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Official Committee Hansard

**HOUSE OF
REPRESENTATIVES**

STANDING COMMITTEE ON INDUSTRY, SCIENCE
AND RESOURCES

Reference: Increasing value-adding to Australian raw materials

THURSDAY, 21 OCTOBER 1999

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HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON INDUSTRY, SCIENCE AND RESOURCES

Thursday, 21 October 1999

Members: Mr Lloyd (*Chair*), Mr Brough, Mr Hatton, Mr Lawler, Mr Allan Morris, Mr Nairn, Mr Prosser, Ms Roxon, Dr Washer and Mr Zahra

Members in attendance: Mr Hatton, Mr Lloyd and Dr Washer

Terms of reference for the inquiry:

To inquire into and report on the prospects of increasing value-adding to Australian raw materials. The Committee will start with an evaluation of the current state of value adding in Australia, and how that compares internationally. This will provide a base from which to evaluate the following topics:

- incentives and impediments to investment;
- intellectual property rights;
- national/international marketing factors which may encourage or hinder Australian value-adding;
- government intervention, both nationally and internationally;
- the location of value-adding industries and projects in regional Australia;
- resource licensing/permit arrangements;
- the impact of vertical integration within particular industries; and
- the Australian skills base and any associated impediments.

WITNESS

**STANTON, Mr Richard Roger John, Director, Economic and Resource Policy,
National Association of Forest Industries 91**

Committee met at 11.48 a.m.**STANTON, Mr Richard Roger John, Director, Economic and Resource Policy, National Association of Forest Industries**

CHAIR—Welcome. I remind you that the proceedings here today are legal proceedings of the parliament and warrant the same respect as proceedings in the House. The deliberate misleading of the committee may be regarded as contempt of parliament. The committee prefers that all evidence be given in public but, should you wish at any stage to give evidence in private, please ask to do so and the committee will consider your request. Would you like to make an opening statement to the committee?

Mr Stanton—That would be a useful way to lead into it. It will be fairly brief, as you have got our written submission. The first point I would like to make is that the forest industries believe they have got significant potential to contribute particularly to the development of rural and regional areas of Australia by adding further value to the raw material that we deal with, the material obtained from our forests. We believe that wood is a raw material that Australia can produce in abundance and on a sustainable basis, from our native forests and also from our extensive plantations of softwood, and increasingly hardwood, timbers. We believe that wood is a renewable, recyclable, biodegradable material. We also note that it locks up carbon that would otherwise be contributing to the greenhouse effect. Therefore, we would like to emphasise the great opportunity that further processing of timber products provides. As outlined in our submission, there have been a number of inquiries into the forest industries. Particularly we have noted the 1993 inquiry of the Industry Commission, the report of which is titled *Adding further value to Australia's forest products*, which is obviously very relevant to your deliberations. We believe that many of the issues raised by the Industry Commission have not been fully addressed and continue to be major concerns for our industry. It is important to note that on page 5 of that report they say:

Governments play a far more significant role in shaping the development of Australia's forest products industries than they do for most other industries.

They are referring there not only to the Commonwealth government but also to the states and local government.

To summarise our submission, there are three key points that I wanted to note, three key things which we believe are limiting the opportunities in adding value to Australia's forest products. You will not be surprised to know that the first is the security of the supply of timber. We believe that it is vital, if there is to be further investment, that the industry knows what volume of material will be available, what quality that material will be and how long it will be available for. With the sorts of investments we are looking at, we need generally 10 to 20 years security of supply if we are going to make a significant investment in timber processing. Of course, we have tended to focus on the publicly owned native forests and access to that resource, but there are also a number of issues which make it difficult to guarantee resource supply from private native forests and also from timber plantations.

The second key point I would like to note is the need for improvement in our rural infrastructure. For example, if we look at the Visy Industries decision to establish a new pulp and paper mill at Tumut, you will note that obviously a first requisite for that was sufficient resource, but a second very important thing was guarantees from state and Commonwealth governments that they would upgrade the infrastructure in that region, including roads, water supplies and what have you. So infrastructure is another key issue.

The final point we would like to note is research and development. We believe that is very important to our industry, both in developing new techniques for processing timber and also developing new end products that can be made from timber. We have got two particular concerns in relation to R&D at the moment, immediate concerns, if you like. One is the fact that we believe our industry has been discriminated against because Commonwealth funding for the Forest and Wood Products Research and Development Corporation is on the basis of 50c of Commonwealth funding for every dollar of industry funding whereas all of the other primary industry R&D corporations are funded on a dollar for dollar basis. We would like to see that addressed. Our other major immediate concern in relation to R&D is the reduction in the CSIRO's commitment to R&D in the wood products area through their laboratories in Melbourne. We would like to emphasise that we see that as very important. If we are to see further value-adding in Australia's forest products, we would like to see an increased government commitment to R&D. Those are the main points I would like to make.

CHAIR—Thank you. I will kick off with a couple of questions. When you made your submission in June, I think only four of the RFAs—regional forest agreements—had been completed. Since that time there have been some more difficulties with RFAs. Would you like to make some comments on how that is affecting the industry and the potential for value-adding?

Mr Stanton—The first point I made was about resource security, and that is where that issue comes home. The industry is still supporting the regional forest agreement process, although we have very serious concerns about particularly what has happened in Western Australia, where an agreement was entered into and some six weeks afterwards the West Australian government decided essentially to walk away from that agreement and change the rules.

CHAIR—The Commonwealth government also has some concerns about that.

Mr Stanton—Our point would be to once again emphasise that we need a detailed analysis of the situation, an agreement and a clear enunciation of what resource is available, the quality of that resource and the period it will be available. Decisions can then be made about processing. But those decisions will only be made if there is confidence that that supply will be guaranteed. Generally, we are looking at 20 years, which is the period that RFAs apply for. If there is not confidence, there will not be investment.

If we look at Tasmania, we have seen significant positive developments there. Unfortunately, the signing of some of the first RFAs coincided with the Asian economic downturn, which obviously had its impact as well. In Tasmania, where the RFA has been signed, strongly supported by the state government, with no apparent major concerns from

the Commonwealth government, there is confidence building and new options are being developed there. That is a good example.

CHAIR—Again, since you have made your decision, the government has released its response to the Ralph review on business taxation. Do you have any comments on the likely impact on your industry?

Mr Stanton—At a very general level, we see the majority of the outcomes of the government's taxation reforms—the ANTS package as well as the Ralph reforms—as positive for business in Australia. As far as the Ralph review is concerned, we did have a concern about the taxation arrangements for timber plantations. With the decision that has come down, we are reasonably happy that up-front expenditure on plantation establishment will continue to be immediately deductible. There are however a couple of minor changes, which we are still assessing, in relation to the rules of when certain expenditure can be claimed. We will be looking at that a bit more but, generally, we are quite positive about the outcomes of the Ralph review.

CHAIR—Are you aware of any examples of successful partnerships between your industry and local government?

Mr Stanton—One thing I could refer to is the *Plantations for Australia: 2020 vision* strategy which I have been involved with and which is outlined in this document. That strategy is aimed at encouraging plantation expansion. One of the major impediments we have had to plantation expansion in Australia has been the attitude of some local governments. But, through this strategy, we have been gearing up to work with local government and to communicate with them about the potential benefits of plantations.

Certainly, looking at towns such as Oberon or Mount Gambier, where the timber plantation industry contributes a significant amount to the local economy, we have been able to use those as examples of positive benefits and thereby encourage local governments to work with our industry. That is one broad example of that sort of thing. More specifically, I think of a medium-density fibre board plant development that went in at Wangaratta. The local government identified that as a potential opportunity for their area and they worked closely with the industry to pursue that development in their town. That is a good example of what local government and industry can do, if they work together.

CHAIR—I listened with interest to your comments about R&D. We have just completed an inquiry into the effects of certain public policy on R&D. Do you have any specific examples of where government changes or public policy changes have affected R&D projects? Often the comment is made that the reduction in the tax rebate has affected R&D, but it is not that often that people can bring forward projects and say, 'This project has been wound back or stopped because of that.'

Mr Stanton—I do not think I have any examples. I could endeavour to look into that and see whether I could find any evidence and give it to you in written form. I am not aware of any immediately.

CHAIR—That is fine; if you do have anything, we would be pleased to have that at some stage. You mentioned a review of R&D arrangements being conducted by the Minister for Forestry and Conservation as of June 1999. Has that review been completed?

Mr Stanton—No, it is still proceeding. I guess this issue of the dollar for dollar funding of the Forest and Wood Products Research and Development Corporation has been raised in that. There have also been some concerns on the industry side about the way the R&D corporation is operating. We hope that has been addressed through Minister Tuckey's review. The industry will be looking closely at this issue of the total funding.

CHAIR—I was sure it was still continuing.

Mr Stanton—There is another meeting planned for late November. I do not think the decisions will come into effect until mid-next year.

Mr HATTON—I cannot remember where it came from, but there is a recent report that indicates that carbon lock-up, and how good forests are for carbon lock-up, is very much a positive for Australia. It says that you get a big CO₂ effect, generally, with the process of land clearance. A lot of that is released into the atmosphere and adds to the greenhouse effect. The point was also made that that happens when you do logging. My understanding is that, within the forest industries, care has been taken with the extraction of materials to try to obviate that possibility. Can you outline the current practices in relation to trying to stem further CO₂ emissions in the logging industry?

Mr Stanton—The greenhouse accounting process, if you like, is certainly a difficult one, and the potential it might offer for Australia is questionable until we have some clear idea of the rules. If we look purely at the harvesting of a native forest, an area of existing forest that we have today, the timber that is removed will be used in a range of ways. As that timber decays, which may take anything from a year, if it is turned into paper, to 100 years, if it is turned into a solid wood products, the carbon will be released. Also, the disturbance that is created in the forest in the harvesting process may result in some carbon being released. Generally, the measures which the forest industry employs to prevent soil erosion and soil movement will help to reduce the amount of carbon that is being released.

Our position would be, when we are looking at a native forest, if we are harvesting that area and it is being adequately regenerated, the regeneration of that forest will absorb carbon from the atmosphere and, essentially, we will pretty much have a neutral situation. Provided you have that disturbance spread over a large area, and you have a continuing cycle of harvest and regenerate, the amount of carbon locked up will remain fairly constant. The big potential for the forest industry in this whole carbon issue is that, if we were expanding our area of forest, that would be increasing the total pool of carbon that is locked up in biomass rather than in the atmosphere contributing to the greenhouse effect.

If we can expand our timber plantation estate, as we expand that will result in more carbon being locked up, even though individual areas of forest or plantation will be harvested and regenerated over time. But of course that benefit, that positive income that would be received from carbon trading, will only be received as long as you are continuing to expand your forest area. Once your forest area becomes static, there is no net addition to

the amount of carbon absorbed so you cannot claim any credit for that. It is a one-off gain, if you like.

The other big concern we have about this whole issue of carbon is how timber will be accounted for once it has been removed. Under the current arrangements, as we understand it, as soon as you cut a tree down, the carbon in that tree will be counted as being released into the atmosphere even though, we believe, a significant proportion of it will remain in the timber product, as a solid table or in a house frame, and not in the atmosphere. We believe that needs to be recognised if the forest industry is to benefit. That of course would improve the competitiveness of timber against, say, aluminium or steel or plastics which involve the release of much more carbon in their processing than does timber.

Mr HATTON—Part of the argument put was that, if you have a quick turnover—say, with our softwood forests—there does not seem to be much gain at all in terms of locking up the carbon because the cycle is too short. In terms of the hardwood forest, what are the normal cycles?

Mr Stanton—It does vary quite significantly, but most of our hardwood forests are managed on rotations of anything from 80 to 120 years, that order of things. I would emphasise again that, if you have a total area of forest and you merely harvest proportions of it and they are regenerated, the total carbon pool there we expect would remain pretty much constant. The only benefit you get is as you expand the forest area by planting new forests, or by using those wood products in replacement for other products which involve a larger release of carbon into the atmosphere. For example, if you used wood as an energy source rather than using petroleum, that wood can be regrown and then that carbon can be reabsorbed by the growth of the new forest. So it is a sort of carbon neutral situation.

Mr HATTON—Another part of the argument relates directly to ground disturbance and the release of CO₂ as a result of that. I think that was the core of it. Can you tell us a bit about the new harvesting techniques that have been used to selectively log parts of the forest using the long lines and so on? They use that basically to chop out a series of trees and do the thinning process at a 20-year level. The impact of that is that it is highly selective, and that thinning process allows the rest of the trees to move on and go through the rest of their growth cycle, reach greater dimensions and therefore lock up more carbon as a result. But you do not get the disturbance that was more prevalent previously.

Mr Stanton—That is right. Certainly there are a wide range of techniques that the industry employs to reduce the impact on soil and reduce soil disturbance and therefore reduce the release of carbon from the soil. They include mechanical means such as rubber tyred, low-impact harvesting equipment, procedures where you lay the residual material when you are harvesting onto the ground and run your machine over the top of it to reduce your impact on the soil, and then there are the various cable harvesting technologies that you are talking about, where you have a suspended cable and you lift logs out rather than operating a machine over it. That will reduce the disturbance of the soil and, therefore, reduce the release of carbon.

Once again, coming back to the plantation scenario, when you establish a plantation on cleared land you initially disturb the soil. There may be some release of carbon when you

plough it, rip it or whatever you do to put in your plantation, but that soil will not then be disturbed for an extended period, maybe 10 years in a short rotation or 35 years with a pine plantation, whereas, if that had been in traditional agriculture, the soil may have been disturbed on a much more regular basis and the total carbon locked in the soil would have been reduced. We see the plantations as building that store of soil carbon over time.

Mr HATTON—You have put an argument forward that state forests should be privatised, that Victoria has and the others have not but they should. What do you see as the importance of that and the significance of it in terms of competition policy and so on? My second question is: has there been any analysis of before and after privatisation of the Victorian state forest as to whether we actually getting any value added benefit out of it?

Mr Stanton—I do not think there has been to date that I am aware of, and we are probably only just now starting to have had sufficient time to even make that sort of assessment, because a lot of the timber supply commitments are quite long term, so to see changes in that takes a significant period of time. Of course, to see changes in the forest itself takes a significant period of time. When we are looking at the Victorian situation, we are really looking at the plantations only. It is only the state government owned plantations which have been privatised.

There are a range of benefits which we would hope to see as a result of that and, as you have rightly identified, we have not proved those yet. The first one is an improvement in the management of the plantation to make it more efficient by transferring it from public ownership to private ownership. There is the general perception that private ownership will be more efficient.

Mr HATTON—Often very wrong.

Mr Stanton—In that case we have seen investors from the United States take roughly a 50 per cent stake in that asset, and we are hoping that they will bring some of their technology and expertise to the management of that resource to complement the existing Australian expertise which has been retained there. We see that as a significant opportunity.

The other major concern is particularly one for smaller private growers who feel that they have been unable to compete in the marketplace because the state government has controlled the resource and, in certain instances, has competed in a manner which has been unfair to them and has made it virtually impossible for them to sell their wood because the state government either has signed up an exclusive deal with a particular processor or has undercut them in price. Once again, whether that will really turn out to be the case or not, or whether it is more a matter of size rather than a government-private matter, only time will tell.

The other major reason for wanting to encourage privatisation of a plantation resource was to get more investment into developing the plantation resource because most of our state governments who have established these plantation resources no longer have the money available to expand them, bring in new technology, do the genetic development and what have you. I guess that is just a feature of the broader economic environment, that governments do not have the sort of money we are talking about to do that. We hope private

investors will, particularly some of the superannuation funds which have more patient capital to dedicate to expanding the resource and improving it, and that is what we are hoping we will see. To date, we have not seen that from the investment in Victoria, but once they have consolidated and got their new systems in place we will start to see them expand their plantation area.

Mr HATTON—If we had not had the state plantations in the past, we would not have an industry at all.

Mr Stanton—That is true.

Mr HATTON—Because no-one else was actually doing it and there was not the private investment in it on a large scale. If they had not done it, it could not then be used by others. In the Victorian plantations, were there provisions when they were privatised to ensure that that land could not be alienated in its use, that it would have to remain as plantation?

Mr Stanton—Yes. The land is actually still owned by the Crown. It was only the standing timber that was sold and the rights to manage that land for plantation growing on an ongoing basis. So, essentially, what they purchased was a restricted lease and the standing timber. So it remains Crown land. The point that you raise that this development would never have occurred in the first place without the government investment—which mainly began in the 1960s with Commonwealth loans—is absolutely correct. That is why we have large plantation resources at Tumut, Oberon and Mount Gambier. These are examples where the government made a significant investment and the industry has developed. The general feeling now is that the industry has matured to a point where that can be taken on by a private investor and developed further, and perhaps government no longer needs to have its capital tied up in that way.

Mr HATTON—Another area where there may need to be Commonwealth and/or state investment is in heavy value adding. There is the CSIRO project to try and develop plantation growth of rainforest timbers. They have had a series of trials on that, including in Mossman where there has been a trial going on now for probably close to 10 years and in a few other places. That has been of interest to the industry and of interest generally. What is your understanding of the progress of that and what the possibilities are?

Also, would your general assessment bear out the advice that I have been given from one of the people who ran Boral's forestry division that, if it works and is successful and we can overcome the major problems that are there, it would actually need the state and federal governments to establish those kinds of plantations? The private capital is not there and certainly is not patient enough to establish major plantations of this type of wood, which would have very high resale value and, therefore in terms of our inquiry, a great potential. However, it is not something that would be realised for another 40 to 50 plus years minimum, given the nature of the growth patterns in those woods.

Mr Stanton—Yes. You have hit the nail on the head with the term of the investment. Certainly a lot of the trials are proving that you can grow high-value cabinet species, but it takes a significant period of time and we are probably looking at absolute minimums of 40 to 50 years. If you look at the sort of private investment in timber growing—not

processing—you are mainly seeing it in the shortest rotation type investments like growing pulp wood on a 10-year rotation or, otherwise, in an existing plantation that is up and growing and generating some cash flow which can then be fed back into developing that resource. You are not seeing investment in starting something from scratch which is not going to deliver any return for 40 or 50 years. That definitely remains a problem. It is for governments to decide whether they see that as an important area to invest in.

There is some small-scale private investment if you go to areas in particularly North Queensland and northern New South Wales—the Lismore and Murwillumbah sort of area—where individuals are investing in maybe 10 or 15 hectares of these long rotation, high value timbers, but they are relatively small areas and they are going to be waiting a long time for their return, but they are basically saying, ‘This is something we want to do. We are prepared to put our money up and accept that we are not going to get a return in our lifetime, it is for our children or our grandchildren.’

Dr WASHER—I want to follow up on a couple of Michael’s points before I ask some questions. Michael made a statement that softwood timbers do not trap as much carbon as hardwood. Is that a true statement? I thought it was in the starch department, not the lignum. I find that an incredible statement.

Mr Stanton—It will vary from species to species and I do not think you can generalise hardwood-softwood. There may be some softwoods which will absorb more carbon than some hardwoods, and vice versa.

Dr WASHER—Hardness is due to lignum content, and lignum does not contain any carbon. I do not understand the science of that. It does not make sense to me—the carbon is trapped in the starch and not in the lignum components of the tree.

Mr HATTON—I am open to correction.

Dr WASHER—You may be right; it is just not what I have been taught. The other thing I want ask about is when we clear-fell, as we do in Western Australia, certain species, we release a lot of CO₂ from the soil. Is that a true statement?

Mr Stanton—Certainly some carbon is released from the soil as the soil is disturbed and organic matter breaks down.

Dr WASHER—So that is decomposition of the organic matter.

Mr Stanton—And that is sped up by the disturbance. If it was packed down and undisturbed, the organic matter would decay more slowly and there would be less release of carbon. When you disturb it and let more light in, it breaks down more quickly.

Dr WASHER—How significant a problem is that? Is it a major release of CO₂? Is it a major problem or a fairly minor problem? Has it been monitored per hectare for clear-felling against selective cut?

Mr Stanton—There is a lot of work going on at the moment to measure these things and we really do not have the evidence. As I said before, our position has been that, given that we are managing a relatively large area on a cyclical basis, as soon as that area is regenerated, for example if you talk about the karri forest and you have thousands of karri seedlings jumping out of the ground, they are absorbing huge amounts of carbon. So we expect that to be roughly in balance over that large area over a significant period of time.

Dr WASHER—Karri is what I had in mind. On page 1 you mention the current economic performance of the industry. Has the proportion of the output generated by further processing increased in recent years?

Mr Stanton—I would have to look at it in more detail, but I would say it has remained relatively constant over the last 10 years.

Dr WASHER—It is fairly static. Another thing you mentioned in here is the use of R&D agencies like the CRC and CSIRO. I guess you are not happy with those in terms of the forest industry and what they are doing for it.

Mr Stanton—Our biggest concern is the increasing supplies of certain qualities of timber that are becoming available and the need to look more closely at developing new products from that timber. We do not believe that there has been significant effort devoted to that. We tend to get the comeback from them that the industry is not as interested in that. I suppose our view is that the industry is not interested until they see an opportunity, and it is a bit of a catch-22.

Going back to your previous question about investment in value adding, I should note that in relation to the hardwood industry in particular there has been an increase in the production of high value timbers—so a shift away from sawing logs into green scantling for house construction into producing high quality appearance grade timbers. That shift has probably occurred most significantly in Victoria but increasingly in other states. While they have probably reduced their total volume of timber they are producing, the value is staying much the same because they are getting more bang for their buck.

Dr WASHER—You mentioned some overseas investment. When I was in Japan, there was great interest there for them to try and achieve carbon credits. They were looking at Tasmanian areas in Australia to buy land to plant trees. Is that a theme you see coming through, that international companies are now looking for carbon credit achievement by tree planting here?

Mr Stanton—We are seeing a range of international investment. If you are looking at plantations, for some years now, probably for the last five to eight years, we have seen a number of mainly Japanese investors investing in plantations in Australia, but initially just to produce raw material to feed their pulp and paper mills in Japan. They have got a range of projects around the country investing millions of dollars, probably aiming for 100,000 or 150,000 hectares of plantation. We are now starting to see much more interest in the carbon side of that and there have been a number of companies—the Tokyo Electric Power Company is probably one you have seen mentioned, which invested in New South Wales and now in Tasmania as well. Essentially, all they are purchasing in the deal is the right to

the carbon. Somebody else, be it the state government in New South Wales or Norths in Tasmania, are going to own the wood and run the plantation. This investor is buying the right to the carbon, which is an interesting development.

Dr WASHER—It is. Why has industry only got a 50 cents in the dollar input from government? What is the reason for that? Why the exception for your industry?

Mr Stanton—I was not around at the time to know but, as I have had it explained to me, it was a suggestion that our industry should be looked at almost as two separate components: the wood growing component, which was seen as equivalent to growing wool or wheat; and the timber processing, particularly where it involved the pulp and paper manufacturing sort of thing, which should not receive that support. We find that quite difficult to understand when we look at other industries such as, say, the beef or sheep industries, where a large proportion of their R&D funding is not being spent on growing better sheep but is being spent on the processing and marketing end. Yet for some reason we are told that the government will not support the funding of research into the processing and marketing of timber; it is only in the growing area where funding is directed.

Dr WASHER—I just make a comment, in the way of a question, that your knowledge of carbon trapping seems reasonable, but obviously there is room for research. If that is hypothetically the new drive from overseas, which you agree with, it seems that you will need to do some really good homework or research on that to see what is the way to achieve the best results for those investors.

Mr Stanton—There has actually been a CRC for carbon accounting funded in the most recent round. We will see that. The carbon one is a difficult one. You can see it as an opportunity, but on the other hand there are some questions about the fundamental science behind the whole thing and also about how the international negotiations on it will go. If the Americans do not support it, will it end up having any economic significance at all? It is a difficult balancing act.

Dr WASHER—One last question. A company went broke quite recently which was studying GM work in trees. Are there any GM planted trees? Have you got any genetically modified ones in plantations? It was Forbio that went broke just recently.

Mr Stanton—That is right. There is some of that work going on in New Zealand but I am not aware of any genetically modified trees being planted in Australia. Obviously there has been a lot of traditional genetic tree breeding type improvement—

Dr WASHER—No, I mean the new technology.

Mr Stanton—No, I am not aware of any of that in Australia.

Mr HATTON—I will explain that the reason I asked the questions about the reports in terms of the effect of clearing on carbon and so on is that it is my guess that there is a move in certain areas to put big question marks on the forest industry about the possibility of big plantations and the ability to create carbon credits by locking that up. Those people are not

necessarily in favour of forest industries. I want to ask about that and try and lay a scientific basis.

It is very important that we got a response from NAFI today and that we continue to pursue this on a real scientific basis, because you could get a campaign running really strongly to nobble the further development of plantations and so on, on a spurious notion that there may be a great deal more carbon emissions and so on. I do not know whether that is true or not, but I think it is important that that be established as quickly and as scientifically credibly as possible. Otherwise, the whole thing could run off at a different point. This is why I asked you that; given the nature of where this argument is going to pop up—apart from the normal arguments one could put about ground disturbance and major ground disturbance, because I know that within the forest industries the whole practice is moving towards far less of that, particularly with selective use.

I want to ask you about a couple of things—I will come back to the biotechnology segue in a moment—about sawlog quality. One of the benefits of the RFAs is that there is relative certainty, hopefully for the next 20 years or so. But, in the meetings I have had with mill operators, one in particular in northern Tasmania showed me a pile of logs that had been rejected. They were subject to a whole range of problems. His arguments linked in with those of a number of other people—that the quality of sawlogs has dropped dramatically. That is a direct response to the fact that so much of the forest—80 per cent now—has been locked up. The industry in the next 20 years will have security, but security with a much lower grade of sawlogs and raw material. That presents problems for them in terms of trying to get the value out of that product, because they have to retool and do a whole series of other things and change their ways of doing things. But it presents a problem for us in terms of value adding. Instead of using the best quality material—if it is true—we are using a much inferior product to try to then generate profits from and get value for Australia. What is your view of that situation of reduced quality of sawlogs and the impact that has had on the millers and also on those others who are involved?

Mr Stanton—It is certainly a complex issue. Quality can be perceived in a number of different ways. One of the key issues might just be the size of the logs. There has been an ongoing transition—which the industry knew was coming but has been greatly sped up by this additional reservation—from large logs which were extracted from mature forests to smaller logs which would be produced on an ongoing basis in a regrowth forest. If those logs are solid and good quality, they can be processed. But, as you have said, you have to invest in retooling your whole mill, which is structured around processing a large log, for processing a small log. But once you have made that investment there are in fact reasons to believe that it should be more efficient, because you are dealing with smaller and more consistent log sizes. So there should be some advantage there, provided you can get over the hump from the old to the new scenario.

It is also true to say, though, that because a lot of the forest reservation has focused on reserving the forests with the most beautiful appearance—the ones with the biggest trees, the tallest trees, the straightest trees—and has left the forests that perhaps appear less attractive, there are more trees which are twisted and bent, with more branches and what have you, now becoming available to industry. That is certainly much more difficult to deal with than just retooling for the smaller logs.

Dealing with that defect is much more difficult, and I guess that is one of the key reasons for the need for further research. But, to some extent, the answer to that will merely be that those logs can only be used in uses where they are basically completely broken down and reconstituted into board or paper or that sort of product—in effect, pulped. That is an outcome of the RFAs in all of the states; a speeding up of this change in log availability.

Mr HATTON—On our trip we had a look at the new thinning processes and at the new machines that they are using. They go down 200 to 300 metres and thin the logs out. It occurred to me that—even though the growth was, I think, 10 to 20 years on and what they were extracting could be used—the value you could get out of those logs and the value you could get in the future from the mature trees, because of the amount of physical damage to those logs already within that forest from termites and from other pests and so on, is dramatically reduced by the natural processes that occur in all of those forests, but some more than others with particular diseases.

This is an area that the industry should be looking at very closely, and this is where I come to Dr Washer's point in terms of the biotechnology approach. Essentially, the biotech approach is a speeding up of natural evolutionary approaches or selection approaches that we have seen across a whole range of industries and areas. How much is being done within the industry in terms of work on biotechnological fixes to disease problems and pest resistance? Because if you can actually engineer that into forests that you are working on and you can cut down on the immense wastage that is there because of those problems then you should have a different kind of industry emerging and a different kind of value.

Mr Stanton—The first point that I would note in that regard is: the regeneration of native forests after harvesting is essentially exclusively with natural material. There is no genetic modification and no tree breeding involved in that. So, the material that you have in, say, a forest at Eden which has regenerated after logging some 20 years ago would be essentially very similar to that which was there before. So, the native forests are not available to us to do that sort of genetic improvement. In plantations, on the other hand, there is significant work being done by a number of companies to breed trees with different attributes—initially mainly focusing on pure growth rate but increasingly now focusing on the size of the branches, the distance apart of the branches, the density of the timber and the fibre qualities for particular end products. To date, I do not think there has been much work on pest resistance. There has been some on disease resistance—for example, in radiata pine—to select trees which are resistant to some of the fungal diseases and so on. So that has occurred, and I think it will increasingly. But we will see a distinction between the management of our native forests and the management of our plantations; between where there is no genetic manipulation and where there is significant breeding and, possibly, genetic modification in future.

Mr HATTON—But we have relatively little in terms of hardwood plantations; have we not? There is a great possibility that, if you can increase not only the extent but the value of the timber within those hardwood plantations, you can do a hell of a lot more with that than you can with pine in terms of its ability to be used in a whole range of different ways. There is also the extra value that you get out of that. We are using native hardwood forests at the moment, where those millers are having so many problems. If you could overcome a lot of

those problems, then there would be an almost exponential growth in terms of their capacity to add value to that, because you would get so much more out of each of those logs.

Mr Stanton—I have two points on that. Firstly, the hardwood plantation area is starting to expand quite rapidly at the moment, although it is primarily focused on growing short rotation pulp. But I am sure that at some point as those other hardwood plantations grow some people will say, ‘Hang on a minute. I won’t harvest my plantation at age 10 and send it to the pulp mill; I will thin it out and see whether I can grow it on and see what I can produce.’ Obviously that is a long-term investment, but I think that sort of thing is starting to happen.

The other point is on the natural defects in timber. It is interesting to see what has occurred with what they are calling ‘natural feature grade timber’ that is being produced in Victoria, where they are in fact capitalising on the inherent defects—the worm holes, the fire scars—in our beautiful natural hardwood timbers. They are marketing that as a strength and selling that in fine quality furniture, veneers, flooring and what have you and, in fact, getting added value from what would traditionally be regarded as defects. There is only a certain market for that, of course, but it is an opportunity.

Mr HATTON—A great deal of inventiveness. But, if you put the right washes on it, you can flog anything to anyone. In terms of the fact that we have such great salinity problems because we have knocked over so many trees, is the industry looking to help provide a solution to those problems in what is probably a fairly innovative way in terms of just growing trees to use in other ways? Is there anything within the industry where the industry is coming to government and saying, ‘We realise the problem is there. This is our experience in relation to this area, however little it may be. We think we can build an industry to actually help solve these problems,’ or is that something that is just up to the government?

Mr Stanton—There is some work going on in that area. We could particularly look to the Western Australian government who have made a significant investment in developing blue gum plantations initially as a means of lowering watertables to reduce salinity, and they now have a couple of other programs. They are working on one with growing *Pinus pinaster* in very low rainfall areas and another with growing blue mallee for eucalyptus oil production. That has been primarily funded by the Western Australian government and by Commonwealth contributions, and some industry is now developing on the back of that.

The biggest problem has been that the major salinity concerns are occurring in areas where trees grow more slowly—lower rainfall areas—and the commercial reality of growing trees in that environment is very difficult unless there is some way that you can extract the commercial value of the environmental benefit that you are gaining. We were talking about carbon before. If we ultimately have carbon trading and plantations are seen as absorbing carbon, then you will be able to earn a benefit from that environmental product that you are producing. I guess it is hoped that the same could occur with salinity.

But, if you are aiming to grow trees where the rainfall is 400 millimetres a year and you have to compete with the normal commercial tree growing people without any financial recognition for the fact that you are helping to address the salinity problem, it does not add

up. I guess that is where the role for government comes in—if there is some way that that environmental benefit can be recognised in a monetary sense.

Mr HATTON—My last question is a slightly political one. How important is a Wood and Paper Industry Council to push the industry forward, to allow the industry to have a better and clearer voice about the problems that it has and to push forward a process to plan a way towards a better value added future for that industry?

Mr Stanton—It is as yet untested, but I think there is significant potential there. One of the reasons perhaps why that is needed now is that in the past forestry has been very much dominated by the state government wood growers who have directed the way the industry has gone. We have talked about privatisation, and that is changing. We are also seeing more international investment. We are seeing large companies which deal across state boundaries. I guess the old mechanisms for policy development, if you like, for the forest industry are perhaps not as good as they could be. Perhaps the Wood and Paper Industry Council, if it were to come to fruition, could fill that gap and perhaps provide a new environment for policy development at more a national level rather than just working on an individual state basis.

Mr HATTON—Thank you.

CHAIR—I know Dr Washer has one quick question and then we will wind up.

Dr WASHER—Just on top of your questions, Michael, not on the salinity problem but on agroforestry where there is a combination of agriculture and forestry—for example, planting of long-term crops like black walnut that takes eons of time and grazing as well—is much of that being done in Australia to your knowledge?

Mr Stanton—Certainly the Commonwealth government has been supporting it to a fairly large degree through the Farm Forestry Program. There is a lot of interest, research and study, but I could not say there have been huge areas established. It is increasing in some areas but it is very much an embryonic business.

CHAIR—Thank you, Mr Stanton.

Resolved (on motion by **Dr Washer**):

That this committee authorises publication, including publication on the parliamentary database, of the proof transcript of the evidence given before it at public hearing this day.

Committee adjourned at 12.40 p.m.

