wales requirements. So, if you have got an intense, short-term rotation crop, there is every chance that, after 15 or 20 years, you are going to get death and decline in the biomass, so again it would be uneconomic. The switching value is not there, as best we can see. So it is a hypothetical, but—

Senator MILNE—So in New South Wales there is a requirement for 100 years written into the legislation?

Mr Grant—Yes, and under the federal Greenhouse Friendly scheme it is 70 years. So they are both long term; they just have a different take on the same thing.

Senator MILNE—Yes, but it does not say that in the legislation.

Mr Grant—No, but it does say that you need to be in the business of carbon sequestration, and our view is that the only way you could realistically demonstrate that—how else could you?—is that you are an accredited party with a licence to create carbon credits.

Senator MILNE—That is not the legislation. We might have to pursue the fact—

Mr Grant—As I say, we would welcome accreditation being within the guidelines.

Senator MILNE—Accreditation according to New South Wales or according to the Commonwealth?

Mr Grant—I think, realistically, now that we know the green paper is out, the Carbon Pollution Reduction Scheme would be the most appropriate measure because it will be a national scheme and it will supplant any existing initiatives. The New South Wales government has stated that it will fold the Greenhouse Gas Reduction Scheme into the federal scheme. It is arguable whether the Greenhouse Friendly scheme will prevail, whether it needs to prevail, when it could be overtaken by the Carbon Pollution Reduction Scheme. And, as I understand it, at the time that was the challenge for the bureaucrats—what can you have as a long-term measure that will survive the fact that the policy is so mobile at the moment?.

Senator MILNE—There is nothing there at the moment. Thank you.

CHAIR—Mr Grant, just before I go to Senator Joyce, I think you said you had about 18½ thousand hectares around Australia.

Mr Grant—About 8½ thousand.

CHAIR—Oh, 8½ thousand, was it? In any state in particular, or are they spread out?

Mr Grant—The majority of the plantings were initially in New South Wales, because that is a requirement of your accreditation under the scheme: the trees have to be grown in New South Wales.

CHAIR—Right.

Mr Grant—We have undertaken projects for the Victorian government, in Victoria, and we are now undertaking plantings in Western Australia for a variety of companies there.

CHAIR—So you do not have any active plots in Western Australia yet?

Mr Grant—This winter.

CHAIR—How many, off the top of your head? Do you know? If you do not know, do not worry.

Mr Grant—We have two properties, but the industry and the particular technology we have deployed has originated from Western Australia. We have an interest in the Oil Mallee Company. The Oil Mallee Company and the Oil Mallee Association, which is a farmer based association, has over 10,000 hectares of mallees, largely funded through salinity action, with a little bit from corporates.

Senator JOYCE—When you are selecting areas in which to plant the trees, what is the process of examination that you go through?

Mr Grant—There are two aspects of the business. One is where we are partnering with landholders. So, firstly, the landholder has to want us to partner with them and have the trees located on their property.

Senator JOYCE—So it is a joint partnership?

Mr Grant—It is an expression of interest. They put forward their properties. If they have the right physical criteria—rainfall, soil type, region—typically the farmer wants to offer up an area of their property that is degraded or uneconomic, and we examine that in terms of its viability.

Senator JOYCE—Can you do anything with that?

Mr Grant—Yes.

Senator JOYCE—If they say, ‘I have got this ridge up here’—

Mr Grant—A ridge is generally no good but often there are paddocks that are poor quality for cereal cropping but are ideal for biomass accumulation. We are growing native New South Wales mallees in the region, so they are well suited; they have evolved in that landscape.

Senator JOYCE—You have just said that there are certain areas where they cannot crop and you say, ‘We can’t crop there; it’s unviable for cropping but it’s good for biomass.’

Mr Grant—Yes.

Senator JOYCE—Is that easy to identify? I am not setting you up; I really am inquiring.

Mr Grant—I know that in Victoria, for example, the natural resource management agencies have identified a minimum of one million hectares of land that is currently under production that is unviable.

Senator JOYCE—That is very interesting. When you go to Google Earth or something like that—because we can certainly get an idea of vegetation from satellite imagery—can you say: ‘I can tell you roughly from Google Earth that that is where you would probably be growing your crops. I can see you’ve got some moulding chocolatey soils there and I notice here you’ve got more of a sandy, lighter soil, but we could do something with that bit of country. We could do

something with that over there as well, being the better soil, but we could certainly do something with this. You might want to keep that for your wheat crop'? Do you do that?

Mr Grant—Yes.

Senator JOYCE—Can you use satellite imagery and other stuff?

Mr Grant—Yes, the data varies across the country. We have looked at the scale of what we could bring to the market in this area. There has been a lot of work done by, again, the CSIRO on suitability for biosequestration and what regions would be optimum.

Senator JOYCE—Even if it is not so much identifying what you can use, you could certainly identify what is prime country and say: 'Bingo; that's flat. I can see the topography and I can see the soil type. I know from the Bureau of Meteorology what the weather is like there. Here is the likely area I would be interested in.'

Mr Grant—I think we have the shifting sands there—in the area on which we have concentrated in New South Wales, which was marginal cropping country. In the last 10 years they have had seven drought years and they have had no economic return from that land. The criteria by which you assess the viability of that land are changing. I think there is some pretty aggressive thinking going on by landholders about how they can shore up their income streams. In our business they get long-term payments from the trees on their property. So they are looking to hedge their income streams to handle that.

Senator JOYCE—I do have a place, and I do have marginal country on it, and so does my family. So I could basically come to you and say, 'I've got this marginal country here—it is marginal for me; it might not be marginal for you—but I know it will certainly grow timber.' So you, in partnership with me while I still have title to the land, would then work out the creation of that. Is your business going well?

Mr Grant—That was a question earlier. I think we are a good case study. This is our fifth year of operation. Last financial year was the first year that we had been profitable. We have invested about \$16 million of shareholders' funds to get to this point. It is not for the faint-hearted. You have to take a long-term view. You have to make a massive investment. And we are pioneers.

Senator JOYCE—With my next question, I will let you know that I am getting back on to being a bit more inquisitorial. You would see this legislation coming up and say, 'Well, I've been doing this for five years; I've got \$15 million of my own people's funds invested in it; now they are going to go out and give someone an upfront tax deduction for doing what we have already been doing. If they had just left things alone, our business plan could have grown quite ably without this.'

Mr Grant—No—in fact, the opposite. Our clients went and sought private rulings from the tax office, and not only was it as bad that there was no deduction, but the tax office formed the view that the molecule of CO₂ emitted by the client could not be shown to be the same molecule of CO₂ sequestered by the tree and, therefore, no tax linkage could be formed. Honestly, it is as bad as that. Yet, if you geologically sequester CO₂, you have no requirement to make the spatial

connection. So the reality is: no-one ever anticipated biological sequestration being a business activity under the tax act. These were unforeseen consequences. And I think the amendments that have been proposed, whilst they are perceived as being tax-driven, are really just tax equalisation in my view.

Senator JOYCE—So if I were to say to you, ‘Okay: with the knowledge you have, Mr Grant, I am going to give you 100,000 acres of land anywhere in Australia; what I am going to ask you to do, though, is to capture the largest amount of carbon as quickly as possible through growing timber.’ Where are you going to go? And do not say, ‘I am going to go everywhere.’

Mr Grant—The drivers are land price, rainfall, soil type, soil depth, carbon price—you need to marry all those together.

Senator JOYCE—So let us go through them one by one. Land type: are you looking for basaltic soils—premium?

Mr Grant—No.

Senator JOYCE—What are you looking for?

Mr Grant—In our case, mallees are suited best to where they were grown previously. Australia had the largest inland mallee forests in the world, which were cleared. We know it grows well where it grew previously.

Senator JOYCE—So what is the soil depth you are looking for?

Mr Grant—The deeper the soil the more productive the tree growth is. Soil depth is uncorrelated to cropping practice. And the higher the rainfall, the more yield you get.

Senator JOYCE—So higher rainfall and deeper soil. What type of tree creates the greatest weight of carbon that you can therefore offer as a product? Let us pretend I have free land everywhere. I just want you to get me an income stream from carbon. Where are we going?

Mr Grant—The simple reality is that there are roughly 900 species of eucalypt in Australia; with only half a dozen of them would we have any idea of what their biomass accumulation over time would be. I used to be a director on the CRC for Greenhouse Accounting—federally run—which ceased operations two years ago. That CRC led all that research into that, and it stopped. So it is a pioneering area. It is pioneering science. It is young.

Senator JOYCE—Well, tell me a good tree.

Mr Grant—What we grow—and why we grow it is that we have data and we can model outcomes—is blue-leaved mallee.

Senator JOYCE—So, for you, mallees are the top tree?

Mr Grant—Yes, very much so. And we do not commercially implement other species because we do not have the data. We simply do not know what the yield would be over time.

Senator JOYCE—And, where you are growing these mallees, what was there before?

Mr Grant—Mallees, largely.

Senator JOYCE—Sorry—if you were planting the trees there were obviously no trees there when you planted them.

Mr Grant—No, there were no trees.

Senator JOYCE—What were they using the country for?

Mr Grant—It could have been sheep grazing, cereal cropping or a combination of those, or it could have been idle.

Senator JOYCE—And the cash flow from it: I do not want to know how much you get, but how does it turn up?

Mr Grant—As I said, the highest component is our capital costs in establishment. Then you have a revenue stream of anywhere from 30 to 50 years, but a very moderate revenue stream. It is really not until year 4 or 5 or 6 that you start to see any kind of reasonable credit income coming from the trees.

Senator JOYCE—And the revenue stream is: I have now got an increase in weight, so I have more carbon credits to sell. What is the price for carbon credits? Not what you are getting, but what would be a benchmark price for carbon credits at the moment?

Mr Grant—At the moment current markets in Australia trade between seven dollars and nine dollars, so it is very low.

Senator JOYCE—Can someone buy those carbon credits from you and say later, ‘Well, now I basically have title to those trees’? Is that what I have?

Mr Grant—No. With the way that property law and carbon trading work, they are separate asset classes. You need to own the right to meet an accreditation condition. But, once the credit, which is the measurement of biomass accumulation, is created, that is a separate instrument that is freely traded in the market; it is like currency.

Senator JOYCE—I might say, ‘Look, I’ve got all those as well as all that carbon credit, Andrew, and I have been looking at the price. I can get \$7 a tonne for that, but for woodchips I can get \$91. I want to take my carbon credits and turn them into woodchips. I have my trucks and my mill here, so let’s get started this afternoon.’ What stops me from doing that?

Mr Grant—It is likely that your woodchip product would not qualify as a carbon sink, because you would not meet the permanence, you would not meet the additionality requirement and you would not meet the risk—

Senator JOYCE—Once I buy that carbon credit from you, it has to remain a carbon credit and I cannot turn it into something else.

Mr Grant—They are mutually exclusive matters. The carbon credit is the instrument or asset that is created and then traded. But the underlying asset, being the sink, has to be protected by the things that I talked about before, irrespective of how many carbon credits you create.

Senator JOYCE—What happens if, down in Victoria, a roaring bushfire takes the whole lot out?

Mr Grant—Again, one of the reasons that we grow mallees is that you can cut a mallee to the ground and it recoppices from the mallee root, the lignin tuber, so it is a temporary carbon depletion event.

Senator JOYCE—Do you then have to tell someone, ‘Look, all that carbon we had has all gone’?

Mr Grant—Yes, ‘We’ve lost it.’ We also have to detail what actions management will take to replace it.

Senator JOYCE—Does the person who relies on that carbon as a carbon credit then have to go out to the marketplace and say, ‘Well, give us a call back when it has grown back’?

Mr Grant—Yes.

Senator JOYCE—‘And in the meantime I’m going to have to find my carbon somewhere else. By the way, Mr Grant, you owe me a lot of money, because you’ve just lost my asset.’

Mr Grant—Potentially. It depends on the nature and structure of the commercial contract. That is one scenario.

Senator JOYCE—Because, unless that happens, it is not a proper market. If you can lose the asset completely but still have it, then you have to say that the market is implausible.

Mr Grant—No, I would not agree with that. If you look at carbon around the world and how it is traded, you will see that it is like a power off-take agreement. You can have a firm contract or an option to secure the power. If it is a firm contract, you have an obligation to supply.

Senator JOYCE—It works on the premise that there is my tree and that is the carbon. If the carbon disappears, it is no longer there; therefore, if this whole greenhouse global warming argument is to stand up, the person who relied on that credit as an asset has to go out and find the same credit somewhere else, because this has gone; it is no longer there.

Mr Grant—Yes, that is right.

Senator JOYCE—It is only when it comes back that, because he has lost his asset, he would have to have the right to say, ‘You’ve lost my asset and I want you to pay me back.’

Mr Grant—As a seller, if you have a firm off-take agreement, you are required to find substitute credits or to pay a penalty to the buyer.

Senator JOYCE—If you can say, ‘Well, even though it has gone it’s still there,’ the whole argument about taking carbon out of the atmosphere becomes implausible.

Mr Grant—No. That is simply not correct. It is the same as a commodity—

Senator JOYCE—How can I get rid of it—burn it and put it in the atmosphere, where the rest of the problem is—and say that it is still there?

Mr Grant—You are not. That is my issue with what you are saying. The way carbon credit creation works is that you have to prove that you have sequestered the carbon. It is only after proving it that you can create a credit. You cannot create credits speculatively. It is incumbent upon you as a creditor party to have a measurement that is then verified by a government-appointed auditor to substantiate your claim. If you have a loss of carbon after you have created the credit, you have to either make good or provide replacement certificates. So, in terms of the integrity of the emission reduction, it remains sacrosanct.

Senator JOYCE—I am trying to work out how you can do that where you have committed the carbon in a tree and that tree is no longer there. Anyway, that is a circular argument. My naive belief is that, when the tree has gone, the carbon has gone. You cannot say that it is still there, if it is not there.

Mr Grant—No, but you are not doing anything after that.

CHAIR—Senator McGauran has a question.

Senator McGAURAN—It was just something you glossed over before. You said that this scheme is welcome in the light of previous approaches to the tax department. Was that the New South Wales tax department or the federal tax department?

Mr Grant—No. The view of the tax office is that, prior to the amendment of the act, there was no deduction.

Senator McGAURAN—What was that story?

Mr Grant—The situation—and it is a real-life example—is that one of our clients sought a private ruling, which is normal process, on capital expenditure for the purposes of carbon sequestration. The view of the tax office prior to the amendment was that there was no provision for depreciation or deductibility of capital and, above and beyond that, because you could not demonstrate causation between the emission and the sequestration, they were mutually exclusive matters. There are other provisions of the tax act—the pollution provisions, which include greenhouse gas emissions—that deal with expenditure.

Senator McGAURAN—With this legislation you now can.

Mr Grant—It provides clarity on the treatment.

Senator McGAURAN—So the tax department will now link the two.

Mr Grant—Yes. It details the basis of the deduction, what activities are deductible and how they would be treated.

Senator McGAURAN—Given that you have got your company structure all ready to go, are you clear how the tax department is going to measure your submissions?

Mr Grant—You are never clear. Experience with the tax office is such that it is a bit like a contract. It is not until it is signed and the money is in the bank that it is real. So we are clearer but, until you have processed an application and had it successfully treated, you could not say so.

Senator McGAURAN—Are you satisfied with the science that they will be using to measure the tonnage?

Mr Grant—Yes. On that point, Australia leads the world. In our business, Dr Bulinski and his team have a dedicated group of people working on the measuring and documentation of the amount of carbon. Other countries come to Australia to learn from the Australian approach. So I think Mr Carruthers was modest about the expertise. The Cooperative Research Centre for Greenhouse Accounting and the federal government's Department of Climate Change are without peer internationally in this space. As a company it is an area that we have pioneered.

Senator McGAURAN—What are your future plans? You must now be ready to jump out of the gates. What, for example, have you planned in hectare purchases?

Mr Grant—They are client driven and they are dependent upon scheme design going forward. So, until we are clear on scheme design, they are speculative.

Senator MILNE—I have two quick questions. First of all, this legislation does not allow for reforestation of degraded native vegetation because it says that it must be cleared.

Mr Grant—It has to be Kyoto compliant, yes.

Senator MILNE—That is one of the flaws in it as far as I can see in terms of giving on-farm benefits to people who have got degraded native vegetation on their land. Do you think it would be enhanced to somehow implement something in this legislation that actually provides people with the capacity to get some return for restoring degraded native vegetation to its full carbon-carrying capacity?

Mr Grant—From memory, section 40 of the tax act, which deals with the environmental provisions, particularly environmental improvement by a primary producer, is a more effective section of the tax act for that. There already are taxation incentives detailed in there and, if it were your view that they were incomplete or inadequate, that would be a more appropriate place. For example, if a farmer undertakes fencing to keep stock off degraded vegetation so you can let the natural restoration processes occur, those costs are totally deductible in the year of expenditure.

Senator MILNE—Yes, I am thinking more that, if you have got an area of New South Wales which had mallee on it which has been degraded but has still got—

Mr Grant—Unfortunately, it does not qualify under any carbon scheme anywhere in the world.

Senator MILNE—That is what I am talking about—an area that is degraded but that would not qualify because it is not cleared as such but that would be eminently suitable for you to come along and—

Mr Grant—Well, you would not meet the purposes of carrying out the carbon business test, because you are not creating carbon revenue from that, so you would not qualify.

Senator MILNE—But you could be creating carbon.

Mr Grant—No, because it is not recognisable under any scheme—

Senator MILNE—That is my point.

Mr Grant—nor is it proposed to be recognised. It is not recognised anywhere in the world. The Kyoto protocol rules and the carbon sequestration rules disallow it.

Senator MILNE—I know, but RRAT is trying to address these issues, and that is why I am trying to make sure that there is a capacity to incorporate restoration in this, and it is not there at the moment. There is a second issue I want to talk about. There is clearly also an opportunity to harvest oil mallees—because, as you said, they are coppice, and there is a volume of carbon below the soil—but you could get an income stream from eucalyptus oil or biomass or, if we get to lignocellulose, you could get an income stream from ethanol as well. In your business, are you looking at growing some of the area or only selling half of the credits in anticipation of being able to harvest or is your total planting carbon sequestration and other plantings for multiple use in—

Mr Grant—We are—purely long-term environmental plantings for the sole purpose of carbon sequestration. The reason is that those other areas of business endeavours are, in our view, uneconomic.

Senator MILNE—That is interesting.

Mr Grant—It is a tiny market. Eucalyptus oil and biomass from mallee eucalypts is in a fledgling state and largely unproven. There is no major commercial driver for it.

Senator MILNE—Okay. Thank you.

CHAIR—Thank you, Mr Grant and Dr Bulinski.

[2.22 pm]

BROAD, Mr Kent Philip, Director, AusCarbon Pty Ltd

CHAIR—I welcome the representative from AusCarbon Pty Ltd via teleconference. Before we go to questions from the committee, do you wish to make a brief opening statement?

Mr Broad—Yes, I do. Good afternoon, senators. Thank you for the invitation to speak to this inquiry and to answer questions. I would like to speak firstly as a farmer, a pastoralist, and secondly as a director of AusCarbon. For most of my working life of over 30 years I have farmed wheat, sheep and cattle in the midwest of the wheat belt, which is approximately three hours north of Perth, and also been a pastoralist in the Murchison region, which is about eight hours north of Perth. I am passionate about rural Australia and proud to be a fifth-generation farmer and grazier.

The introduction of forest carbon sinks to the wheat belt areas of Australia is a win-win-win situation for all stakeholders. From a farmer's perspective, it offers another industry that will complement existing farming practices. In the more marginal areas where cropping has become unviable, forest carbon sinks offer the best possible land use. Some of these areas should never have been cleared. It gives the farmer an alternative cash flow and could end up even replacing the never-ending drought assistance packages. The tax deduction for establishment costs are crucial as the capital required up front is significant and, after years of lean times, there is not a lot of spare money in the bush. Forest carbon sinks will offer a significant impact on the local environment as well as reducing excess CO₂ from the atmosphere. It breaks my heart to see the amount of topsoil that blows away every year in my area and, of course, here in the west, salt encroachment onto productive land is a real issue.

From AusCarbon's point of view, we are planting a variety of locally-sourced, endemic, mixed species, which is helping to build biodiversity back into the region. Our vision statement is: 'Building the community carbon cycle.' By this, we mean that, by increasing the vegetative biomass and thus increasing the amount of carbon stored, there will be a significant flow-on of benefits, economically, environmentally and socially, and this gives a win-win-win result for the community. Thank you.

CHAIR—Thank you, Mr Broad. As a Western Australian senator, it is very pleasing to hear that positive opening statement from you. We have certainly heard some interesting submissions today but you are a farmer and pastoralist, and you have entered into this scheme already—I am right there, aren't I?

Mr Broad—That is correct. We became accredited a month ago through Greenhouse Friendly, but back in February we took the punt and, on a 3,000 hectare farm, we started planted out seedlings at the beginning of June.

CHAIR—And how many hectares have you dedicated to carbon capture?

Mr Broad—On each property we are dedicating approximately 80 per cent of the farm, depending on its viability in terms of our modelling. But we would like to leave at least 20 per cent of all arable, viable, cropping and grazing land to normal agriculture.

CHAIR—Sorry; you wish to leave 80 per cent?

Mr Broad—No, 20 per cent—and these are of course in the areas that are already marginal. We are talking about the 300 to 350 millimetres rainfall average areas.

CHAIR—I did notice in your opening statement that you said that a lot of this land should never have been cleared in the first place.

Mr Broad—That is correct.

CHAIR—I find that very interesting. That is very informative, Mr Broad. We will now go to questions from other senators.

Senator MILNE—Thank you very much for your opening statement. I wish to raise a couple of issues. You mentioned a moment ago that the rainfall in the areas that you have planted out to date was about 350 millimetres. One of the issues we have concerns about is the displacement of rural communities by large-scale plantation development in higher rainfall areas. Do you have any reason for saying that you are in the 350 millimetre band? Or would your intent be to expand into areas of higher rainfall? What about issues of interception of water by the establishment of plantations—or are all your plantings biodiverse?

Mr Broad—All our plantings are biodiverse. Our particular economic modelling only allows for these marginal areas. The way we do our biodiversity projects will not allow us to encroach into the higher rainfall areas. We are looking at \$500 a hectare and below, for us to make it economic. That is part of our vision statement: to rebuild these communities from which, as I have witnessed over the last 30 years—as everyone has witnessed—people have been moving to the cities because they have just become unviable. So we are proposing that our model will allow both to coexist and in fact be enhanced by getting vegetation back out there.

Senator MILNE—I certainly appreciate that, and that is certainly a very worthwhile aspiration. My concern here is with the price of land. You said that you have done an economic model based on \$500. But, with large emitters and the aviation industry, for example, now coming into the market big time with large capital funds, what is to stop huge investment driving up the price of land all over the place in order to access it for the offsets which they can get more cheaply by planting plantations than by reducing their emissions at source?

Mr Broad—I am just a bit unsure as to the focus of your question, I am sorry.

Senator MILNE—The issue here is that, on the face of it, what you are doing could be complementary to higher rainfall areas and higher value crops, in the sense that you are looking at marginal land at a lesser land value.

Mr Broad—Yes.

Senator MILNE—What I am saying is that the land market will be seriously distorted with the onset of the Carbon Pollution Reduction Scheme because it will allow the aviation industry and the coal industry—the coal generators in particular—to invest in land for carbon sequestration as opposed to investing in changing how they operate at their generator or, in the aviation industry, how they run their aircraft, therefore driving up the price of land. That is what I am talking about.

Mr Broad—Sure. I guess it just gets down to a basic economic decision. At \$20 or \$15 a carbon credit, those higher rainfall areas will not be economic, I believe. If you were talking \$50 a carbon credit, that might be. I am not actually that familiar with the higher rainfall areas; I have lived all my life in these other areas. So I am not sure if I can answer that question.

CHAIR—Mr Broad, in what area is your property?

Mr Broad—We are in the north-eastern corner of the wheat belt in Western Australia. The wheat belt runs from, say, Kalbarri right down to Esperance.

CHAIR—So are you out Wubin way?

Mr Broad—Yes, that is correct—north of Wubin by about 150 kilometres.

CHAIR—Thank you. So near Paynes Find?

Mr Broad—Paynes Find is, of course, in the rangeland, but, yes, we are a bit north of there.

CHAIR—Thank you very much for that. Sorry, Senator Milne.

Senator MILNE—So, Mr Broad, is it your intention to work in partnership with existing landholders, or to buy out existing landholders?

Mr Broad—A bit of both. For instance, this first farm we have purchased outright. The farmer's son is staying on—he is living in the homestead—and he is going to be a contractor for the local area. That family has chosen to sell out because they were finding things too tough and they have ceased farming. But the son is staying on in the community with his family. It is our intention to look at each case as it presents. Obviously, leaving 20 per cent of these marginal farms to opportunity cropping and grazing will allow a family to remain in the area and look after, say, three or four of our properties.

Senator MILNE—And in terms of your economic plan, your forward plan, for your company, what is your aspiration in terms of the amount of land you would like to own and have under management?

Mr Broad—Over the next 10 years we would like to have 160,000 hectares of these marginal areas in the wheat belt under our planting.

Senator MILNE—Thank you.

Senator JOYCE—So, really, the benefit that you obtain is that you are also part of the cash flow—that you have the capacity to farm as well as to get the benefit of the carbon sink—is that correct?

Mr Broad—That is correct.

Senator JOYCE—What sort of country do you put the carbon sink trees on?

Mr Broad—We will be selecting 20 per cent of each property, each parcel of land, that will basically give us the best economic return. So, in our country out there, it is the sandy red loams that will recoup, and, generally, the other parts of the properties that have become unviable for cropping and grazing. So that is what we will be putting down to trees.

Senator JOYCE—And you can clearly identify which—obviously, you can; this is a loaded question—is the less applicable country for farming, and that is the country you are more likely to use for the carbon sink?

Mr Broad—That is correct.

Senator JOYCE—That is not a hard task is it—to identify that type of country?

Mr Broad—Not at all, especially having lived in the area all my life. Plus, with the satellite photos there are these days, you can pretty much map out from them as well.

Senator JOYCE—Especially trawling through stuff like Google Earth and using the types of software that clearly identify soil types and vegetation types?

Mr Broad—That is correct.

Senator JOYCE—I imagine that you would have, as we do in Queensland, tree-clearing guidelines and everything like that, where you have to follow certain rules and regulations?

Mr Broad—Sure, yes. WA has a total clearing ban—over one hectare per year—so we are very aware of any local regulations.

Senator JOYCE—And they can monitor that almost to the square metre, can't they?

Mr Broad—That is correct.

Senator JOYCE—So there is the capacity, if the government wished to, to identify where we can have a win-win situation where we are not imposing on better agricultural land, which you have. At this point in time, you would be able to identify less prime agricultural land and say that that is the stuff there that you have the capacity to use the deduction for?

Mr Broad—That is correct.

Senator JOYCE—That is basically one of the things we have been advocating. At this point in time, they say, ‘Oh, they’ll never use up prime agricultural land, because the market won’t let it happen.’ The market might not let it happen now, but it may change later on. We are just saying: to stop the threat of using up prime agricultural land, there is the capacity and there is the technology, which farmers—and I am one myself—know how to use, which can clearly identify the sort of country that you would be only too happy to have a carbon sink on because that would be the best, optimum use for the land, as opposed to what the market allows. Where you are putting your carbon sink is the best, optimum use for that land—that is, out of all your alternatives, the best, optimum use is that—and that still gives the capacity to be growing grain and also using some of the place for grazing et cetera.

Mr Broad—That is correct. That is our argument, yes.

Senator JOYCE—Thank you.

Senator O’BRIEN—Mr Broad, is it fair to describe the land that you—with others, I assume—are considering planting the oil mallees on as very marginal agricultural land?

Mr Broad—Yes.

Senator O’BRIEN—You describe the rainfall as 350 millimetres. Is that a good year or a bad year?

Mr Broad—Over the last 30 years, this country we are looking at had less than 350 millimetres; closer to 300 millimetres. It is right on the edge of the rangelands, right down the Western Australian wheat belt.

Senator O’BRIEN—Is that the limit of the range where you might be successful with those plantings?

Mr Broad—With our economic modelling it is, at this stage. That is what we are focusing on, yes.

Senator O’BRIEN—For the benefit of the *Hansard*, can you just explain how it would work for a farming entity to take, say, 80 per cent of their property and plant it to oil mallees and survive.

Mr Broad—It depends on what sort of contractual agreement it is. We have a joint venture arrangement, or we have a direct purchase, or we have a leasing arrangement, so it could get very detailed, but basically our argument is for the farmer to stay there and to benefit from any upward movement in future carbon price.

Senator O’BRIEN—Who invests the money?

Mr Broad—It depends. If the farmer has any spare at this stage, they would put a bit in. They have got the land, so that is a fairly good contribution. And then obviously we, with our other joint venture partners, would put in the capital costs.

Senator O'BRIEN—So it would be a bit like sharecropping, would it?

Mr Broad—I guess so, yes. You could call it that.

Senator O'BRIEN—Your modelling is based on a carbon price of \$7 to \$9, is it?

Mr Broad—That is on the very low end of our scale. We have not sold any at that price—put it that way.

Senator O'BRIEN—What have you sold it at?

Mr Broad—We have not yet. We are still negotiating for prices above that, between \$10 and \$20—put it that way.

Senator O'BRIEN—And your modelling is showing that it will be viable for farming enterprises in that region?

Mr Broad—Yes, it will be. As I think Andrew Grant mentioned previously, there is a two- to three-year time lag with the trees and with the growth, so by year 4 we are looking at a return for everybody.

Senator O'BRIEN—As compared to a grain return, if you can get one?

Mr Broad—Yes. The first three years it would not compare, but I think by year 4 it will compare very favourably, and of course, in the 20 years, from say five to 15 years, the trees will do very well compared to other farming practices.

Senator O'BRIEN—In what other parts of the wheat belt would you expect this model to be picked up in Western Australia?

Mr Broad—I would say any part of the wheat belt that fits our criteria of soil type, price per hectare and rainfall. Over Australia, I think there are seven million hectares that would—that is just off the top of my head, but I think it is in that vicinity, where the marginal areas are. I am not familiar with a lot of the eastern states, because they have different rainfall patterns, but there is a fairly large area available, I believe.

Senator O'BRIEN—I presume you are saying that the market viability of this will determine whether farmers will want to enter into it or not.

Mr Broad—That is correct.

Senator O'BRIEN—Thanks.

CHAIR—Mr Broad, do you have any mates around the area following suit?

Mr Broad—No, we have not as yet.

CHAIR—I suppose there would still be a bit of scepticism around—would that be fair?

Mr Broad—There is a lot of noise about what is meant to happen and what should happen, but at this stage we are just going quietly along doing our first property to try and prove the concept, if you like, in that area. There is a lot of interest from our neighbours. In fact, some of the neighbours are already saying, ‘Count me in for next year.’

CHAIR—That is tremendous, Mr Broad. I have one last question. Is there an airstrip near your property?

Mr Broad—Yes, I am sure there is!

CHAIR—Is there a viable airstrip? That did not make me feel any more comfortable, Mr Broad! Put it this way: there could be?

Mr Broad—Yes, absolutely.

CHAIR—I am serious. I just want to know whether there is an airstrip—

Mr Broad—Yes, there definitely is.

CHAIR—it is not a loaded question—if someone were to come in.

Mr Broad—No, there is. Morawa town site is only 40 kilometres away. There is an RFDS strip there.

CHAIR—As there are no other questions from the committee, I wish you all the best, Mr Broad. Thank you very much for your time.

Mr Broad—Thank you.

[2.43 pm]

BALSARINI, Mr Peter James, Executive Director, Carbon Conscious Ltd

SHIELDS, Mr Michael, Non-Executive Director, Carbon Conscious Ltd

Evidence was taken via teleconference—

CHAIR—Welcome. Before we go to questions, do you wish to make a brief opening statement?

Mr Balsarini—If I could. If it would be okay, I would like to briefly touch on our business model and then that will hopefully provide some input into questions.

CHAIR—Please do.

Mr Balsarini—Carbon Conscious is actively involved in the Australian carbon market. We listed on the ASX in May 2008. Our business proposition is the creation of stakeholder value through the sequestration of carbon from the atmosphere by the planting of native mallee eucalyptus trees in the wheat belt areas of Australia. The business identifies optimal sites within wheat belt farms of Australia and integrates planting of these trees with existing agricultural activities. This integration involves working in conjunction with farmers to ensure that plantings can coexist within existing cropping rotations. Existing farmers maintain ownership of the land, while Carbon Conscious takes a carbon right on the land which is registered on the title. The carbon right enables the production of a carbon credit, which is now referred to as a ‘carbon pollution permit’ under the government’s proposed Carbon Pollution Reduction Scheme. These carbon credits are generated as the trees grow and the carbon is sequestered.

Farmers are rewarded for the use of their land, with cash consideration and, at their option, a share of the carbon credits generated from the plantings. In addition, farmers will reap significant environmental benefit from the surrounding land due to the presence of the native trees. Carbon Conscious believe there is no net loss of food production from the plantings, due to the environmental benefits associated with the trees. The capital cost associated with the use of the land and the planting of the trees will, in the majority, be met by third-party carbon emitters. These third-party emitters will be asked to pay up front for establishing the trees and in return will be provided with a stream of carbon credits over the growing life of the tree. The decision-making process for the third-party emitter is a hedging decision. They will compare the known costs associated with planting and maintain the trees against their potential liability under the proposed Carbon Pollution Reduction Scheme. The carbon emitter who invests into the carbon sink will take real risk on tree growth over the period of the plantation.

Carbon Conscious will manage the plantations over the effective life of the plantation for an agreed management fee. Carbon Conscious contends that the tax deduction under consideration is very material to the successful operation of this program as it provides an additional economic stimulus to the proposed project. We believe that this represents an ideal opportunity to direct

necessary capital to achieve positive environmental outcomes, with the potential to ensure long-term sustainability of the wheat belt regions of Australia.

That is our opening introduction and that is a summary of our business model. Mr Shields is my co-presenter and is also a farmer. He is a non-executive director of Carbon Conscious. I brought him along today because he will certainly be able to deal with any sorts of environmental issues or issues from a farming perspective. I would like to open up to questions now.

CHAIR—That is tremendous. Thank you, Mr Balsarini. I have to tell you, it sounds like the West Aussies are leading as per normal. You are off and running and that is great to hear. We have also just heard from another Western Australian grower doing a similar thing. Mr Balsarini and Mr Shields, before I go to other senators for questions, how many properties do you have off and running at the moment?

Mr Balsarini—I need to explain a little bit about our business background. We are a listed company, as I said, but our parent entity is a company by the name of AACL. They run a managed investment scheme which is involved in growing wheat, or raising equity, and putting that equity to wheat farmers. They will grow about 385,000 tonnes of wheat this year in that format, with 150 farmers at about 250 locations. We are a relatively young business. We have planted 100,000 trees on 100 hectares, which we did last week, but our business plan is to plant trees next year in the order of around 2½ thousand hectares, and we would like to grow that to about 25,000 hectares per annum. That is our growth aspiration. What we are looking to do in terms of land access is use our strategic relationships that we already have with these farmers to identify the land and plant the trees.

CHAIR—How far off are you from your projection of, say, 25,000 hectares?

Mr Balsarini—We plan to do about 10 per cent of that next year. Relatively, we are a fair way off, to be honest.

CHAIR—Sorry—I did not propose the question as clearly as I should have. How many years away do you think that is?

Mr Balsarini—Three to four years for full production.

CHAIR—And these third-party carbon emitters are kicking your doors down?

Mr Balsarini—We have had about 30 meetings with third-party carbon emitters. What has actually transpired is that they are looking for pricing signals. We are now going back for second-round interviews, where we are working through that hedging strategy, but it has been very positive so far.

CHAIR—Good. Regarding the 150 farmers over the 250 locations throughout the wheat belt, are they centred in one particular area or are they spread everywhere?

Mr Balsarini—They are spread everywhere, to be honest. We are very much in a low-rainfall area—I would like to make that point. We are in a 250- to 450-millimetre rainfall area. It is a

traditional wheat-growing area. It is not in the high-rainfall areas of Western Australia but it is certainly spread across the majority of the wheat belt.

CHAIR—Are most of your partners in this business still keeping a certain percentage of their land for cropping or have they gone completely to trees?

Mr Balsarini—No—nearly all the farmers are staying on their farms. As I mentioned before, the farmer will retain title. What we are looking to do is two types of plantings. One is belt plantings, where you integrate a 10-metre row of trees into the existing cropping rotation. So there might be 10 metres of trees, 100 metres of cropping and then another 10 metres worth of trees. That is the belt plantings. Then we will do block plantings, and they will be on certain parts of the farm where the soil is perhaps less conducive or less economic in terms of wheat growing. It is not necessarily our intention to buy whole farms and for farmers to move off their land. We actually work with farmers and we consider ourselves in a partnership in relation to farmers.

CHAIR—And I would say that the farmers would really see a win-win situation, in that not only can they stay on the land but their communities should benefit as well.

Mr Balsarini—And their farms, because of the environmental benefits.

CHAIR—I love it when the west leads the charge. Well done.

Senator O'BRIEN—Mr Balsarini, you related a connection with AACL. It would be interesting, given the relation of that connection, if you would tell us how that scheme is running. I know it is managed investment and it is wheat, but I understand it is predicated on farmers being part of the scheme and using the scheme as a risk management tool. How is it operating?

Mr Balsarini—Effectively, the AACL business raises money retail. It is a managed investment scheme so it prepares a product disclosure statement. This year it raised approximately \$40 million from retail investors. That money is pooled and is then provided to wheat farmers who take a proportion of that money for an agreed amount of their crop. It is real equity, in the sense that it is not a debt instrument. The farmer takes the money; the farmer provides the land, the labour and the know-how to plant the crop; and he also provides the capital equipment—the tractor and so forth—and the investors provide equity. For that equity, they get a return on the grain production. The AACL business actually has significant resources tied up in people such as agronomists, who go out and make assessments of farms, agree contracts with farmers and monitor those farmers over that period. It is a very intensive business in terms of understanding the productive capacity of each farmer, and it has proven very successful, as you have mentioned, as a risk mitigation tool for the farmers, because they get a chance to take some equity on board that finances their plantings. Potentially farmers do not use it on 100 per cent of their plantings but they may use it on a proportion. I might ask Mr Shields, who is also involved in that, if he has some comments.

Mr Shields—We actually started using it after the 2006 drought, just to lower our risk profile with borrowings, because it does not require you to put any of the borrowings against land—which lets you sleep a little bit better at night. It has worked well for us and we will continue to

use it. It is probably a little bit more expensive way of financing as compared with a bank but, at the end of the day, it is a safer way of financing, especially when you have the degree of fluctuation in production that we have. We fluctuate wildly—especially in the last few years.

Senator O'BRIEN—Does the investor share in your production risk?

Mr Shields—Correct. To put it simply, say, for example, this year we got \$500 a hectare up front to put the crop in. If we had a bad frost or a drought and we only returned \$200 a hectare, then the investor would lose the \$300. We would not have to repay that amount. Whereas, if we had done that through a bank, we would have to repay the \$500. On top of that, if, say, it is agreed we make a return of \$700 a hectare, then the investor obviously shares in that incremental \$200 a hectare. That is where their bonus comes in.

Senator O'BRIEN—From the point of view of AACL and now Carbon Conscious, how would you describe the management fee arrangement for the facilitation of the scheme in both cases?

Mr Balsarini—Forgive me, but I cannot necessarily talk to the AACL management fee. I believe it is a management fee based on a tonnage provided. I will have to defer on that one. In terms of the carbon position, we are looking to sell a carbon lot. We are going to emitters and saying that we can provide them with a carbon lot. A carbon lot is 1,000 tonnes of carbon. We will provide that over a 30-year period. We will charge a dollar fee indexed to CPI on that carbon lot over a 30-year period. Obviously, we have to manage and maintain that, and it will grow by CPI over that period of time. So it is certainly a long-term relationship between us, the farmer and the carbon emitter.

Senator O'BRIEN—You are saying that you sign someone up for 30 years; the farmer has the carbon; and you get a commission per year over 30 years in a fixed real dollar amount—if I can put it that way?

Mr Balsarini—Yes. I would not call it a commission; I would call it a management fee, but 'commission' would be another terminology.

Senator O'BRIEN—Presumably, you have locked in a price for the carbon over the 30 years in this deal?

Mr Balsarini—The emitter pays up front. So, as a corporate entity, we will make an up-front profit. I will use some mythical numbers: if we planted it all—which might cost us \$10 per one tonne of carbon—and sold it to the emitter for \$15, we would make an up-front profit there. Obviously, we would then get the management fee which I referred to. Having said that, we do have responsibilities through that 30-year period to go out and monitor and measure the trees and to retire the carbon credits. So it is not all profit per se; it is a fee for service performed.

Senator O'BRIEN—How many tonnes of carbon are you expecting your business to manage?

Mr Balsarini—Again, we would like to think of 25,000 hectares, and if you put that into context that might produce 7.5 million tonnes over a 30-year period. That is the sort of number on an annual basis.

Senator MILNE—Just to follow up from Senator O'Brien, in the event that a bushfire goes through and burns the whole thing down, who bears the financial liability for making good? Do you, as the management company, bear the liability to buy credits on the market to restore it, or do you intend to manage larger areas than those for which you are generating credits as a risk offset? Can you explain to me who will bear the cost in the circumstance that disease, incredible drought, bushfire or some other thing destroys your asset?

Mr Balsarini—Certainly. I will just make a couple of preliminary comments. The first comment is that these trees are native trees and very hardy trees. In terms of the comment about drought, we would expect that once these trees were established—and I am talking in a three- or four-year time frame—they would survive drought, but they certainly will not grow. They will not sequester carbon in drought, because it is about tree growth per annum. But we expect that they would live and start to regrow once the drought had passed. The second comment is that the trees re-coppice after five years. A lignotuber of the tree sits below the ground. It depends on certain variables, but about 40 per cent of the carbon sits underground in the roots. If a bushfire went through, our experts tell us that it would take about three years for the trees to re-coppice, and then the carbon would be back in a net position.

The third comment is that we would not necessarily see that bushfire per se as a huge risk because of the way that we are planting these trees. They are spread across the wheat belt and also in the belt configurations that we mentioned before. You are more likely to have crop fires than bushfires burning significant amounts of vegetation. The fourth comment is that we are awaiting the green paper on the carbon reduction scheme for further clarification on how this system might work. Under the current system that the Australian Greenhouse Office runs, we need to have a 'set aside', and a set aside approximates to 15 to 20 per cent. We intend to do that, and that will help manage the fire risks.

The last comment—and this is yet to be developed—is that we are confident that insurance instruments will be developed. The market is very new. We can certainly insure the young trees in the first three or four years, but we are yet to develop a product to insure the carbon in the trees. But I think that will come as the industry matures.

Senator MILNE—But what you are saying to me is that your company bears the risk, not the landowner.

Mr Balsarini—It is certainly not the landowner. As I mentioned in my opening statement, the carbon emitter who takes the position bears a real risk on tree growth. So, if the trees do not grow for any particular reason, the carbon emitter is short in terms of their carbon position.

Senator MILNE—On the issue of drought, there is a lot of scientific evidence to say that climatic conditions are going to get worse rather than better or stabilise as they are but that we are not going back to former scenarios. In that case is there a rainfall below which it is not viable to plant mallee?

Mr Balsarini—There obviously is because if there is no rainfall they will not grow. As I said, we have been targeting 250 to 450 millimetres. The answer to that question is that under 250 millimetres it becomes problematic as to whether they will grow, but they may not grow in a manner that makes it economical to harvest the carbon, for want of a better word. Certainly at a lower rainfall it becomes problematic. One other issue is whether there is groundwater and they tap into the watertable but, again, that is a finite resource in a very low rainfall environment.

Senator NASH—I was interested in your target land. Obviously the rainfall area has been 250 to 400. How did you come up with those figures? What made that the target rainfall bracket for you?

Mr Shields—That is predominantly most of the wheat belt where crops are grown now, and that is where mallee trees are native and where most of them grow. If you go under where you can grow a crop, in terms of rainfall, you will find that mallee trees do not really exist either. That is why that was the predetermined level, although people are growing crops in slightly lower rainfall areas than that, but it increases the risk in that one of the major costs of the trees is the planting costs, and a lower rainfall could put the first couple of years of growth in jeopardy; that is why that was chosen.

Senator NASH—As a New South Welshman, I am not very familiar with WA land uses. Your submission was very good. For a brief submission you covered everything very, very well. It is one of the better ones that we have seen, I think. You talk about the no-net loss of food production from the plantings due, obviously, to the environmental benefits. Could you explain that a bit more for us?

Mr Shields—We have always planted trees on our farms, and this is why I got involved with Carbon Conscious. My wife and I would plant about 10,000 a year anyway, because she loves planting trees and we use them to rehabilitate areas. A lot of areas that we have rehabilitated with trees are growing crops. They are quite often the wet areas where the crops get waterlogged, and now we are growing far better crops in those areas than we did before. We also have another farm that is prone to wind erosion, and we have established a number of tree belts on it already as a windbreak and we are now going to put a lot more trees on there, because we are always planting them without really getting any monetary return from the trees. We will probably plant another 10 per cent of our hectares with trees, but we will end up getting more crop out of it. You really want to get more crop from each hectare you grow because it is so expensive to put it in, and we see trees as a way of doing that.

Senator NASH—I am a farmer as well, and we do a similar thing at home. Basically what you are saying is that the area of land on your farm you are going to give over to trees may well be an area you were going to give over to trees anyway.

Mr Shields—Yes, especially where we put the contour drains in and then plant trees in salt areas, which is really effective; on the tops of hills that we have cleared that we are replanting—just because we get shocking wind-blow up there; and on areas that are not really productive now. And, where we have put the windbreaks in, it actually makes that site more productive. So it is a bit of a win-win. Most farms could do that. And most farmers would do that if they could get some money out of doing it. Really, farmers do not want a lot of money for doing it; they would much rather improve their farms.

Senator NASH—Absolutely; I could not agree more. We have had a fair bit of discussion earlier today around property title. I noticed in your submission that you were saying that the Western Australian legislation actually allows for that, so that you would see the right being registered on the property title itself. One concern that has been brought up is that, as far as we can tell, that is not contained within the federal legislation anywhere. Do you think that the state legislation is going to be enough surety that that registration on the property title will be there?

Mr Balsarini—I think so. I guess it would be fair to say that that state legislation has been in for a few years over here but it has not necessarily been tested because it is a fairly fledgling industry, as I guess you would appreciate. In addition to the carbon right that we lodge on title, we also take what is called a carbon covenant. The carbon covenant is a registered document. It outlines the relationship between the landowner and the carbon rights holder, particularly in relation to the permanency of the trees and the things they need to do on an annual basis, such as to certify that the trees are there and are growing and that they are getting managed. We have a management protocol, so a number of the farmers actually provide management services and get a cash return for that. It is a little bit wait-and-see. And I guess if we could get some further clarification about how the carbon reduction scheme will operate that would help us. But at the moment I am relatively comfortable with the way the WA title system works—albeit that it will obviously need to be tested over the next few years.

Senator NASH—Thanks, gentlemen.

Senator MILNE—Mr Balsarini, I have questions on a couple of things. Firstly, the legislation as it currently exists does not specify that, to be operating a business for the purposes of qualifying for this deduction, you have to be accredited with anyone. And there is nothing to stop the coal industry or the aviation industry setting up their own company to just directly move into it and cut out the middleman, which is effectively your business. Do you think there is any benefit here in requiring that the companies or the entities getting the tax deduction have to be accredited and that, therefore, you can bring in a whole range of qualifications on what you need to do to be accredited?

Mr Balsarini—I think the issue with that is this. I will go to your first point regarding a coal company or another carbon-polluting company. In our model, even though we are the middleman, the tax deduction will go to them; they are the ones putting the money up. So it is structured in a manner such that they plant the trees. As I mentioned before, they are taking real risks on growth. So our position is that, whoever is providing the equity and taking the real risk needs to get the tax deduction.

In terms of cutting out the middleman, I find it unlikely. Certainly, these companies have the resources and the capacity to scale up and put teams on to do this type of thing. But the issue is actually the access to land. In terms of our business, our unique position is to have worked with 150 farmers over a number of years, growing crops with them. Most farmers, if a sharp suit from the city turns up with a tie on and knocks on their door and says, 'Have I got a deal for you,' will tell them to get lost. So you really do have to maintain relationships with farmers. I doubt that they would actually do it off their own bat. So my overall position is: whoever is taking the risk on the growth should get the tax deduction. As I mentioned in my presentation, it is an economic decision for the emitter, because they are looking at a known price today and trees grow carbon over a 30-year period, so they then get the credits over that 30-year period, versus doing nothing

and waiting to see what permits come on the market and how much the permit price is. So it is an attractive offer, and certainly the capital that they need to commit is up front, and obviously the offer will be a whole lot better if they can have a tax deduction for the capital that they commit up front.

Senator MILNE—That is the point that I was getting to: why do we need to give anybody a tax deduction for this now when it is designed to offset emissions from the large emitters, they now have a carbon price signal in the market as of 2010 and it will be an economic decision for them as to whether it is more economical to offset their emissions from their coal-fired power station in the paddock or at the plant?

Mr Balsarini—It is the timing issue. If there is no incentive for them to do this today because it is not a tax deduction or they do not have a definitive price signal, then these trees will not go into the ground and be sequestering carbon in five years time. So, effectively it is an incentive for them to make decisions; it is an economic benefit. I hear your comment that they are in business and they are at risk but, in terms of the way the government has designed the system, they are going to reduce the number of permits every year. The way I read the green paper, the only other opportunity to provide credit is through tree growth, and the incentive would be to get on and do it today. That is why I think that the 2008-12 period which the government put into this legislation is the ideal period because it provides an incentive for this to start happening now.

CHAIR—Mr Shields, is it your wife who likes planting trees?

Mr Shields—She does.

CHAIR—Does she like mowing lawns?

Mr Shields—No, she does not. I do that.

CHAIR—I was going to invite you down to Freo for a barbie on the weekend; but anyway. Thank you very much for your time, and I must sincerely apologise for the lateness. Unfortunately we had to shuffle the agenda around to accommodate certain senators who had travel arrangements that they could not get out of this afternoon. Once again, thank you very much.

[3.13 pm]

JAMES, Mr Russell, Assistant Secretary, Water Policy Branch, Department of the Environment, Water, Heritage and the Arts

CHAIR—Welcome. I remind senators that the Senate has resolved that an officer of a department of the Commonwealth or of a state shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions asked of the officer to superior officers or to a minister. This resolution prohibits only questions asking for opinions on matters of policy and does not preclude questions asking for explanations or policies or factual questions about when and how policies were adopted. Officers of the department are also reminded that any claim that it would be contrary to the public interest to answer a question must be made by a minister and should be accompanied by a statement setting out the basis for the claim. Mr James, before we go to questions, do you wish to make a brief opening statement?

Mr James—Yes; thank you. I thought it might be helpful if I gave some information to the committee in relation to the National Water Initiative and the issue of water use by plantations, including plantations for the purpose of carbon sinks.

The basic approach of the National Water Initiative is that commercial water use should be limited so as to ensure environmental objectives can be met and that the allocation of water for commercial use should be through the market. While much water use is regulated in the form of water access entitlements, the NWI recognises that a number of water-using activities, such as farm dams, bores and plantation forests, have potentially significant water use. If this is not taken into account in the water planning process, there is a risk that the environment will get less water than intended and that the water access entitlement system will be eroded. The NWI commits states and territories to having in place, by no later than 2011, arrangements to ensure that such water intercepting activities are considered in the water planning process and, in cases where such activities are expected to intercept significant volumes of water, that they are managed appropriately. In systems that are overallocated, fully allocated or approaching full allocation, the NWI indicates that proposals above a certain threshold size should be required to obtain a water access entitlement and that a suitable monitoring regime is put in place.

The NWI is not concerned about the impacts of plantation forests as such; rather, it is concerned that whichever commercial use of water is proposed—whether it is irrigation, large-scale commercial plantations or large urban developments—the water use is factored into the water planning process and that, where water is becoming scarce, it is only made available for commercial use through the water access entitlement system, that is, by purchasing an entitlement in the market. In other words, if comprehensive water planning arrangements are in place, any proposals for carbon sink forests or other water-using proposals will be assessed in this context. They may need to obtain a water access entitlement in some areas. The decision to proceed or not proceed then becomes a commercial decision.

From a water management perspective, the question is: to what extent do the states and territories have these comprehensive water management arrangements in place? I can respond to that question in two ways. Firstly, South Australia has made significant inroads into addressing

the use of water by plantations; Victoria and Western Australia are actively developing proposals; and in other jurisdictions the position is less clear. Secondly, at COAG in March this year, the Working Group on Climate Change and Water, chaired by Senator Wong, was asked to prepare advice on a forward work program for water reform. One of the issues to be addressed specifically was that of accelerating the National Water Initiative commitments on interception in recognition of the potentially significant impact of growth-intercepting activities. This advice is expected to be put to COAG in October this year. That is my statement.

CHAIR—Thank you very much, Mr James. I am sure there will be questions from Senator Nash.

Senator NASH—Thank you, Chair. There may well be! Mr James, how much were you involved in the actual development of the legislation? I do not mean you personally but your department or the relevant areas of your department. How much were you involved in the development of the legislation?

Mr James—For the carbon sinks?

Senator NASH—Yes.

Mr James—We were consulted. We had input into the briefing for the minister. From our point of view, we have no particular concerns with it. We think it is a good proposal.

Senator NASH—Obviously the issue of interception has come up, and the advice is due to COAG in October. I think that is what you just said.

Mr James—Yes. A report will go to COAG in October.

Senator NASH—Could you give us a bit more detail around the possible impacts from the department's perspective? If this work has been tasked it must be a concern, or at least acknowledged, that the planting of these sinks may well have some interception capability, if you like. Could you just run us through, as much as you can, what has been discussed and what the potential dangers are of that interception?

Mr James—Regarding concern about intercepting activities broadly, carbon sink forests are only one possible form of those activities. For example, in the Murray-Darling Basin there are estimates that in the next 10 years something like an additional 1,500 gegalitres of water might be taken out of the system by growth in activities like farm dams or plantations. There is nothing specific about carbon sink forests in that estimate. In a sense, that is why COAG has asked us to look at this issue more closely. There is already a commitment in the NWI to ramp up the regulation of these activities by 2011, and COAG has asked us to make that happen even faster.

In relation to carbon sink forests, I am not aware of any huge or particular concern that my department would have. I am not an expert on carbon sink forests, but my understanding is that the arrangement proposed is likely to lead to investment in the lower rainfall areas of catchments, for mallee plantings and that type of thing. In many of those catchments the level of water use is not significant and it would be a surprise to us if there was a big concern about water use of plantations in those drier areas. The most significant potential use of water by

expansion in a plantation estate is really in the higher rainfall areas, where you currently find pine or blue gum plantations. Those are probably the areas of more concern from a water management point of view.

Senator NASH—As a hypothetical, in terms of setting up a carbon sink forest, it is then going to be the responsibility of the planter, if they feel they are going to need some kind of irrigation capacity, to go and source a licence or whatever to do that themselves?

Mr James—Under the legislation that is proposed that is correct; although because they will, by definition, be doing that activity in a state or a territory, the state or territory water management arrangements would in a sense kick into place. The proposal that is set out in the National Water Initiative is for these things to be looked at on a catchment by catchment basis. If a state, in looking at the water use in a particular catchment, thinks that plantation development activities beyond a certain threshold need to have a water access entitlement, then the state would make that a legal requirement of developments going ahead.

Senator NASH—Would the department view the water use of, say, a carbon sink forest on a farm differently from irrigating a crop on the farm, or is that water licence to that farmer saying the farmer can do whatever they want—there is going to be no restriction on what that water licence can be used for?

Mr James—That is the principle, yes. In a sense, we do not care if it is—

Senator NASH—If you have got X you can use X.

Mr James—That is right. It is the amount of water that is being used that is at issue. I think the point is that the history of developing water management arrangements in Australia is that the focus has been on the big users, where you are pumping water out of a river or you are making water available through a dam. That is basically around the irrigation sector or large-scale urban developments. The NWI recognises that plantation forests are significant water users and that in some areas there might be an argument for them to also require water access entitlements. In a sense, the system that is being set up allows that decision to be made in the context of a particular catchment and the level of water development in that catchment. It is very hard to have a one size fits all approach to this.

Senator NASH—Absolutely. With the report on the interception that is going to COAG in October, are you expecting anything to come out of that that might retrospectively shed some light on the legislation that is currently being set up around this? I suppose what I am getting at is: is there any information that you are expecting to come out of that which may well have determined a different outcome in some of the legislation that has been drafted?

Mr James—Obviously I cannot comment on what is likely to go—

Senator NASH—Sorry; it is very hypothetical, but—

Mr James—I understand, but—

Senator NASH—You see, I am just wondering if it is putting the cart before the horse a bit in that particular area; that is all.

Mr James—No, we do not believe so. The way the legislation is devised is perfectly compliant with the approach in the National Water Initiative, and that is really all we, in a sense, are trying to implement, but perhaps implement more quickly, through the COAG advice.

Senator NASH—Thanks.

Senator MILNE—Mr James, when the managed investment schemes for forest plantations came in, did your department express any concern about water interception at that time?

Mr James—I am not sure of the answer to that question. When was that? I have only been in the department for 18 months. I think this was prior to that.

Senator MILNE—Yes, it was well before that.

Mr James—Yes. I am not aware of any concerns that were expressed.

Senator MILNE—The point I make is that it was a massive blunder that that was not done at that time. As you have rightly indicated, there is massive interception of water from plantation establishment and they are getting their water free, and now, subsequent to the event, we are trying to fix it up. What we heard this morning and what you have confirmed now is that in some states they are dealing with their catchments and they have a better idea; in other states they have no idea. We heard that 2011 is when we are going to get the National Water Initiative and this issue of water sorted in terms of distribution. This legislation is effective as of now. We heard this morning that an application will be made to the tax office for a deduction, and that will be ticked off after an assessment by the Secretary of the Department of Climate Change. He or she, whoever the secretary is at that particular time, will determine compliance with this set of guidelines, which includes water. Given what you have said, on what possible basis can the Secretary of the Department of Climate Change tick off compliance on issues around water interception today, for Tasmania? Let us be very specific. For Tasmania today, could the secretary make any kind of sensible decision about water interception?

Mr James—It is hard to comment on hypotheticals, but I would have thought that by using existing water management plans in Tasmania—so that would presumably involve some communication with the state government—there would be a basis on which to say whether or not a particular proposal, in the context of where it was occurring and the level of development of water in that particular catchment, was going to cause an issue or not.

Senator MILNE—Are you confident that Tasmania has water management plans for each of its catchments?

Mr James—I am sorry; I do not know enough about the individual state of—

Senator MILNE—Okay. I did not expect you would, but you sat here and said that you had no particular concerns with the way this legislation is coming in—that it will be consistent with the National Water Initiative, and by 2011 we will know. It is now 2008. This is law. We have

heard companies say they are marching in right now and organising with farmers to plant out thousands of hectares now. You made another statement a minute ago saying that you are confident this will be in low-rainfall areas and so on. There is nothing in the legislation—

Mr James—I said I understood that is where those plantations would go, and I am not an expert on where they are going to go.

Senator MILNE—Okay. Well, you understand that there is nothing in the legislation, let me tell you, that requires that at all. You can put in a plantation of this kind anywhere you choose. It is going to be a matter of market economics. The issue here becomes—and this is a hypothetical—that today the Secretary of the Department of Climate Change ticks off my company, let us say, that has just decided to plant 10,000 hectares somewhere. They tick it off saying that it meets the water requirements, because there are none, or for whatever reason they decide. In 2011, however, when the Water Initiative have done the assessment, they discover that planting those 10,000 hectares was actually a disaster and now the catchment is overallocated. You then say, ‘Well, you have to buy the water rights,’ so now the whole catchment is penalised on the price of water rights in that catchment because this was allowed to happen now.

Mr James—Sorry, what was the question?

Senator MILNE—The question is: isn’t that the case? Isn’t it the fact that this is being allowed now, before we have an assessment of the allocation of water in catchments, and that in three years time, in 2011, when we know what a reasonable allocation in the catchment is, this could drive up the price of water to every user in the catchment?

Mr James—I guess all I can say to that is that that is a hypothetical and it is at a particular end of the spectrum. It is not as if within the various states there is no information on which previous proposals to use water have been based. The states are at various levels of development of their water management plans and the information base on which those things are made.

Senator MILNE—Yes, but this—

Senator NASH—I am sorry, Senator Milne. The catchment management plans, as you say, are at various levels. Where I live, we do not even have one yet, and it keeps being pushed out. So how can you make a determination where we have regions like the one where I live that does not even have a catchment management plan?

Mr James—The basic approach that states use in developing their priorities for water management planning is, sensibly enough, to start where water use is highest or where there is most risk of overuse of those resources. So, in some areas, presumably they have come to a conclusion that the risk of overuse is relatively low, and they perhaps have not put a lot of resources into planning in those particular areas. Under the National Water Initiative, however, there is a commitment to bring in these sorts of, if you like, more formal water management plans, and the states are rolling out various programs to do that.

Senator MILNE—Wouldn’t it be sensible, therefore, to restrict the tax deduction for a carbon sink plantation to those areas where there is already a water management plan in that catchment?

Senator NASH—And, if I could just add a second bit to that question, if you do that, isn't that precluding those people who live in the areas where it is not done from having a balanced bite at the apple, if you like?

Mr James—Sorry, I do not—

Senator NASH—Sorry. Answer Senator Milne's question first, and then I will explain what I mean.

Senator MILNE—My issue is this: at the moment, I know of many catchments in Tasmania where there has been no assessment whatsoever—no assessment on groundwater, no assessment on recharge, no assessment on the catchment or anything. In fact, it has got to the point where they are going to have to cut down some of the plantations in order to restore environmental flows. So, if you have not got the water data on the catchments, why would we want to make the matter worse by going ahead? Wouldn't it be better to put into this legislation that only those catchments with water management plans can qualify for this carbon sink tax deductibility? That would at least drive some catchments or state governments to get their act together.

Mr James—From the department's point of view, we would support the development of water management plans everywhere—so one would hope over time that these things are going to be developed by the states. What you are proposing makes sense, but there is also an issue in that your assumption is that, if a management plan is not in place, the water resources in a particular catchment are somehow in peril. That may well not be the case because, as I said, there is a sort of priority placed on the development of those plans. I think it is a bit hard to have a hard and fast rule as you have proposed.

Senator MILNE—But the issue is again the retrospectivity. According to the guidelines which cover the planting of these plantations:

In cases where establishment of carbon sink forests would represent a significant interception activity in a catchment that has been identified as fully allocated, over-allocated or approaching full allocation, water access entitlements must be obtained.

But, if you got that allocation prior to such an assessment being made, wouldn't you argue that you had no obligation to pay it because you cannot apply legislation retrospectively?

Mr James—Just for clarification—

Senator MILNE—It is the third one, down the bottom. It says that you might have to buy a water right if you have put this in. But say you put it in today and there are no water rights, there is no restriction and you get 100 per cent tax deductibility; later, it turns out you have to buy water rights. You are going to argue that you did not have to at the time; why should you have to now—it is everybody else's problem.

Mr James—Sure, I understand where you are coming from. The statement here is that, where carbon sink forests are going to, or are likely to, use a significant amount of water and the catchment has been identified as fully overallocated or approaching that—and that sort of approach is very consistent with what is in the National Water Initiative—then water access

entitlements must be obtained. In a sense, the question of whether there is a water management plan or not—

Senator MILNE—Yes, but it is not today. That might apply in three years time once it has been identified, but you could say, ‘At the time I planted it there was no identification of that and I was not required to do it, so why should I do it now?’

Mr James—I guess all I can say to that is that the more likely position is that, in catchments that do not have management plans, it would be surprising to us if they are actually overallocated or at risk of becoming overallocated in the short term, because it would imply that there is really no information about the way those catchments have been managed and about the water use of current commercial activities in those catchments. I would be surprised—again, it is a bit hypothetical—if there were many situations around the country where that is the case.

Senator MILNE—I think you should prepare to be surprised. In the Tasmanian context, I can tell you that Launceston City Council might well have to build a new reservoir because of plantation establishment in all its catchment areas. They had no idea of the impact of fast-growing plantations through the conversion of native forest to plantations in their catchments—and that is just one example I can give you. There is also the Prosser River on the east coast; there are any number of them. So I suspect that, all around Australia, your expectation of the level of information about the hydrological cycle in any of those catchments will be far less than you are suggesting is the case. Anyway, you do not object to the notion that it may be better to restrict the plantings to catchments where the evidence on water allocation is already available?

Mr James—I do not have any problem with that proposition, no.

Senator MILNE—Thank you.

CHAIR—There being no further questions, thank you very much, Mr James.

[3.52 pm]

CURNOW, Mr Paul Henry, Partner, Baker and McKenzie

WALKER, Mr John, Partner, Baker and McKenzie

CHAIR—Welcome. Firstly, I sincerely apologise for the inconvenience we have put you through in rearranging today's timetable. We had to make some last-minute alterations to fit in certain senators' travel arrangements and so forth. Once again, on behalf of the committee, thank you very much, gentlemen, for making yourselves available this afternoon. Before we go to questions, does anyone wish to make a brief opening statement?

Mr Curnow—I might make a brief statement. John and I are speaking in our individual capacities here—we are not representing any clients of ours—in the context of having worked in the area of carbon sequestration projects for a number of years. We would like to share our views from having been involved in that sort of work.

There are a couple of things which from our perspective are worth touching on and which may come up in questions. The important point to note with respect to the tax deductions as contained in the Income Tax Assessment Act is to put them in the broader context of the other complementary policies that relate to promoting the uptake of forestry sequestration projects in Australia, including the voluntary inclusion of those sorts of projects under the proposed Australian emissions trading scheme, which is one of the options put forward in the green paper the government released last week, as well as to consider those in the context of the various carbon sequestration rights legislation that exists at the moment in most states and territories and that has underpinned most of the projects to date. I think there are a number of issues with respect to that carbon sequestration rights legislation which we see would need some addressing as part of these various policies.

CHAIR—Thank you. Mr Walker, do you wish to make a brief opening statement?

Mr Walker—No.

CHAIR—Questions. Senators Milne?

Senator MILNE—Just to go to this issue of carbon sequestration rights, one of the issues that have concerned members of the Senate is that 'carbon sequestration forests' be put on the title of the property. At the moment there appears to be no requirement for that. If I have a property, get the tax deduction for a carbon forest and then sell the property to someone else, that is not shown on the title and all those issues about rights arise. You mentioned that you had some thoughts about tidying up the legislation. Can you tell us how you would address that issue?

Mr Curnow—Yes. I was referring to the carbon sequestration rights legislation in each state and territory. Let me touch on that first, and we can come back to the question of how that might be dealt with under the tax legislation.

I think the situation is that all states and territories, except the Northern Territory and the Australian Capital Territory, have some form of carbon sequestration rights legislation in place. Those different pieces of legislation confer different rights. In New South Wales, Western Australia and South Australia, they confer an interest in land. In the other states, on our analysis, they confer only a personal right and have some restrictions with respect to being able to register an interest on title. If we look at those states where there is, in fact, the ability to register a CSR on title, in our experience from having been involved in a number of these projects, the reality is that it is very difficult to get the commercial backing for these projects without holding a carbon sequestration right. In practice, the reality is that all of these sorts of projects that may take benefit from the deduction that is allowed under the Income Tax Assessment Act would seek to have some form of carbon sequestration right registered on title. I think, in that sense, it is important to remember that, practically, what we see as being likely to happen in most instances is that people developing these projects would get the carbon sequestration right registered on title.

The issue that I referred to at the beginning of my remarks was the fact that at the moment not all states and territories have the same approach. I think there is a need to make the nature of that carbon sequestration right and the way in which it can be registered on title uniform across the states and territories. At the moment, in some states and territories, you do not get the ability to register an interest on title. So, if there is a change in ownership of the land, that carbon sequestration right does not run with the land, because you have a mere personal right as opposed to something that is registrable on title. There is definitely an issue at the state and territory level about the nature of carbon sequestration rights and what protection they confer when there is a change of ownership of the land.

Senator MILNE—What you have said confirms a lot of the concern and confusion around as to how it is registered, how it is recognised over a period of time, how a buyer would know—five changes in land use down the track—what was going on and so on. You are suggesting that, complementary to this, there needs to be uniformity of those state laws through, presumably, a COAG process.

Mr Curnow—Yes, something like that. Clearly, because we are dealing here with property law, you would have to have something enacted to deal with each state and territory's system of property ownership and registering title on land. I think that something through COAG would be one way of doing that. However, clearly there are significant differences between the states and territories. In our view, New South Wales and Western Australia are probably the two current systems that are the most developed; they are probably the best examples of the sort of system that the other states and territories should be enacting.

Senator MILNE—In relation to that, is there a significant difference, or could we just say that we recommend that the New South Wales system be adopted as a national system?

Mr Curnow—It is slightly difficult. To be specific, the New South Wales regime has one disadvantage, in our view, which is the requirement that you have to carry out a full survey plan with respect to registering that title, which can be very costly. Other states do not require that, including Western Australia. Western Australia has an additional benefit in that it recognises the sequestration of carbon in the soil, not just trees. So that potentially provides a basis for any developments down the track with respect to recognition of soil carbon under any emissions

trading scheme. I think both of them have advantages and that it would be worth looking at both of them as a basis for what the other states and territories need to perhaps do. The issue in Victoria and Queensland is that it is not an interest in land; they are just a personal interest. So I think there are real issues in Queensland and Victoria with respect to the ability to enforce the carbon sequestration right against any subsequent landowner.

Senator MILNE—So what you are effectively saying is that, as it currently stands, it would be difficult for people in those states to raise the capital or interest in engaging in this process because the carbon rights issue is unclear about transfer.

Mr Curnow—That is actually not the case. In our experience, notwithstanding those restrictions, the reality has been that a lot of projects are still happening in those states and territories. So I think it is not so much a case of things which are preventing or discouraging investment but more about how we can improve the overall system and make it more robust, particularly in the context of potentially a lot of these projects opting into an emissions trading scheme down the track.

Senator MILNE—Thank you. The other issue I wanted to talk to you about is water rights. We have heard evidence today that the National Water Initiative process, in terms of judging the allocation of water in catchments, will not really be finished until 2011. This is law now, in terms of people presumably planting in catchments. The guidelines that the minister has introduced to cover these carbon sequestration forests say that you have to be compliant with state legislation. What is the legal situation if I plant, say, a 1,000-hectare forest now and then, in three years time when the National Water Initiative reports, it is discovered that the catchment that I have planted into has been overallocated and I am told that I have to purchase a water right? Is that retrospective, or can I argue that I do not have to buy it because at the time that I planted the sink I was compliant with state legislation?

Mr Curnow—I am not sure I am qualified or am in a position to answer that in any substantive way. In terms of what the issues may be under the relevant water legislation, I could not comment. Whether that can apply retrospectively is something that would be dependent on the circumstances. From a policy perspective, if projects were undertaken now based on these guidelines and an expectation that, if they meet those, they would be otherwise in compliance, it would probably mean that it then would be difficult to apply something like that retrospectively. However, I think that is probably all I would be able to say on that point.

Senator MILNE—Thank you, because that is how I would read it too. There are a number of catchments around Australia that do not have at this point and will not have for a number of years any kind of water assessment, and it may give more certainty if catchments without water plans are excluded from eligibility until such time as water plans exist. That would give more legal certainty anyway.

Mr Curnow—Yes.

Senator O'BRIEN—In terms of the tax legislation that is being considered, are there any areas in which you believe it could be improved?

Mr Walker—One point that has not been made yet is that, when we talk about schemes being designed to take advantage of these rules, the focus seems to be on the ability outside of the Income Tax Assessment Act to limit that activity. That is what Paul has been particularly focused on. The other comment that needs to be made to put these issues into context is, of course, that the Income Tax Assessment Act has quite an effective set of general anti-avoidance rules whereby, if a scheme were set up specifically for the purpose of claiming these deductions, even if it fell within the letter of these provisions, it would be unlikely that those deductions would be available in any event.

Senator O'BRIEN—I am sorry; I did not follow that. We are all screwing up our foreheads, thinking that we have missed something. Could you run that past us again?

Mr Walker—There is a general anti-avoidance rule in what is part IVA of the Income Tax Assessment Act 1936. That specifically provides that, if you do something for the dominant purpose of obtaining a tax benefit, that tax benefit will be denied to you. We seem to miss that step when we are criticising these provisions. If someone enters a scheme much like what was described earlier, where expenditure is incurred in respect of a carbon sink project, and immediately thereafter or within a short period of time that land is sold, someone could walk away with the benefit of those deductions despite the fact that they had on-sold that land. Before we look at any amendments to carbon sequestration law, the first question should always be, 'What was the dominant purpose of the taxpayer in doing this transaction?' If they were driven with the dominant purpose of claiming the tax deduction, the commissioner would be well within his power to deny those deductions.

Senator O'BRIEN—Is that generally applicable to schemes under the tax law?

Mr Walker—Yes. There is a general anti-avoidance rule, which is found in part IVA of the Income Tax Assessment Act 1936.

Senator O'BRIEN—If a property holder made the investment, claimed the tax and then sold the property having improved the value of the property, you think that might fail that anti-avoidance rule?

Mr Walker—It would if, in looking at the objective facts, his dominant purpose was to claim those tax deductions.

Senator MILNE—He would have to prove it though.

Mr Curnow—Just to add to that, in our view the fact that you can sell the land is not anathema to the ability to claim the deductions if, as John says, it is not the dominant purpose, and that is because of the ability at the state and territory level to register the carbon sequestration right on the title and have separate ownership of that to the land. You could imagine the scenario where, even if someone sells the land, obviously any future owner is bound by that carbon sequestration right. The purpose of having initially set that up can still be maintained, notwithstanding that the original developer no longer owns the land.

Senator O'BRIEN—I am wondering whether effectively a lease for a part of the land for that purpose would bind a subsequent property owner, although I think that, if the contract for the

sale required vacant possession, that would not be possible with an outstanding lease. Do you have any comment on that?

Mr Curnow—So you are thinking of a situation where there is a carbon sequestration right registered on the title for a particular part of the land and that is subsequently leased to—

Senator O'BRIEN—Not even having anything registered on the title, but where there is a parcel of the land that is placed under trees and there is a 99-year lease to an entity who is trading in the carbon and the original property holder then says, 'I'm going to sell the land.' I am guessing that they would not be able to provide vacant possession in that circumstance, because the lease would continue.

Mr Curnow—That would depend to some extent on the lease, in terms of what you could do to dispose of the land while it was being leased. I think that is another issue. The key point is the question of the nature of any carbon sequestration right those parties might have, and if it is registered on the title then that will bind all future dealings in the land, whether that is on ownership or lease. That brings me back to the earlier point we made: that is why having a uniform approach is important.

A point I forgot to mention before, which you have reminded me about, regards another area that all states and territories need to look at with respect to their carbon sequestration rights legislation: the ability for an owner of the land to grant themselves the carbon sequestration right. At the moment that is typically usually only created where the land is being sold to someone who will develop the forestry project or where a developer coming onto existing land carries out the project under lease or service arrangements. If we are talking about a situation where a lot of landholders want to be able to develop projects or host projects themselves, then it would be important for that legislation to enable those existing landholders to grant themselves the carbon sequestration rights that are registered separately on titles without having that occur only once there is sale of that land or some other dealing with a third party.

Senator O'BRIEN—So you are saying that is an issue with the state legislation at the moment?

Mr Curnow—Yes. None of them actually provide for that at the moment.

Senator O'BRIEN—In the absence of that happening, where would we be with the federal legislation?

Mr Curnow—In the absence of harmonising the state and territory—

Senator O'BRIEN—Yes.

Mr Curnow—John can add to this but, looking at the language of the federal Income Tax Assessment Act, it talks about, 'The purpose of establishing the trees does not include the felling of the trees.' I think that would mean it is incumbent on each person who is seeking to claim this deduction that they can demonstrate that that is their ongoing purpose. So, if the land is being sold, I guess they have to make sure there is some arrangement in place that protects their interests in that sequestered carbon, notwithstanding a change in ownership. As I said, some of

the states and territories have, perhaps, slightly deficient systems in that you cannot register the title on land. Having said that, you can, through contractual means, seek to restrict any subsequent owners of land. It is not, in our view, the ideal scenario, but certainly it has not stopped people carrying out those projects to date.

Senator MILNE—But, given what you have said, it could tie you up in quite a bit of cost and a whole lot of legal arrangements, by the sound of it, whereas, if we could actually streamline this at the beginning and make those rights very clear and transferable, and registered on property and title, it would make the whole system a lot easier to manage over time.

Mr Curnow—Yes, I agree with that estimate. I think that would be an important thing in reducing the transaction costs in this. And that is not just in terms of the difference—the age-old problem in Australia of dealing with different—

Senator MILNE—Jurisdictions.

Mr Curnow—regimes in each state and territory, and the administrative costs, but also the different survey requirements. I mentioned earlier on that New South Wales has the requirement for a full planned survey whereas, in Victoria, you can do it off GPS coordinates, which has a much, much lower cost. So the survey requirements within each of those regimes should also be looked at, in our view.

Senator O'BRIEN—The arrangements on title would almost certainly require survey, wouldn't they?

Mr Curnow—That is right—not to say that there should not be a survey, but I guess there are cheaper and more expensive ways of doing surveys. So, if you can rely on GPS coordinates to initially set the boundaries of the parcels rather than having to go out and survey those from scratch—which is what New South Wales requires—then, certainly from what a lot of our clients tell us, you can keep the costs down a lot more.

Senator O'BRIEN—It might be cheaper to have a separate register.

Senator MILNE—Given your experience with carbon sequestration projects, why would we now need a tax deduction to establish them—given that the government has included plantation establishment under the Carbon Pollution Reduction Scheme and so the price signal will now be in the market? Why would we want to give people a tax deduction as well?

Mr Curnow—I think it is important to remember that the carbon—I can never get my head around this new name—the emissions trading scheme or the carbon reduction scheme—

Senator MILNE—Feel free to call it that; we know what you are talking about!

Mr Curnow—is one policy, although it is going to have broad coverage—at least as far as what the green paper proposes—covering most sectors, including a voluntary, opt-in arrangement for the forestry sector. The reality is that, in our view, there will be a reasonably low carbon price in the early years, because you are going to have a transition arrangement from having no scheme to introducing the scheme and then ratcheting the caps down over time. So I

think, in that context, complementary measures in the early years of introducing the emissions trading scheme will still be very important. We have seen, for example, that renewable energy projects will not get up purely on the basis of the introduction of a carbon price because it is likely to be too low in the early years. So you need a complementary measure like the national renewable energy target. I think this really falls into a similar category, because with forestry you have very long lead times before you get substantial levels of sequestration. The first five years of most plantings do not yield much in the way of sequestered carbon and, given that, I think that the financial nature of doing forestry projects is that there are some significant up-front costs and the returns only come in later. So I think you need complementary measures, like the ability to claim tax deductions on aspects of that, to help in that transition period.

Senator MILNE—What about the omission here that there is no complementary measure to provide finance for protecting existing carbon stores either in native forests or in native vegetation, where you have substantial volumes of carbon already stored?

Mr Curnow—I have two comments on that. One would be that, if you as a forestry company with existing carbon stores opt in—and it is a voluntary opt-in as currently proposed—then you would bear any liability with respect to the harvesting and the felling of trees. That may be a reason why many of those forestry companies will not opt in under the scheme—because they would take on that liability. The other thing is, of course, that the states and territories have legislation that restricts land clearing. Whether one needs to provide an additional financial incentive to stop deforestation within the Australian context is, I guess, ultimately a policy consideration. We do have those existing laws with respect to land clearing that to date have allowed Australia to meet its Kyoto target, for example.

Senator MILNE—Yes, I know, but the problem is that there is very little monitoring or enforcement of or compliance with the land-clearing legislation, where it exists. In some states it still does not exist in any real capacity. So we are subsidising logging and land clearance at one level, and now we are going to subsidise reforestation at another level. Basically, the carbon equation is going to be in the negative because we are going to be clearing huge stores and planting plantations which will take 100 years to get the same stores back.

Mr Curnow—I do not really have any further comment on that.

Senator MILNE—That is fair enough. My final question is on the price. What are you advising? Obviously you give advice in terms of carbon markets.

Mr Curnow—Yes.

Senator MILNE—What is your current advice to people about the likely price for a carbon offset credit for sequestration into, say, the next 10 years in Australia?

Mr Curnow—Have you got a crystal ball down there?

Senator MILNE—Not at all. That is why I am asking you: what are you advising?

Mr Curnow—We do not advise on that in any strict sense, but certainly we have our own views, and I am happy to share those. Let us look at current prices in the forestry offset market,

obviously very much in the voluntary space under things like Greenhouse Friendly and previously under the New South Wales greenhouse gas abatement scheme. Typically, we see prices there of anywhere from \$12 to \$20 a tonne of CO₂ equivalent. We have also seen much, much higher prices, but they would not represent the large volume. I think it is fair to say that at the moment there is not much price transparency, because this has all been done on bilateral trade, so there is no spot market or an exchange where you can see what the prices are. That will happen over time, of course.

In terms of the proposal under the green paper, where forestry would be a voluntary opt-in as a covered sector, I guess our expectation would be that the price for forestry permits, or whatever they will be called, would be only slightly below the permit price. It would not go above the permit price, because it would not be viable if the forestry permits were going to be more than the general permit price, so of course it would not ordinarily go above that. How much less than that it would be is difficult to say.

If you look at the European trading scheme and you look at the permit price there of European allowances of around 25 at the moment, the offset price for credits being brought in under the CDM is trading at around 85 per cent of the market price. So you may see, if we assume a \$20 price in Australia for a permit, that the forestry permits would be anywhere from \$15 to \$17, perhaps. That is pretty much in line with the current price, but I think that, as the permit price goes up, you would expect the forestry permit price to track that, but probably at a slight discount.

That is really the first phase I am thinking of, but in terms of the next 10 years it really is a function of what caps are set. It is really difficult to look beyond that. But, if you look at the European scheme again by way of example, the current price is around 25 for phase 2 pricing. A lot of analysis has been done on what the price would be in phase 3, and there are reports out that indicate that it would be anywhere from 40 to 50. So I guess we are seeing a doubling of the price in a relatively short space of time, and I would imagine there would be a similar situation in Australia.

Senator MILNE—Thank you for that. Just to summarise what you have said: your key consideration is that we get some standardised, national legislation around the carbon sequestration rights so that we simplify things, make it cheaper for transaction costs and get some uniformity around the country?

Mr Curnow—Yes.

CHAIR—Mr Curnow and Mr Walker, once again my sincere apologies for delaying you. Thank you for making yourself available to the committee.

Mr Curnow—You are welcome.

Mr Walker—That is all right.

CHAIR—Thank you, and all the best.

[4.29 pm]

MARTIN, Mr Kent, Natural Resources Committee, South Australian Farmers Federation

Evidence was taken via teleconference—

CHAIR—Welcome. Before we go to questions, do you wish to make a brief opening statement?

Mr Martin—Yes. We are very interested in this legislation because one of the major issues with South Australia and our farming sector in the south of the state is the application of forestry—plantation forestry—and the outcomes from that and how it impacts on water and water allocation and a number of those processes. For the last eight years, since the beginning of the National Water Initiative, we have been working to make plantation forestry accountable as a significant water-affecting activity. To that end, in 2004 there were changes to regulations that took into account recharge impact—recharge for forestry—and last year changes were being made to take into account direct extraction.

However, having looked at the accountability of that part of forestry, the federation absolutely supports plantation forestry as long as, like every other landowner, it meets its responsibilities and obligations. There has been a huge expansion of the blue gum plantation forestry industry in this part of the state, encouraged by MISs. The development would have been much better if it had been planned as a proper forestry investment rather than just being subsidised with an MIS, which is interested in the MIS rather than the forest industry.

That basically is our position and our interest in this for a start. Also, with respect to resource management, we are heavily involved with the regional natural resource management board and in developing their regional plan about where water, land use and biodiversity fit into all of that. That is the role we see that we play and where we are interested.

CHAIR—Thank you, Mr Martin. Some interesting submissions came across from the other side of the border earlier today. Do you have any knowledge of what is going on in Western Australia with the mallee trees?

Mr Martin—We do some work there and have some understanding of the implications of some of that activity, which is similar to what happens in the upper mid-south-east of South Australia. It would be good if I had a map to show you. They are similar sorts of approaches about how mallee can take a place with carbon sequestration and how this might work in any future trading scheme.

CHAIR—Do you have some projects underway in that part of South Australia?

Mr Martin—There are a number of major projects. Prefacing all of this, a lot of the work that has been done in South Australia is about integrated natural resource management. The word ‘integrated’ is very important. We see these things as having a requirement. Single monocultures pose numbers of difficulties in management in regions. Where you can get really good outcomes

with a better integrated approach with a variety of species, this is a beneficial outcome. One of the issues that I will probably raise with you later is about this concept of 'additionality'. The way the sinks and the emissions trading are structured, it is very much aimed at a single issue—for example, you have a single species in your plantation and this has to be dedicated to carbon sequestration. We believe that you can get much better outcomes for everybody if you can do numbers of things. Down here we have threatened species, such as the red-tailed black cockatoos, which are a nationally threatened species. So if you can have carbon sequestration and get viable amounts sequestered, and if you could get a better environmental outcome, this has to be a plus. That is what we have been quite interested in as well in dealing with this.

Senator MILNE—I come from Tasmania, where we also have seen considerable displacement of rural communities because of managed investment schemes and water interception, so I know exactly what you are talking about. Several issues have come up today. One of them is the issue of encouraging multispecies plantings and plantings to be in the ground for 100 years, and the issue of water management. I will go to the water management issue first. Has South Australia now done assessments in each catchment of water availability et cetera? Is there a fair understanding of the hydrological system and what is available for the environment and for productive use otherwise in each catchment?

Mr Martin—It is much better developed in certain catchments. I will give you a little bit of my background. I sat on the state's Natural Resources Management Council for five years, up until one month or so ago. Basically there is a system in this state with—I should be able to tell you this exactly—eight regional boards, and they have to develop their own water allocation strategies and plans, which have to be signed off under this process. They are not directly catchment but they are regional. This is a South Australian thing. The south-east one is very well developed with its water management, and Murray-Darling is well developed. Areas like the arid areas and Aboriginal lands in the north of the state have completely different water ones, although arid areas are the Great Artesian Basin. They were in the process of signing off on most of their water allocation plans for the five-year period that they have been through. They are now signing off on new ones at this point in time. I guess the answer to you is: fairly reasonable—very good in some places and reasonable in others—but it could always be better.

Senator MILNE—The reason I ask is that it was explained to us today that the way this will operate is that before the tax office gives the tax deduction for a planting for a carbon sink forest it has to go to the Secretary of the Department of Climate Change to sign off, and the secretary will determine that on the basis of the environmental guidelines that have been put out. One of those guidelines is in relation to interception activity in a catchment and whether a catchment is fully allocated, overallocated or approaching full allocation and whether water entitlements must be obtained. So my question to you is: at the moment, would anybody in the South Australian government be able to give an answer to the Secretary of the Department of Climate Change if they rang up and said, 'There's been an application to plant 1,000 hectares in X catchment'? Would somebody in the government in South Australia be able to say, 'That catchment is already overallocated, underallocated, or whatever'?

Mr Martin—Let us talk about the south-east, which is the high-rainfall area. There are two high-rainfall areas in South Australia: Mount Lofty and Fleurieu in the south-east, where the majority of the forests and expansion in these industries is in this state. The figures for the south-east are available and are being used, and a water allocation regime is being put in place right at

this moment, basically, to accommodate new forestry and to make it meet its obligations with water allocations in overallocated areas for both extraction and recharge. The legislation and changes to legislation are going through the parliament at this point in time. We are involved with it. Getting legislation through is a slow business, as you well know. But, for this part of the state, yes, all those things can be accounted for and are being accounted for.

There are a few issues with the forest industry, which tends not to be happy, but the south-east is in the fortunate position that the water has been well managed. And people need to be really clear about this: forestry is being offered and will be given a water entitlement allocation or property right, whichever they finally settle on, of all their prior use, and we can do that within the whole process without overallocating. That is 287,000 megalitres, which is a significant issue for the forests. So their water is guaranteed, but they are going to be fully accountable.

Senator MILNE—What I am trying to establish here is that, if someone applies to the tax office for a tax deduction and the Secretary to the Department of Climate Change comes to the south-east catchment authority or whatever, you would be able to quote to them the fact that, yes, they could put in so many thousand hectares but they would have to buy a water right, which would cost X.

Mr Martin—That is right: they could. There is water made available for forestry. There is some water still available for forestry, so they do not actually have to buy straightaway. But that has restrictions on it depending on the management area and its allocation status.

Senator MILNE—Would you support an amendment here that says that the tax deduction cannot apply to catchments without that level of assessment having been done? In other words, if you cannot say whether they need a water right and whether the catchment is allocated or not then they should not be able to get a deduction for planting in that catchment.

Mr Martin—Yes. We are in the process of making that available to everybody and basically, unless you can have it you should not be allowed to proceed, because it has caused all sorts of trouble here. There is all sorts of trouble on Kangaroo Island that we are trying to sort out, with plantation forestry going ahead without a water allocation and then somehow, under NWI, it has to be brought back into balance, and that is much harder when you have encouraged people to go and do something without getting the proper authorisation.

Senator MILNE—Thank you. That is our problem here—that this will be available now in terms of a tax deduction but that it will be three years, in some cases, before the water allocation issue is dealt with, in which case do you then have retrospectivity and do you drive up the price of water to everyone in the catchment? Anyway, thank you for that. I appreciate it, Mr Martin.

Mr Martin—It is not just driving up the price. If water forestry eventually comes into the budgeting and all allocations have to be cut back, everybody is then responsible for the cutback. So we have a major concern, along with you.

Senator MILNE—Thank you, Mr Martin.

Senator O'BRIEN—You said that forestry in the south-east region has been allocated 287,000 megalitres. How many megalitres in total are allocated?

Mr Martin—It is about 30 per cent. I do not have exact figures, though I should know this perfectly, but I think it is about 13,000. The figure we are talking about is about 30 per cent of the water.

Senator O'Brien—Who else has to have an allocation?

Mr Martin—There is a major allocation for irrigation, there is a major allocation for stock and domestic, there are allocations for industry and then there are some environmental allocations.

Senator O'Brien—So forestry is the only operation where there is no direct water application which requires a water licence?

Mr Martin—At this point in time, it does. It requires a licence for impact on recharge. We are in the process—when I say ‘we’, that is industry, the government and whomever—of getting the final detail, and it is almost off the press, about how forestry will be given its water allocation and how it will be required. One of these things is about prior use. When the resource was proclaimed in this state in the different management areas, with each as a single operation, existing users—irrigators, business and such—got their prior rights, and the same will apply to forestry. They have prior rights, and how much water they were using has been accounted for for quite a while informally. That is why, for instance, the south-east of South Australia is in the fortunate position that it actually can give forestry its water. It had always been taken into account. It had always been recognised that plantation forestry was a major user of water. It had always been followed up.

Senator O'Brien—We have been given an illustration, with some figures, of the south-east region prepared by the Bureau of Rural Sciences. They say that the total area of the region is 27,868 square kilometres and that 132 square kilometres of that—half of one per cent of the area—is plantation hardwood and that 3.6 per cent of that area is softwood and mixed plantation. Most of the area is in fact annual crops and highly modified pastures. What would that account for?

Mr Martin—I am just not quite getting your question, and I actually have a bit of an issue with those figures. There are two sets of figures that people are dealing with. One is for the whole of the south-east and its water management, which gives you a very low impact of forestry. There is a completely different set of figures for the area where it has been legislated for forestry to have its own water allocation—those 287,000 megs and the resulting controls. In actual fact water usage for forestry accounts for, I think, 42 per cent of the water on 30 per cent of the area. I think that is the right way around with the figures.

Senator O'Brien—Can you describe the area you are talking about? I am looking at this document, which depicts the south-east region as covering 27,868 square kilometres.

Mr Martin—That would be the whole of the NRM board area right up to the other side of Bordertown, way up into the upper south-east, heading up towards Murray Bridge.

Senator O'Brien—Murray Bridge is in the next one. It is in the Murray-Darling Basin region, which is a bigger area of 56,959 square kilometres.

Mr Martin—It is bigger. The area with the impact of the plantation forestry on the water is basically only half the area that you are quoting. Because of rainfall change—and you go out of the higher rainfall area where they actually want to grow forest into a drier area—it basically nearly halves the figures. It is up to the forestry industry to use the figures they wish to use, but they have used figures which make it look as though forestry is only a minor percentage of all of this. There is a completely different set of figures for the area where there is the impact on the watertable—the underground aquifer, where it impacts on recharge and direct extraction and where the forests actually are. Those figures are about half of what you are looking at. I am sorry; that is only a rough estimate, without actually going and getting it. Forestry is a major water user in the bottom part, and that goes over the border into Victoria.

Senator O'BRIEN—Yes, the Victorian region has a significant amount—

Mr Martin—Yes, because we have this border-sharing agreement up and down the border, 16 kilometres on each side, which has special legislation. I can make sure you can have those figures, with really good documentation to show exactly where the plantation forests are. There are about 100,000 hectares of radiata and there are about 30,000 or 40,000 hectares of hardwood. The other issue that overlies this area as well is that there is in fact what we call farm forestry allocation.

Senator O'BRIEN—The figures for the whole of the region for hardwood, according to BRS, at 1 June 2008 were about 13,200 hectares—132 square kilometres at 100 hectares a square kilometre. You just said 30, so the figures that BRS have given us do not line up with your figures—and they are for the bigger region, not the smaller region that you are talking about.

Mr Martin—The difficulty with the regions is that the bigger region has completely different land use altogether.

Senator O'BRIEN—Two-thirds of the region as a percentage is annual crops and highly modified pastures—that is the south-east region generally. We are talking about approximately four per cent of the larger region—not the smaller one you are talking about—being plantations of hardwood or softwood or mixed varieties.

Mr Martin—I think that is probably the figure that they quoted.

Senator O'BRIEN—But I just picked you up on that. You said that you thought 30,000 hectares of hardwood, and their figure would equate, on my calculations—and I freely admit I am not always right—to about 13,000 hectares.

Mr Martin—There is a lot more than that. If I may, I will make sure that I forward to you the exact figures for the region.

Senator O'BRIEN—Okay, that is fine. I am working off a Bureau of Rural Sciences document which was created on 1 June 2008. We presume it is up to date.

Mr Martin—We can send you the latest department figures which will show you where the plantations are and the exact areas. At this point in time there are 100,000 of radiata—

Senator O'BRIEN—It says there are 1,000 square kilometres of radiata.

Mr Martin—and there are at least 40 of blue gum. One of the difficulties with this is to pin that industry down to giving you figures of what is in the ground, if they actually know that. This has come back to haunt them, I have got to say to you. When government has tried to make certain allocations of water available their figures are somewhat difficult to deal with—and I am trying to find a really fair way of saying that.

Senator O'BRIEN—Thank you very much, Mr Martin.

CHAIR—On that, Mr Martin, thank you very much for your time, and before I let you go I must sincerely apologise for mucking you around. We really do appreciate your being so flexible and accommodating for the committee. Thank you very much, Mr Martin.

Mr Martin—That was a pleasure. As I said, I can check up and I will get those other figures sent through to you.

CHAIR—Wonderful. Thank you very much. All the very best. Thank you very much to the secretariat, to Broadcasting and to Hansard. The committee now stands adjourned.

Committee adjourned at 4.52 pm