Myoora Investments Pty Ltd

Priorities for an Australian Forest and Wood Products Industry Plan

Prepared for the

Australian Forest and Wood Products Industry Council

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QUALIFICATIONS AND DISCLAIMER

Myoora Investments Pty Ltd (Myoora) has been engaged by the Commonwealth Department of Agriculture, Fisheries and Forestry (DAFF) to draft on behalf of the Australian Forest and Wood Products Industry Council a set of priorities for an Australian forest and wood products industry plan for the next decade. This plan is a summary of recent major industry reviews some of which were sector specific while others broader in their scope.

The principal consultant at Myoora is Rob de Fégely and he is qualified to provide this opinion having over 30 years of experience in the Australian forest industry including 16 years consulting to the industry and 10 years as Managing Director and Principal of Jaakko Pöyry Consulting (now Pöyry Forest Industry Pty Ltd) one of Australia's largest forest industry consulting firms. Rob de Fégely has qualifications including a Bachelor of Science (Forestry) from the Australian National University and a Master of Science in Forest Business Management from Aberdeen University in the United Kingdom.

The following report contains an opinion on the current status of the Australian forest and wood products industry and the future opportunities and current barriers to achieving those opportunities. This report identifies a small number of priorities that the industry should focus on to achieve to the greatest gain for the industry as a whole.

This report is provided to DAFF and the Australian Forest and Wood Products Industry Council for their own use and no responsibility is taken for any other use and there is no responsibility to update this report for events and circumstances occurring after the date of this report.

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GLOSSARY

ABARES	Australian Bureau of Resource Economics & Sciences
AFA	Australian Furniture Association
AFG	Australian Forest Growers
AFPA	Australian Forest Products Association
AFS	Australian Forestry Standard
CFI	Carbon Farming Initiative
CLT	Cross Laminated Timber
CFMEU	Construction Forestry Mining & Energy Union
DAFF	Department of Agriculture Fisheries and Forestry
FAO	Food and Agriculture Organisation
FWPA	Forest and Wood Products Australia
FWPS	Forest and Wood Products Statistics – produced by ABARES
FSC	Forest Stewardship Council
HIA	Housing Industry Association
HoR	House of Representatives Inquiry into the future of the Australian Forest Industry – 'Seeing the forest through the trees'!
LVL	Laminated Veneer Lumber
MIS	Managed Investment Scheme
NAFI	National Association of Forest Industries (an industry body pre-dating AFPA)
NAS - FF	DAFF - National Action Statement on Farm Forestry, 2005
NFPS	National Forest Policy Statement 1992 & revised 1995.
NHSC	National Housing Supply Council
PPISG	Pulp and Paper Industry Strategy Group – Final Report 2010.
RET	Renewable Energy Targets
R&D	Research and Development
RFA	Regional Forest Agreement
RIRDC	Rural Industries Research and Development Corporation
ROI	Return on investment
The CIE	The Centre for International Economics.

TCA	Timber Communities Australia
TQ	Timber Queensland
VAFI	Victorian Association of Forest Industries
VIC-DPI TIAP	Victorian Department of Primary Industries – Timber Industry Action Plan

SUMMARY

The Australian Forest and Wood Products Council has requested the following report to outline priorities for the Australian forest and wood products industry (the industry) to define a plan and advise government over the next decade.

The priorities were derived from a series of previous recommendations from recent and relevant forest industry reviews and research including amongst others the Pulp & Paper Industry Strategy Group Final Report (March 2010) and 'Seeing the forest through the Trees':-The House of Representatives Inquiry into the Future of the Australian Forestry Industry (Nov 2011).

Timber has been used since the dawn of time and its physical as well as environmental qualities are often taken for granted. With this history it is also unsurprising that industry profit margins in most sectors are not large.

The industry is suffering in the current economic climate where traditional demand for many products is weak, particularly for new housing, and the high Australian dollar is providing a competitive advantage to imports. The industry also continues to suffer from attacks by anti-industry groups. As a result the general community is not providing any strong signals that they appreciate the work the industry does to protect and sustainable manage our forests for future generations, despite their fondness for forests and wood products.

Notwithstanding this difficult current situation the Australian forest industry has a potentially bright future. Demand for forest products is driven by population and economic growth and both the Australian and Asian populations and economies are predicted to grow and possibly quite strongly in China and India. Combined with this overall growth is a shift towards a carbon regulated economy or at a minimum a greater consciousness of the environmental impact of production. Wood has excellent environmental production credentials being natural, renewable, sustainable and recyclable and generally carbon positive, particularly if carbon is accounted for over the life of the forest and when stored in harvested products or wood replaces more energy intensive products. Well managed, wood is a timeless and enduring product.

Technology is also providing opportunities with new panel products potentially providing not only more efficient domestic housing but also innovative new multi-storey wooden commercial buildings. There are also opportunities for wood based chemicals in biofuels and replacements for petroleum based products in adhesives, resins, thermo plastic's etc.

But there are barriers to overcome to capitalise on these opportunities.

The industry has an image problem which affects its capacity to operate in both natural forests and develop new plantations and also in attracting skilled staff and students to study forestry and related wood and wood product sciences.

The industry has been successful in gaining bipartisan support from the major political parties and has also run successful promotional campaigns but they

have not persisted and the industry despite its environmental credentials is not expanding or attracting investment in resource development.

The industry must seek to understand the community's concerns before it can be understood[1]. Gaining community acceptance and understanding of the industry may allow harvesting in natural forests to continue which is the closest the industry can come to organic farming. Gaining acceptance from rural communities will allow more plantations to be developed (possibly both farm forestry and broad scale) including expanding opportunities in private natural forests which could become a greater source of supply than currently occurs from public native forests.

Continuous improvement of the industry's competitiveness is also extremely important including improvements to vital road and port infrastructure and access to competitive supplies of energy. Lack of market transparency is a disincentive for many investors and poor supply chain knowledge may be hiding inefficiencies. Complex and conflicting regulations and the cost of compliance at different levels of government is also a barrier to investment. While new technologies present interesting opportunities declining and fragmented research and development and a lack of skilled graduates will eventually reduce the industries capacity to compete.

Over twelve industry reports and strategies were reviewed and refined into the five priority recommendations listed below:

1. **Government support for the industry** – a clear statement of support for all the industry sectors including assisting it to understand and respond to community concerns.

2. **Recognition of Industry's role in a carbon regulated economy** - by:
    a. Sequestration of carbon dioxide from the atmosphere.
    b. Storage of carbon in harvested wood products
    c. Substitution of non-renewable, energy rich products in the market

3. **Actions to improve plantation investment and resource development**
    a. Including models for sustainable development of plantations
    b. Action to initiate rolling/evergreen Regional Forest Agreements
    c. Recognise and support the unique characteristics of farm forestry

4. **Improving Industry competitiveness** – including cost efficient resources, infrastructure and energy, efficient government planning and policy alignment, equity between importers and domestic producers.

5. **Funding support for forest industry education, research and development**. – to replace the loss of university training and research facilities such as the CSIRO Division of Forests and Forest Products and the CRC for Forestry, otherwise skills and research will decline causing a loss of competitiveness in a renewable resource industry.

[1] Adapted from Stephen Coveys' 7 Habits of Highly Successful People, Habit number 5 is "Seek first to understand, Then to be understood"

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1 INTRODUCTION

Myoora Investments Pty Ltd as trustees for the Myoora Trust (Myoora) has been engaged by the Department of Agriculture Fisheries and Forestry (DAFF) as secretariat for the Forest and Wood Products Council (the Council), the formal consultative mechanism between the forest products industry and the Australian Government, to undertake a strategic planning process (The Plan) for the forest and wood products industry.

The objective of this project is to evaluate the recommendations from recent and relevant forest industry reviews and research, and to then focus the wide range of recommendations into a narrow number of tangible and achievable actions. These will then inform the future work plan of the Forest and Wood Products Council and progress sustainable industry competitiveness, career attractiveness and provide input for government policy. The report provides priorities for the industry for the next 5 to 10 years.

The following sections outline the current state of the industry and some considerations for the future. It provides a summary of the salient recommendations from some of the major industry reviews from the last decade and the opportunities and their barriers for the industry to define its future.

2 THE CURRENT INDUSTRY AND ITS POTENTIAL

2.1 The Australian Forest and Wood Products Industry in 2012

The forest industry possibly suffers from its history. Timber has been used since the beginning of time and yet if it were a more recent discovery it would be hailed as a champion product of the future.

Early Australian settlers either cleared forest for farming or harvested selectively, taking the best trees which were invariably priced by governments at levels to encourage investment in a range products and services but not necessarily at a level that encouraged investment in new forests. This selective harvesting may have had a positive aesthetic impact due to its low intensity but potentially a large negative impact through high grading[2]. The investment in Australian plantations to provide a substitute resource has struggled to make either an economic return on investment or be valued for the externalities that plantations provide. Hence governments have mostly initiated investment in plantations either directly or supported schemes that would attract investors.

With attributes that are renewable, sustainable, recyclable, biodegradable and greenhouse positive, wood is unmatched in its environmental qualities by any other construction, packaging or writing medium.

[2] High grading is the act of removing the best quality or most valuable trees from a forest leaving behind either the poorer quality trees (physically and/or genetically) that can then dominate the forest and reduce its average quality.

Possibly due to the age of the forest and wood products industry, market forces particularly in well developed economies have removed any significant return margins or super profits to such a degree that the industry struggles in some sections of the supply chain to make profits that will encourage investment. This ultimately affects the entire supply chain.

Wood is a relatively common material and when compared to more recent non-renewable materials it suffers from 'familiarity breeds contempt and rarity wins admiration'[3]. Due to a lack of recognition of its environmental credentials it is impossible for wood products to capture any market premium for these qualities and yet in this era of climate change and environmental awareness it is easy to argue that wood products should gain a premium. Gaining this premium remains a challenge for the industry.

Australia has enjoyed immense economic benefits from the sale of its minerals and gas deposits, but these are non-renewable resources and while it may not be imminent they will eventually exhaust.

A smart economy uses these fortunate but non-renewable resources to create a future built on sustainable resources, smart manufacturing and enduring services (Napoleoni, 2012).

Currently in Australia there are a range of negative factors impacting on the forest and wood products industry (the industry). Some of these are expected to be temporary while others are more entrenched.

The high value of the Australian dollar in relation to the United States dollar and the European euro is making forest product imports attractive and dampening the demand and competitiveness of our export products, in particular wood chips for pulp and paper production.

The Global Financial Crisis particularly in Europe and North America has dampened their domestic demand forcing producers in those regions to look for attractive export markets of which Australia is one.

Within Australia the residential housing market (both new houses and alterations and additions to existing houses) consumes a significant percentage of sawntimber as well as engineered wood products such as laminated veneer lumber and I beams and wood based panels. Historically this market has been well above 150,000 new starts per annum having only dipped once below this level in the past decade (HIA, 2012). However, the Housing Industry Association (HIA) suggest that both the current financial year and next year will end below 150,000 starts, before picking up 'robustly' in 2013.

A frustration for the domestic industry is that the HIA, the National Housing Supply Council (NHSC) and retail banks such as the National Australia Bank (NAB) suggest that Australia has a shortage of between 200,000 and 250,000

[3] *Apuleius, Roman philosopher, rhetorician, & satirist (124 AD - 170 AD)*

houses and yet this is not apparent in the current demand. The industry is questioning the veracity of these claims.

The NHSC suggest that a large part of the problem is driven by a growing divergence between underlying demand, which is demographically driven, and effective demand, which is what actually happens in the market, which is driven by housing affordability as well as demographic factors (NHSC, 2012).

According to the NHSC a shortage of housing actually leads to higher housing costs but admit that there is no single measure that can give a full picture of 'housing affordability'.

A subdued housing market has a significant impact on the demand for sawntimber and wood based panels and the industry may need to develop its own measures of demand.

The Australian furniture industry also has problems. According to Rohan Wright Chief Executive Officer of the Australian Furniture Association Inc. a paradigm shift occurred over the past 15 years where import barriers were removed, and no reasonable measures were put in place to ensure downstream wood product imports complied with general Australian requirements for sustainability, health, safety, and quality standards.

Wright also suggests that this has resulted in inequitable competition and perverse outcomes for consumers. Essentially Australian consumers were conserving their own forests at the expense of others. Perversely this created demand for products of suspect quality from possibly dubious origins.

Industry competitiveness is under pressure not only from the 'Dutch Disease"[4] where a country's high value exports place upward pressure on its currency to the detriment of the rest of the economy, but also the lack of log resources and low domestic demand is causing older production facilities to close.

Australia has lost 130,000 jobs in manufacturing over the last three years but this has been offset by 100,000 new jobs in mining and another 240,000 jobs in health and social services (NAB, 2012). A general view in the industry is that failing any intervening action this unemployment trend is likely to continue over the next 5 years possibly averaging 20% or more in each sector.

Loss of manufacturing in the forest and wood products industry over recent years include the Boral Hancock plymill and Hyne I Beam plants in Queensland, the Kimberly Clark pulpmill at Millicent and the Carter Holt Harvey LVL plant at Nangwarry in South Australia and the Australian Paper plants in Burnie and Wesleyvale in Tasmania.

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[4] In economics, the Dutch Disease is a concept that explains the apparent relationship between the increase in exploitation of natural resources and a decline in the manufacturing sector. It suggests that an increase in revenues from natural resources (or inflows of foreign aid) will make a given nation's currency stronger compared to that of other nations (manifest in an exchange rate), resulting in the nation's other exports becoming more expensive for other countries to buy, making the manufacturing sector less competitive. While it most often refers to natural resource discovery, it can also refer to "any development that results in a large inflow of foreign currency. The term was coined in 1977 by 'The Economist' to describe the decline of the manufacturing sector in the Netherlands after the discovery of a large natural gas field in 1959 – source http://en.wikipedia.org

However in contrast Australia has developed some world class wood processing facilities including new sawmills, LVL and wood panel plants and an unbleached softwood kraft pulpmill. However, Australia is still struggling to develop a world class bleached hardwood kraft pulpmill.

A challenge for the processing sector is to understand the critical success factors that have allowed these world scale companies to invest and operate so that older plants can be easily retired and new more efficient plants developed.

In addition to competition from imports the market for solid wood products is also open to competition from non-renewable substitutes such as steel, concrete and aluminium.

Processors want an expanding wood supply at an affordable price to improve economies of scale. However, growers suggest that current log prices and growth rates are too low and costs too high to initiate investment in new plantations. Hence expansion of the softwood estate has only increased by a little over 5% over the last 10 years. (ABARES, Plantation Statistics, 2012).

The supply from public natural forest has been declining for many years and the confidence of processors to invest in this sector has gradually weakened with the continuing campaigns by anti-industry groups, uncertainty of sustainable yield levels (either quality or volume or both), the unsuitability of plantation logs and the more recent impact of the GFC and the high Australian dollar. Alternative supplies from private natural forests could supplement the public supply but there has been little investment in management assistance for landowners or developing a transparent market that is common to agriculture.

Even the advent of third party certification schemes has not significantly assisted in shifting sentiment to the industry and part of the problem could easily be the lack of mutual recognition between the two main schemes namely the Australian Forestry Standard (AFS) and the Forest Stewardship Council (FSC). FSC is designed for certification of natural forests but as a national standard has not yet been developed and it is not clear if large scale natural forest certification is possible. Although, some smaller and lower intensity managed natural forests have been FSC certified. To achieve large scale FSC certification of natural forests in Australia, those close to the scheme suggest industry must engage in, and support, the development of the standard.

Based on polling in Victoria and Tasmania (AFPA, 2011) industry believes that the negative sentiment to natural forest harvesting misrepresents the broader public view with suggestions that a majority of the community support sustainable harvesting. This view is not new and some in the industry suggest a different approach by developing a better understanding of community concerns rather than rely on a promotional or political solution (which it has done successfully in the past[5]). Unless a new approach is developed then history suggests the negative sentiment will continue and ultimately succeed in closing

[5] The forest industry has in the past developed strong political (& bipartisan) solutions to its problems such as The National Forest Policy Statement in 1992 which was signed by the Commonwealth and ultimately all State governments and Plantations 2020. In terms of promotion the NAFI -'school room – get the facts' television advertisements were successful for a short period but the industry continues to suffer from a lack of a broad Australia wide community acceptance natural forests harvesting.

an important industry that can be managed sustainably to supply products that cannot be provided from plantations.

The significant area of hardwood plantations developed under managed investment schemes (MIS) is not a simple substitute for the natural forest resource because the species characteristics, processing ability and markets are different. Natural forests supply products that range from durable power poles to feature panelling, flooring and furniture. The majority of the hardwood plantations were developed for fine writing paper production.

Despite all the favourable environmental characteristics of wood the industry has been unable to develop any demand pull for its products. Sustainable, recyclable, renewable and carbon positive are all product features that are generally well understood in the community but the industry has not been able to market these features to its advantage.

Australia's balance of trade in forest products has not improved in the last twenty years despite significant investments in resource development during that time. Australia's trade deficit mostly for paper products has remained around AUD1.8 to 1.9 billion per annum since 1990 (ABARES, FWPS 2012)

2.2 The industry of the future

By recognising that the industry is in a difficult economic and social era it must consider what can be done to ensure that it continues to be either more efficient manufacturers of wood products in its traditional products or embrace the opportunities presented by technological development and the communities increasing interest in the supply of natural and sustainable products by actively understanding and addressing their concerns about industry activities.

It would be easy to let the current economic circumstance (high dollar, low demand, cheap imports etc.) shape the industry. But the cycle will turn as it has done previously with change in the main demand drivers which are:

- Population increase
- Economic growth
- Environmental regulation
- Technological development

The following sections outline some sound reasons to be positive about the future of the industry.

2.2.1 Population increase and economic growth

The Australian population is predicted to increase significantly over the next 30 years to 35 million by 2050 (ABS, 2008) which will provide increased demand for Australian forest products, particularly if the industry can not only position itself to service the growth but also understand and address community concerns about resource development and harvesting.

To provide an order of magnitude the per capita consumption at present is roughly 0.5/m^3/annum which suggests another 6 million m^3 of sawntimber,

wood based panels and paper products will be required by 2050, assuming consumption patterns remain the same. Current consumption is approximately 5 million m^3 of sawntimber, 2 million m^3 of wood based panels and 4 million tonnes of paper and paperboard products (ABARE, FWPS, 2012).

Asia is the fastest growing economic region in the world and the medium prediction by the United Nations (2009) suggest that its population could grow to 5.2 billion by 2050 representing 57% of the world total of 9.1 billion.

China's demand has driven the Australian mining boom and it is also the major global importer of softwood and hardwood logs, Medium Density Fibreboard (MDF), and hardwood sawntimber. China is also the largest global producer and exporter of plywood, MDF, blockboard, furniture and finished wood products. China needs raw materials to feed its processing plants (Taylor, 2012). It is also highly unlikely that it will be self-sufficient in forest products. China will become the largest wood chip importer in the Asia Pacific region and is expected to surpass Japan as the major importer in the next decade.

Unless Australia develops more forest resources Macleod (URS, 2012) predicts that by 2050 sawntimber imports could grow from the current level of 600,000m^3 to over 2 million m^3 per annum. Population and associated economic growth in Australia and Asia will drive demand for forest products.

2.2.2 Environmental regulation

The Carbon Economy

Since the mid 1990's debate about climate change and the role of greenhouse gas emissions in global warming has consumed governments, industry and environmental non-government organisations with considerable research and debate on the cause and impact of climate change and the most appropriate course of action.

While the final global and Australian strategy towards greenhouse gas abatement is yet to be defined, to proceed as an industry without any strategy would be an extremely high risk.

Mitigation of greenhouse gas (GHG) emissions is likely to be a feature of the Australian and global economy in the future and forestry can play a significant role in potentially three ways by:

1. Sequestering carbon dioxide from the atmosphere
2. Storing carbon in harvested wood products
3. Substitution of products made from energy intensive non-renewables

The sequestration of carbon in plantations is relatively well understood and recent research suggests that sustainably managed natural forests can also play a positive sequestration role. While wood products are not accounted for under the Kyoto Protocol, countries can report carbon emissions and removals from the atmosphere with the use of wood products under the UNFCCC (Moroni, 2011). Wood substitution of products made with fossil fuels is also a positive.

Environmental Repair and regulation

Australia has significant environmental problems caused by the clearing of native vegetation for agriculture and urban dwellings.

The Australian Natural Resource Audit (ANRA) suggests that since European settlement 13% of our landscape was cleared which is approximately 100 million ha (ANRA, 2003).

According to ANRA the key problems are:

- **Erosion** – approximately 4.8 billion tonnes of soil per annum has the potential to be moved by sheet & rill erosion.
- **Salinity** – currently there is over 5 million hectares of land at risk of dryland salinity and this could grow to 17 million hectares by 2050 if it is left unchecked.
- **Loss of Biodiversity** – the land cleared for agriculture and urban zones are the lowest in biodiversity and need additional planting.

While Landcare (http://www.landcareonline.com.au/) has greatly increased awareness of repairing our landscape the forest industry has the science and tools to accelerate the planting on a larger scale if there is the possibility of producing commercial species and or speciality products. However it will be important that these plantings are accepted under the additionality requirements of the Carbon Farming Initiative and are eligible for the sale of carbon credits.

The ANRA audit illustrates an important point that Australia is not overplanted with trees and any restrictions on tree planting is not justified when compared to the level of clearing that has been undertaken since European settlement.

Environmentalism

The community trend towards higher environmental awareness and subsequent consumer preference for natural products that are classified as organic, humane, recyclable and renewable is unlikely to wane. A great opportunity exists for the industry to gain greater community acceptance. This could be achieved through a combination of stakeholder engagement to understand why the industry is not appreciated, what practices to improve, plus creditable certification that is trusted and or accepted by the community and finally improved promotion when the industry is confident that the community and/or consumers are receptive.

2.2.3 Technological development

The growth in population suggests that there will be good demand for traditional timber and paper products particularly if community acceptance of the industries activities can be raised. However the forest industry could also supply both new markets and new products.

Engineered wood panels such as Cross Laminated Timber (CLT) could become a serious and more environmentally friendly alternative to pre-fabricated tilt up concrete slabs. Melbourne based construction company Grocon is building a

multi storey building from CLT which is designed to be carbon neutral. Lend Lease has also recently announced it is planning to build the worlds' tallest wooden building (http://www.forteliving.com.au).

Forestry Tasmania is also trialling products made from veneer peeled from what would traditionally be considered pulpwood. Once peeled and glued in a Laminated Veneer Lumber format they are developing different structural and appearance products. This is potentially a higher value end product with higher utilisation of the resource and faster processing times than if it were sawn.

Renewable energy will also be an important part of the carbon economy and energy from biomass has been extensively developed in Europe and North America. Torrefaction is a value added biomass which essentially turns wood waste into a coal like and substitute product which is more efficient and easier to handle than the traditional raw wood pellets.

Virgin Airlines is aiming to source at least 5% of it is jet fuel requirements from sustainable bio-derived fuel by 2020. It is investigating ligno-cellulosic sources including mallee plantations and other wood waste. (White, D. 2012).

Carbon fibre has been produced by extracting lignin from kraft pulp. Promising research findings with carbon fibre from lignin are presented in a new doctoral thesis by Ida Norberg in Stockholm, Sweden. The thesis shows that lignin, a substance that is found in wood but is removed during kraft pulp production, has great potential for use as a raw material for manufacturing carbon fibre. Carbon fibre is strong and light, with many applications. Today, demand is mainly limited by the high cost of production due to the petroleum-based raw material and fibre spinning, accounting for around 50% of the cost.

Research in New Zealand is also showing promise by producing substitutes for petroleum based chemicals from hardwood waste for the production of 2nd generation ethanol based fuels, thermo plastics, resins and adhesives, confectionary and wood pulp (Snowden, 2012).

Assuming the forest and wood products industry can gain stronger community acceptance and maintain its competitiveness it should have a bright future due to the population and economic growth within Australia and Asia driving demand for wood products. In addition, promising research is suggesting new and potentially exciting products which could also provide investment options for the industry as the economy transitions to more renewable resources.

3 SUMMARY OF FOREST INDUSTRY REVIEWS

There have been various pan industry, sector and regional reviews over the last decade and the following section will develop a précis of the main recommendations from previous research and literature and in particular from the two main reference documents:

- *Pulp & Paper Industry Strategy Group Final Report (March 2010) (PPISG)*
- *Seeing the forest through the Trees: Inquiry into the Future of the Australian Forestry Industry – Nov 2011. (HoR)*

[A summary of the main recommendations for the above are contained in the Appendix].

A dozen reports and strategies were reviewed and the total number of recommendations from these is over 150. The following recommendations are amalgams of these reports and strategies and, recognising many have similar intentions, they have been grouped into the following six themes.

1. Industry Policy and Strategy
2. Plantation Investment & Resource Development
3. Industry Competitiveness
4. Marketing
5. Research and Development
6. Greenhouse and Carbon

3.1 Industry Policy and Strategy

The following recommendations relate to industry policy and strategy.

Recommendation	***Who***[6]
Provide a clear statement supporting the value & long term viability of the forest industry.	PPISG, VAFI
Consider whether Australia should be self-sufficient in wood supply.	HoR
Review, revise and renew the Regional Forest Agreements	HoR, PPISG, Vic DPI - TIAP
Review of the 1992 National Forest Policy Statement last revised in 1995	FWPA (2011)
Review policy alignment that impacts on industry investment, infrastructure and supply chain efficiency	PPISG, FWPA (2011), DAFF – NAS-FF
Develop a landscape approach for new plantations and farm forestry	DAFF-NAS-FF

3.2 Plantation Investment and Resource Development

The plantation investment and resource development recommendations are:

Recommendation	***Who***
Create a national plantation investment model to underpin current industry	PPISG, HoR, FWPA (2011), AFPA, TheCie, NFPS, Vic DPI TIAP, VAFI, TQ AFG
Develop a national plan and support for Farm Forestry	HoR, DAFF-NAS-FF, AFG, TQ
Ensure Caring for our Country funding is available for Farm Forestry	HoR, AFG
Support for enhanced management of Private Natural forests	NFPS, AFG
Maintain a diversity of wood supply for specialist and commodity uses	AFA, AFG

3.3 Industry Competitiveness

The following recommendations relate to industry competitiveness.

Recommendation	***Report***
Through COAG - establish a single integrated planning & approval system for major infrastructure projects and access to private natural forests	PPISG, AFG, HoR
Australian Export Finance & Insurance Corp to give greater weighting to ethical, environmentally sustainable, value adding projects	PPISG

[6] Acronyms are listed in the Glossary and refer to the main Reviews and/or Associations that have made this or a similar recommendation.

Develop innovative & secure financial instruments to attract infrastructure investment i.e. convertible infrastructure bonds.	PPISG, AFPA
Australian & State Governments develop policies for an affordable supply of gas and a competitive market for wholesale electricity	PPISG
Overhaul of building regulations to ensure regions are not disadvantaged by regulations (i.e. energy efficiency) more suited to other states.	TQ
Develop working group with Australian Customs & Border protection Service to reform and streamline dumping actions	PPISG
Consider investment or regulatory response to supply chain impediments and look to develop industry clusters.	PPISG, AFA, TQ, FWPA
Integrated and coordinated decision making - to reduce fragmentation and duplication in land use decisions between the States and the Commonwealth and forest management agencies to achieve durable land use decisions.	NFPS
Preventing products entering Australia that are either under-priced or fail to meet Australian quality and health standards; this is very important for downstream industries like furniture, cabinet-making and joinery.	PPISG, AFA
Support research and development to improve utilisation of raw materials and develop new high value products	PPISG, TQ, AFG

3.4 Marketing

The following recommendations relate to Marketing.

Recommendation	***Report***
Understand long term demand for Australian forest products	HoR, TQ
Australian Government to work with industry to support internationally recognised forest certification schemes and mutual recognition.	PPISG, AFPA, HoR
Modify Australian procurement policy to recognise legitimate social & environmental standards - Australian Ethical Quality Mark	PPISG
Understand community concerns about sustainable forest development and management and promote the environmental credentials of wood products	HoR, NFPS, Vic DPI-TIAP, VAFI AFG
Promote greater understanding of forest certification and mutual recognition between schemes	HoR, DAFF-NAS_FF,
Promote open and transparent markets for log products including publicly available log prices	FWPA, DAFF-NAS-FF,
The under-pricing of wood fibre in world markets is expected to persist, imposing a cost on any trade-exposed forestry region where prices are driven by the world price	The CIE

3.5 Research and Development

The following recommendations relate to Research and Development.

Recommendation	***Report***
Establish the P&P industry innovation council	PPISG
Support workforce planning and development initiatives such as new & emerging technologies, products & manufacturing processes	PPISG
Increase Australia's national forest research and development effort and to ensure it is well co-ordinated, efficient and effective.	NFPS, AFPA AFG
Support farm forestry R&D that will promote commercialisation of new species and the development of new products, investment frameworks and production systems.	DAFF-NAS_FF
Encourage industry innovation & R&D	Vic DPI-TIAP, AFPA AFG, TQ
Research into community attitudes to understand their negative perceptions of the industry and what needs to change to gather their support for all sectors	TCA
A strong R&D capacity that can increase tree growth rates will strongly impact ROI	FWPA 2011.

3.6 Greenhouse and Carbon

The following recommendations relate to a carbon regulated economy.

Recommendation	***Report***
Assist the Industry to meet its emissions challenges	PPISG, AFPA
Develop national standards for accounting for carbon in harvested wood products	PPISG,
Develop a mature Carbon Farming Initiative (CFI) to consider: i) The capacity for 'additionality' to recognise the diversity plantations and farm forestry applications, rather than generalised inclusions ii) The capacity of 'permanence' to include sustainable harvesting and replanting of plantations and farm forestry; and iii) How the CFI can support the forest industry generally.	HoR, TQ AFG
Increasing the availability of the renewable energy stock by: i) ensuring wood waste is classified as a renewable energy input & ii) amending the expanded Renewable Energy Target (RET) rules to enable renewable energy certificate (REC) from the renewable heat component of co-generation circuits	PPISG, HoR
Investigate the implementation of incentives to further encourage domestic recycled paper manufacturing	PPISG
Promote the environmental credentials of wood including the positive contribution the industry can make to greenhouse gas mitigation including: i) Sequestration in growing forests ii) Storage of carbon in harvested wood products iii) Substitution potential of wood products to displace energy rich and generally non-renewable products.	AFPA, VAFI, TQ, Moroni (2011) AFG

4 OPPORTUNITIES

The following are brief notes on the opportunities for the industry in the future.

4.1 Population growth in Australia and Asia

As discussed, there is expected to be significant growth in both the Australian and Asian population (led by China) which will drive demand for forest products.

Neither Australia nor China is self-sufficient in forest products which creates both an opportunity and impediment for the Australian market. If Australia does not have the products it cannot trade.

4.2 Improved community acceptance.

The Australian forest industry has periodically gained significant support from the major political parties and the industry has run successful advertising campaigns but unfortunately these did not last. The expansion and subsequent failure of MIS plantation companies has created an image problem for the industry in rural areas to the extent that licencing of plantation development is being contemplated. In addition the visual impact of harvesting natural forest and especially clearfalling appears to be overshadowing all the beneficial externalities of sustainable forest management. Dedicated research into community understanding is required to develop policies that will provide

lasting community support. Given the positive credentials of wood products if this is undertaken well it represents one of the industy's greatest opportunities.

Interestingly other industries consider forests to be positive advertising, as the NSW mining industry has used a photograph of a miner in a young forest holding a seedling to advertise their achievements in minimising environmental impact (Regional Express, 2012)!

4.3 Forestry recognised in the carbon economy

Both internationally and domestically there has been a focus on storing as much carbon in forest landscapes as is biologically possible, without considering the additional accounting for carbon in harvested wood products and the offsetting potential these products have when they substitute for more energy rich and usually non-renewable products (Moroni, 2011).

This approach treats forests as static systems which is incorrect as forests are dynamic and irrespective of their tenure they will constantly change.

It is more appropriate to model carbon inflow to a forest via growth and then outflow due to harvesting, decomposition and fire. This model can incorporate the necessary dynamics of forest growth and disturbance regimes, and can be expanded to include carbon stored in wood products and the substitution effect of these products in the marketplace. Substitution is recognised as having the greatest benefit in GHG mitigation (Moroni, 2011)

Recent work by Ximenes et al (2012) support the proposition by Moroni and suggest that harvested forests provide a greater greenhouse gas benefit than leaving forests unharvested.

Australian forests and wood products, if realistically accounted for, can provide a significant GHG mitigation benefit for Australia.

Modelling by FWPA (2011) and Paul (2001) suggest that a carbon payment of around $20 per tonne of CO_2^{-e} would assist in the expansion of the production plantation estate in Australia without causing perverse land use change.

While politics is defining carbon policy at present (The CIE, 2012), moving to a carbon regulated economy suggests that the competitiveness of energy intensive products will gradually decline as carbon pricing becomes more commonplace within the local and global economy and renewable resources like wood become increasingly more appealing not only for consumers but industry as well.

4.4 Resource Development

Broad scale Plantations - There is demand for further expansion of broad scale plantations and given Australia has over-cleared its landscape any argument suggesting the contrary is unjustifed. However, arguments supporting food security versus the poor image (and performance in some regions) of plantations will mean that an integrated approach will be more socially acceptable with a greater chance of success than purely broad scale planting.

Depending on the demand, growth rate and processing efficiency assumptions, the area of new plantations needed to meet the demand of 35 million people by 2050 could be as high as another 300,000 to 500,000 ha.

Accessing land for broad scale plantations – will be a challenge. Stewart (2010) researched the opportunity to access land for plantation investment and found that absentee landowners could provide an opportunity. Scale could be a problem but with a good investment model, industry could develop lasting relationships with these landowners who may be more time poor and cash rich than full time farmers and thus find plantations an easy management option.

Farm Forestry - The area of plantations under farm forestry in Australia was estimated by URS Forestry (2008) in a report to RIRDC to be around 155,000 ha. The CIE suggest that farm forestry also represents a highly acceptable form of plantations and source of environmental services for the taxpaying public.

The CIE also note that there have been wide-ranging efforts to establish farm forestry, particularly over the last decade. However, consultation with industry suggested that farm forestry is not currently receiving any meaningful support which would be required to overcome landholder reluctance.

Private Natural Forest area is approximately 38 million ha which is significant when compared to the 9 million ha of public natural forest available for wood production (ABARES, 2011). The quality of private natural forest is extremely variable and the condition and productivity is not well recorded. Anecdotal data from Australian Forest Growers (AFG) estimates that there are about 10 million hectares that could be managed for forest products of which probably 5 million hectares are currently producing in some form. The sheer size of this resource represents a considerable opportunity for production of both commodity and specialist forest products (e.g. durable poles and heavy construction timbers as well as high value feature timbers for flooring, panelling and furniture) which are not easily grown in plantations. In addition there are good social outcomes when it is integrated with agricultural activities such as beef cattle production.

The importance of private natural forests to the industry is increasing as access to public natural forests for harvesting is diminishing. Best practice silvicultural management (which costs considerably less than plantations) should derive public benefits which do not accrue to the individual landholder, including sustainable production for industry and sustainability of forest ecosystems as they are predominantly managing the naturally occurring endemic species.

These values derive longer term social and economic benefits that are not fully captured by the landholder, particularly in jurisdictions where the future rights to harvest are perceived to be insecure and there are greater incentives to exploit the resource earlier rather than endure significant costs and risks associated with good silvicultural management. Long term harvesting rights for private natural forest owners are only secure in Tasmania, although Queensland does have legislation that overrides local government. In the other states, harvest planning regulations for private forest owners are not straightforward and could be viewed as a disincentive to manage private forests for wood production.

Sustainable management of natural forests is closely related to organic farming. Organic is a definition the community understands and it requires specific management that is not dissimilar to current natural forest management. The criteria for organic includes the following: (http://www.organicgrowers.org.au/)

- Improves the structure, fertility, and health of the soil while enhancing the surrounding environment
- Produces quality agricultural and livestock products, true to species, with high nutritional value
- Avoids pollution resulting from agriculture
- Minimises the use of non-renewable resources
- Increases biodiversity
- Works towards being a closed system

4.5 Attracting investment

Australia has an annual surplus of harvested wood but an import deficit which suggests that there may be resource development, value adding, or new market opportunities. These could be captured with the correct government policy incentives for investment and supportive research and development. The aim would be to balance the supply with Australia's demand and prevent a repeat of the MIS era which focused mainly on one species for one export market.

Attracting appropriate wholesale investment for plantations from establishment to final harvest is critical to increase the supply of renewable forest resources and adopting successful carbon schemes from overseas could be a catalyst.

The PPISG suggested that the development of innovative & secure financial instruments to attract infrastructure investment such as convertible infrastructure bonds may also assist in attracting investment.

4.6 Improving cost competitiveness of the industry

There are two aspects to improving the industry's cost competiveness firstly improving the efficiency of the traditional products and its supply chain and secondly innovation within the industry.

In terms of the traditional industry the NFPS in 1992 had recommendations for; efficiency in the wood processing supply chain, decision making in relation to land use and training and skills development. The recent reviews recommended a range of factors to improve cost competitiveness which includes:

- Introducing uniform resource security for harvesting on private property to encourage investment in sustainable management.(FWPA, 2011)
- Streamlined planning to prevent uninformed bias from local government councils. Mutual recognition of certification systems would also assist. A concern is that some local government areas are employing their own code of practice inspectors to check on plantation managers. Local government does not have the experience to do this but adds a layer of

cost. The PPISG suggest establishing a single integrated planning and approval system for major infrastructure projects.

- Developing strong industry clusters where there are good markets for all products. (FWPA, 2011)
- Care with centralisation of responsibilities so that regional variances are taken into account. For instance building regulations and ratings associated with energy use and efficiency that are suitable in Victoria are probably inappropriate for Queensland. (TQ, pers com).
- The PPISG, TQ and VAFI suggest that affordable supplies of gas and electricity are obviously important for cost competitiveness and ensuring that road development is in line with plantation development and processing facility locations is also important.
- Preventing products entering Australia that are either under-priced or fail to meet Australian quality and health standards; this is very important for downstream industries like furniture, cabinet-making and joinery.
- The PPISG recommended streamlining anti-dumping processes for and the Australian Furniture Association (AFA) suggests that a reverse onus of proof may also be an option.
- PPISG consider investment or regulatory response to supply chain impediments including:
    i) Enabling double stacked containers the north south rail route
    ii) Improve access to intermodal terminals
    iii) Separation of the passenger and freight rail lines servicing ports
- PPISG want urgent implementation of COAG's decision on national heavy vehicle regulation and consistency of heavy vehicle mass limits across all three levels of government
- Improve competition in the wholesale electricity market & that electricity network investment is necessary, prudent, tightly controlled & transparent, justified and affordable (PPISG, TQ, VAFI)
- Support workforce planning and development initiatives such as new & emerging technologies, products & manufacturing processes (PPISG).
- The industry needs to adapt to remain competitive. For instance the price of steel used in housing is considerably more expensive than timber (Harvey, 2011) but it is still holding market share.

Improving the cost competitiveness through either new products and/or markets or through structural change at an industry or supply chain level is also possible.

- A range of new products were discussed in section 2.2.3 that have emanated from the development and utilisation of innovative technology. This research can continue to provide new opportunities for the forest industry if R&D providers are available.
- Weak market knowledge and reporting beyond wholesalers and the truss and frame industry may be obscuring inefficiencies.
- Adapt construction methods to provide cost efficient prefabricated housing for the mining industry (to compete with the steel and alloy units), or others operating in isolated areas?

- Removing distortionary policies is as beneficial as finding new markets e.g. removing the impediments to biomass from natural forests for renewable energy can assist the efficiency of the industry and potentially provide much needed power in isolated areas.
- Education and training can increase productivity by addressing the capabilities and relationships between managers and workforces to create High Productivity Workplaces.
- Australia is a high cost economy and while it has enjoyed the export of commodities to its advantage, developing products of high value is advantageous as commodity cycles will eventually turn.
- Continued R&D in innovative technologies is required. For example FWPA engaged research into powder coating timber which will virtually eliminate the need for painting and could remove one of the main disincentives for using timber cladding on houses. Innovative technologies can be utilized to manufacture new products (possibly niche products) and potentially dramatically improve the cost competiveness of the entire supply chain.
- Bio-refining of wood for chemicals that replace petroleum products or even niche products for medicinal products are possible. Often the process is not new but requires some assistance or the removal of any policy bias to get them into the market.
- Australia's harvest surplus and trade deficit suggests some opportunity for increased value adding although importantly not all the surplus is substitutable for the imports. In general the greater the value adding in the regional community where the wood resource is grown, the more significant is the benefit that accrues to that community, both with respect to employment opportunities and business or economic activity.
- Previous studies (FWPA, 2011, URS 2008) have suggested that full transparency in wood pricing and regional demand will aid investment confidence for smaller growers.

4.7 Externalities of forestry in rural Australia

The CIE (2012) suggests the existence of market failures or other impediments in the economy are impacting the efficiency of forestry markets. The level of investment in trees in Australia could be below the economically-efficient level. The CIE suggest the most significant constraints are in relation to externalities whereby the free market does not fully account for the benefits from the production and consumption of environmental services provided by plantations

Payments for ecological services could offer a robust and transparent source of revenue. Establishing these markets remains dependent on the recognition of these values by government, and the communities that they represent

Governments frequently implement policies to address market failures associated with externalities where price mechanisms do not take into account the social costs and benefits from the production and consumption of goods and

services such as air, water and other ecological services. As individual actions can positively or adversely affect all they are rarely priced in a free market.

5 BARRIERS

5.1 Broad scale plantations

There are a number of key barriers for renewed investment in broad scale plantations.

Location & image - the forest industry clusters (i.e. Tumut, Green Triangle, Sth East Qld) are the obvious place to develop new plantations. Apart from the often higher capacity to pay of competing land use The CIE (2012) found:

"*expansion of plantations imposes mixed impacts on the community and structural changes to regional economies and demographics. This generates benefits to some (such as higher land prices & employment) whilst imposing costs on others and any dominant expansion…of plantations (as occurred through MIS) can cause regional scale transitional adjustment issues"*.

The CIE also added that regional surveys show that agricultural land uses are overwhelmingly viewed as very acceptable and favoured over plantations. The industry will also need to address the various State responses to the National Water Initiative that can restrict where and how new plantations are developed.

The industry has an image problem that it needs to address before it is likely to be able to develop any new plantations of any scale.

Investment attraction – a key barrier to attracting investment in new plantations are the high up-front costs of purchasing the land and establishing and maintaining the plantation. The growth rate and average log price are not high enough to counter these early costs and risk, the so called difficult first decade. However lowering the cost of access to land and introducing the sale of carbon can lift the investment to an acceptable rate of return (FWPA, 2011).

Modelling by FWPA (2011) found that if the Federal Government provided a defined grant of $2,500 to $5,000 per hectare to purchase the carbon stored in the plantation then a rate of return around 7% real pre-tax can be achieved.

The rationale for government intervention in plantations could revolve around three main themes:

1. Developing the supply of renewable resources
2. Maintaining a stable and economic regional industry
3. Reforestation of degraded landscapes

Plantations can make a significant contribution to a lower emissions economy, as well as providing a renewable supply of building products to meet the increasing demand for housing. They can also assist the provision of a cost-effective and reliable form of renewable energy. Therefore assisting plantation development is a worthy inclusion in climate change policy and in return the sale of carbon credits and waste wood for bio-energy can encourage new

plantation development. Past investment in plantations in Australia has in most cases, stimulated investment in secondary processing and created new employment. This has greatly assisted the economic development of a number of rural and regional economies and also met Australia's demand for wood products which is expected to remain strong.

Importantly due to the unique position of the government in facilitating reform to correct for market failures and as the principal (potential) customer of environmental services provided by plantations, the future of investment in long rotation plantations is dependent on governmental recognition of the benefits associated with the removal of impediments (CIE 2012).

The CIE found strong evidence for many environmental values for plantations. But, the impact on market pricing and the viability of plantations is difficult to assess and they found no evidence to identify a case for investment in long rotation plantations based on socio-economic values.

Negative social perceptions of forestry also impose constraints in terms of policy development and planning decisions. This is despite the industry over the years undertaking extensive environmental impact statements, Regional Forest Agreements and gaining third party certification.

Lack of sufficient scale of resource

The surplus wood from the early softwood plantings of the 1960's to the 1980's is now maturing and most of this supply is committed to industry. There is now a lack of large scale resource baskets to feed world scale and competitive processing plants. Hence processors wishing to expand or new entrants will find it impossible to secure supply without buying out another processor.

Admittedly there are still some scattered, sub-scale resources that are not fully committed, or are attracting low returns. Resource owners must decide whether they can attract competitive industry or sell to a higher value land use.

5.2 Farm Forestry

The CIE (2012) reported that studies on farm forestry have concluded that landholder reluctance to plant is primarily associated with perceived or actual economic impediments to planting, maintaining and harvesting their trees.

The CIE identified hidden taxation and superannuation issues which may disadvantage small holders and private individuals investing in forestry compared to agriculture or other assets. Achieving equal status with other investments, particularly agriculture, may partially alleviate economic barriers to planting trees. Nonetheless, compensation for environmental values from Catchment Management Authorities (CMAs) or governments is likely to be required to induce any serious commitment in farm forestry (CIE 2012).

Farm forestry is unlikely in the near term to provide the critical mass or resource security necessary for a competitive and viable processing sector. However, given the industry's image problems it could be rewarded if it could develop a workable model. If landholders act as researchers suggest, they

expect to see most planting by landholders in initially small and perhaps irregularly shaped plots, creating a mosaic effect across the landscape which has benefits but is inefficient for industry Therefore industry should review overseas models possibly in the Nordic states to understand how to incorporate this planting into its wood supply and improve its social licence in rural areas.

Farm forestry also includes private natural forest and there is an opportunity for industry to increase its sustainable wood supply if log price transparency and market access for landowners is improved and extension support provided.

5.3 Industry competitiveness

There are a number of barriers to the Australian forest industry competitiveness, some of which have already been discussed. In short they are:

- The high Australian dollar.
- Lack of vital or adequate infrastructure.
- Complex and conflicting regulation at different levels of government.
- Regulation costs such as certification and the lack of mutual recognition.
- Old processing facilities (in some sectors) of which some have closed and not been replaced.
- Lack of market transparency or knowledge particularly between the grower and primary processor and the end consumer.
- Poor supply chain knowledge making it difficult for growers and primary processors to impact end product price
- The CIE noted that politics may be impeding the development of equitable and conducive policy for the industry. Including policies on taxation and superannuation, private natural forest regulation and the development of markets for carbon and biomass.

5.4 Declining & fragmented education and R&D

Education particularly at the tertiary level for the Australian forest industry is not well co-ordinated and the industry is having problems attracting staff from forest machine operators to skilled graduates for forest management, wood processing and marketing. Attracting new entrants to the industry is difficult and the industry has resorted to importing skills from overseas.

Forest and Wood Products Australia (FWPA) is an efficient manager of research levies but it does not undertake research and with the closure of the CSIRO Division of Forest and Forest Products, the CRC for Forestry and many of the state agencies there is no national entity that specialises in forest research. A decline in high quality research will ultimately reduce the industries investment attraction and competitiveness.

6 RECOMMENDATIONS

Following the evaluation of the various reviews the following five recommendations are provided to guide both industry and government planning.

6.1 Government to develop a clear statement of support for the industry

A clear statement of support for the industry was requested by the Pulp and Paper Industry Strategy Group (PPISG Rec 1) and inherent in the House of Representatives Inquiry into the future of the Australian Forest Industry (HoR Rec 3). This is also within the National Forest Policy Statement (NFPS Goal 9) and the industry strategies in Victoria and Queensland. Australian Furniture stressed a desire for improved social licence and government policy priorities are also required to ensure farm forestry operates effectively. The industry has an image problem and while Governments cannot provide social licence they can support the industry in its endeavours to engage with the community and understand and effectively address their concerns so as to allow the development of environmentally positive and renewable resources like wood.

6.2 Full recognition of the industry's role in a carbon regulated economy

The industry can play a significant role in a carbon regulated economy by:

1. Sequestration of carbon dioxide from the atmosphere.
2. Storage of carbon in harvested wood products
3. Substitution of non-renewable and energy rich products in the market

There are policies which bias against the forest and wood products industry including impediments under the Renewable Energy Targets (RET) for renewable heat, biofuels and wood waste, particularly from natural forests (PPISG Rec 11 & HoR Rec 15). The Carbon Farming Initiative (CFI) does not recognise commercial plantations or those developed by MIS and yet with recognition of their full life cycle benefits they have the potential to make a greater contribution to greenhouse gas abatement than forests which are not harvested. Further incentives for domestic recycling (PPISG rec 12) would be positive and 'end of life legislation' could also be investigated which is common in Europe. Recognition of the industry's potential supportive role in a carbon regulated economy are also recommendations in the HoR inquiry, FWPA (2011), The CIE (2012) and in a number of industry association plans.

6.3 Plantation Investment and Resource Development

Actions to improve investment in long term plantations and the development of sustainable wood resources from public and private natural forests are a common theme and included the following points.

- Design mechanisms/models for sustainable development of plantations.
- Complete reviews of Regional Forest Agreements (RFA) and establish a rolling/evergreen mechanism for their renewal and access to public natural forests while ensuring there are no adverse restrictions on private natural forests.

- Recognise the unique characteristics of farm forestry in particular the social value of integration of forestry in local communities and to supplement supply from industrial plantations and public natural forests.

Institutions continue to be interested in investing in established plantations but not in developing new long term plantations which has slowed to historic lows. Recognition that once developed, plantations and natural forests can be managed sustainably in perpetuity has significant economic, social and environmental values but government and community support is required before these values can be realised.

6.4 Improving Industry Competitiveness

Recommendations for improving industry competitiveness include:

- Ensuring investment facilitation comparable to other countries (including overseas incentives for bioenergy), (PPISG rec 5).
- Adequate supplies of affordable gas and improve competition in the wholesale electricity market (PPISG rec 14 & 17).
- Establish a single integrated and co-ordinated government planning and decision system for resource development through to major infrastructure projects (NFPS goal 3, PPISG rec 6, NAS – FF rec 2)
- Develop innovative and secure financial instruments to attract infrastructure i.e. convertible infrastructure bonds (PPISG rec 8)
- Federal and State Governments to consider investment or a regulatory response to industry supply chain impediments (PPISG rec 17, AFA)
- Australian Government to support workforce planning and development initiatives such as emerging technologies, products and manufacturing processes (PPISG rec 18)
- Policy alignment with forest resource development and related transport and energy infrastructure. (FWPA 2011)
- Development of industry clusters to improve the economies of scale of the existing industry. (FWPA 2011)
- Ensuring imports are priced and produced at acceptable Australian quality standards. (AFA & Industry comment)
- Strong implementation of anti-dumping measures including establishment of an anti-dumping agency and effective regulation to underpin illegal logging legislation (PPISG rec 15, CFMEU)
- Accept that the industry is made of many parts some large producers and processors and some small, each has an important role to play in sustaining an efficient industry

6.5 Maintain Funding Support for Industry Education, Research & Development

Support for education is also required from University to the trade level and from growing to processing and end markets to maintain industry attractiveness and competitiveness. Forestry related research and development is required across the supply chain from resource development to new end products and marketing. A national research institute is required to replace the loss of capacity at CSIRO, State forest agencies and the CRC for Forestry.

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8 APPENDIX ONE – PULP & PAPER INDUSTRY STRATEGY GROUP

The Pulp and Paper Industry Strategy Group comprised representatives from the Commonwealth government, the Australian pulp and paper industry, unions and industry experts. Their abbreviated eighteen recommendations to the Australian Government are as follows:

	Industry Support
1.	Provide a clear statement supporting the value & long term viability of the P& P industry.
	Innovation
2.	Establish a Pulp and Paper Innovation industry council
	Investment
3.	Establish a plantation investment model to underpin current industry
4.	Provide assistance to the P&P industry to meet its emissions challenges
5.	Develop a strategy to promote Australia as a preferred location for P&P investment
6.	Establish a single integrated planning & approval system for major infrastructure projects
7.	That the Australian Export Finance & Insurance Corporation mandate to provide investment and financial facilitation give greater weighting to the major industrial investment proposals that are ethical, environmentally sustainable, value adding projects.
8.	Develop innovative &secure financial instruments to attract infrastructure investment i.e. convertible infrastructure bonds.
	Sustainability
9.	To work with industry to support internationally recognised forest certification schemes
10.	Modify Australian procurement policy to recognise legitimate social & environmental standards through possibly an Australian Ethical Quality Mark.
11.	Increasing the availability of the renewable energy stock by i) ensuring wood waste is classified as a renewable energy input & ii) amending the expanded Renewable Energy Target (RET) rules to enable renewable energy certificate (REC) from the renewable heat component of co-generation circuits.
12.	Investigate the implementation of incentives to further encourage domestic recycled paper manufacturing
13.	i) Ensure outstanding reviews of Regional Forest Agreements (RFA) are completed by mid-2010 ii) Explore options to maintain long-term resource security for the natural forest industry
14.	Ensure adequate supplies of affordable gas and gas infrastructure for future industry needs
	Productivity
15.	Streamline the processes making a dumping or subsidy case including: i) Business be given a clear definition of material injury ii) Reject the Productivity's Commission - Public Interest test and continuation of measures.
16.	Consider investment or regulatory response to P&P Supply chain impediments including: i) Enabling double stacked containers on main north south rail route ii) Improve access to intermodal terminals iii) Separation of the passenger and freight rail lines servicing ports iv) Implement ASAP COAG's decision on national heavy regulation and consistency of heavy vehicle mass limits across all three levels of government
17.	i) Improve competition in the wholesale electricity market & ii) that electricity network investment is necessary, prudent, tightly controlled & transparent, justified and affordable.
18.	Support workforce planning and development initiatives such as new & emerging technologies, products & manufacturing processes

9 APPENDIX TWO – INQUIRY INTO THE AUSTRALIAN FORESTRY INDUSTRY

The House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry completed an inquiry into the future of the Australian forestry industry called 'Seeing the forest through the trees'. The Committee was chaired by the Hon Dick Adams MP and contained seven other members of the House of Representatives. Their abbreviated nineteen recommendations, recommended by the Committee to the Australian Government are as follows:

	Future role of forestry and forest products
1.	Assess and publicly report on the likely demand and supply scenarios over the next 40 years
2.	Consider whether Australia should be self-sufficient in wood supply.
3.	Promote timber and wood products as replacements for more energy intensive materials
4.	Develop robust national standards for quantifying the carbon stored in different products made from harvested trees, including the storage and policy implications of those standards.
5.	Develop a mature Carbon Farming Initiative (CFI) to consider: i) The capacity for 'additionality' to recognise the diversity plantations and farm forestry applications, rather than generalised inclusions ii) The capacity of 'permanence' to include sustainable harvesting and replanting of plantations and farm forestry; and iii) How the CFI can support the forest industry generally.
	Natural forestry
6.	Initiate a process to review existing Regional Forest Agreements (RFA), incorporating the principles of review, consultation, evergreen extension and concrete timelines
7.	In conjunction with the relevant State Governments ensure that a renewed RFA is in place within three year of the expiry of each existing RFA. Renewed RFA's to incorporate the principles in recommendation 6 above.
8.	In negotiation with the State Governments develop, agree and implement a new regime within all renewed RFA's to provide for on-going monitoring and periodic assessment. The new regime should provide for the periodic assessment of each rFA on an individual basis, at regular intervals, and at arm's length from all interested parties.
9.	Direct DAFF to consider and evaluate the 'stewardship' proposal outline above, and that relevant Minister report to Parliament on its findings within 12 months.
	Plantations
10	Lead a process through COAG to create a national plan for plantations, to ensure that i) Plantations of appropriate species are planted in appropriate locations; and ii) Appropriate regional infrastructure exists or is planned and funded
11	i) Decide whether the encouragement of long rotation plantations is an appropriate objective of policy ii) Establish whether it is necessary and appropriate for government to provide an incentive to meet that objective iii) Set out a clear plan to meet that objective, according to the national plan for plantations iv) Assess whether MIS as a mechanism can meet that objective v) If MIS can meet that objective, determine whether it needs to be altered to make it more effective; and vi) If MIS cannot meet that objective, determine whether other mechanisms could do so.
	Farm Forestry
12	Through COAG, lead a process to agree a national plan for the provision of, and access to enabling infrastructure for farm forestry.
13	In concert with state and local governments, provide immediate and ongoing financial support to local organisations that provide extension services for farm forestry, particularly through the Caring for our Country initiative.

14	Explicitly state that Caring for our Country funding is available for farm forestry activities, and actively promote this fact to the broader community through an extensive information campaign.
	Using forestry biomass
15.	Under any version of the RET (or similar scheme) bioenergy sourced from natural forest biomass should continue to qualify as renewable energy, where it is a true waste product and it does not become a driver for the harvesting of natural forests.
16.	If the above principles are adhered to legislation or regulation direct the Minister to grant an individual exemption from natural forest biomass exclusion.
17.	Under any system of exemption from the natural forest biomass exclusion, provision be made for reporting on biomass volumes used, energy used and income generated, to ensure that the biomass used is a true waste product.
	Forestry into the future
18.	Provide funding to FSC Australia to support the development of the proposed FSC national standard, with the expectation that the FSC national standard will replace the interim standard within 5 years.
19.	Lead a process of discussions with all state and territory governments to consider national approaches to: i) Forestry and Climate Change ii) Farm Forestry; and iii) Future wood product demand and supply.