

**AUSTRALIA AND NEW ZEALAND INSTITUTES OF  
FORESTRY CONFERENCE**

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**PACIFIC FORESTRY—GROWING A FORESTRY FUTURE**

**Speech by the Hon Dick Adams MP**

**Chair of the House of Representatives Standing Committee on  
Agriculture, Resources, Fisheries and Forestry**

**On the current and future prospects of the Australian forestry  
industry**

The House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry has undertaken to conduct an inquiry into the current and future prospects of the Australian forestry industry.

The Committee feels that this is an opportune time to look into many of the issues surrounding the industry. In recent decades the industry has undergone a transformation which has presented both challenges and opportunities. The area of native forest available for harvesting has declined substantially, and all harvesting is now subject, through the Regional Forests Agreements, to strict environmental protocols. Plantation timber has doubled and diversified in the last two decades, and now accounts for a major proportion of the annual harvest of timber. New technologies have made the industry capital intensive. Global competition has required innovation both in technology and management practices. All of these

factors have required the industry to become harder and leaner. All have placed pressures upon the industry and the communities supporting it.

The inquiry will examine the industry across a range of issues.

Opportunities for and constraints upon production as well as opportunities for diversification, value adding and product innovation;

The environmental impacts of forestry, including the impacts of plantations upon land and water availability for agriculture, and the development of win-win outcomes in balancing environmental costs with economic opportunities;

Creating a better business environment for forest industries, including looking at investment models for saw log production, new business and investment models for plantation production, and superannuation investment in plantations;

The social and economic benefits of forestry production;

Potential energy production from the forestry sector, including biofuels, biomass, biochar, cogeneration and carbon sequestration; and

Land use competition between the forestry and agriculture sectors; the implications of competing land uses for the cost and availability of timber, food and fibre; the potential for harmonising competing interests; and the opportunities for farm forestry.

The Committee hopes that by examining this broad range of issues we can provide future directions for government and industry, and perhaps provide a way forward which balances the needs of the economy and the environment. Forestry is an important industry in Australia. Australia is a significant per capita producer and consumer of forest products, so the future of the Australian forestry industry is vital to all Australians.

## **AUSTRALIAN FORESTRY TODAY**

The major trends affecting Australian forestry in recent years have been the decline in access to native forests, the rapid, but now slowing, increase in the plantation estate, the steady increase in the consumption of forest and wood products, and the large but more or less stable dollar deficit in the trade of forest and wood products.

Australia has a significant forest estate. Forests cover an area of 149.4 million hectares, or 19 per cent of the land mass. Approximately 2 million hectares of this is plantations and the rest is native forest. The area of Australia's native forest in formal nature conservation reserves is about 23 million hectares or 16% of the total forest estate. The area of forest in multiple-use public forests, in which wood production is an objective, is 9.4 million hectares, down from 11.4 million hectares ten years ago. Conservation now outweighs production as the management priority for over half the potentially productive forest estate, and pressure is on to reserve more of our native forests for conservation purposes.

The conservation of native forests has been a priority for over two decades. At a national level, policy is determined by The National Forest Policy Statement. This is an agreement between Australian governments to achieve their vision for the forest estate. To ensure that the community obtains a balanced return from all forest uses, 11 broad national goals have been pursued. These goals have been pursued within a regionally based planning framework that integrates environmental and commercial objectives so that, as far as possible, provision is made for all forest values.

At an international level, Australia's forest policy is determined by its participation in the Montreal Process, formed by countries with temperate and boreal forests. Australia has accepted the criteria developed by the Montreal Process Working Group and adapted the various indicators developed under the process to better suit Australia's unique forests.

The outcome of these national and international policies was the Regional Forests Agreement process. One of the key objectives of the RFA process was to use a set of nationally agreed criteria for the establishment of a CAR (comprehensiveness, adequacy and representativeness) reserve system in Australia based on the JANIS criteria to protect, in nature conservation reserves:

- 15% of the pre-1750 distribution of each forest type
- 60% of the existing distribution of each forest type, if vulnerable
- 60% of the existing old-growth forest

- 90% or more of high-quality wilderness forests
- all remaining occurrences of rare and endangered forest ecosystems (including rare, old-growth forests).

In conservation terms, the RFA process has enjoyed notable success. The process resulted in the transfer of more than 2 million hectares of forest from the broad tenure category of multiple-use public forest to nature conservation reserves.

In terms of its national and international obligations, Australia is well ahead of the game in forest protection. In Tasmania, 47% of forests are in CAR reserves; in Victoria, 61% of forests are in CAR reserves. Nationally, some 73% of old growth forests in regions covered by RFAs are in reserves. Most forest types are being conserved at rates in excess of their JANIS targets, including all forest types subject to commercial harvesting. The main source of loss of forested areas has been land clearing for agriculture and urban development, not forestry.

The other side of the loss of access by industry to native forests is the development of Australia's plantation estate. From the 1960s to the 1980s, the area of softwood plantations increased rapidly because of investment by governments. The total area by 1990 was a little over one million hectares. After 1990, the area of hardwood plantations began to increase rapidly because of private investment, while the rate of establishment of new pine plantations slowed. The emphasis since 1990 has been on eucalypts established on farmland and managed to produce woodchips for paper manufacture on 10 to 15 year rotations. There were 2 million hectares of plantations in Australia in 2009. Of this total, 49% were hardwood species and 51% were softwood species. The expansion of private hardwood plantations and the sale of government plantations means that over 60% of plantations are now in private ownership.

The transition from native forest to plantation harvesting has been significant. In 2010, the industry harvested 24.8 million cubic metres of logs. Approximately 2.8 million cubic metres of sawlogs and veneer logs were harvested from native forests, and 3.6 million cubic metres of pulpwood and other logs. This represents an overall reduction in the harvest from native forests over the last decade of 44%.

The harvest from hardwood plantations of sawlogs and veneer logs was 161 000 cubic meters, and for pulpwood and other logs was 4.3 million cubic meters, an overall increase in a decade of 430%, representing the vast increase in hardwood plantations in the last two decades.

The harvest from softwood plantations of sawlogs and veneer logs was 9.2 million cubic metres, and for pulpwood and other logs was 4.8 million cubic metres, an overall increase of 15% in ten years.

Australia's production of paper products has increased 29% in the last ten years; consumption has increased 21%, but in both volume and dollar terms, domestic consumption far outweighs production. Production and consumption of softwood sawn timber have increased, while production and consumption of hardwood sawn timber have both decreased, reflecting the transition from harvesting of native forests to plantations.

In 2010, total imports of wood products were valued at \$4.2 billion, while exports were valued at \$2.3 billion, leaving a trade deficit in forest and wood products of \$1.9 billion. This reflects the value rather than the volume of trade. Closing the trade gap is more about value adding than increasing volumes of wood harvested and exported.

## **Tasmania**

Tasmania has a unique position in Australian forestry. Forests cover some 50% of Tasmania. There are over a million hectares of multiple use forest, over a million hectares of conservation reserves, 300 000 hectares of plantation forest and nearly 900 000 hectares of forest on private land. 79% of Tasmania's identified old-growth forests are in conservation reserves.

Tasmania's forestry and wood products industries employed an estimated total of 6300 people in 2006. This represented 3% of Tasmania's employed labour force. Because most forestry and forest products employment is regionally-based, employment in these industries exceeded 5% of total employment in 11 of the 23 Tasmanian local government areas.

Tasmania has high quality native forests, producing a range of timbers suitable for almost any purpose. It has an extensive craft industry utilising a wide range of high quality timber products. It produces high quality timber veneers through the Ta Ann mills, and there are opportunities for value adding through other wood products such as plywood and pulp production.

Tasmania has also, of course, been one of the principle battlegrounds between environmentalists and the forestry industry over access to forests. The large quantity of forest in Tasmania retaining high conservation values has made Tasmania a focus for conservation efforts. The RFA process has not prevented ongoing conflict; the proposal for a pulp mill at Bell Bay has created a new battleline.

In October 2010, a historic rapprochement was begun with agreement between the industry and environmental non-government organisations on a statement of 18 principles. The thrust of these principles is the creation of a strong and sustainable timber industry based on plantation resources, with a transition away from native timber harvesting and a moratorium on the harvesting of high conservation value forests.

Reaching agreement beyond these principles has proved difficult. The devil is in the detail. When is a moratorium not a moratorium? When did it begin? To what extent do wood supply contracts override the moratorium? For a number of observers, more important questions are “why a moratorium?” or “why should we lock up a valuable resource like native forest?” It can be argued that conservation and forestry can co-exist with proper management regimes. They have in Australia in the past, and do in other parts of the world.

Nonetheless, the Tasmanian situation is a litmus test on another level. If industry and environmentalists can find a way forward there, then it can be achieved anywhere. It is a historic opportunity that should not be wasted by either side.

## THE FUTURE

Despite the problems facing the industry, there are real opportunities for the future.

In 2010, the National Association of Forest Industries articulated its vision for the future. It noted that 'Australia needs a sustainable and growing forest industry', and that 'with a growing population and growing demand for building and paper products, the forest industry is uniquely poised to assist the transition of the Australian economy to a sustainable, low emissions future.'

It further notes, however, that 'given the long lead times for investment and production of wood we need to plan now for a sustainable and growing forest industry. Otherwise we simply will not have enough locally grown wood to meet our future domestic needs. With the right policy settings, the forest industry could create thousands of new jobs and generate up to \$19 billion in new investment by 2020, while reducing carbon emissions by 80 million tonnes per year.'

NAFI has identified six priorities for action:

- Planning for the future: developing a comprehensive industry plan based on resource security and a long term assessment of community demand for forest products.
- Building resource security: including access to native forest through a renewed Regional Forest Agreements process based on updated resource assessments; and building the plantation estate by establishing an effective investment mechanism for long rotation sawlog plantations and maintaining current Managed Investment Schemes (MIS) arrangements.
- Innovation and investment: including a policy and investment focus on domestic value adding and carbon emissions abatement; and a reinvigorated R&D effort, especially into the development of plantation hardwood sawlogs and climate change mitigation.
- Developing industry skills for an innovative future, including funding for Forestworks, the Industry Skills Council.

- Improving market access through consistent environmental rating, environmental accreditation, building codes and energy rating of building products, export facilitation, effective control of illegal timber imports and anti-dumping measures.
- Identifying and developing infrastructure essential to the future of the forestry industry.

Broadly speaking, I think this is a good set of proposals for taking the industry forward.

The forestry and forest products industries have already set off down the path of reform. In March 2011, Australia's peak industry bodies, the National Association of Forest Industries (NAFI) and the Australian Plantation Products and Paper Industry Council (A3P), announced their intention to merge to form the Australian Forest Products Association (AFPA). This will give the industry a single united voice in discussion with government and the community.

### **Carbon opportunities**

The abatement of greenhouse gases is potentially one of the biggest opportunities facing the industry. Forestry can mitigate greenhouse gases in three ways: through storage of carbon in forests and in wood products; through the production of bioenergy; and through competition with other products with higher levels of embodied energy and therefore a larger carbon footprint.

Australia's total greenhouse gas emissions from power generation, transport, agriculture and other sources was over 800 million tonnes in 2007. Plantations and native forests sequestered a net 18.9 million tonnes of carbon dioxide in that year. That amount reduced national emissions by 2.2%. By deliberately using forestry as a form of carbon capture and storage we can increase this level of sequestration. Forests store carbon. Wood products store carbon. The overall level of carbon storage in mature and senescent forests is much greater than in regrowth forests, and includes carbon stored in the forest (not just the trees) and in the soil. However,

modelling has shown that where carbon sequestration in wood products is taken into account, carbon capture from forests harvested on a 35 year rotation is more than double that of unharvested forest over a period of 200 years. Thus, wood products have real potential to contribute to carbon sequestration, although, of course, the use of forests for carbon capture and storage has to be balanced against other economic and environmental values, such as the protection of native flora and fauna.

Wood not only stores carbon, the use of wood products in construction is also less energy intensive than the use of other construction materials. Wood has a lower level of embodied energy. The embodied energy of a product is all the energy used to obtain raw materials and to manufacture, package and transport the product. Energy use is closely associated with the amount of carbon dioxide emissions to the atmosphere. Different materials have widely different embodied energy. The embodied energy of timber products is much lower than that of many other materials, a fraction that of concrete, brick, aluminium or steel.

Forestry for the production of bioenergy is a controversial issue. There is some concern that the use of forest products for bioenergy production will intensify the use of forest resources. Nonetheless, there is great scope to use the waste from harvesting and milling for energy production. The technical possibilities for using forest products in the production of bioenergy are considerable. There is already use of forestry biomass for the production of energy, particularly in Europe. Indeed, it would appear that Australia has a lot to learn about bioenergy production from forest products from other nations. In Scandinavia, the use of forest products for energy production is well advanced and provides a model for Australia. We also have the example of the sugar industry in Australia. The production of biofuels, such as ethanol, from forest waste is technically feasible, as is the production of biochar. There are real opportunities for energy production from renewable forest products. Other countries have embraced them. So should we.

### **Farm Forestry**

Farm forestry is one avenue for increasing the potential for carbon sequestration, increasing the size of the plantation estate, and providing environmental services to land managers. There is significant potential to increase the uptake of farm forestry.

The main impediments are the lack of appropriate support and commercial opportunities.

In its last inquiry, the committee looked at three successful models of farm forestry.

Forestry Tasmania runs a program called 'Trees on Farms'. Trees on Farms encourages land owners to partner Forestry Tasmania in planting trees on land that would otherwise be unproductive. The program provides a timber resource to Forestry Tasmania and a revenue stream for farmers. Forestry Tasmania provides the tree growing expertise and management, the farmer provides the land, the farmer enjoys the environmental benefits of tree growing, and both share in the returns.

In the New England region of New South Wales, the Engineered Woodlands Project utilises tree plantings to provide carbon offsets, windbreaks and stock shelters, as well as a harvestable resources. Through careful design, it was possible to place a substantial proportion of a property under trees with no loss of stock carrying capacity or productivity.

In Victoria, the Otway Agroforestry Network offers an extension service focused on farmers developing forestry skills so that they can have exclusive control of the forestry resources developed on their land. The Network focuses on trees as part of the farm infrastructure, providing aesthetic value, environmental services—habitat for birds as part of integrated pest management, stock shelter and revegetation of water courses—while also providing an income stream through the production of high quality saw logs. The key to success was giving each farmer the training and tools to manage the timber on their own properties, within the context of group leadership and peer support. Farmers undertook formal training through the Master Treegrowers course, and had access to expertise and support within the network. Network cooperation meant that relatively small stands of timber could be harvested at commercial rates. The result of the Network's operation was a significant increase in tree cover without loss of productivity, and an improvement in the commercial and environmental sustainability of individual farm enterprises.

Farm forestry has gotten off to a slow start, its potential only really now being realised by many land managers, foresters and wood product manufacturers. But the

potential is there to create a flexible and adaptable resource for the production of high quality timbers for a range of commercial purposes. The government has recognised this potential through the Carbon Farming Initiative, which will enable farmers to use farm forestry to derive income from carbon markets.

### **Investment in forestry**

Carbon markets are one of the elements now falling into place as a potential driver of investment in forestry. By recognising the contribution of forestry to the carbon economy, we are placing a value on forestry which should allow it to compete for investment dollars with other parts of the economy. This represents a new phase in the development of investment strategies in forestry.

Historically, investment in forestry has been driven by government. Government investment has been vital to the development of Australia's forestry industries. In the 1960s, 70s and 80s, there was a massive expansion in the softwood plantation estate, driven by 'soft' loans from the Commonwealth to the States. This has given Australia a softwood plantation estate of around 1 million hectares, which has been stable for some time, and a high level of self-sufficiency in softwood timber. However, government investment has been in decline for some time, and it is not the way of the future.

In recent decades, the hardwood plantation estate has experienced a massive increase, largely driven by Managed Investment Schemes (MIS), providing woodchips for export. The problems experience with the managed investment schemes, particularly the collapse of Timbercorp and Great Southern, has brought this expansion nearly to a halt and has raised questions about the validity of the MIS model of investment. On the one hand, it is argued that MIS has distorted investment decisions and produced some absurd outcomes, such as the moribund plantations on Kangaroo Island. On the other hand, MIS has funded the expansion of the plantation estate and is expected to fund further expansion, but at a slower and more rational pace. Love it or hate it, however, the fundamental fact is that MIS is a legal reality and will continue to fund the plantation estate into the future.

Other potential drivers of investment are carbon credits and superannuation funds, although, at this stage, the reality is that super funds have tended to invest in

established plantations. The biggest single investment by a superannuation fund was by a Canadian company taking over the forestry assets of Great Southern. Nonetheless, super funds now account for about 13% percent of total investment in plantations.

Probably the key investment issue facing the industry is how to get money into hardwood sawlog plantations. With rotations of 30 years plus, and a focus on timbers other than those used for woodchips, making hardwood sawlog plantations attractive to investors will be difficult. Carbon credits may be part of the answer. Farm forestry may be another part of the answer. The longer term investment horizons of sawlog plantations may make them more attractive to super funds. It may be, however, that we must create a new form of investment model, similar to MIS, but more suitable to longer investment timeframes. Such a scheme is worthy of consideration because of the economic and environmental benefits of sawlog plantations. Hardwood sawlog plantations may not replace native forests as a source of sawlogs, but they will provide us with another management option in the future.

## **CONCLUSION**

Australian forestry is at a crossroads. The direction we take now will affect the industry and the nation for a generation to come. We have a strong resource base, and great potential for value adding. The future could be very bright. It is the determination of the House of Representatives Standing Committee that the future of the forestry industry will be a bright one, and we certainly hope to make a contribution in ensuring that it is so.