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SENATE

ENVIRONMENT, COMMUNICATIONS AND THE ARTS
REFERENCES COMMITTEE

Reference: Forestry and mining operations on the Tiwi Islands

FRIDAY, 2 OCTOBER 2009

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SENATE ENVIRONMENT, COMMUNICATIONS AND THE ARTS

REFERENCES COMMITTEE

Friday, 2 October 2009

Members: Senator Birmingham (*Chair*), Senator McEwen (*Deputy Chair*), Senators Boswell, Ludlam, Troeth and Wortley

Substitute members: Senator Crossin for Senator Wortley

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

Senators in attendance: Senators Birmingham, Crossin, Ian Macdonald and Siewert

Terms of reference for the inquiry:

To inquire into and report on:

Forestry and mining operations on the Tiwi Islands

- a. an assessment of the environmental, economic and community impacts of existing and proposed forestry and mining operations on the Tiwi Islands including compliance with relevant environmental approvals and conditions;
- b. a review of governance arrangements relating to existing forestry and mining operations on the Tiwi Islands, including the examination of consent and approval processes to date;
- c. in respect to forestry operations, an examination of the adequacy of contractual, commercial and legal arrangements between project proponents and operators and the Tiwi Land Council;
- d. an examination of the economic opportunity costs associated with existing developments including forestry operations;
- e. an examination of the prospects for alternative economic development opportunities and impediments for the Tiwi Islands including sale and promotion of cultural products, community development activities, land and sea management, and opportunities for involvement in future carbon trading and emissions offsets schemes; and
- f. any related matters.

WITNESSES

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Committee met at 9.32 am

CHAIR (Senator Birmingham)—Thank you, Senator Crossin and Senator Siewert, for joining us by phone. We will move to the proceedings and the formalities. I declare open this public hearing of the Senate Environment, Communications and the Arts References Committee in relation to its inquiry into forestry and mining operations in the Tiwi Islands. The committee's proceedings today will follow the program as circulated. These are public proceedings. The committee may also agree to a request to have evidence heard in camera or may determine that certain evidence should be heard in camera. I remind all witnesses that in giving evidence to the committee they are protected by parliamentary privilege. It is unlawful to threaten or disadvantage a witness on account of evidence given to a committee. Such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to the committee.

If a witness objects to answering a question, the witness should state the ground upon which the objection is to be 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 may be given in camera. Such a request may also be made at any other time.

With those formalities over, I welcome everyone here today—although it is a very empty room here at present.

[9.34 am]

AJANI, Dr Judith Ingrouille, Economist, Fenner School of Environment and Society, Australian National University

CHAIR—I particularly welcome Dr Judith Ajani. Thank you very much for coming and speaking with us today. You have come at our request and invitation and were not a submitter to the inquiry. So I extend my particular thanks in that regard. You have provided some background information, however, in advance of today's hearing. That has been circulated. Thank you very much for that. Do you wish to make a brief opening statement before we proceed to questions?

Dr Ajani—Yes, thank you. Good morning. By next week I will have participated in five parliamentary committees concerning in some substantial way plantation MISs. That is five inquiries since 2000, so an average of one every two years. Plantation managed investment schemes have got a fundamental flaw which governments, both Liberal and Labor, believe is not a problem or have chosen not to fix. The problems that stimulated this inquiry into forestry and mining on the Tiwi Islands are embedded in the deeper problems of the plantation MIS as a model. My point here is that, left operating, plantation MISs will continue to wreak havoc.

As Senator Birmingham mentioned, I forwarded a document yesterday, which is what I would like to speak to briefly. I will run through that document. The information I present in table 1 on the second page is to help us understand what the fundamental flaw in the plantation MIS model is. The information presented under the column heading 'MIS' is information collected for the midterm of these projects, so around the year 2000-01. What we see first of all is that these are very high-cost schemes where a grower-investor typically pays in around \$9,000 per hectare—the figure there is \$9,300 per hectare—to plant a hectare of trees and manage those trees over the rotation. In this case it is hardwood chips, usually, for around a 10-year rotation. All of that money, that \$9,000 per hectare, is fully tax deductible upfront. The cost of actually doing the job—of planting a hectare of trees and managing them over the rotation—is around \$2,000 per hectare, and then there is another \$2½ thousand or so per hectare to buy the land. Typically, though, the grower-investor does not own the land. So we have a scheme where money is flowing in for establishing a plantation which is way above the actual cost of doing the job. But on top of that we also have grower-investors who expect a return—when we look at the prospectus documents, a return of around six per cent per annum.

So how these schemes are structured is with the use of, in my view, optimistic assumptions on wood yield and price, which are the two key variables, to get these projects over the six per cent financial return line. So the signals from the wood market, which should regulate investment, are gutted in this model. The prospectus companies get their money upfront and bear little of the wood market risk. The grower-investors' demand is driven by demand for tax minimisation, not wood market realities, so overplanting and collapse are inevitable. The wine industry is still struggling to bring its grape harvest into line with its processing after its MIS-driven planting boom. I argue that the MIS should be terminated as a model in agricultural commodities, including plantations. So that is the background to looking at the Tiwi Islands issue.

In table 2 on the next page I present some information from Great Southern's public disclosure documents and a review by Australian Agribusiness Group on that document. What it runs through is the key pricing issues and assumptions concerning the plantations in the Tiwi Islands and the mainland plantations. I do not want to spend much time here but the really crucial thing is that the Tiwi Islands venture, as part of the Great Southern operation, was about access to low-cost land and that is using their words. Great Southern plantations actually made it quite clear in their product disclosure statement that the wood quality from the Tiwi Islands plantations was of a lower quality with a lower pulp yield and a high-cost wood in terms of the chemical cost of bleaching for pulp production. Furthermore, Great Southern also commented that these plantations on the Tiwi Islands were of a lower wood yield. My point here is that in a market of oversupply, which we will move to in the next page, lower quality products and projects will struggle and are usually the first to collapse.

My next page, page 4, goes into the hardwood chip market. The first thing to comment on is that as a result of the stimulus of the plantation MIS arrangements we have had a substantial hardwood plantation investment activity in Australia and we have resources from those plantations now coming on stream. I really want to emphasise the bold dot point on page 4 that in my view we are facing in Australia a woodchip glut. The reality is that Australia needs to sell double the volume of hardwood chips we currently export into a no-growth market, which I will come to in a minute, where we already account for one-third of the trade and we need to do this virtually immediately.

The background information to this is the projections from the Bureau of Rural Sciences on Australia's hardwood chip production from plantations and ABARE's export data which originally comes from the ABS. The crucial bit in terms of the market picture that is looming for this resource is presented in figure 1 below. Just as background, Japan dominates the global hardwood chip trade. Eighty-five per cent of our hardwood chips whether they are from native forests or from plantations is sold into the Japanese market. We supply around a third of Japan's hardwood chips. We can see in that graph on the dark black line that through the seventies and eighties there was very strong growth in hardwood chip imports into Japan. We see the MIS operations for hardwood chips coming on stream in a more substantial way in the early nineties and building up through that decade we see in 1997 the launch of the Plantation 2020 vision document which aimed to triple Australia's plantation estate by 2020. We see at that time that the Japanese market has basically flattened and it has remained flat for the next decade. For the entire duration of the substantial investments in hardwood chips, the main market for hardwood chips—and main is probably not as strong a word—the dominant market for hardwood chips has been flat.

I am happy to answer questions about China, but China in my view will not come to the rescue in clearing this market and certainly not at prices that growers might expect. My point again here is that this is the market which the Tiwi Islanders will be faced with.

My final page, to complete this introductory statement, concerns the Oakton report at page 12 where they investigate the income to Tiwi people from net harvest proceeds. So this is money in addition to the land rental. What I have done is brought into the analysis information that Great Southern has provided in its prospectus documents—something which the Oakton report did not do. This is a case here, I think, of Great Southern using one wood yield assumption to create expectations of a profitable project to prospective grower investors but another wood yield

assumption to create less optimistic expectations of income from harvesting for the Tiwi Island people. My point here is that if this is right then, in my view, this is morally wrong behaviour by Great Southern.

CHAIR—Thank you very much, Dr Ajani, for that opening statement and for the information that you have provided.

Senator SIEWERT—Dr Ajani, could we start off where you just finished where you were describing those two sets of figures. Could you go into that in a bit more detail, please. If I understand you correctly then what you are saying is that there were two sets of figures designed to show two different stories, is that correct?

Dr Ajani—What the Oakton report has done is to present half of the information that I have just presented and half of the information in my table 3. What the Oakton report did was to look at the estimated income from net harvest proceeds for the Tiwi Islanders. According to the Oakton document at page 12, the way they approached this was to ask Great Southern to prepare the estimate; and then it was reported. So what appears to have happened is that Great Southern has given Oakton a wood yield figure of 144 green tonnes per hectare and then run through the calculations of net harvest proceeds and the various shares that the Tiwi Islanders would get from net harvest proceeds. Oakton presents a figure, which I understand came from Great Southern, of \$693,000 per annum estimated to come as income from net harvest proceeds to the Tiwi Islanders.

The issue here is that when Great Southern presented its prospectus document to grower investors for the wood yields from the Tiwi Islands plantations it did not use 144 green tonnes per hectare as the assumed wood yield; it used a figure which I have converted to green tonnes—something in the order of 196 green tonnes per hectare, which is a higher wood yield figure. What I have done there in table 3 is to rework the calculations presented in the Oakton document. I have worked through those calculations using that higher wood yield figure that Great Southern presented in its prospectus documents with an adjustment from cubic metres to green tonnes. I have come up with an estimate for income to the Tiwi Islanders which is in the order of 36 per cent higher.

Senator SIEWERT—If I understand what you are saying correctly, in other words the prospectus in effect boosted yields to make it look as if production was going to be higher. Is that the outcome of what you are saying?

Dr Ajani—The issue here is that, in my view, Great Southern has chosen a relatively high wood yield assumption in preparing its overall prospectus document to present to grower investors and essentially get the project over the line in terms of financial viability. But it appears that when it prepared its estimates of likely income to the Tiwi Islanders from gross harvest proceeds it used a significantly lower wood yield estimate—in other words, this has the effect of dampening the expectations of Tiwi Islanders as to the actual amount of money they will receive.

CHAIR—Do you have an opinion, Dr Ajani, as to which is the more likely outcome?

Dr Ajani—Yes. In my view the more likely outcome is the lower wood yield figure.

Senator SIEWERT—Is it the one that was given to the Tiwi Islanders?

Dr Ajani—Yes.

Senator SIEWERT—So you think that is a realistic figure?

Dr Ajani—I cannot comment on that because there are so many other variables. In this calculation of the income to Tiwi Islanders there are price assumptions and all of that too and I would not comment on the yield figures because I am not a forester any more than what I have commented at this stage.

Senator SIEWERT—Can I then go to the issue around the glut on the woodchip market. We have had very conflicting evidence. We have had some evidence suggesting that there is a significant market just waiting for the timber that is going to come off Tiwi and we have had evidence from you and in submissions suggesting that there is a glut in the world trade and it is going to be difficult to sell these woodchips. Can you go into a little bit more detail about the glut and about the comment that we are already one third of the world trade in woodchips? If I understand what you have been saying correctly, there is going to be difficulty in selling these chips.

Dr Ajani—Yes. Some of that information I have presented on page 4 of that handout and I will work through some of that. What we have at the moment, and it is the really crucial issue here, is a very big volume of hardwood chip resources coming on stream from plantations and we also have the native forest resource hanging in there as a continuing significant supplier of hardwood chips. We are actually seeing at the moment some displacement of the native forest resource by Australia's plantation resource. I expect that displacement to continue but I think the battle will be much harder than what we would normally expect in a freely operating market. What we are faced with is effectively the variables from the perspective of the timing issues here. The really important point to note here is that the Bureau of Rural Sciences, by working through the plantation estate and the plantation age history for Australia, has prepared projections which are showing very large volumes of hardwood chips coming onto the market by around 2010 through to the 2014 period, so effectively that is immediately. What we have at the moment—and we have had this in place for some time—is that Australia is a major supplier of hardwood chips into Japan, the world's dominant market for hardwood chips. That one-third figure is unlikely to change substantially in the short term without some very serious economic plays being played out here. So what we are looking at here is Australia's plantation chip resource increasing from our current level of production of around four million cubic metres per annum—that is the volume of that resource that we export currently from hardwood plantations—to around 14 million cubic metres per annum by 2010-2014. Native forest resources in there at the moment are supplying around 5½ million cubic metres. We have inevitably some very big resource volumes coming on stream very quickly. Some people might say that this is not a glut situation. I think they are not being open in their assessment of the reality here.

Senator SIEWERT—So while Tiwi chips could be sold could the scenario be that with a glut prices drop, even if they get the yields that are expected, they are not going to get the price expected for the chips?

Dr Ajani—The issue here is that with a glut we have a problem that happens in any commodity industry. Lower quality resources are the ones that always struggle to get market share and, in particular, to get market share at the price they expect. In other words, they are the parts of the industry or the resource that are discounted in these sorts of market situations.

Senator SIEWERT—You are suggesting that the quality of the chips from Tiwi is not going to be as good as the quality of the chips from elsewhere. Is that also the point?

Dr Ajani—This is a statement that Great Southern actually made in its product disclosure documents—that, relative to their own plantations using eucalypt on the mainland, the Tiwi Islands chips using *Acacia mangium* are of a lower quality. They are of a lower quality, according to Great Southern plantations, because they have a lower pulp yield—in other words, you need more wood to make the same volume of pulp—and they are of a lower quality in terms of the additional costs that are required with respect to bleaching for paper production. That is information that Great Southern itself presented.

Senator SIEWERT—A point that was made to us early in this inquiry was that these chips might be sold into, for example, mills in Indonesia and they would not necessarily be sold into the Japanese market. You also made comments about China. Are either of those two markets realistic for this product?

Dr Ajani—I think in these situations everyone will be scrambling for markets, and they are all in the same boat. I cannot comment on individual opportunities et cetera but everyone will be essentially in the same boat. With respect to China, I have been doing some work in this area. One of the most important issues in this is that China, like the rest of the world, is largely softwood based in its resource requirements, leaving aside the sawmill industry, which is largely softwood based globally. That situation also exists in the pulp and paper industry, where the big product markets for paper in terms of volumes are in the packaging papers, in particular. Those sorts of papers are made largely with softwood, because of the longer fibres, which are attractive for the strength properties, and with recycled paper, which is attractive because it is cheap relative to making new pulp.

In the case of China, what appears to be the situation is that the Chinese government many years ago made an assessment that, yes, they potentially could shock the global wood resource by their very high growth and consumption of paper products. The Chinese appear to have put a strategy in place to avoid that outcome, which would then see an increase in wood prices, which is not in their interests. They have avoided this outcome so far by, first, negotiating with suppliers contracts with very low prices—in other words, price reductions before you enter into the game of exporting to the Chinese. This activity occurred in the eighties. Since then, the Chinese have implemented a set of strategies to reduce the demand for wood but to still produce large volumes of paper.

The first strategy was to escalate their use of recycled paper. They have become major importers of recycled paper from around the globe and from their own internal resources. So the Chinese paper industry has a very high proportion of its paper made from recycled paper.

The second strategy China is engaged in is encouraging high-yielding pulp processes. So it is not the craft pulp mills—although they do invest in craft pulp mills—but semichemical thermomechanical pulping, for example, which requires less wood to produce a tonne of pulp.

The final strategy, which they are embarking on in a very forceful manner at the moment, is a very significant plantation program. In my view, we need to be very careful about assessing the market opportunities for wood in China and look not simply at the consumption of wood products, including paper, in China but actually look at what is happening in China with respect to wood sourcing. In my view, the growth in wood input for paper products in China will flatten seriously.

Senator SIEWERT—Chair, I realise I have asked quite a lot of questions. I have a few more, but if we have time at the end I can ask those then or put them on notice.

CHAIR—Thank you, Senator Siewert. I was about to interrupt you.

Senator CROSSIN—Hello, Dr Ajani. How are you?

Dr Ajani—Hello, Senator Crossin. I am good. You?

Senator CROSSIN—Good, thanks. Senator Siewert has covered a lot of the area that I was interested in. The crux of the matter now is that we find ourselves with a forestry plantation on the Tiwi Islands that is growing. I cannot see any other way out of this other than to enable the Tiwi islanders to at least harvest what is there at this point in time, unless, with your expertise, you can think of another way forward.

Dr Ajani—Yes, I agree—it is a complicated problem. I really want to come back to the first point I made which is that the Tiwi Island issue is embedded in a much bigger problem, which is the plantation MIS arrangements as a whole. The first job is to contain the problem. It is not just for the Tiwi islanders but also Australia wide—that is, in my view we should terminate the plantation MIS arrangements, because the last thing we want is greater havoc being played because we have more investment going into these operations while we are facing the market as I have described. The issue you raise is: what then happens to the trees? Perhaps this is going forward a little bit in working through where the Tiwi islanders themselves would like to be with their future income and what opportunities can be created that might be even out of forestry—it might be in the carbon markets or something completely different—and then basically working through ways of bringing the reality that they face now into where they want to be in the future. I do accept that this is not a very specific suggestion.

Senator CROSSIN—If the way for the future is forestry, even if the Tiwi Land Council or Pirntubula buys this operation, are you suggesting, given your analysis of the market and your comments today, that the *Acacia mangium* is not such a profitable venture?

Dr Ajani—I am suggesting that, given the information that Great Southern itself provided some time ago and given the market conditions, there should be a great care about further expanding the plantation estate.

Senator CROSSIN—How many jobs would you anticipate each year would be involved in managing a plantation of this size?

Dr Ajani—I would have to take that as a question on notice. There is the issue of whether you treat this as a short-term arrangement to deal with a problem. There is another point I would like to raise. The committee forwarded to me a discussion paper a couple of days ago. The back of the discussion paper had a table which presented the planting activity on the Tiwi Islands by the land that it was planted on. It appears that much of the planting has been done on land that was previously native vegetated.

Senator CROSSIN—Yes, it was—that is correct.

Dr Ajani—I think this is most unfortunate because it rules out that land qualifying as Kyoto forest. Kyoto forest has a number of requirements, one of which is that it is land that was cleared prior to 1990. In that table, all the planting activity presented was since 1990 and large areas of it were obviously planted on already vegetated land. In other words, it does not qualify as Kyoto forest, which means that whoever ends up owning these plantations cannot use them to opt in to the emissions trading scheme and earn carbon credits. I am just adding a bit more bad news to the situation.

Senator CROSSIN—Given your last comments, you could not then say, for example, ‘We’ll harvest these trees, then rehabilitate the area, regrow the forest and opt into a new economy, which is carbon credits’? You cannot do that now?

Dr Ajani—That is right. It would not qualify for participation in the emissions trading scheme, because these areas are not Kyoto forest areas. The only way—and I think this is an opportunity that should be investigated but would require a much bigger government commitment—is to look at new ways of bringing the land-use sector into the climate change challenge. I am not suggesting bringing it into the emissions trading scheme, but I am saying that there seem to be large areas of land in Australia which are not farming land but are basically natural areas and at the moment these areas are not included in our climate change challenge but have significant carbon stocks and significant potential for building up carbon stocks, virtually all in degraded areas. It seems to me that there are many players who would be very enthusiastic about managing those landscapes—which, again, are not food-producing areas—for their carbon storage and for rebuilding the carbon stores, which is essentially doing the job of managing the landscape to protect biodiversity. I cannot see why we should not be looking much more seriously as a nation at paying people to manage these areas for biodiversity and to get the benefits of carbon storage flowing through. That sort of arrangement, I think, has a lot of attractions for people like the Tiwi Islanders. The issue here is that this sort of arrangement is not on the political radar at this stage, and I think it would be wonderful if it were.

Senator CROSSIN—There is an option, though, is there not, for the Tiwi land council to supply the forestry project and replace the *Acacia mangium* with a much more durable tree that could be used for floorboards or furniture instead of woodchips?

Dr Ajani—I think there are a range of options. Which ones have reasonable markets and commercial viability is another matter. The job is hard here. The high appearance market for sawn timbers is very appealing in a more romantic sense. The problem is that the forestry

industry globally and particularly in Australia is a commodity focused industry. It goes in for and its main production is focused on the big commodity woodchip markets, the big commodity sawn timber markets and so on. So the amount of wood that goes into the high appearance markets like flooring and furniture may be something of the order of five per cent of total production. So it is not a big market. You do have to be clever in your management and with your management skills in these sorts of markets. I do not want to discourage people from looking at these sorts of opportunities, but there is no easy way here.

Senator CROSSIN—Thank you.

Senator IAN MACDONALD—Can you remind me what your expertise is?

Dr Ajani—Yes. I am an economist. I have worked for nearly 30 years now in wood industry research and policy. I started that work in the Victorian industry department, looking at and managing the wood industry policy within the Victorian government. That was within the manufacturing arm of the industry, not the forestry-growing arm, which was in a completely different institution: the Forests Commission. I worked for a short period of time as a private consultant and did a major piece of work on the plantation wood supply potential in Australia. This was work funded by the federal government and commissioned by the state conservation councils in the mid-1990s. I also looked at the processing opportunities for plantation wood in Australia around the regions.

Senator IAN MACDONALD—So you are an economist specialising in wood matters. I apologise; I was late coming here. We have spoken to you before, I think, in relation to climate change.

Dr Ajani—Yes.

Senator IAN MACDONALD—Can I just read you this:

In 2009, Eucalyptus chips destined for Japan were down to 74% of all Australian hardwood chip exports as compared to 86% in the previous year. Other increasingly important markets include Taiwan, South Korea and China. The brightest spot for chip exports the past year has been China, which has more than doubled the import volumes from Australia this year, reaching over 470,000 tons during the first eight months (some softwood but most hardwood).

Although Eucalyptus exports have declined, the domestic consumption of plantation Eucalyptus wood fiber in Australia has been increasing steadily as fast-growing plantations have matured. In the 2Q/09, there were 21% more Eucalyptus chips traded compared to the same quarter last year.

I am quoting from FORDAQ, the timber network. I have just been trying to Google something while you have been talking. That does not seem to suggest that there is a huge glut in the world market.

Dr Ajani—When we are looking at hardwood chips, we have 85 per cent going to Japan. We cannot ignore that reality. That is ABS statistics.

Senator IAN MACDONALD—But, Doctor, the Gunns share price, which I have also looked up, seems to be at an all-time high—which Senator Milne will be distressed about. There does

not seem to be any lack of confidence from those who put their money into the future of the chip market around the world.

Dr Ajani—I also note within the information about the share prices of Great Southern and Timbercorp some very strong in views about their futures. I do not think the share price is a good indicator of where an industry is headed. As a rule, I do not think you can base—

CHAIR—I know Senator Macdonald raised the matter of the share price, but I am conscious of time and I would be more interested in your response to the data on where the market is shifting, which Senator Macdonald quoted, than an exchange about the worth of share prices perhaps.

Dr Ajani—If I can continue on that, the issue of China is that the figures on growth have to be put in context, and that is growth on a very low base. China is not a big importer of hardwood chips from Australia. What we face is a very big resource increase from Australia's hardwood chip market—or the supply part of the market—and we need to have that resource shifted very quickly. For Australia to shift the volumes that are coming on stream, in my view, will be a very difficult challenge, particularly to do so in a timely manner and in a way which does not see a serious cut in the hardwood chip price. One of the issues here that we are facing is that it is unlikely that the Japanese will boost their demand for hardwood chips, but the Japanese have always approached the hardwood chip market from the perspective of security of supply. They have been far more generous than we would normally expect on the pricing issue. The Chinese play a different game.

Senator IAN MACDONALD—My first question is going to be: what has all this got to do with the Tiwi Islands and forestry there, with Great Southern out of the picture? For as much as you denigrate Great Southern, it is gone. It is in liquidation. Your comment that there is a great glut in the market, just going through Google, does not seem to be supported by a lot of the data there. I do not really want to enter into that.

What is your point in relation to the Tiwi Islands? You said earlier in your evidence that it was morally wrong that Great Southern years ago—and they are a company that no longer exists—had a high price in their prospectus and they told the Tiwi people a low price. But then you concede that the Tiwi people are being given the right price, the low price. We are not in this inquiry judging the morality of a defunct company, but we are trying to work out how it impacts upon the Tiwi Islands. What was your point in relation to the Tiwi Islands?

Dr Ajani—The first thing with respect to Great Southern not being an operating company does not mean to say that the resource is still not there. We still have a resource there and it was still in the market in some way—

Senator IAN MACDONALD—Clearly, the resource is still there. We have seen it.

Dr Ajani—and so my comments with respect to the market is about a resource which is there, a reality, and how it will be played out. With respect to the last page in the information that I have provided about the morality issue that you raise, there are two points here. The first is that Oakton in its report apparently did not see fit to investigate the information that Great Southern provided them on the income estimate and to check the assumptions that were used, the key one

here being the wood yield assumption against what Great Southern actually presented in its prospectus documents to the investors. My point to put on the public record is that here we seem to have a situation when companies may appear to be giving one set of assumptions for a financial activity and another set of assumptions with respect to—

Senator IAN MACDONALD—We understand that you hate MIS. That is fine. It is not the subject of this inquiry. We understand that perhaps you do not like woodchipping, and that is not the subject of this inquiry. As I understand it—and unfortunately I was not aware that you were going to be dealing with this or I would have brought my Oakton report—and from what I can remember of it, Oakton provided a balanced and authentic series of possible returns to the Tiwi Islanders. The Tiwi Islanders have got money out of Great Southern. In fact we saw a school they built out of forestry money. So long as things happened, the Tiwi Islanders were happy with the deal that they had struck and they had had very good advice from very good lawyers and others in relation to that. Whilst these other issues are important to you, I am just wondering what the relevance is to our inquiry about forestry and mining on Tiwi Islands.

Dr Ajani—Just for the record, what you said is correct with respect to my arguments against plantation MISs as a model. Just for the record, the woodchip industry and particularly the plantation based woodchip industry, is a particularly important industry for a world efficient paper industry and it has my support. With respect to the Tiwi Islanders, maybe you are absolutely right and they have nothing to worry about.

Senator IAN MACDONALD—They do now because Great Southern is not around. I assume—

Dr Ajani—If that is so, fine. If there is nothing to worry about, someone will pick up that resource and continue the game.

Senator IAN MACDONALD—I am certainly hoping that it will happen and I am not sure how we as a committee can get an update on that. But there is a growing resource there. The legal ownership of it seems to be uncertain to the committee, when last I looked. But it is a valuable resource and there is a market for it and the Tiwi Islanders were very happy with the jobs it created and the money that they had got out of it to date.

Dr Ajani—If everything is fine as you suggest, and I am suggesting that not everything is fine given the gloomy market outlook, the Tiwi Islanders will have nothing to worry about. Unfortunately, it does not look as if everything is fine. We heard last week, I think it was, that a funding syndicate has not accepted the funding of the plantations and will withdraw their funding arrangements, if I understand correctly, by around the time we are speaking.

CHAIR—Senator Macdonald, you can have one last question and then I will wrap up with a couple of quick ones, please.

Senator IAN MACDONALD—Chair, I am at a loss to understand the evidence Dr Ajani is giving.

CHAIR—Is that a question for Dr Ajani or for me? If it is a question for me, we will deal with it afterwards. Dr Ajani, is the global hardwood chip market still growing?

Dr Ajani—The global hardwood chip market is largely flat.

CHAIR—You have shown data to suggest the market in Japan is flat.

Dr Ajani—Yes, that is right. The trade figures are largely flat. The current downturn also is not presented in this graph on page 4. I do not see the hardwood chip trade globally recovering to such an extent that the wood volumes that we have coming on stream, virtually immediately, are going to be cleared easily and without putting pressure on the price.

CHAIR—Yes, price pressure is a different thing. If you get a supply/demand imbalance then you would expect there would be price pressures. Senator Macdonald read out a list of countries, including China, Taiwan and elsewhere, that purportedly are increasing their imports of Australian hardwood chip. That could simply be a substitution within those markets or it could be that there is market growth there. Based on whose data and what statistics are you telling me that the market is flat?

Dr Ajani—In this case, the major market is Japan—

CHAIR—I have the Japan data; I want the global market. Japan is a flat economy. I am interested in the growth economies.

Dr Ajani—In the other economies, the major data source is the FAO, Food and Agriculture Organisation. We are seeing globally a very strong separation of wood into wood products—paper and sawn timber—and the actual production trends of those products. In other words, what we are seeing globally are resource saving technologies coming through such that the strong growth in wood products is not flowing through to strong growth in wood input.

CHAIR—Recycling technologies and so on are substituting for plantation and native woodchips—is that your contention?

Dr Ajani—Yes. The main play here in the paper market is the role of recycled paper dampening the demand for wood despite strong growth in paper consumption.

CHAIR—Within Australia, is production of woodchips from native forests increasing, decreasing or stable?

Dr Ajani—It is trending down and that is largely from competition from the plantation resource. At this stage, we are seeing a displacement of native forest resources by plantation resources. In my view that is a good thing both economically and environmentally, and in my view that will continue to play out.

CHAIR—In terms of our domestic supply there is a substitution taking place. Whilst there may be a doubling of the statistics for plantation woodchips you have quoted, there will not be a doubling of the overall woodchip market because those plantation chips will substitute some native chips.

Dr Ajani—Yes, and that substitution process will occur in the export market because very little of our native forests and plantation chip resources are actually used in Australia. I should

also qualify that by saying that the speed of the substitution of plantation chips for native forest chips with Australian resource in the hardwood chip trade will not be as fast as normal market forces or free-flowing markets would have it. The major reason here is that our three south-eastern states—Tasmania, Victoria and New South Wales—do not have a policy of clearing the market of quite low-priced native forest resource. So a little more effort will have to be put in by hardwood chip exporters to keep displacing the native forest resource.

CHAIR—To what extent do you expect the overall woodchip supply in Australia to change in the period 2010 to 2014?

Dr Ajani—I think there will be a continuing displacement of native forest resource. I do not think it will get to 100 per cent plantation supply by then, although it should. I am not sure exactly where it will be.

CHAIR—Could you take on notice that aspect? On page 4 of your notes, the fourth dot point is about hardwood plantation chips and the BRS projections there. If you could provide that for the entire woodchip market, that would be helpful. If you could point the committee to any evidence that backs up the statements you made before in relation to the global demand for woodchips being flat as a result of a substitution with recycled products and so on, that would be useful evidence for us to see as well.

Dr Ajani—Yes.

Senator IAN MACDONALD—What is your concern about the Tiwi Islands, from the Tiwi Islanders' point of view?

Dr Ajani—I think they have a product which is not well placed in the play that is going to unfold over the next few years as our hardwood plantation resource comes onto the market.

CHAIR—Thank you for your time today and for making yourself available to the committee. I apologise that we have gone a little over time.

[10.27 am]

SCRYMGOUR, Ms Marion, Private capacity

Evidence was taken via teleconference—

CHAIR—Welcome. Thank you for joining us today. We did plan to have you speak to us at another time, and that proved to be a time of some moment in your neck of the woods. We are pleased that you could join us today. You are aware of all the usual conditions of appearing at these committees—that it is under privilege, that you may seek to go in camera et cetera. We have your submission, as submission No. 41. Do you wish to make any amendments to that?

Ms Scrymgour—Firstly, can I thank all senators for allowing me to talk to my submission. I filled out the appropriate forms and sent them down yesterday. I also sent an additional submission. I am not sure if your staff have got it. Part of that was responding to the Tiwi Land Council's response to my submission.

CHAIR—I can comfortably say that members of the committee have not seen that yet. The secretariat is checking as to whether they have or have not received it, but in the interim we will plough on. Do you wish to make a brief opening statement before we go to questions?

Ms Scrymgour—No, that is fine. I was just going to talk through some things. I suppose a big part of what I wanted to respond to was the land council letter of 21 July.

Senator SIEWERT—Perhaps, because we do not have that particular response in front of us, you could summarise it for us.

Ms Scrymgour—Okay, if that is okay with the senators—and I will try and go as fast as I can and be as coherent as I can so that people can get the general gist of what I am saying. I received and read an unsigned copy of the letter that was submitted on 21 July by way of response to my written submission to the inquiry. We know that the signatories are Robert Tipungwuti, who is the Chairman of the Tiwi Land Council, and John Hicks, who is the Secretary of the Tiwi Land Council. The reason I want to respond is that I found the date of that letter, 21 July, quite interesting because it was the very next day after I had a chance meeting with Mr Hicks and others at the premises of one of our air charter companies at Darwin airport.

We were waiting to catch flights to different destinations and in the short time that was available to me I walked up to where Mr Hicks was standing to engage him in conversation, as I normally do. Mr Hicks mentioned my submission of 16 June. In our brief conversation I said to him that it would be good if the Tiwi Land Council would invite me to the next meeting and I would walk through and address those concerns that land council members had, and also concerns that I had been very consistently raising with those members about the lack of representation of women on the Tiwi Land Council.

John Hicks then said to me, in a manner which I can only describe as smug, words to the effect of, 'Well, you can't expect too much. After all, it's only 70 years ago that Tiwi men were

prostituting their wives.’ I was totally stunned and taken aback. My response was, and still is, to query why John Hicks would introduce a statement like that into a discussion of contemporary governance of a statutory land council.

Having now read the letter of 21 July 2009 I can probably guess what the gist of Mr Hicks’s answer would be, and I will probably provide my own response to the claims in that letter shortly. Before I do want I want to make it even more clear, and more emphatically now than I have in the past, that I am convinced that the influence of Mr Hicks on the Tiwi people over the past 20 or so years has been toxic and I believe that his continued role at the Tiwi Land Council is the principal stumbling block to Tiwi advancement and social harmony. I have gone through—

CHAIR—Sorry to interrupt for a moment, but we do need to be mindful of statements and allegations that are made, especially hearsay allegations along the way. We will probably need to review a couple of the statements that you have just made along the way and possibly take them as in camera evidence. I just ask you to be mindful of what allegations or statements you might make from here on in, please.

Ms Scrymgour—Sorry, I did not quite catch all of that. Were you saying that I should be mindful of making allegations?

CHAIR—I am conscious of the flow of ‘he said, she said’ type allegations. That is something that we would ideally try to avoid. The evidence you have given we will probably have to either give Mr Hicks some opportunity to respond to or we will take aspects of that as in camera evidence. I remind you that we are taking this evidence in parliament house and therefore the committee is on live public broadcast as well. I guess if there are other things that you wish to say that could be crossing a certain threshold, and potentially taken as adverse comment against other individuals, perhaps you should make a request to go in camera, please.

Ms Scrymgour—Can I go in camera and then I will explain further. What I have just said is what was said to me.

CHAIR—Sure, I am not accusing anybody of lying or giving misleading evidence; I am just trying to make sure that we uphold our standing orders and give everybody appropriate rights along the way. Senators, I have a request from Ms Scrymgour to go in camera with her evidence. Is that acceptable to all parties?

Senator IAN MACDONALD—Can I just get an assurance that all three people on the telephone are in rooms by themselves?

Senator CROSSIN—I certainly am.

Senator SIEWERT—Yes, so am I.

Ms Scrymgour—I am in my electorate office in a room that is closed.

Senator IAN MACDONALD—In that event I am happy to go in camera.

Evidence was then taken in camera but later resumed in public—

[11.19 am]

GARNETT, Professor Stephen Thomas, Private capacity

Evidence was taken via teleconference—

CHAIR—Professor Garnett, thank you for joining us today. The committee has, as you know, just been having an in camera session. I will now resume proceedings and I note for all participants that we are now back in public session and will be broadcast within Parliament House et cetera. Professor Garnett, thank you for taking the time to talk to us today. I will just remind you that these are official proceedings of the parliament. The evidence you give is protected by parliament privilege and it is unlawful for anyone to threaten you or seek to disadvantage you as a result of any evidence given. You may seek to have the committee go in camera. If there is evidence that may be of a particularly disadvantageous nature to other individuals you would be wise to flag that in advance so that we can consider doing so. I am not suggesting that there will be. We have received your submission, which is known to us as submission no. 24. Do you wish to make any amendments or alterations to that submission?

Prof. Garnett—I would like to make one small amendment. Yes.

CHAIR—Certainly. What would that be?

Prof. Garnett—In the second paragraph it refers to the ‘gold standard’ and I would like to change that to the ‘climate, community and biodiversity standard’ and add that at the time that we wrote our paper the lowest rate available under the standard was \$8 a tonne, potentially yielding \$22 million for the area that was cleared, and you could get \$4 a tonne on the Chicago Climate Exchange. That would have yielded about \$10 million.

CHAIR—I suspect that that will partly go to questions and so on that senators may have. Before we go to those questions do you wish to make a brief opening statement or any other remarks?

Prof. Garnett—Certainly.

CHAIR—It was a little remiss of me—because you are on the phone I should introduce the committee. We have on the phone, with you, Senator Siewert, who is in Western Australia; Senator Crossin, who is in the Northern Territory. Here in Canberra we have Senator Ian Macdonald and me, Simon Birmingham, the chair, as well as the committee secretariat. Please proceed with your opening remarks.

Prof. Garnett—I made my submissions to the Senate committee in the hope that you could determine whether Great Southern or the Tiwi Land Council did, or were legally able to, explore the potential for selling their uncleared forests on the voluntary carbon market. It seemed to me that it had been a tragically missed opportunity. I thought it would be of interest for the Senate committee to find out whether there had been an opportunity and, if so, why it had been missed.

I would just like to add that I have had four connections with the Tiwi Islands. I was part of a project to help the people of Milikapiti to develop a business plan for a nursery that was to revegetate their mined areas. That was partly funded by Matilda Minerals. I undertook some population modelling of the vulnerable red goshawk on behalf of Great Southern and I was one of four members of the Tiwi Land Council's biological reference group, which provided advice to the council on the environmental impacts of forestry on the islands. I did have an agreement from Tiwi Land Council to explore future scenarios for the islands, particularly under climate change, but the chair of the land council wrote me a letter, subsequently, saying that they no longer wish to proceed with the project. This was some time before I made my submission but I just thought it useful for the committee to hear the sort of connection I had with the islands.

Senator IAN MACDONALD—Thank you for your note and for your evidence. Can I just try to make sure that I understand it. You recommend an inquiry to determine why Tiwi Islanders appear to have been denied the opportunity to benefit from REDD opportunities. Are you saying this in relation to the land that was cleared and is now plantation land or are you saying this in relation to future clearing and future plantation forestry?

Prof. Garnett—I was referring primarily to the land that was cleared. They had a permit. When we started writing our paper and when we sent them a draft, there were 4,200 hectares which they had permission to clear. They had not cleared it and, at that time, it was possible to get a return on the uncleared land in the voluntary carbon market.

Senator IAN MACDONALD—That was in 2008, was it?

Prof. Garnett—Yes.

Senator IAN MACDONALD—I am sorry—I do not know enough about the voluntary carbon market. You could help us here. In simple terms, are you saying that the Tiwi Islanders can say to the carbon market: 'Look, we have some native forests here. We're going to let them continue to grow and you pay us to offset some of your emissions elsewhere in the world.' Is that right?

Prof. Garnett—More or less right, yes. They have to have the permits to clear. You cannot do that for land that was never going to be cleared.

Senator IAN MACDONALD—Okay. Great Southern, bless their souls—whatever they might have done wrong in the past is all a matter of history now. Going forward, though, is that opportunity still available? I understand you saying that one of the reasons that did not happen was that the MISs required the forests to be felled. But, going forward from here, did you say that there is \$22 million to be made by not harvesting the native forests that are still on the island?

Prof. Garnett—No, that was for the 4,200 hectares they did end up clearing. They could have made that amount and I am not sure why they never looked into that. It is much more confused now. The situation has changed and it is still uncertain. It depends on the system that is eventually brought in under the CPRS.

Senator IAN MACDONALD—If anything is brought in.

Prof. Garnett—If anything is brought in. But until that is settled one way or another you could not attract investment of any sort.

Senator IAN MACDONALD—Again to clarify, approximately when was the 4,200 hectares of clearing done? Are we talking about 2008 or prior to that?

Prof. Garnett—We are talking about 2008.

Senator IAN MACDONALD—Has that subsequently been planted with plantation forests?

Prof. Garnett—I imagine it would have been.

Senator IAN MACDONALD—Thanks for that. That is an interesting proposition. Do you know if the Tiwi Islanders are aware that there is money to be made by not clearing?

Prof. Garnett—We did talk about it. I am not sure who became aware of it. We never had an opportunity to talk with more than a few members of the land council about it.

Senator IAN MACDONALD—Is it a fact that it is only of value if they have a permit to clear it but then do not clear it?

Prof. Garnett—That is as it was then. What it will be like under the CPRS, if one comes in, I do not know.

Senator SIEWERT—So your proposition for this particular plantation at the moment is that they could have made more money in the carbon market than through the MIS?

Prof. Garnett—They may have been able to. I was not privy to the economics of the amount they were going to be getting from the MIS.

Senator SIEWERT—Have you subsequently looked at that through, for example, Great Southern's perspective and the information that has subsequently become available?

Prof. Garnett—No, I have not had a chance to do that.

Senator SIEWERT—But your point is they could have made a substantial amount of money?

Prof. Garnett—That is right, yes.

Senator SIEWERT—I realise that you do not have a crystal ball, so you do not know what the global carbon market or Australia's ETS will look like, but is it also your proposal that in the future there will be more money to be made through the carbon market than through the continuation or expansion of plantations on the island?

Prof. Garnett—There may be. I think it is something that should be explored.

Senator SIEWERT—Could you outline in a little more detail what you mean by carbon as an ecosystem service and how that would be valued under any new international arrangements. Is it possible to do that in a brief paragraph or two?

Prof. Garnett—I understand that in Copenhagen there is a scheme being discussed called ‘reduced emissions from deforestation and degradation’. And this is something that places like Indonesia are very interested in because they might be able to keep their forests under that. So people get paid not to cut down forests which they have a permit to clear. That would depend on the amount of carbon in the forest, both in the standing trees and in the soil. We do not know at this stage whether we will be part of that scheme, and the details of that have not been worked out yet. There is potential for the Tiwi Islanders to be part of that market. But the irony is that you have to be given permission to clear to be part of that market. The other alternative form of carbon trading which is being discussed up here in the Northern Territory with great interest relates to the burning of the savannahs.

Senator SIEWERT—That is what I wanted to go to next. We have already got an example in Arnhem Land where that is occurring and there are significant benefits flowing from that already.

Prof. Garnett—That is right, and they are trying to extend that scheme and ensure it is included in any scheme that is introduced here in Australia.

Senator SIEWERT—Have you had a look at whether Tiwi Islanders could be involved in that and what the economic benefits to the island would be of participating in a scheme like that?

Prof. Garnett—I believe the Tiwi Islanders could be involved. I do not have the economic data on that, I am afraid. I understand that CSIRO here in Darwin have been exploring that potential, but I do not have their data.

Senator SIEWERT—But are we talking of the scale of millions of dollars?

Prof. Garnett—For the whole island? Possibly. There are many imponderables, such as the price of carbon and the security of that carbon. But if the forestry does not go ahead, there is potentially more to be made from that than is being earned currently from those lands.

Senator SIEWERT—When you say, ‘if the plantations do not go ahead,’ that is if there are any proposals to expand the plantations. In your opinion, would there be more benefit to the islanders from entering into the carbon market than into the plantation market, for example? I am ignoring in that the biodiversity benefits that are achieved by clearing, if you are looking at financial benefits.

Prof. Garnett—From what I know of the finances of the forestry industry there, the risks from cyclones, the costs of production, and the genetic material they have, I think they could make more from the carbon market. That could be an immediate return. To expand the forestry would need a very high level of ongoing investment before a profit could be made, and that would be at high risk.

Senator SIEWERT—Can I backtrack a little. As I understood it, you said you were initially involved in discussions looking into the money that could be made on the carbon market from those forests instead of going ahead with the existing plantation, and that there was a decision made not to proceed—is that correct?

Prof. Garnett—I do not know that there was an active decision. I do not know whether they even considered it. I raised it with them. They were sent drafts of the paper. But it may have been that they were already too far down the road of having to clear it, that they had made commitments.

Senator SIEWERT—So you sent them papers but you were not actively engaged in discussions.

Prof. Garnett—We did not start to negotiate with them in terms of that opportunity, no.

Senator SIEWERT—Could you give us some more detail on the other project that you referred to in your opening comments, a project that you decided not to go ahead with? I am a little bit confused.

Prof. Garnett—We had been funded by the Caring for Our Country program to explore with a number of communities around the Northern Territory the implications of climate change. That meant doing some scenario modelling of where the communities could go, looking not just at climate change but at a whole range of threats to those communities and trends in their societies, markets and so forth. We had discussed that with the Tiwi Land Council, and they had agreed that we could work with them on that. It was not going to cost them anything. But then they wrote us a letter saying no, they no longer wanted to proceed with that.

Senator SIEWERT—When was that?

Prof. Garnett—The letter would have been about August last year, I would think.

Senator SIEWERT—Do you know why they decided not to go ahead?

Prof. Garnett—No, they did not give a reason for that.

Senator SIEWERT—So you are not engaged in any work at the moment looking at the potential for the carbon market on the Tiwi Islands?

Prof. Garnett—No, we are not.

Senator SIEWERT—The only work you were doing there at the time was that Caring for Our Country funded project?

Prof. Garnett—We had been doing some modelling of the red goshawk.

Senator SIEWERT—Sorry, I meant in terms of the carbon market.

Prof. Garnett—That is correct.

Senator SIEWERT—Was the project that you were just talking about that was funded out of Caring for Our Country funded out of the money that the federal government promised out of Caring for our Country?

Prof. Garnett—No, it was completely separate. It was a separate project.

Senator SIEWERT—Have you been engaged with the Commonwealth in terms of that money that was promised under Caring for Our Country to look at the fledgling carbon market?

Prof. Garnett—No, I do not know who that even went to. It has not come here, anyway.

CHAIR—Senator Crossin, do you have any questions?

Senator CROSSIN—I do not have any questions, actually; I think they have all been covered.

CHAIR—I just have a couple of questions. In terms of the risks of operating within the carbon market, what risks do bushfires, cyclones and so on pose or not pose to Tiwi should they put their land to that use?

Prof. Garnett—You have two different schemes. One is trying to hold on to your carbon and one is reducing the amount that goes off in greenhouse gases like methane and so forth. So the risk there is that you get more fire than you have promised to allow on the island. The experience in western Arnhem Land is that they have been able to contain those risks. So they have been able to lower the frequency of fire each year that that has occurred, compared to a baseline. Empirical evidence will give confidence to potential investors in that sort of greenhouse gas abatement. The forests on Tiwi islands are probably in a constant state of recovery from cyclones. They get them frequently enough. There is, nevertheless, a standing stock of carbon both above and below ground, and that will have a mean level over an extended period. That would be a baseline. That would be the amount of carbon that you would have available on the market. The price that you would get for that carbon is likely to be linked to the risk that you could go below that level.

CHAIR—Given the need to manage the threat of bushfires and those sorts of things, what types of employment opportunities does the west Arnhem experience, or other experiences, show might exist? It is one thing to derive income from the land by keeping it native or keeping the plantation there and not feeling it, but what about job opportunities?

Prof. Garnett—One of the good things about the forestry program was that the forestry company funded the ranger group there and there was enthusiasm for working as part of that ranger group. The sorts of activities they undertook could be expanded. There are Caring for our Country ranger groups popping up all over the Territory. It is one of the areas of employment that people really enjoy because they get back onto their country. They look after their country through the burning. There are good opportunities for people to be employed on a seasonal basis. You cannot work on farm management all through the year. There would also be opportunities for weed management, because, if you get too many weeds in there and you get undesirable fires, it could reduce your carbon stock. So there is a range of activities that a ranger group could undertake as part of their forestry management.

CHAIR—Thank you, Professor Garnett.

Senator CROSSIN—I would like to ask Professor Garnett one question. When I asked Dr Adjani a question about the future of the plantation there, she said that, because the natural forest had been cleared and it was not pre-1990 forestation, it could not be included in the carbon credits scheme. Is that something that you could comment on?

Prof. Garnett—As currently formulated, I understand that to be the case. You might get some philanthropic money to re-establish those forests, but the opportunity to make it part of the trading scheme is not there because it was cleared after 1990. But there could be a great deal of employment, I would have thought, in re-establishing those areas as forests.

Senator CROSSIN—What is the benefit, then, if you cannot use that land commercially? That is, if you want to use the land commercially, essentially.

Prof. Garnett—That is right. Depending on the trading scheme that is eventually decided on, there may be opportunities in the voluntary carbon market to re-establish that. I know of one site in Indonesia where funding is being put in to re-establish rainforests at a site that was clear-felled for logging. So there are precedents internationally. If the future is not forestry, you need to look at the cost of what might happen to that land. The most likely prospect is that it becomes a weed-scape with *Acacia mangium*. As fires take out the mangium, it is replaced by mission grass, and the high-biodiversity value areas, the rainforest pockets, would be invaded by the mangium. The prospects are not very good if it is not maintained as forestry, if it is just allowed to stay as it is. You might be able to sell rehabilitation of that land to philanthropic investors, but I have not explored that.

Senator CROSSIN—Thank you.

CHAIR—Professor Garnett, thank you very much for your time today, your participation in the inquiry, your submission and your evidence. It has been greatly appreciated by all of us. I thank the senators who have participated and all our witnesses. The secretariat has just given me advice that the information provided to the committee by Dr Adjani has simply been received by the committee. The committee now accepts that as additional information to be published.

Committee adjourned at 11.44 am