



SUBMISSION

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

Inquiry into the Australian forestry industry

April 2011

Executive Summary

The Victorian Association of Forest Industries (VAFI) appreciates the opportunity to provide submission to the House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry Inquiry into the Australian forestry industry.

We are pleased that this Inquiry into the forestry industry is being undertaken. Ensuring the correct policy frameworks are in place is imperative to ensuring a sustainable future for the forest industry.

We are a member of, and support the submission of, the Australian Forest Products Association.

There are a number of key areas of particular interest to the industry in Victoria; in particular, the need for resource security if forestry is to have a sustainable future in Australia. In recent decades successive governments have placed significant areas of native forest in conservation reserves without taking adequate steps to source new production resource. Without a strong policy framework to assure business that further reductions in resource will not occur, it will prove difficult to attract new investment into the industry; reducing employment in communities reliant on forestry and further exacerbating Australia's \$2 billion deficit in wood and paper products.

The issue of resource security must be dealt with before other matters of public policy, such as innovation and increased investment in value-added activities, can be addressed. However, there are a number of innovative areas within the industry that with the right framework can be used for both economic and environmental benefits. These include the use of wood residue fuelled bioenergy and timber building products to meet the Government's carbon emissions reduction target.

The industry also believes the minimal negative environmental impacts of forestry must be recognised, as do the ecological benefits it can produce. This is a requirement if the debate on the future of forestry is to move beyond the ideological and instead focus on the science and economics of the issues involved.

Summary of recommendations

1. Opportunities for and constraints upon production

- 1.1 Government should ensure that any extra forest estate reserved for conservation is balanced by creating a new resource supply: either from other native forest or plantations;
- 1.2 That the Federal Government work towards improving the monitoring of sustainability indicators areas across the public native forest estate;
- 1.3 Immediately start a process of renewing and strengthening 20 year RFAs backed by Commonwealth and state legislation, on a five year rolling basis to ensure at least 15 years of resource security;
- 1.4 That RFAs are improved as instruments to support a landscape approach to forest management, including the maintenance of values beyond wood production and incorporating forestry as a forest management tool to support other forest management goals;
- 1.5 That government work with industry to develop an effective policy to address the market failure in investment in long rotation plantations; and

- 1.6 That plantation forestry be reconfirmed an 'as-of-right crop' that must be treated equitably along with other agricultural crops.
- 1.7 Farm forestry and private native forestry are supported through reducing regulatory inconsistencies and providing information and support services for landholders interested in commercial production.

2. Opportunities for diversification, value adding and product innovation

- 2.1 Government must recognise that resource security is required if the industry is to invest in new innovations and value-adding processes;
- 2.2 Review, in partnership with industry, the level and structure of research and development funding for the forest industry, to improve overall capability and incentives for innovation and delivery of research and development;
- 2.3 Improve monitoring of sustainability indicators outside timber production areas and to support research which integrates forestry with the pursuit of other values such as fire risk mitigation, water yield management and development of renewable energy; and
- 2.4 Greater focus on planning to support investment and innovation linked with market development. The research priorities identified in the 2009 Victorian Timber Industry Strategy should be funded as a priority;

3. Environmental impacts of forestry

- 3.1 The benefits of active land management should be acknowledged by Federal Government;
- 3.2 That the Federal Government acknowledge the limited scope of forestry operations in Victoria (<0.07 percent of the Victorian public forests estate);
- 3.3 That the environmental benefits (restoring degraded land, improving water quality, carbon sequestration and erosion prevention) of timber plantations, farm forestry and native forestry should be recognised and supported;
- 3.4 Plantation forestry should be considered an 'as-of-right crop' raising activity that must be considered equitably along with other agricultural crops when addressing interception;
- 3.5 The benefits of any action taken by Government to manage the impacts of land-use change must outweigh any associated costs;
- 3.6 Any decisions concerning water interception and allocation must be based on sound evidence and science.
- 3.7 All policy on water interception should take into account issues of water quality as well as water quantity; and
- 3.8 Any inclusion of land use change to plantation forestry in a water entitlement system must take into account the differences between the physical extraction of water from the way supply system by humans and the natural interception of water by plants.

4. Creating a better business environment for forest industries

- 4.1 That MIS arrangements are maintained with enhanced safeguards to protect investors and to rebuild investor confidence;
- 4.2 The development of taxation or financial recognition of currently non-market services performed by plantations; such as a carbon trading scheme which provides carbon credits for the CO₂ storage capacity of plantation timber;
- 4.3 That the Federal Government supports the provision of training to young Australians and the re-training of older workers, to ensure the forestry industry has access to adequate levels of skilled labour;
- 4.4 That the Government continue to support vocational skills and training in the forest and wood products industries and the National Forestry Masters Program;
- 4.5 That Government takes a more holistic approach to energy efficient ratings for buildings that includes rating materials used in construction, and a 'whole-of-home' assessment that produces a much improved and fairer environmental result. This should include expanding the Energy Star Rating regulations to include the embodied energy of building materials; properly acknowledging the carbon storage potential of timber, as well as its energy efficiency as a product;
- 4.6 That the Federal Government does what it can to ensure errors in building software are corrected so as to provide builders with accurate information on the energy efficiency of the materials they are using; and
- 4.7 Government should support all credible independent third-party certification schemes and use independently certified timber and paper products where possible; and
- 4.8 Government forestry policy should focus on planning to enhance the international competitiveness and productivity of the forest and wood products industry. Policy reforms that do this may provide a multiplier effect to other policy setting adjustments, encouraging further private sector investment in the local industry.

5. Social and economic benefits of forestry production

- 5.1 That government recognise the socio-economic importance of forestry and the reliance of many communities — particularly those in rural and regional areas — when making decisions which could impact on the forestry industry.
- 5.2 That Government properly recognise and utilise the forest management capabilities of the forestry industry; including the skill, experience and local knowledge its workforce, and the comprehensive fire access infrastructure and fire-fighting equipment it maintains.

6. Potential energy production from the forestry sector

- 6.1 Government should work towards increasing the use of wood residues for bioenergy through the inclusion of native wood residues in the GreenPower accreditation program. The regulations for the National Renewable Energy Target Scheme, specifically the high value test regulations that impede the full use of forestry wood waste for green energy, should also be amended; and
- 6.2 Wood residues utilised for bioenergy should also be considered as viable candidates for any government funding for renewable energy grants and any research and development spending made in this area.

7. Land use competition between the forestry and agriculture sectors

- 7.1 Any proposed policy or other regulatory response must take into account the need for equitable and consistent treatment of timber plantations compared to other productive land uses.

The Victorian Association of Forest Industries

The Victorian Association of Forest Industries (VAFI) is the peak forestry industry body in Victoria. It was established in 1945 and represents its members' interests to governments, communities and markets. Our members include forest producers, processors and associated bodies.

The hardwood timber resource used by our members is largely derived from public forests managed sustainably by the Department of Sustainability and Environment (DSE). Parts of these forests are vested to VicForests, a state owned enterprise which is responsible for the harvest and commercial sale of timber from State forests in Victoria. Under these arrangements forest values are protected, active management of State forest occurs and sustainable timber products are made available for consumption by Victorian, Australian and global communities.

VAFI is committed to promoting an economically robust, socially responsible and environmentally sustainable forestry industry. We support and encourage best practice in industry and in forest and land management.

Overview of the Victoria's Forest Industries

Forestry in Victoria is a dynamic industry that utilises timber — a renewable, biodegradable, recyclable product — to create materials for new homes, buildings and furniture, paper for books and potentially fuel for green energy. Wood is one of the greatest natural materials to use for these and a range of other purposes. Timber has a low embodied energy — requiring far less expenditure of fuel and electricity to make available for use than steel, aluminium, plastic and concrete — and is an ongoing store of carbon. Sustainable use can help Australia reach its carbon abatement target.

Forestry also has economic benefits. A 2006 estimate counted 1,875 firms in the forest-growing and wood product industry in Victoria.¹ The industry in Victoria is a significant employer in both metropolitan and rural areas. Throughout the State the industry directly employs approximately 24,000 people, mostly in processing and manufacturing occupations dependent on Victorian-produced timber. A smaller number of workers are engaged in services to the industry, including harvest, haulage and silviculture, and growing occupations, such as commercial forest management. Around 10,000 of these jobs are located in rural and regional areas, where there are only a limited range of alternative employment options; with a number of Victorian towns highly dependent on forestry for their future sustainability. A further 1,704 people are employed in timber wholesaling and approximately 42,000 to 52,000 indirect jobs are supported by the Victorian timber industry.² The employment opportunities offered by forestry also tend to provide a higher than average level of income to a diverse range of workers; including many with lower levels of educational attainment.³ Victorian sourced timber generated approximately \$3 billion in economic value in 2007-08 and \$6.5 billion in sales and services income from the wood and paper products.⁴

This high level of economic value is generated from a relatively small land base. Within Victoria there are 424,150 hectares of timber plantations, 600,000 hectares of public native forest available for timber production (approximately 10 percent of all public native forest in Victoria) and 350,000 hectares private native forest (of which there is little data concerning timber production).⁵

The Victorian forestry industry operates according to strict regulatory controls for responsible forest management. Timber production on public land managed by VicForests, a government owned enterprise. Less than 0.07 percent of the State's public native forest estate is harvested per annum.⁶ This area is fully regenerated following operations. VicForests operations are certified to the

¹ ForestWorks (2006) *Forest and Wood Products Industry Workforce and Industry Data Collection Survey Report 2006*, National Skills Company for the Forestry and Forest Products, Furnishing and Pulp & Paper Industries Ltd and Forest and Wood Products Australia, Melbourne

² Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 1: Profile of forest industry businesses, employment and spending, and impacts of recent changes on businesses*. Report prepared by the Fenner School of Environment and Society for the Victorian Department of Primary Industries, p. 15
Available from: <http://new.dpi.vic.gov.au/forestry/research/technical-reports/part-1>

³ Dr Jacki Schirmer (2010) *Socio-economic characteristics of Victoria's forestry industries Part 2: Profile of socio-economic characteristics of forest industry workers* p. 9

⁴ Victorian Department of Primary Industries ((2009) *Timber Industry Strategy Public Consultation Draft*, Victorian Government, April; quoted from ABARE (2008) *Australian Forest and Wood Product Statistics*, March and June quarters 2008, Canberra

⁵ Victorian Department of Primary Industries (2009) *Timber Industry Strategy Public Consultation Draft*, Victorian Government, April; quoted from ABARE (2008) *Australian Forest and Wood Product Statistics*, March and June quarters 2008, Canberra; Bureau of Rural Sciences (2009) *Australia's Plantations: 2009 Inventory Update*, Department of Agriculture, Fisheries and Forestry, <http://adl.brs.gov.au/mapserv/plant/NPI2009Update.pdf>

⁶ VicForests *Sustainability Report 2009-10* p. 3 and VicForests *Sustainability Report 2008-09* p. 7

Australian Forestry Standard.⁷ Approximately 86 percent of the total plantation area in Victoria is certified under the Australian Forestry Standard, the Forest Stewardship Council, or both.⁸

⁷ The Australian Forestry Standard and the Forest Stewardship Council are two independent, internationally recognised schemes for the certification of responsible forest management which are available in Australia.

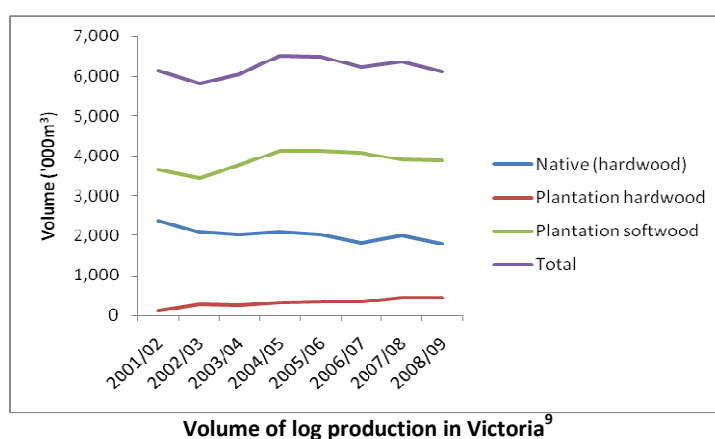
⁸ Victoria has approximately 422,112 hectares of softwood and hardwood plantations. Approximately 361,930 hectares are certified to AFS and/or FSC. www.forestrystandard.org.au and www.fscaustralia.org, accessed 17 April 2009

Opportunities for and constraints upon production

There is no shortage of demand for timber and paper products in Australia. In fact, they are more popular than ever. However, despite this timber production in Victoria is declining. The greatest impediment to increased investment into the forest and wood products industries in Australia is resource supply. If they are to have a sustainable future, the forest resource as a base for domestic production needs to be secured, it must grow and it must be diversified; and constraints of supply must also be addressed if the industry is to be seen as a secure sector of the economy for private sector investment.

Due to a range of factors, total log production has declined in recent years in Victoria. However, the value of log production has increased. In the 2008/09 financial year, a total of 6.1 million cubic metres of logs were harvested, with a gross value (at the sawmill door) of \$400 million. As the figure below shows, the volume of timber harvested from native forests has declined between 2001/02 and 2008/09. However, there has been an increase in log production from plantations (softwood and hardwood).

This indicates there is greater diversity in the resource base, though it should be noted the increase in production from hardwood plantations is from short-rotation pulp logs, whereas there has been a decline in hardwood sawlogs from native forest. The result of this being that public native forests now only produce approximately 30 percent of the resource, with plantations making up a larger share. However, it must be noted that the products produced by these different resources are not the same. To ensure the Australian forest and timber products industries have access to high-grade sawlog a secure, diverse and growing resource base must be established.



Government must work with industry to reduce sovereign risk and increase resource security. Markets should be allowed to work where they are efficient, and government policy should be aimed at addressing market failures and reducing regulatory inconsistencies where they exist, while seeking to minimise actions that create sovereign risk. This can be done by strengthening Regional Forest Agreements (RFAs) to ensure they are seen as a strong guarantee for resource security and effective forest management, and the proper maintenance and monitoring of conservation reserves; with efforts made to replace any resource lost to new reserves with an alternative supply.

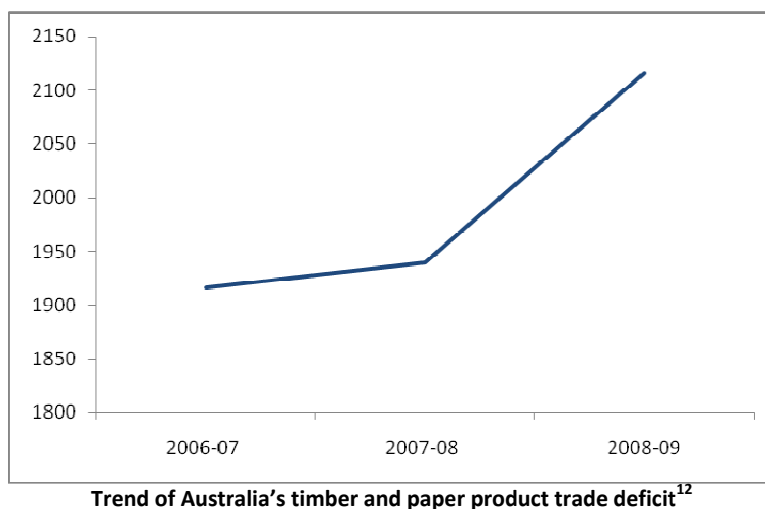
⁹ ABARE (2010) Australian forest and wood products statistics, September and December quarters 2009, Canberra, May

Reduction in native forest resource supply

There is no shortage of demand for timber and paper products in Australia. In fact, they are more popular than ever. However, despite this — and despite the fact that Australia is the seventh most forested nation on Earth — Australia is consistently running a trade deficit in wood and paper products of approximately \$2 billion per year.¹⁰

| Country | Million hectares |
|----------------------------------|-------------------------|
| Russian Federation | 809 |
| Brazil | 520 |
| Canada | 310 |
| United States of America | 304 |
| China | 207 |
| Democratic Republic of the Congo | 154 |
| Australia | 149 |
| Indonesia | 94 |
| Sudan | 70 |
| India | 68 |
| Others | 347 |

Forest coverage by country¹¹



Sovereign risk has become one of the greatest threats to the future of forestry in Australia. Forestry and forest product processing is a long term business with commitments for investment and business planning required for decades. Key to the development of the industry is secure long-term access to available wood supplies from Australia's well-managed native forests and plantations.

Throughout Australia between 1998 and 2008 formal nature conservation reserves grew from 17.6 million hectares of public native forest to 23 million hectares.¹³ In 2005-06 only 9.4 million hectares

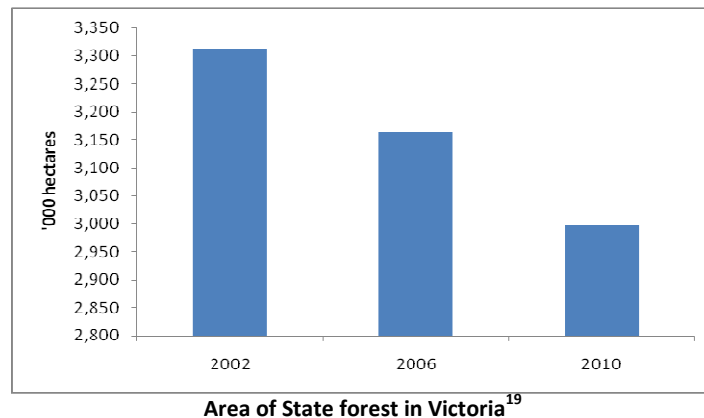
¹⁰ FAO Forestry Paper 163 *Global Forest Resources Assessment 2010 Main Report* p. 13

¹¹ FAO Forestry Paper 163 *Global Forest Resources Assessment 2010 Main Report* p. 13

¹² ABARES (2009) *Australian forest and wood products statistics September and December quarters 2009* pp. 34-5

¹³ Montreal Process Implementation Group for Australia, 2008. *Australia's State of the Forests Report 2008*. Bureau of Rural Sciences, Canberra p. 21

were available for in multiple use public forest.¹⁴ In Victoria between 2001/02 and 2005/06 the area of native forest held in nature conservation reserves increased by 221,000 hectares.¹⁵ Another approximately 154,110 hectares of public land was transferred into the formal reserve system following a 2006 election policy proposal by the Victorian Government.¹⁶ ¹⁷ Conservation reserves now account for more than half of Victoria’s public native forest estate. Concurrently, the area available for timber production in public native forests has decreased due to parts of State forests being transferred to conservation reserves or affected by bushfires. Timber production is now limited to 730,000 hectares, or 11 percent percent, of Victoria’s public native forests.¹⁸



During this period there has also been an increasing divide between actively managed and monitored parts of State forest available for timber production and forest in reserves. The conversation has been based on conservation through reservation rather than through improving forest management (including through integrated and active management approaches) and demonstrating outcomes from management. Commercial timber production in public native forests offsets the cost of forest management and contributes to fire management as well as other goals. Victoria has suffered a lack of monitoring and reporting of forest values in parts of its reserve system and historically a lack of prescribed burning to support fire management. An integrated and active management approach is required along with improved management and accountability.

The Independent Review on the RFAs found there has been a lack of monitoring and reporting of environmental performance across the public forest estate, including for biodiversity outcomes; and that reserves have been created outside obligations in the RFAs and commitments to support industry development have not been met, particularly in the North East and West Victoria RFA regions.²⁰ These changes to the resource available to industry have increased sovereign risk and decreased investor confidence.

¹⁴ Montreal Process Implementation Group for Australia, 2008. *Australia’s State of the Forests Report 2008*. Bureau of Rural Sciences, Canberra p. 54

¹⁵ Department of Sustainability and Environment (2009) State of the Forests Report 2008, www.dse.vic.gov.au

¹⁶ Australian Labor Party – Victoria (2006) ‘Victoria’s National Parks and Biodiversity’, Policy for the 2006 Victorian Election.

¹⁷ This includes 41,000 hectares specified in the policy for the Goolengook Block, the Great Alpine National Park and forest in East Gippsland as well as 94,710 hectares of expanded Red Gum National Parks and 18,400 hectares for Cobobboonee National Park, which were not specified in hectares in the Policy but which have since been implemented.

¹⁸ Department of Primary Industries (2009) 2009 Victoria’s Timber Industry Strategy, www.dpi.vic.gov.au

¹⁹ DSE (2003) Victoria’s State of the Forests Report 2003, www.dse.vic.gov.au; DSE (2009) Victoria’s State of the Forests Report 2008. 2010 Figure includes the reservation of 45,000 hectares of State forest in East Gippsland (2010); 94,620 hectares of red gum State Forest along the Murray River (2009); and 27,000 hectares of State forest for the Cobobboonee National Park (2008).

²⁰ *Independent Review on Progress with Implentation of the Victorian Regional Forest Agreements: Final Report May 2010* p. 45

The importance of Regional Forest Agreements (RFAs)

Regional Forest Agreements evolved from a decade long process of review, consultation and negotiation. They embraced sustainable development and environmental conservation as interdependent processes. The key to the RFAs was sound science and public consultation. They also provided for ongoing research and adaptive management. A system of permanent and transitory reserves allow for flexibility in management as values change, while maintaining net areas of multi-use forest and conservation reserves.

The Agreements created a very high level of conservation of native forests by global standards and improved the security, management standards and scientific basis for forest management. VAFI believes they are a model for regionally-based, integrated natural resource management.

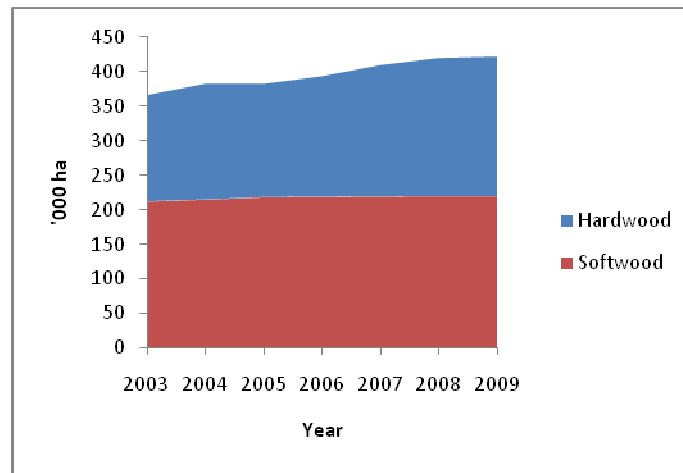
With expensive capital outlays required, decades long commitments for investment and business planning in the forestry industry are standard. For the industry to survive, let alone prosper, it requires secure, long-term access to resources; from both sustainably managed native forests and plantations; and a conducive policy framework. Therefore, a key objective of the RFAs was also to create resource security and certainty for the growth of internationally-competitive forest-based industries, and thereby employment and socioeconomic benefits for communities. In this, they have not been entirely successful.

VAFI believes RFAs can be an important component of responsible and adaptive management and conservation of Australia's forests. They were based on a rigorous framework to protect environmental values. However, until they are seen and implemented as a strong guarantee for resource security and supporting of effective forest management, there will be an under-investment in forestry in Australia.

We also believe sustainable forestry should be seen as part of a set of forest management tools within which the RFA system that can achieve broader land management values beyond just wood production. Through its commercial operations, timber production contributes to the financial resources available for managing public native forests and provides experienced personnel and equipment to manage fires. This capability should be utilised to ensure all values of our forests, including conservation values, are fully realised.

Plantation development

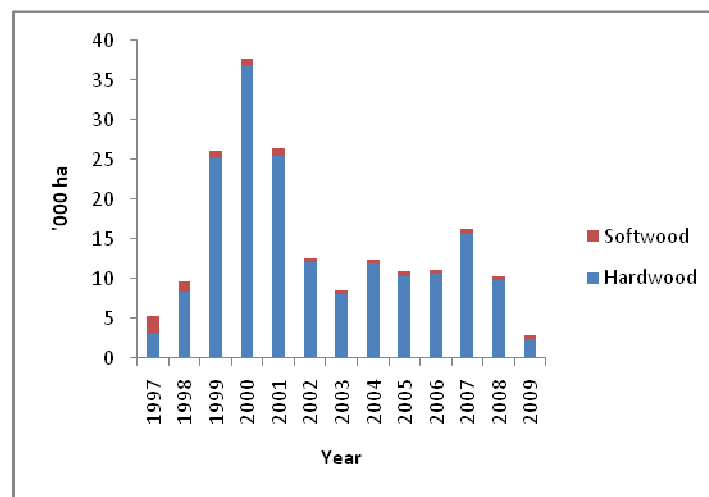
Australia's plantation industry plays a critical role in the provision of timber and fibre to our economy and overseas economies. However, due to the long term nature of plantation investment, the establishment of the resource has often required government assistance and regulatory arrangements that recognise the time and scale issues associated with plantations.



Hardwood and softwood plantation area in Victoria²¹

Despite strong demand for sawn timber and a favourable outlook for the main markets in new housing and building, Australia has not established any significant area of new long rotation sawlog plantations since the early 1990s. The reason is primarily the low rate of return on investment for longer rotations of typically 25 to 40 years. Poor profitability is attributed to the high initial costs of acquiring land and establishing the plantation, which has a significant opportunity cost of capital for a period of time until the investment matures.

As can be seen in the chart below, the rate of new plantation development in Victoria has slowed in recent years after a period of rapid expansion in the late 1990s and early 2000s. The development of softwood has remained low during this entire period. If the local industry is to rely on a greater use of plantation timber in the future, then this decline will need to be arrested and reversed shortly.



Plantation establishment in Victoria²²

Direct mechanisms that address the high up-front costs and cash flow issues of long rotation investments may well be justified in terms of their broader landscape and environmental benefits, such as carbon sequestration and regional employment.²³ Further work in this area is essential to foster long term strategic investment in plantation development in Australia.

²¹ ABARE (2010) Australian forest and wood products statistics, September and December quarters 2009, Canberra, May

²² ABARE (2010) Australian forest and wood products statistics, September and December quarters 2009, Canberra, May

²³ Forest and Wood Products Australia (2011). *Review of Policies and Investment Models to support continued Plantation Investment in Australia*. Report prepared by de Fegely R, Stephens M and Hansard A, Project PRA189-1011, March.

It is important to recognise that future plantation expansion or rationalisation of the existing estate will involve private farm land. This will require improved relationships and approaches between the agricultural and forestry industries to achieve an appropriate mix of industrial scale and small farm plantings.

For example, if designed appropriately and with the correct policy framework, commercial plantations could be combined with other environmental plantings and play a positive role in the reforestation of the Australian landscape.

This approach recognises that the additional costs to plantation investors need to be recouped. Hence the further development of markets for these services should be developed in conjunction with the commercial plantation sector that can leverage private capital with public funds for such purposes.

Private native forests and farm forestry

There is approximately one million hectares of native forest across Victoria located on privately owned land. It is estimated that of this, around 350,000 hectares might be potentially available and suitable for commercial timber production. However, this is not certain as relatively little is known about the composition of these forests; and therefore privately owned native forests are currently not widely used for timber production.

The management and use of private native forests is governed by Government regulation to protect remnant vegetation and biodiversity and ensure responsible use. This includes compliance with the Code of Practice for Timber Production.

There are also approximately 12,000 hectares of small-scale farm forestry timber plantations owned by approximately 1,000 individual landholders in Victoria.

Besides regulation protecting environmental values of these forests, there is little government interest in this potentially important sector in Victoria beyond the local government level. Because of the generally local nature of regulations impacting on farm forestry and native forests on private land, these suffer from the lack of a consistent policy framework. Farm and private native forestry can be supported through the reduction of regulatory inconsistencies and the provision of information and support services for landholders interested in investing in commercial production. Many policy reforms that benefit larger plantations will also encourage the investment in new smaller-scale farm forests.

Recommendations

- 1.1 Government should ensure that any extra forest estate reserved for conservation is balanced by creating a new resource supply: either from other native forest or plantations;
- 1.2 That the Federal Government work towards improving the monitoring of sustainability indicators areas across the public native forest estate;
- 1.3 Immediately start a process of renewing and strengthening 20 year RFAs backed by Commonwealth and state legislation, on a five year rolling basis to ensure at least 15 years of resource security;

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Opportunities for diversification, value-adding and product innovation

The importance of diversification and value-adding

Diversification is vital for a sustainable forestry industry. However, in order to attract the investment required to build the capacity to diversify operations further, a secure resource base is required. Currently, the resource security is not available to the level required to encourage an adequate level of investment capital.

However, it would be wrong to characterise the industry as limited to growing and harvesting operations. Forestry industries are diverse and in many cases dynamic. There are a large number of downstream operators, with 63 percent of all jobs in Victoria's forest industries in the secondary processing of timber products.²⁴ These are effectively manufacturing jobs, requiring high levels of vocational skill to utilise sophisticated equipment. There are a number of innovative uses for Australia's native and plantation timber resource. This includes manufacturing high grade paper in state of the art mills, as well as a green and renewable energy resource that can power bioenergy plants and provide heating for Australian homes.

Although there are many opportunities for growth in Australian forestry, this is hampered by a lack of resource security which deters new investors from entering the market, or in some cases current operators reinvesting in existing businesses.

Research and development

Research and development (R&D) is critical if the innovation required to power the value-adding operations, productivity gains and international competitiveness of the forest industry into the future.

Since the 1981-82 financial year, the level of funding for forestry related R&D has declined in real terms by just under one percent.²⁵ With resource availability from both native forests and plantations likely to decline in the near future, research into improving the quantity and quality of wood resources and value added processing will continue to be a high priority. It is also important that research and policy development for climate change mitigation and adaptation are integrated for forest management. Research properly accessing the carbon benefits of forestry and forest products would benefit the industry, and Australia's efforts to reduce carbon emissions.

VAFI believes research priorities identified in the 2009 Victorian Timber Industry Strategy should be funded as a priority. We also believe there is greater scope to improve monitoring of sustainability indicators outside timber production areas and to support research which integrates forestry with the pursuit of other values such as fire risk mitigation, water yield management and development of renewable energy.

²⁴ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 1: Profile of forest industry businesses, employment and spending, and impacts of recent changes on businesses*. pp. 15-6

²⁵ National Association of Forest Industries (2011) submission to the House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry Inquiry into the Australian forestry industry.

Recommendations:

- 2.1 Government must recognise that resource security is required if the industry is to invest in new innovations and value-adding processes;
- 2.2 Review, in partnership with industry, the level and structure of research and development funding for the forest industry, to improve overall capability and incentives for innovation and delivery of research and development;
- 2.3 Improve monitoring of sustainability indicators outside timber production areas and to support research which integrates forestry with the pursuit of other values such as fire risk mitigation, water yield management and development of renewable energy; and
- 2.4 Greater focus on planning to support investment and innovation linked with market development. The research priorities identified in the 2009 Victorian Timber Industry Strategy should be funded as a priority;

Environmental impacts of forestry

The benefits of active management

Besides being used to manage economic values of our environment, forestry can also be used as a land management tool to maintain ecological values.

As mentioned above, between 1998 and 2008 formal nature conservation reserves grew from 17.6 million hectares of public native forest to 23 million hectares.²⁶ The majority of these national parks are located in RFA regions and are adjacent to production forests, bush communities and farmers.

It has been argued that ‘passive management of nature reserves in Australia has failed to maintain healthy ecosystems’,²⁷ with ‘conservation management currently [seeming] to be directed mainly towards designating reserves rather than physically conserving forest ecosystems and maintaining their health. Forest health decline and increasing fire control problems are two facets of a problem arising from passive management philosophies.’ Forest and woodland thickening is occurring in many parts of these conservation areas, where inadequate human intervention is applied to manage fuel loads and ecosystems.

Overstocked forests and woodlands, where trees and shrubs crowd the forest structure, are recognised as not reflecting the pre-European landscape, which was shaped by indigenous use of fire. Not only is the vegetation thickening effect a severe fire risk, it also does not meet society’s biodiversity expectations in the maintenance of natural environment

Active and adaptive forest management across all land tenures is required to reduce fire risk and maintain forest health. The Australian National University is currently researching environmental thinning practices for application to native forest areas in negating vegetation thickening for biological conservation purposes.²⁸ Selective thinning can also be used to increase water flow in catchment areas. VAFI supports the use of forestry as a land management tool to undertake non-commercial operations, such as ecological thinning, to maintain environmental values.

The scope of native forestry in Victoria

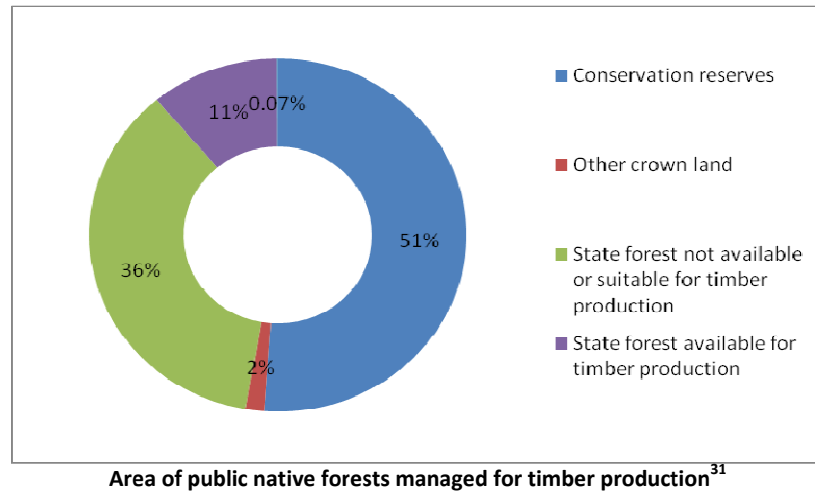
Forests are dynamic systems and the benefit accrued by neglecting them in an attempt at conservation should not be overstated. In some cases it can lead to problems with introduced species and increased fire risk; defeating the initial purposes of the reserve. Active management — coupled with threatened species conservation — can and should be used to support environmental outcomes. Forestry is one such management tool. This is appropriate, as timber harvesting on public land is highly regulated and increasingly well managed, with the conservation of environmental values being a key priority in all operations.

²⁶ Montreal Process Implementation Group for Australia, 2008. *Australia’s State of the Forests Report 2008*. Bureau of Rural Sciences, Canberra p. 21

²⁷ Jurkis, V. (2005) ‘Decline of eucalypt forests as a consequence of unnatural fire regimes’, *Australian Forestry*, 68(4), 257-262

²⁸ McIntosh G. (2007) *Ecological thinning: A long-term strategy for forested water catchments and managed reserves*. Department of Forest and Ecosystem Science, University of Melbourne

In the 2008/09 financial year, VicForests harvested approximately 5,500 hectares of public native forest; less than 0.07 percent of the almost eight million hectares of public forest estate in Victoria.²⁹ This is generated from a relatively small land base, with timber production confined to approximately nine percent of all public native forest in Victoria. That is, about 91 percent of the State's public native forest is located in conservation reserves and is generally not available for commercial timber production.³⁰



VicForests also undertakes a rigorous regeneration program using seeds local to the region. These efforts are regularly monitored to ensure all tree species present before harvesting return. VicForests does not return the land to the DSE until certain strict standards are passed.

In the 2008/09 financial year, Vicforests returned more than 5,400 hectares of forest to DSE following successful regeneration.³² This was followed by VicForests' largest ever regeneration program, which re-seeded more native forest in 2009/10 than was harvested during that financial year. Figures from VicForests show that more than 300 million seeds were sown that year,³³ covering 5,300 hectares of harvested forest.³⁴ This was the result of more than \$6 million spent on regeneration in 2010.³⁵

The greatest threat to environmental values in public native forests is not forestry, but fire. The 2002-03, 2006-7 and 2009 fires between them burnt nearly three million hectares; at current rates it would take the industry nearly 500 hundred years to harvest an area of this magnitude. Besides being of incomparable magnitudes, it should be noted many large scale fires burn at such an intense heat few of the environmental benefits of lower-intensity fires exist; topsoil can be destroyed and the loss of fauna as well as flora can be widespread.

²⁹ VicForests *Sustainability Report 2009-10* p. 3 and VicForests *Sustainability Report 2008-09* p. 7

³⁰ Victorian Department of Primary Industries (2009) *Timber Industry Strategy Public Consultation Draft*, Victorian Government, April; quoted from ABARE (2008) *Australian Forest and Wood Product Statistics*, March and June quarters 2008, Canberra; Bureau of Rural Sciences (2009) *Australia's Plantations: 2009 Inventory Update*, Department of Agriculture, Fisheries and Forestry, <http://adl.brs.gov.au/mapserv/plant/NPI2009Update.pdf>

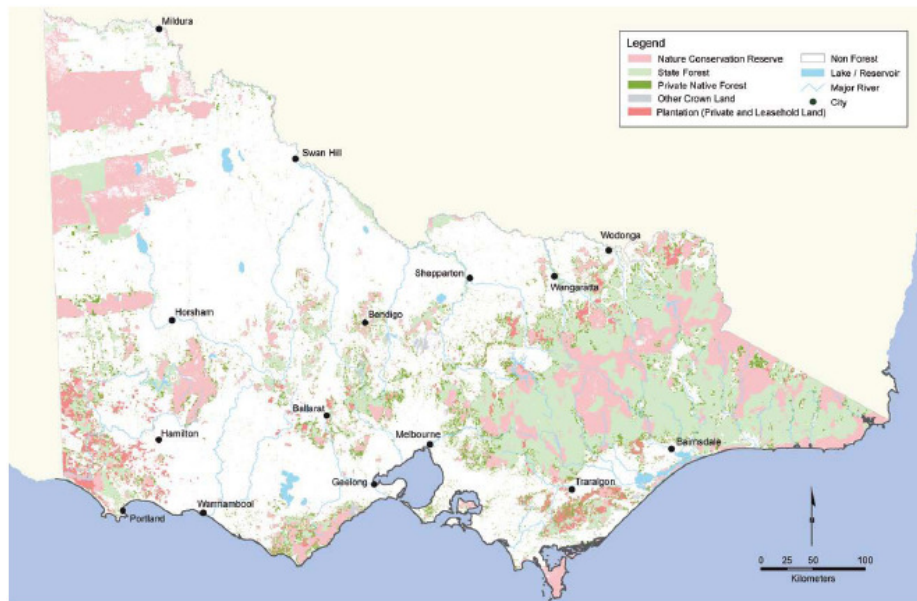
³¹ Department of Sustainability and Environment (2009) *State of the Forests Report 2008*, www.dse.vic.gov.au; Department of Primary Industries (2009) *2009 Victoria's Timber Industry Strategy*, www.dpi.vic.gov.au; VicForests (2009) *VicForests Sustainability Report 2009*, www.vicforests.com.au

³² VicForests *Sustainability Report 2009-10* p. 4

³³ VicForests *Sustainability Report 2009-10* p. 4

³⁴ Vicforests media release, *Report highlights sustainability* 15 December 2010

³⁵ VicForests media release, *VicForests regenerates for future generations* 15 July 2010



Victoria's forest estate³⁶

As mentioned above, forestry is highly regulated in Victoria. The Sustainable Forests (Timber) Act 2004 also requires VicForests, to operate according to the principles of ecologically sustainable development, including the obligation 'to protect biological diversity and maintain essential ecological processes and life-support systems.'³⁷ Its operations have also been certified to the Australian Forestry Standard (AFS), which is endorsed by the global Programme for the Endorsement of Forest Certification (PEFC); the world's largest independent certification system.

Plantations

The Victorian plantation estate is privately owned by timber companies, managed investment schemes, superannuation funds or other private individuals and entities.

There are 424,150 hectares of timber plantations in Victoria; 21 percent of the plantation area in Australia. This includes 202,703 hectares of hardwood plantations, composed of predominantly fast-growing native hardwood eucalypt species, such as blue gum, shining gum and sugar gum; 220,009 hectares of softwood plantations, composed predominantly of radiata pine; and 1,438 hectares of other categories, including mixed plantations.³⁸ These plantations must comply with the Victorian Code of Practice for Timber Production.

Timber plantations can provide a range of environmental benefits, including restoring degraded land, improving water quality, carbon sequestration and erosion prevention. As detailed below, the impact of plantation forests on water resources is often minimal; with plantations often developed on traditionally forested sites.

Private native forests

³⁶ Department of Sustainability and Environment (2009) State of the Forests Report 2008, www.dse.vic.gov.au

³⁷ Available from: http://www.austlii.edu.au/au/legis/vic/consol_act/sfa2004289/.

³⁸ Bureau of Rural Sciences (2010) Australia's Plantations – 2010 Inventory Update, Department of Agriculture, Fisheries and Forestry, http://adl.brs.gov.au/data/warehouse/pe_brs90000004201/NPlupdate2010_20100525_ap14.pdf

There is approximately one million hectares of native forest across Victoria located on privately owned land. It is estimated that of this, around 350,000 hectares might be potentially available and suitable for commercial timber production. However, this is not certain as relatively little is known about the composition of these forests; and therefore privately owned native forests are currently not widely used for timber production.

The management and use of private native forests is governed by regulation to protect remnant vegetation and biodiversity and ensure responsible use, including compliance with the Code of Practice for Timber Production.

Impact of forestry on water resources

Effective water management has been a priority in Victoria and Australia, given the recent drought and the importance of water to the environment, agriculture and industrial production and towns and communities.

The impact of timber production occurring in public native forests in Melbourne's water catchments also has only a minimal impact on water resources; being both highly regulated and limited in scope. The harvesting of native timber is entirely prohibited in approximately 88 percent of the catchments, with a maximum of 340 hectares being harvested per year. An average of 265 hectares has actually been harvested per annum over the past 20 years; less than 0.17 percent of the catchment area per annum.³⁹ Projections for the next 50 years show that the harvested area will decline to around 220 hectares per year by 2030 and then further decline to approximately 130 hectares per year thereafter.⁴⁰

However, despite its small scale, timber harvesting in Melbourne's water supply catchments produces some of the highest quality timber in Victoria that can be obtained from few other sources in Victoria; providing approximately 200,000 cubic metres (m³) of log volume annually and comprising roughly 15 percent of the estimated annual sustainable yield for native forest timber production in Victoria.

According to the research, the most significant threats to water yield in the water catchments of our urban areas is not forestry, but climate change and fire.⁴¹ The 2009 bushfires, for instance, impacted on approximately 30 percent of Melbourne's water catchments; including but not limited to 75 percent of the Maroondah catchment, 93 percent of the O'Shannassy catchment and 100 percent of Armstrong Creek.⁴²

Over the next 250 years moderate climate change is predicted to decrease the average annual water yield by 27.2 percent in the Thomson catchment and by 33.1 percent in Armstrong Creek (Main).⁴³ An extreme bushfire event is predicted to decrease average annual water yield by 22 percent in the Thomson catchment and 26 percent in Armstrong Creek over the same period.⁴⁴

³⁹ Department of Sustainability and Environment (2008) Harvesting in water catchments – managing resources sustainably,

⁴⁰ MBAC (2008) Feasibility of plantations substituting for timber currently harvested from Melbourne's water catchments – Part 2: Markets, supply, land and water, Report prepared for the Department of Sustainability and Environment, http://www.ourwater.vic.gov.au/_data/assets/pdf_file/0015/12714/TimberSubstitutionPart2.pdf

⁴¹ Department of Sustainability and Environment (2008) Research Results for the 'Wood and Water' project, DSE, http://www.ourwater.vic.gov.au/_data/assets/pdf_file/0018/12744/Summary_of_Research_Results.pdf

⁴² http://www.melbournewater.com.au/content/water_storages/bushfires_in_catchments/catchment_impact_table.asp, accessed 21/08/09

⁴³ Moderate climate change is defined as a 7.1% reduction in rainfall and a 1.5 degree increase in temperature.

⁴⁴ One hundred percent tree mortality.

Timber harvesting is subject to strict controls to protect water supply and Melbourne's water quality is not compromised by the very small amount of timber harvesting in catchment areas. All timber harvesting is conducted in accordance with the Code of Practice for Timber Production (Revision No. 3, 2007). The Code outlines operational requirements to manage the potential impacts of timber harvesting on water quality, including buffer strips and filter strips to protect waterways and controls on roads, tracks and log landings. Compliance with the Code is independently and publicly audited annually under the Environment Protection Authority framework.⁴⁵

The timber industry can also play a constructive role in managing forests in water catchments not just in mitigating the risks from fire but also minimising the impacts of fire on water yield over time.⁴⁶ Water flows can also be improved through forest management techniques, such as ecological thinning.

Plantation forestry is often a minor land use at a regional and catchment scale. However, land use change can impact on water yield and the current water accounting framework is incomplete and does not include water use from interception.

It is important that plantations are treated equitably along with other agricultural land uses, as an 'as-of-right crop' raising activity, and that future rotations are recognised as a continuation not a change in land use. Policies to address interception must include all new land use change and land users. Technical and policy decisions must be based on evidence and sound repeatable science, taking into account appropriate baselines and the scale as well as intensity of the impact of land use change on water resources. For example, a large proportion of the plantation estate in the Murray-Darling Basin has been established on ex-native forest sites and not on land previously cleared for agricultural use. As such, plantations represent a land use consistent with the former vegetation type and impact on catchment hydrology.

Recommendations:

- 3.1 The benefits of active land management should be acknowledged by Federal Government;
- 3.2 That the Federal Government acknowledge the limited scope of forestry operations in Victoria (<0.07 percent of the Victorian public forests estate);
- 3.3 That the environmental benefits (restoring degraded land, improving water quality, carbon sequestration and erosion prevention) of timber plantations, farm forestry and native forestry should be recognised and supported;
- 3.4 Plantation forestry should be considered an 'as-of-right crop' raising activity that must be considered equitably along with other agricultural crops when addressing interception;
- 3.5 The benefits of any action taken by Government to manage the impacts of land-use change must outweigh any associated costs;
- 3.6 Any decisions concerning water interception and allocation must be based on sound evidence and science.
- 3.7 All policy on water interception should take into account issues of water quality as well as water quantity; and

⁴⁵ For more information, go to: <http://www.epa.vic.gov.au/envaudit/forestry.asp>

⁴⁶ Batini, Bradshaw and Underwood (2007) Managing forested catchments for water, timber and biodiversity, Proceedings of the 2007 IFA and NZIF Conference, Coffs Harbour, pp. 60-65

- 3.8 Any inclusion of land use change to plantation forestry in a water entitlement system must take into account the differences between the physical extraction of water from the way supply system by humans and the natural interception of water by plants.

Creating a better business environment for forest industries

Resource security

The goal of any Government forestry policy should be the development of a competitive and innovative local industry. The most effective way of doing this would be to address issues of sovereign risk and uncertainty over resource supply.

As mentioned above, a key inhibitor of investment in forestry is the lack of resource security created in part by past government actions. Policies that restrict access to resource from native forests or threaten the development of new plantations make forestry a less attractive option for investors. To mitigate the perceived risk of investment, government must provide a policy framework which offers a reasonable level of security and provide a level of guarantee that changes will not be made to this framework which will impact on investments.

Policy settings to grow the industry

There are a number of policy settings that can support increased investment in forestry. These should follow some key guidelines, such as having strong industry and community support, transparency and strong levels of industry-government collaboration.

Currently Australian forestry faces a supply/demand contradiction. There is substantial demand for timber and paper products, but due in part to past government policies there is insufficient supply of resource. Arguably the most effective way to grow the resource supply is to facilitate the development of new plantations. VAFI believes there are a number of justifications for government facilitation of plantation development. The most compelling reasons being the long-term investment required for plantations (minimum 12 years for pulpwood and 35 years sawnlog) and the difficulty of traditional markets to capture the public good benefits of plantations, such as soil and salinity amelioration, carbon sequestration, water quality improvement, landscape protection and biodiversity benefits. Plantation development may also help achieve other government policy goals, such as facilitating regional development and climate change mitigation.

In the past Australia has been able to encourage significant private sector investment into plantation development through the use of special taxation arrangements for Managed Investment Schemes (MIS). Although initially successful in encouraging the development of a significant hardwood pulpwood resource, the financial collapse of many MIS companies has damaged investor, industry and community confidence.

VAFI supports the use of MIS as an ongoing mechanism for attracting investor funds and appreciates the Government's current actions to strengthen MIS related regulations. If successful, these will help rebuild confidence in short-rotation pulpwood plantations as an attractive investment option. However, it is unlikely they will play a significant role in attracting investment into long-rotation plantation development.

If it is accepted there is a broad public benefit to having a sufficient long-rotation plantations to supply domestic demand, a policy framework will need to be developed that addresses the high up-front costs and short to medium term cash flow issues involved in such investments.

According to a report prepared for Forest & Wood Products Australia it is claimed there are broad public benefits and strategic national objectives obtained by developing plantation resources. These include:

- Development of renewable resources;
- Meeting future demand and supporting regional economic growth and stability, and
- Reforestation of the landscape.⁴⁷

VAFI supports these conclusions.

The recognition of currently non-market services performed by plantations — such as the above mentioned carbon sequestration, and soil and salinity amelioration — may be one mechanism through which government could potentially increase investor interest in long-rotation plantation development; providing an ongoing source of revenue prior to harvest.

Skills and training

Sixty-three percent of all jobs in Victoria's forest industries are in the secondary processing of timber products.⁴⁸ These are effectively manufacturing jobs; requiring high levels of vocational skill and utilise sophisticated equipment to produce building materials and other products used by all Australians.

These employment opportunities (as outlined below) often provided better pay and greater job security for workers with lower than average levels of education. With ongoing issues facing all industries in attracting adequately trained and experienced personnel, ensuring there is a workforce available with the required skills is essential if we are to provide a sustainable future for the forestry industry. VAFI encourages any efforts the Federal Government can make to support the provision of training of young Australians and the re-training of older workers; to ensure industry has access to adequate levels of skilled labour and that all Australian's have the ability to pursue fulfilling careers.

In particular, our Association supports any efforts the Federal Government can make to provide assistance and support to increase the percentage of the forestry workforce with tertiary qualifications. In particular, professional foresters with a Masters degree in Forestry are invaluable to the industry. The National Forestry Masters Program provides graduate students with access to high quality teaching, field and industry experience; as well as research opportunities in forestry. Foresters with this level of training are integral to the proper management of native forests for both conservation purposes and sustainable production, the development of innovative forms of forestry and forest industries, the provision of assistance to farmers diversifying their income, and the management and restoration of forested landscapes. Government should do what is within its power to ensure that those Australian's with an interest in forestry are able to pursue this level of qualification if they wish, so as to provide the industry with the trained staff it requires in order to manage the forests it works with in a scientific and ecologically sustainable way.

⁴⁷ Rob de Fégely, Michael Stephens and Allan Hansard (2011). *Review of Policies and Investment Models to support continued Plantation Investment in Australia*. Prepared for Forest & Wood Products Australia p. 39

⁴⁸ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 1: Profile of forest industry businesses, employment and spending, and impacts of recent changes on businesses*. pp. 15-6

Market access

Timber and paper products are some of the most environmentally friendly available. Wood is natural, organic and non-toxic; re-usable, recyclable and bio-degradable. It has been estimated that up to 70 percent of carbon in commercial logs remains in long-term storage; in products in use, in landfill, or through avoided fossil-fuel use. One example where this can have a significant impact is in construction. A standard timber framed home stores 7.5 tonnes of carbon whilst steel framed home emits 2.9 tonnes of carbon (see chart below from *Australia's State of the Forests Report 2008*).⁴⁹

Table 80: Emission and storage of carbon in the manufacture of building materials (kg/m³)

| Building material | Carbon released in manufacture | Carbon stored in product | Net carbon released |
|-----------------------|--------------------------------|--------------------------|---------------------|
| Treated timber | 22 | 250 | -228 ^a |
| Glue-laminated timber | 82 | 250 | -168 ^a |
| Structural steel | 8,132 | 15 | 8,117 |
| Reinforced concrete | 182 | 0 ^b | 182 |
| Aluminium | 6,325 | 0 | 6,325 |

- a A negative value means carbon is stored for the life of the building.
 b There is a tiny amount of carbon in the steel reinforcement. The long-term uptake of atmospheric carbon dioxide by concrete (carbonisation) is normally not considered: coatings and other means are usually applied to prevent carbonisation, as it can lead to the corrosion of the reinforcing steel.

Source: Buchanan and Honey (1994)

Table 81: Comparison of material use and effect on carbon storage for a typical 180m² house

| | Wood-framed house | Steel-framed house |
|---|---------------------------|--------------------------|
| Frame only | 13 m ³ of wood | 5 t of steel |
| Total house | 21 m ³ of wood | 8 m ³ of wood |
| Total carbon stored (t) | 9.7 | 3.7 |
| Total carbon released to the atmosphere (t) | 2.2 | 6.6 |
| Balance of carbon – tonnes stored (+) or released to the atmosphere (-) | +7.5 | -2.9 |

Note for Tables 80 and 81: New information is expected during 2008 from a life cycle inventory project on wood and wood products.

Source: Turner (1990)

However, these benefits are not acknowledged by Government Five Star Energy Efficiency regulations (Six Star from 1 May 2011). The current regulations assess only energy used in part of the operational phase of the home, with the embodied impact of the materials the home is constructed from ignored.

A further problem is that the software currently used to measure energy efficiency ratings in home design still contains errors in the sub-floor modelling algorithms. These give timber a lower result than they should. These errors need to be fixed as they harm the timber industry, provide false information to builders and have perverse environmental outcomes.

Recognising the environmental benefits of timber for building both homes and commercial structures is important, due to the large scale of the building industry in Australia. In August 2010, Home Industry Association (HIA) projections found 1.92 million new dwellings would be required in Australia over the coming decade; 420,000 more than was built over the previous one.⁵⁰ Due to the carbon emission reductions that can be gained through an effective use of timber, it would appear that its use should be maximised to offset the environmental impact of the large-scale building program to house Australia's growing population.

⁴⁹ Montreal Process Implementation Group for Australia, 2008. *Australia's State of the Forests Report 2008*. Bureau of Rural Sciences, Canberra pp. 119-20

⁵⁰ 2010/11 State Budgets — Summary for Housing. Available from: <http://economics.hia.com.au/media/State%20budget%20summaries%20-%20Housing%20-%20August%2010.pdf>

Independent Certification

Forest management certification is a voluntary process for the independent, expert assessment of forest management against an internationally accepted standard. This generally involves an independent analysis of the ecological, social and economic performance of forestry operations.

Government should support the use of independently certified timber and paper products where possible. However, it should not favour one scheme above another, but instead support all credible independent third-party certification schemes.

Processing and value-adding operations

Victorian forestry is a dynamic industry largely reliant on processing and other value adding activities. Currently, approximately 63 percent of the workforce of Victoria's forest and wood products industry is employed in secondary processing. These are largely manufacturing roles and tend to be high-paying.⁵¹ It should be noted that this figure does not include some downstream value-adding operations, such as furniture making.

By dealing with the above issues relating to resource security and sovereign risk, the wider government policy framework within which the industry operates, and its access to a skilled workforce and viable markets, Australia's forest and wood products industry would be able to build on an already strong processing and value-adding sector. By ensuring that Government policy focuses on planning to enhance the international competitiveness and productivity of the industry, the beneficial nature of these reforms will be multiplied and existing industry players will be encouraged to further invest in value-adding processes and new entrants may enter the market.

Recommendations:

- 4.1 That MIS arrangements are maintained with enhanced safeguards to protect investors and to rebuild investor confidence;
- 4.2 The development of taxation or financial recognition of currently non-market services performed by plantations; such as a carbon trading scheme which provides carbon credits for the CO2 storage capacity of plantation timber;
- 4.3 That the Federal Government supports the provision of training to young Australians and the re-training of older workers, to ensure the forestry industry has access to adequate levels of skilled labour;
- 4.4 That the Government continue to support vocational skills and training in the forest and wood products industries and the National Forestry Masters Program;
- 4.5 That Government takes a more holistic approach to energy efficient ratings for buildings that includes rating materials used in construction, and a 'whole-of-home' assessment that produces a much improved and fairer environmental result. This should include expanding the Energy Star Rating regulations to include the embodied energy of building materials; properly acknowledging the carbon storage potential of timber, as well as its energy efficiency as a product;

⁵¹ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 2: Profile of socio-economic characteristics of forest industry workers* p. 28

- 4.6 That the Federal Government does what it can to ensure errors in building software are corrected so as to provide builders with accurate information on the energy efficiency of the materials they are using; and
- 4.7 Government should support all credible independent third-party certification schemes and use independently certified timber and paper products where possible; and
- 4.8 Government forestry policy should focus on planning to enhance the international competitiveness and productivity of the forest and wood products industry. Policy reforms that do this may provide a multiplier effect to other policy setting adjustments, encouraging further private sector investment in the local industry.

Social and economic benefits of forestry

Forestry as a job creator

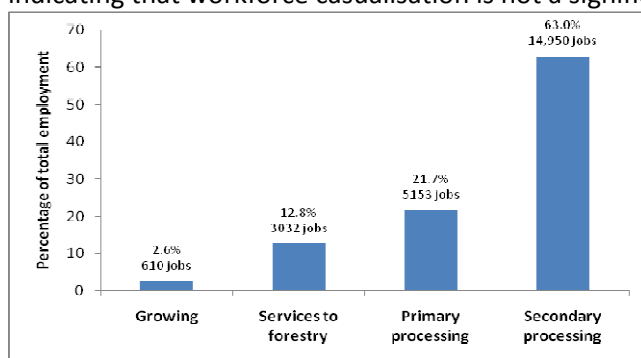
Forestry is a significant creator of good local employment opportunities.

Victorian forestry directly employs approximately 24,000 people. This includes all workers in Victorian-based businesses in growing, services to forestry, primary processing and secondary processing sectors. There are also a further 1,100-1,150 jobs generated outside Victoria dependant on Victorian grown timber; primarily in New South Wales and South Australia.⁵²

Forestry tends to employ workers slightly older than the workforce average, with low average levels of educational attainment.

However, forestry workers also tend to have a high rate of attainment of trade qualifications and they tend to have higher than average incomes and lower than average housing costs than the Victorian labour force as a whole.⁵³ As was mentioned above, 63 percent of forestry industry workers are employed in secondary processing industries.⁵⁴ These are often the most highly paid, with pulp and paper manufacturing workers earning higher incomes than workers in the rest of the industry.⁵⁵ The wages of forest industry workers also appear to be increasing at a faster rate than the Victorian labour force average.⁵⁶

It has also been found that employment opportunities in the forestry industry tended to be more secure than average, with a higher proportion of workers having full-time, permanent jobs; indicating that workforce casualisation is not a significant issue in the industry at this stage.⁵⁷



Percentage and number of total jobs in the Victorian timber industry^{58 59}

⁵² Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 1: Profile of forest industry businesses, employment and spending, and impacts of recent changes on businesses*. Report prepared by the Fenner School of Environment and Society for the Victorian Department of Primary Industries, p. 15

⁵³ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 2: Profile of socio-economic characteristics of forest industry workers* p. 9

⁵⁴ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 1: Profile of forest industry businesses, employment and spending, and impacts of recent changes on businesses*. pp. 15-6

⁵⁵ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 2: Profile of socio-economic characteristics of forest industry workers* p. 28

⁵⁶ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 2: Profile of socio-economic characteristics of forest industry workers* p. 28

⁵⁷ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 2: Profile of socio-economic characteristics of forest industry workers* p. 38

⁵⁸ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 1: Profile of forest industry businesses, employment and spending, and impacts of recent changes on businesses*. pp. 15-6

Australian Bureau of Statistics estimates indicate a total of 1,754 people were also employed in timber wholesaling in Victoria in 2006, and a further 3,669 employment opportunities were created by the wooden furniture and upholstered seat manufacturing sector. These figures are not included in the total industry estimates above.⁶⁰

It is also significant that a large proportion (approximately 10,000 or 40 percent) of workers directly employed in the Victorian forestry industry are employed in rural and regional areas.⁶¹ Many of the communities in these areas are highly dependent on forestry for their ongoing survival and are vulnerable to changes in the industry. This is partially related to the proportion of the workforce employed by forestry. For example, towns such as Dartmoor rely on the forestry industry for 73 percent of all employment. Likewise, Heyfield (56.65), Cann River (41.7), Rosedale (25.21), Myrtleford (22.79), Bruthen (21.26) and Heywood (19.96) were, amongst other communities, all found to be highly dependent on forestry; a factor of employment in forestry, income from forestry and community size and isolation.⁶² Thirty percent of the communities found to be highly dependent on forestry were located in a single region in Victoria: East Gippsland.⁶³

The towns that are both highly dependent on forestry and most sensitive to change include Nowa Nowa, Cann River, Dartmoor, Orbost, Heywood, Myrtleford, Koondrook, Yarram, Morwell, and Heyfield.⁶⁴ Any government decisions that affected the operations of the industry in these communities would impact on the economic situation and therefore the future sustainability of these communities themselves.

The fire management skills fostered by forestry

Forestry is consistent with a risk minimisation approach to wildfire in multiple use forests. It provides the access, skilled personnel and equipment necessary to quickly respond to fires in State forests. Sustainable timber production also creates a diversity of age classes and therefore fuel levels across the forest estate. Timber harvesting removes merchantable timber and provides a fire disturbance, consistent with the natural need of eucalypt forests for fires on a 30 to 400 year cycle for their ongoing survival.⁶⁵ Without such disturbance, species such as Mountain Ash could not survive in perpetuity.

⁵⁹ These figures are based on an analysis of Australian Bureau of Statistics (ABS) data as well as a forest industry survey. The figures are slightly higher than ABS data, which do not include many haulage and silvicultural works and some processing workers.

⁶⁰ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 1: Profile of forest industry businesses, employment and spending, and impacts of recent changes on businesses*. Report prepared by the Fenner School of Environment and Society for the Victorian Department of Primary Industries, pp. 16

⁶¹ Schirmer, J. And Dunn, C. (2010) *Socio-economic characteristics of Victoria's forestry industries, Part 3: Dependence of Victorian towns and localities on the forest industry* p. 24

⁶² Sheridan Coakes Consulting Pty Ltd (2009). *Victoria's Forestry Communities: Adapting to Change in the Forestry Industries*. Prepared for Department of Primary Industries, Victoria p. 108

⁶³ Sheridan Coakes Consulting Pty Ltd (2009). *Victoria's Forestry Communities: Adapting to Change in the Forestry Industries*. Prepared for Department of Primary Industries, Victoria p. 110

⁶⁴ Sheridan Coakes Consulting Pty Ltd (2009). *Victoria's Forestry Communities: Adapting to Change in the Forestry Industries*. Prepared for Department of Primary Industries, Victoria p. 236

⁶⁵ Attiwill, P.M. (1994) 'Ecological Disturbance and the Conservative Management of Eucalypt Forests' in *Australia, Forest Ecology and Management*, 63: 301-346

There is visual and anecdotal evidence on the impact of harvesting and young regeneration on reducing the intensity of the February 2009 fires. In fact, clusters of regrowth are often used strategically as a site from which to attack the fires. The aerial photo below indicates that reduced fuel loads in the regrowth (less than 10 years old) helped to bring the fire question in question under control. This effect appears to have helped block fires burning some of Melbourne’s water supply catchments.



The labour sector of the native forest industry has been the backbone of active native forest management for the public good. This includes bushfire mitigation, preparedness and fire fighting resources. As there has been a decline in multiple-use native resource availability for Australia’s forest products industries, so too has there been a decline in associated job prospects and population in a number of communities traditionally reliant on forestry. This has a flow-on effect in terms of reducing the availability of people to contribute to the CFA, the SES and other community organisations, such as sporting clubs.

The Victorian Parliament Environment and Natural Resources Committee (ENRC) recognised the negative impact of the contraction of native forestry on Victoria’s capacity for fire management and suppression in its Inquiry into the 2006/07 fires. In its findings, the ENRC found that ‘the reduction in the extent of timber harvesting on public land and associated loss of local knowledge and expertise, machinery available for fire prevention and suppression, and a decline in the number and accessibility of vehicle access tracks has had a negative impact on land and fire management, particularly the bushfire suppression capacity of relevant agencies.’⁶⁶

Plantation companies also have an important role to play in fire management. As planted forests are valuable commercial assets, they are resourced and managed to mitigate fire risk. It is standard practice that plantation companies each have a fire brigade which is under the operational control of the CFA. Industry brigades provide resources to manage and protect the plantations from wildfire. They carry specific skills in managing forest fires. They can provide additional resources to the CFA and DSE, including personnel and specialist vehicles.

⁶⁶ Environment and Natural Resources Committee (ENRC) (2008) Inquiry into the Impact of Public Land Management Practices on Bushfires in Victoria, Parliamentary Paper No. 116 Session 2006-2008, Parliament of Victoria – Recommendation 5.2

Recommendations:

- 5.1 That government recognise the socio-economic importance of forestry and the reliance of many communities — particularly those in rural and regional areas — when making decisions which could impact on the forestry industry.
- 5.2 That Government properly recognise and utilise the forest management capabilities of the forestry industry; including the skill, experience and local knowledge its workforce, and the comprehensive fire access infrastructure and fire-fighting equipment it maintains.

Potential energy production from the forestry sector

The use of bioenergy powered by woody biomass

The forest industry can make a significant contribution to emission reductions at a relatively low cost, while providing a range of economic, social and environmental benefits. One way it can do this is through the provision of timber residues for bioenergy production.

According to the United Nations Food and Agriculture Organisation, 'Long-term and sustainable reductions of CO² emissions through land-based activities will to a large extent have to come from the use of wood for bioenergy and products.'⁶⁷ Bioenergy fuelled by wood residues can provide a non-toxic and renewable source of electricity and heating for Australian communities. When used in a cogeneration process producing heat (for the heating of homes and businesses, for instance) as well as electricity, it can operate at efficiencies of up to 90 percent.⁶⁸

This is particularly significant for regional and remote communities located near native forests or plantation resources, but a significant distance from other baseload power generators.

As a heavily forested country, Australia has an abundance of resource available for use as a power source. It is estimated that there is approximately three million tonnes of residues available for this purpose. This could be used to meet some of Australia's mandatory renewable energy target while retaining sufficient residues in the forest to protect biodiversity.⁶⁹

This process has already been trialled in Australia, with 650 megawatts of electricity from biomass already being generated.⁷⁰ However, the lack of a clear climate policy framework has created considerable business uncertainty.

This form of power generation can assist in providing security of supply to meet the baseload power needs of the Australian economy, and minimise the price impacts on households and businesses; as was acknowledged in the Federal Government's proposed Carbon Pollution Reduction Scheme, which granted biomass a zero emissions rating.⁷¹ VAFI is a strong supporter of any attempts to develop a policy framework that would encourage the use of wood residues for such purposes.

Recommendations:

- 6.1 Government should work towards increasing the use of wood residues for bioenergy through the inclusion of native wood residues in the GreenPower accreditation program. The regulations for the National Renewable Energy Target Scheme,

⁶⁷ Food and Agriculture Organisation (2010) Forestry Paper 162. *What woodfuels can do to mitigate climate change* p. 75

⁶⁸ Food and Agriculture Organisation (2010) Forestry Paper 162. *What woodfuels can do to mitigate climate change* p. 35

⁶⁹ Montreal Process Implementation Group for Australia, 2008. *Australia's State of the Forests Report 2008*. Bureau of Rural Sciences, Canberra p. 120

⁷⁰ Montreal Process Implementation Group for Australia, 2008. *Australia's State of the Forests Report 2008*. Bureau of Rural Sciences, Canberra p. 120

⁷¹ *Victorian Timber Industry Strategy* p. 38

specifically the high value test regulations that impede the full use of forestry wood waste for green energy, should also be amended; and

- 6.2 Wood residues utilised for bioenergy should also be considered as viable candidates for any government funding for renewable energy grants and any research and development spending made in this area.

Land use competition between forestry agriculture sector

The development of timber plantations is a legitimate use of agricultural land. They provide economic diversification in rural landscapes and communities and support employment in downstream processing as they mature.

Besides providing a number of non-market benefits to the community and environment — soil and mitigation of dryland salinity, carbon sequestration, water quality improvement, landscape protection and biodiversity benefits — plantations may also assist broader government policy objectives relating to regional development and job creation, climate change mitigation and the provision of needed timber resources.

VAFI believes it is important for the timber industry and other agricultural industries to cooperate to support resilient rural and regional communities and economies and improved natural resource management outcomes.

Recommendations:

- 7.1 Any proposed policy or other regulatory response must take into account the need for equitable and consistent treatment of timber plantations compared to other productive land uses.

Conclusion and recommendations

VAFI appreciates the opportunity to provide submission to the House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry Inquiry into the Australian forestry industry.

We are pleased that this Inquiry into the industry is being undertaken. Ensuring the correct policy frameworks are in place is imperative to ensuring a sustainable future for the forest and wood products industries in Australia, as well as the communities they support and the jobs they create.

As outlined above, resource security is the key issue that informs a number of other matters affecting the industry. In recent decades successive governments have placed significant areas of native forest in conservation reserves without taking adequate steps to source new production resource. Without a strong policy framework to assure business that further reductions in resource will not occur, it will prove difficult to attract new investment into the industry; reducing employment in communities reliant on forestry and further exacerbating Australia's \$2 billion deficit in wood and paper products.

The issue of resource security must be dealt with before other matters of public policy, such as innovation and increased investment in value-added activities, can be addressed. However, there are a number of innovative areas within the industry that with the right policy framework can provide both economic and environmental benefits. These include the use of wood residue fuelled bioenergy and timber building products to produce affordable homes for all Australians, while also assisting the Commonwealth Government meet its carbon emissions reduction target.

The industry also believes the minimal negative environmental impacts of forestry must be recognised, as do the ecological benefits it can produce. This is a requirement if the debate on the future of forestry is to move beyond the ideological and instead focus on the science and economics of the issues involved.

Summary of recommendations

1. Opportunities for and constraints upon production

- 1.1 Government should ensure that any extra forest estate reserved for conservation is balanced by creating a new resource supply: either from other native forest or plantations;
- 1.2 That the Federal Government work towards improving the monitoring of sustainability indicators areas across the public native forest estate;
- 1.3 Immediately start a process of renewing and strengthening 20 year RFAs backed by Commonwealth and state legislation, on a five year rolling basis to ensure at least 15 years of resource security;
- 1.4 That RFAs are improved as instruments to support a landscape approach to forest management, including the maintenance of values beyond wood production and incorporating forestry as a forest management tool to support other forest management goals;

- 1.5 That government work with industry to develop an effective policy to address the market failure in investment in long rotation plantations; and
- 1.6 That plantation forestry be reconfirmed an 'as-of-right crop' that must be treated equitably along with other agricultural crops.
- 1.7 Farm forestry and private native forestry are supported through reducing regulatory inconsistencies and providing information and support services for landholders interested in commercial production.

2. Opportunities for diversification, value adding and product innovation

- 2.1 Government must recognise that resource security is required if the industry is to invest in new innovations and value-adding processes;
- 2.2 Review, in partnership with industry, the level and structure of research and development funding for the forest industry, to improve overall capability and incentives for innovation and delivery of research and development;
- 2.3 Improve monitoring of sustainability indicators outside timber production areas and to support research which integrates forestry with the pursuit of other values such as fire risk mitigation, water yield management and development of renewable energy; and
- 2.4 Greater focus on planning to support investment and innovation linked with market development. The research priorities identified in the 2009 Victorian Timber Industry Strategy should be funded as a priority;

3. Environmental impacts of forestry

- 3.1 The benefits of active land management should be acknowledged by Federal Government;
- 3.2 That the Federal Government acknowledge the limited scope of forestry operations in Victoria (<0.07 percent of the Victorian public forests estate);
- 3.3 That the environmental benefits (restoring degraded land, improving water quality, carbon sequestration and erosion prevention) of timber plantations, farm forestry and native forestry should be recognised and supported;
- 3.4 Plantation forestry should be considered an 'as-of-right crop' raising activity that must be considered equitably along with other agricultural crops when addressing interception;
- 3.5 The benefits of any action taken by Government to manage the impacts of land-use change must outweigh any associated costs;
- 3.6 Any decisions concerning water interception and allocation must be based on sound evidence and science.
- 3.7 All policy on water interception should take into account issues of water quality as well as water quantity; and
- 3.8 Any inclusion of land use change to plantation forestry in a water entitlement system must take into account the differences between the physical extraction of water from the way supply system by humans and the natural interception of water by plants.

4. Creating a better business environment for forest industries

- 4.1 That MIS arrangements are maintained with enhanced safeguards to protect investors and to rebuild investor confidence;
- 4.2 The development of taxation or financial recognition of currently non-market services performed by plantations; such as a carbon trading scheme which provides carbon credits for the CO₂ storage capacity of plantation timber;
- 4.3 That the Federal Government supports the provision of training to young Australians and the re-training of older workers, to ensure the forestry industry has access to adequate levels of skilled labour;
- 4.4 That the Government continue to support vocational skills and training in the forest and wood products industries and the National Forestry Masters Program;
- 4.5 That Government takes a more holistic approach to energy efficient ratings for buildings that includes rating materials used in construction, and a 'whole-of-home' assessment that produces a much improved and fairer environmental result. This should include expanding the Energy Star Rating regulations to include the embodied energy of building materials; properly acknowledging the carbon storage potential of timber, as well as its energy efficiency as a product;
- 4.6 That the Federal Government does what it can to ensure errors in building software are corrected so as to provide builders with accurate information on the energy efficiency of the materials they are using; and
- 4.7 Government should support all credible independent third-party certification schemes and use independently certified timber and paper products where possible; and
- 4.8 Government forestry policy should focus on planning to enhance the international competitiveness and productivity of the forest and wood products industry. Policy reforms that do this may provide a multiplier effect to other policy setting adjustments, encouraging further private sector investment in the local industry.

5 Social and economic benefits of forestry production

- 5.1 That government recognise the socio-economic importance of forestry and the reliance of many communities — particularly those in rural and regional areas — when making decisions which could impact on the forestry industry.
- 5.2 That Government properly recognise and utilise the forest management capabilities of the forestry industry; including the skill, experience and local knowledge its workforce, and the comprehensive fire access infrastructure and fire-fighting equipment it maintains.

6 Potential energy production from the forestry sector

- 6.1 Government should work towards increasing the use of wood residues for bioenergy through the inclusion of native wood residues in the GreenPower accreditation program. The regulations for the National Renewable Energy Target Scheme, specifically the high value test regulations that impede the full use of forestry wood waste for green energy, should also be amended; and
- 6.2 Wood residues utilised for bioenergy should also be considered as viable candidates for any government funding for renewable energy grants and any research and development spending made in this area.

7 Land use competition between the forestry and agriculture sectors

- 7.1 Any proposed policy or other regulatory response must take into account the need for equitable and consistent treatment of timber plantations compared to other productive land uses.