



## Submission to the Senate Rural and Regional Affairs & Transport References Committee – Inquiry into Australian Plantation Forestry

### Executive Summary

- The PTAA represents the Australian plantation timber industry and promotes the increased use of Australian plantation timber.
- There are 1.6 million hectares of timber plantation in Australia.
- Timber plantations supply more than half of the wood produced in Australia and could be providing 75 per cent by 2010.
- The plantation sector, in partnership with all Governments, has a vision of expanding to more than 3 million hectares by 2020. The key objective of this expansion is to create regional level wood supplies that are sufficient to support internationally competitive wood processing operations.
- Some of the major factors limiting further investment in plantation expansion in Australia include:
  - Return on investment
  - Investment timeframe
  - Critical mass
  - Regional planning and infrastructure
  - Land use regulation
  - Role of governments
  - Information and awareness
  - Research and development
- It is not the contents or the comprehensiveness of the 2020 Vision strategy that is limiting its success. Rather it is the level of commitment of the various players to the strategy, the extent to which responsibilities for action have been clearly identified and pursued and general awareness and understanding of the strategy which are limiting its success.
- The PTAA is in the process of developing a plantation industry development strategy. It is hoped that this strategy will guide the industry's development and will provide a basis for cooperation between industry and government to maximise regional development outcomes. It is intended that the strategy will be entirely compatible with the 2020 Vision but that it will go beyond the supply side focus of the 2020 Vision.
- Some of the key issues which have been identified in the development of the strategy which are of relevance to this inquiry include.
  - Investment environment
  - Trade facilitation
  - Wood product promotion
  - Environmental credentials of plantation management
  - Infrastructure development
  - Support for regional communities
  - Quarantine and pest incursion management

## Introduction

The Plantation Timber Association of Australia (PTAA) represents the Australian plantation timber industry and promotes the increased use of Australian plantation timber. The PTAA has some forty member companies who collectively manage more than 850,000 hectares of plantation and process more than five million cubic metres of sawlogs annually. PTAA member companies are major employers and income generators in regional Australia. A list of PTAA members is contained in the accompanying brochure.

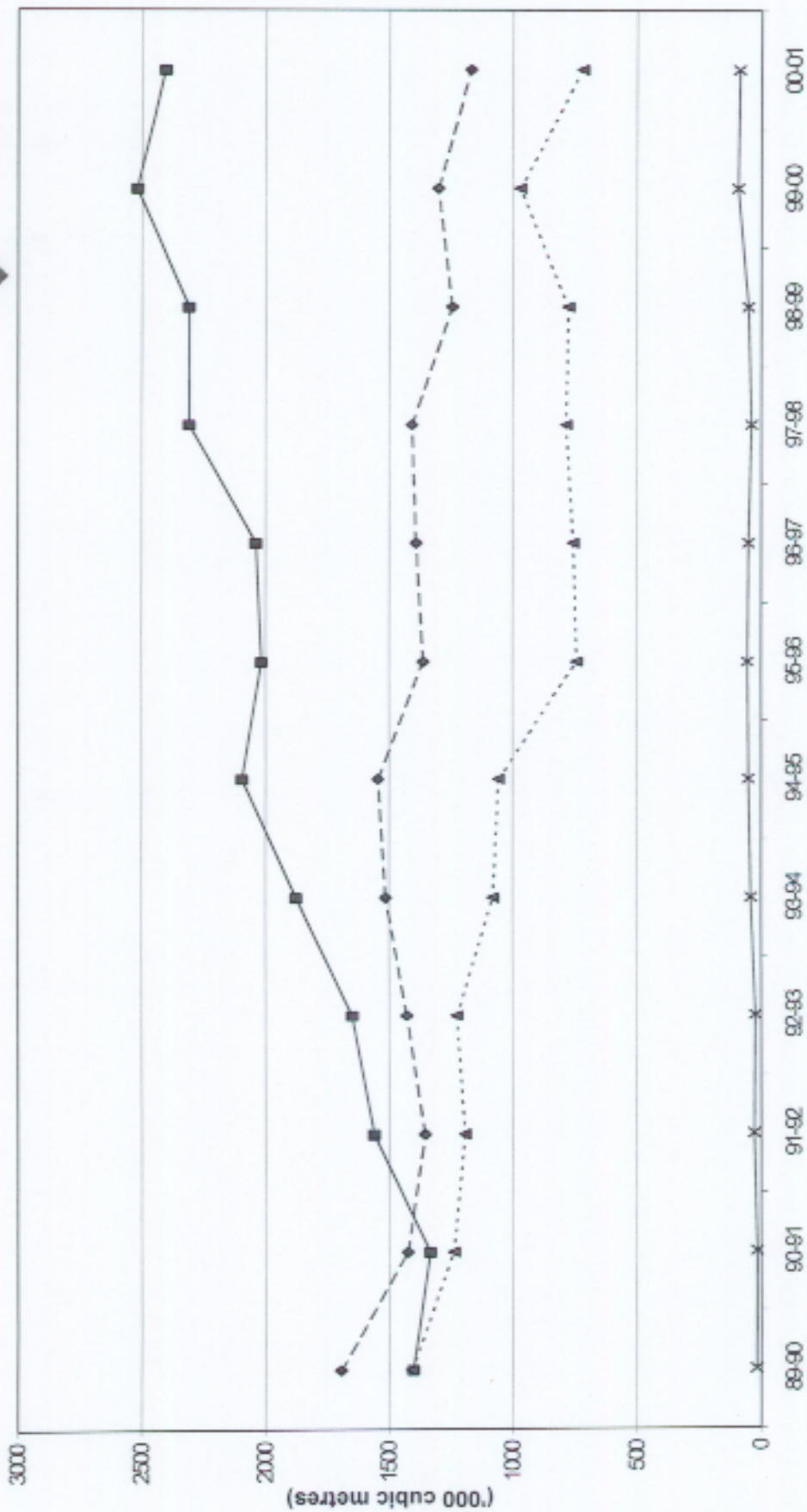
There are now approximately 1.6 million hectares of timber plantation in Australia and the plantation sector, in partnership with Commonwealth and State Governments, has adopted a vision of expanding the plantation area to more than 3 million hectares by 2020. The existing timber plantations are located in all States and Territories of Australia, generally in areas where mean annual rainfall exceeds 700mm (28 inches) per annum.

The plantations supply the raw material for a range of integrated processing industries including sawmills, panel-board plants and pulp and paper mills. More than 16,000 people are directly employed in the growing and processing of plantation timber with significant additional dependent employment in supplying services to the sector. Timber plantations play a central role in the economic and social structure of towns such as Mt Gambier, Tumut, Oberon, Gympie, Burnie, Myrtleford, and Manjimup.

Timber plantations now supply more than half of the total wood produced in Australia. More than fifty six per cent of the sawn timber consumed in Australia is produced from Australian softwood plantations. This is an increase from thirty three per cent just ten years ago. This increased production from Australian plantations has driven a significant reduction in timber imports and has also been able to fill the gap left by declining harvests of hardwood from native forests. This significant increase in plantation wood production has been made possible by continuing capital investment in new harvesting and processing capacity. The attached graph illustrates these trends.

Recent projections (ABARE Current Issues August 2002 see attached) indicate that the increasing production from Australian plantations will continue for the foreseeable future. ABARE estimate that plantations could be providing 75 per cent of domestic industrial wood supplies by 2010. Log availability from softwood plantations is expected to average 15 million cubic metres a year in the later half of this decade compared to around 13 million cubic metres a year currently. Wood flows from hardwood plantations are projected to rise from 1 million cubic metres in 2000-01 to an average 9.2 million cubic metres a year in the later years of the current decade. However, it should be noted that the vast majority of this plantation hardwood production will be in the form of pulp logs.

# Australian Sawtimber Production/Consumption



Source: ABARE

—◆— Aust Hardwood —■— Aust Softwood ...▲... Imports —\*— Exports

In many respects timber plantations do not differ from other forms of agricultural land use such as grazing and cropping. The growth of the plantation and the success of the business depends on the qualities of the soil, the vagaries of the climate and the ability of the manager. Plantations do differ from most other agricultural crops in so far as the time between planting and harvesting is greatly extended, from 10 years to more than 40 years in some instances. This timing issue has significant implications from both an economic and environmental perspective.

## Government Regulation of the Timber Plantation Sector

The management of land for timber production in Australia is regulated by a myriad of legislation imposed by all three levels of government. This regulation adds significant costs for the sector.

### Commonwealth Government

The Commonwealth Government has very limited constitutional responsibility for the management of land but does influence the plantation sector particularly through its control of taxation and national economic settings and through specific program expenditure (e.g. for the provision of infrastructure).

In recent years the Commonwealth has taken steps to remove its control on the export of unprocessed wood sourced from timber plantations. These controls served little practical purpose and merely imposed an unnecessary administrative burden, both on exporters and the Commonwealth. The controls have been removed on a State-by-State basis following investigations to ensure that the removal will not have an adverse impact on the environment. The controls have now been removed for all States and Territories with the exception of Queensland and the Northern Territory. The plantation industry continues to seek the removal of all export controls on the grounds that they are an impediment to business and their removal will not result in any adverse impact on the environment.

Despite its limited regulatory role the Commonwealth Government does have a significant role to play in the future of the plantation timber industry. This submission outlines a number of areas where action by the Commonwealth could make a positive contribution.

### State & Territory Governments

As land management is primarily a State Government responsibility the majority of the legislation and regulation that impacts directly on the plantation sector is State based. It is beyond the scope of this submission to review all the State legislation and regulation which impacts on the timber plantation sector. However, some generalisations can be made.

All States have some form of code of practice for timber plantations. These codes generally cover plantation establishment, management and harvesting operations and much of their content is aimed at conservation and environmental protection. The plantation industry strongly supports the use of codes of practice, developed in consultation with industry, as the primary means of ensuring sound and sustainable plantation management.

Most States also have legislation for the preservation of native vegetation and biodiversity, the conservation of soil and the protection of water supply catchments and rivers and streams. This legislation may be generic in nature or may relate to specific land uses or industries.

The plantation sector is particularly concerned with State legislation where it impacts on the ability of a landowner to establish a plantation or to harvest timber from a plantation. The 2020 Vision, a strategy endorsed by the Ministerial Council on Forestry, Fisheries and Aquaculture, includes commitments by State governments to treat plantations as long rotation agricultural crops, to remove uncertainty about harvesting rights and to ensure that commercial tree growing is treated as an "as of right" use (Action 13 p17).

#### Local Government

Local Government in some States is responsible for implementing some aspects of the legislative land-use planning framework and has the capacity to frustrate plantation projects through its role in planning approvals and conditions imposed on the management of plantations and harvesting of plantation products. Plantation growers generally operate across a wide area and may be required to deal with several local governments all imposing different regulatory conditions and significant additional costs on plantation growers. There is a need for across region consistency in approaches (a form of mutual recognition or broader legislative backing) so that investors are not trying to meet differing requirements when they move across larger areas.

## Inquiry Terms of Reference

The following sections present the PTAA's views on the specific terms of reference for this inquiry.

**(a) *Whether there are impediments to the achievement of the aims of 'Plantations for Australia: the 2020 Vision' strategy.***

The PTAA, and one of its predecessor organisations, Plantations Australia, has been and will continue to be a key supporter of Plantations for Australia: the 2020 Vision. PTAA has been intimately involved with the development of the 2020 Vision and the current review, along with the other industry partners and Commonwealth and State Governments. PTAA has also contributed to funding for the national plantations co-ordinator and 2020 Vision communication strategy.

From a PTAA perspective the key objective of the 2020 Vision is to expand the Australian plantation area in a manner which will create, at the regional level, a wood supply which is sufficient to support a fully integrated and internationally competitive wood processing industry. The National Plantation Inventory provides statistics for industrial plantations in fifteen regions in Australia. With respect to softwood production, only three of these regions, the Green Triangle, Murray Riverina and South East Queensland, could be considered to be world competitive scale. In all of the other twelve regions there are significant softwood plantation resources but further expansion of that resource is required to achieve the scale necessary to ensure that the maximum socio-economic benefits are obtained from the significant investment in the existing plantation resource.

Since the initiation of the 2020 Vision strategy the national plantation area has increased by some 500,000 hectares as shown below:

	1994 (ha)	2001 (ha)	Increase (ha)	Increase (%)
Softwood	883,980	979,633	95,653	11
Hardwood	158,570	587,856	429,286	270
Total	1,042,600	1,568,900	526,300	50

Measured purely on the basis of area of plantation established it would appear that the 2020 Vision has been a success and is on track to achieve the headline objective of trebling the size of the Australian plantation estate. However, PTAA has a number of significant reservations about this conclusion.

Firstly, it can be seen that the major plantation expansion has been in hardwood. These are primarily plantations of *Eucalyptus globulus* (Tasmanian Blue Gum) being grown on 8-12 year rotations for the production of fibre intended for export to Japanese paper manufacturers. While this is a legitimate objective, it does not contribute to the objective of expanding the pre-existing plantation resources to the required size at a regional level to support internationally competitive wood processing. In fact the recent

plantation expansion has led to the creation of two new regional hardwood plantation resources (south west Western Australia and Green Triangle) which are approaching the scale required to be internationally competitive. The Tasmanian hardwood plantation resource is also of world competitive scale particularly when combined with additional native forest resources.

Secondly, it is not reasonable to assume that the plantation expansion will continue at the current rate for another fifteen to twenty years unless there is a further increase in plantation investment. Once the new plantations reach maturity and are harvested, in the case of much of the new plantation area this will occur in the next five to ten years, a significant proportion of the available capital will have to be spent replanting the harvested area, not in expanding the plantation resource. Significant investment is now required to maintain the one million hectare softwood plantation estate and the hardwood plantation estate will reach this situation more rapidly because of the shorter rotations involved.

Regardless of the above discussion about the size of the plantation resource, it should be noted that the 2020 Vision is about more than the headline objective of trebling the plantation area. The real substance of the 2020 Vision strategy is the specific actions that aim to remove impediments to and encourage increased investment in plantation growing.

Some of the major factors limiting further investment in plantation expansion in Australia are explained briefly below:

*Return on investment.* Most wood products are internationally traded commodities and the international market is highly competitive with industry in a number of countries, particularly in the Southern Hemisphere, able to produce wood products in plantations. In order to be an attractive commercial proposition plantation growing cannot be burdened by any unnecessary costs. Costs and uncertainty associated with Government processes and approvals are a major focus in the 2020 Vision.

*Investment timeframe.* Plantation growing, particularly for solid wood products is a long-term investment. A stable political, legal and social environment, as exists in Australia, is therefore important for plantation investors. Mechanisms for reducing the investment timeframe for an individual investor are discussed further under TOR (d).

*Critical mass.* Because wood is a relatively low value, high volume product, a plantation resource of a certain size is required to justify the establishment of processing facilities within economic haulage distance. The need to create critical mass is one of the reasons why Governments took a major role in plantation expansion in Australia in the 1960s and 1970s. The lack of critical mass and markets is an impediment to investment in certain regions creating a "chicken and egg" scenario.

*Regional planning and infrastructure.* Related to the point above, there is a need for a greater level of planning and infrastructure development to attract

investment in the wood processing facilities which are essential if the potential income and employment generating opportunities created by plantations are to be fully realised.

Land use regulation. Agricultural landholders are generally free to transfer production from one crop to another without any form of external approval. However, in some jurisdictions plantations are treated as significantly different to other agricultural crops and it is not possible to establish a plantation without a range of approvals which may vary from State to State or by local government area.

Role of governments. The report prepared by the Centre for International Economics as a basis for the 2020 Vision clearly identified the role of Governments as major plantation growers as an impediment to further plantation expansion. This issue is addressed in several of the 2020 Vision actions.

Information and awareness. Because plantation growing in Australia has traditionally been dominated by State governments and major wood processing corporations, there is not a widespread understanding of the commercial and technical aspects of plantation growing amongst potential investors and landholders. Increasing awareness and understanding is a major focus of the 2020 Vision and significant progress has been made.

PTAA is working actively with Government agencies, including AFFA and its Bureaus, ABARE and BRS, to improve the availability and continuity of resource and economic data for the timber plantation industry to a level consistent with Australia's other agricultural industries. Much of this basic information should be considered a public good and therefore be supported by Government funding.

Research and Development. The existing plantation growing and processing industry in Australia is making a significant investment in research and development particularly aimed at improving plantation productivity, improving wood processing technology and developing new and improved plantation timber products. While this R&D focuses primarily on incremental improvement to the existing industry there is a need for longer-term research in areas such as silvicultural systems for non-traditional species and growing environments and development of new products and services from plantations. There is a significant public good component to this longer-term research and it should therefore be funded primarily by Government.

**(b) *whether there are elements of the strategy which should be altered in light of any impediments identified;***

The 2020 Vision strategy identifies the limiting factors discussed above and suggests what needs to be done to address those factors which are within the control of the 2020 Vision partners on a cooperative basis. Purely commercial



factors can only be addressed by those directly involved in plantation growing and wood processing activities.

The Private Forestry Consultative Committee, which is made up of representatives from the Commonwealth and State Governments and the industry associations which support the 2020 Vision, is currently in the process of reviewing the 2020 Vision. This review process has included a public information and consultation program based on a revised version of the 2020 Vision prepared by the PFCC.

The revision of the 2020 Vision has restructured the strategy to make it more clear and logical. The revised version also includes some increased emphasis on the need for regional planning to assist the development of markets for plantation grown timber and on the emerging issue of the use of plantations to deliver environmental services (see TOR (c) below).

However, it is not the contents or the comprehensiveness of the 2020 Vision strategy that is limiting its success. Rather it is the level of commitment of the various players to the strategy, the extent to which responsibilities for action have been clearly identified and pursued and general awareness and understanding of the strategy which are limiting its success.

If the 2020 Vision is to be successful and the full potential of plantations to deliver social, economic and environmental benefits is to be realised it will be necessary to raise the profile of the strategy and to ensure that the specific actions detailed in the strategy are completed in a timely manner.

**(c) *whether there are further opportunities to maximise the benefits from plantations in respect of their potential to contribute to environmental benefits, including whether there are opportunities to:***

- (i) better integrate plantations into achieving salinity and water quality objectives and targets.
- (ii) Optimise the environmental benefits of plantations in low rainfall areas, and
- (iii) Address the provision of public good services (environmental benefits) at the cost of private plantation growers;

#### *Environmental Benefits of Timber Plantations*

The establishment of a timber plantation can deliver significant environmental benefits particularly where the land on which it is grown has been used for intensive grazing or cropping in the past.

When planting an area of land to trees, plantation managers generally set aside a significant proportion of the total area in reserves which will not be disturbed or used for production. These areas include streamside or riparian areas, swamps, retained native vegetation and environmentally sensitive areas such as steep slopes. These areas may be set aside as a result of a

regulatory requirement but are often supplemented with areas which the plantation manager voluntarily excludes from planting to achieve conservation objectives. The exclusion of areas from the productive land base represents a significant cost to the plantation owner both in terms of lost production and reduced economies of scale for planting and harvesting operations.

The reservation of areas mentioned above confers a range of conservation benefits many of which can be considered to be public goods. Streamside reserves help to prevent erosion and protect the quality of the water flowing out of the plantation. The protection of remnant vegetation and revegetation of some areas enhances biodiversity by providing habitat for a wide range of plants and animals.

One of the key environmental benefits of timber plantations is their role in protecting and rehabilitating soil that has been compacted and degraded by intensive use. The growing of a tree crop generally involves initial cultivation of the land before planting, followed by an extended period in which the soil is protected from disturbance or compaction for many years. The growth of tree roots and the additional leaf and bark litter from the trees helps to prevent soil erosion and restores soil structure and organic matter content.

Trees are deep-rooted perennial plants and therefore can play a significant role in the water cycle. In most instances plantations are established on land which has been cleared of trees in the past. Thus the establishment of the plantation helps to restore the hydrological balance that existed prior to tree clearing. Plantations can be used as a tool to assist in the management of water, particularly by the planting of recharge areas to lower ground water and thereby reduce dryland salinity.

When located appropriately tree plantations can also provide protection from wind for soils, crops and livestock thus increasing productivity of adjoining land.

#### Public Good Conservation

Conservation activities carried out by landowners cover a spectrum, from those which are primarily aimed at ensuring the sustainability of the owner's production system through to those which provide a significant benefit to the wider community generally, a public good. Allocating the costs of these conservation activities in an equitable manner is therefore difficult because of the need to identify the beneficiaries.

The timber plantation industry accepts its responsibility to manage resources on a sustainable basis and seeks to achieve this primarily through the implementation of codes of practice. However, the plantation industry believes that the significant public good conservation outcomes provided by the expansion of timber plantations should be more widely acknowledged in government policy.

There is a range of options for using public funds, either directly or via the taxation system, to compensate landholders for costs they may incur in the name of public good conservation. The plantation sector is not seeking direct government funding for plantation establishment but does see a need for

recognition and acknowledgement of the significant public good conservation benefits provided by plantations compared to many other land uses. Despite the inherent environmental benefits of plantations, as outlined above, plantations continue to be regulated to a far greater degree than other agricultural enterprises when the opposite should arguably be the case.

In the most extreme case of public good conservation involving a plantation, a plantation grower may be prevented from harvesting a plantation, specifically established for the purpose of timber production, in order to provide some public good conservation benefit. Under these circumstances the grower should be fully compensated for lost income and it could be argued that the processing industry involved should also be compensated for the loss of resource. Provision for compensation should be made in "right-to-harvest" legislation. Such legislation exists in some States and is currently being considered in a number of others.

One means of acknowledging the public good conservation benefit of timber plantations without the redistribution of public funds would be for all three levels of government to deliver on their commitment to remove regulatory impediments to plantation expansion. Provision of an unambiguous right for landowners to plant and harvest timber plantations, provided they do so in accordance with codes of practice, would encourage further plantation expansion delivering increased employment, rural income and a range of public good conservation outcomes.

### Environmental Services

Utilising the ability of timber plantations to provide environmentally desirable outcomes, or environmental services, as part of the fundamental financial justification for establishing a plantation is a relatively new concept and one which has not been widely used in Australia to date.

Many people are now recognising the potential of such a system to use the efficiency of market forces to deliver environmental outcomes particularly in relation to climate change amelioration (carbon credits), salinity remediation (salinity credits) and biodiversity protection or enhancement (biodiversity credits). However, for market forces to be bought into play there are two fundamental requirements.

Firstly a mechanism is required to create a real economic demand for the environmental service. A significant demand of this nature can only be created either by Government using public monies to purchase the environmental service or by legislating to penalise "polluters" unless they offset their pollution by purchasing the equivalent amount of environmental services.

Secondly, before taking the business decision to supply the demand discussed above, investors need to be confident that a stable, secure and transparent marketplace has been created for the "product", or environmental services, concerned.

A number of major players in the Australian plantation timber industry have demonstrated their interest and willingness to be involved in environmental services markets via development work and some trial trading. However, until the two fundamental requirements outlined above are met with respect to each prospective environmental service it is unlikely that such trading will move beyond the trial and public relations phase.

Members of the PTAA recognise that ratification of the Kyoto Protocol by Australia, although potentially impacting plantation input and processing costs, would also provide a stimulus for attracting investment into plantation development in less productive areas, as well as reforestation for environmental services combined with conventional timber production.

The Protocol provides a framework for emissions trading as a means for participating industries in Australia and other participating nations to access and acquit credits generated from compliant Australian plantations, benefiting Australian investors, rural landowners and the environment generally.

If Australia is to meet its Kyoto target of 108% of 1990 baseline emission levels, governments should not rule out the option of public-private partnerships with the plantation sector as a way of stimulating positive outcomes in natural resource management and rural development objectives.

Governments should also not rule out the option of fully funding (investing in) large scale environmental plantations if this can be shown to be the most efficient use of financial resources.

**(d) whether there is the need for Government action to encourage longer rotation plantations, particularly in order to supply sawlogs; and**

As discussed above (TOR (a)), PTAA believes that there is an argument for Government action to encourage investment in longer rotation plantations. Longer rotation plantations supplying a range of logs suitable for many end products have greater potential to supply fully integrated processing operations which will maximise income and employment outcomes for regional communities.

It is highly desirable that the existing longer rotation plantation resources located in regions which have not yet reached critical mass be expanded so that their full potential can be realised. For example, the existing softwood plantation resources in Northern Tasmania, South West Western Australia, South East NSW, Northern NSW and North Queensland are not of sufficient size to support internationally competitive processing operations in the long term.

At this stage it is not entirely clear exactly what form of government action would be most appropriate to encourage investment in longer rotation plantations. PTAA understands that the Australian Bureau of Agricultural and

Resource Economics (ABARE) is about to commence a study that will identify the causes for the current low level of investment in longer rotation plantations compared to the significant level of investment currently being directed to shorter rotation plantations.

Without wishing to preempt the ABARE study, it should be noted that one possible means of increasing investment in longer rotation plantations would be through the development of secondary markets for immature plantations. The existence of such markets would allow investors to enter or exit the market at any time without waiting for a final harvest to realise a return on investment. Such markets would also allow different investors to specialise in managing the risks associated with different parts of the plantation investment cycle.

The ABARE study is expected to identify the reason why a secondary market for immature plantations has not developed in Australia when such markets do exist in other countries. It has been suggested that the taxation treatment of plantations is one of the major reasons why a secondary market has not developed.

There is also the issue of the management of the existing short rotation hardwood plantations. Decisions about the marketing and utilisation of these plantations should be made by the owners on a commercial basis. However, it is probably inevitable that some of these plantations will be grown on to produce larger logs for solid timber production. This will require research to identify the appropriate silvicultural systems and wood processing and marketing strategies. Research funding will assist this process but the imperative created by rapidly increasing resource availability will be a significant driver. Such a process was also undertaken for Radiata Pine, which has been transformed from a virtually unrecognised timber to a major player in the manufacture of a range of different products.

- (e) whether other action is desirable to maintain and expand a viable and sustainable plantation forest sector, including the expansion of processing industries to enhance the contribution to regional economic development.**

The PTAA is in the process of developing a plantation industry development strategy. It is hoped that this strategy will guide the industry's development and will provide a basis for cooperation between industry and government to maximise regional development outcomes. It is intended that the strategy will be entirely compatible with Plantations for Australia: the 2020 Vision but that it will go beyond the essentially supply side focus of the 2020 Vision.

Some key issues which have been identified in the development of the strategy and are of relevance to this inquiry are discussed briefly below.

*Investment Environment* – The overall investment environment in Australia is fundamental to the successful expansion of the timber plantation industry. A

strong domestic market and investor confidence in the economic and political stability of the nation are essential. Australia's standing in this regard has been improving steadily for a number of years and this has assisted the continuing investment in plantation timber processing in Australia.

Trade Facilitation – With the exception of hardwood and softwood woodchips to Japan, Australian companies have relatively little experience in exporting plantation timber products. However, this situation will change as production increases steadily in the years ahead. The economic performance of Australian plantation timber producers will also be fundamentally influenced by the success of other major producer countries such as New Zealand, Chile and South Africa. The Australian Government has a role to play in facilitating the free trade of timber products.

Wood Product Promotion – Wood is a highly versatile material and the fact that it is renewable, recyclable, biodegradable and stores carbon make it the most economic and environmentally suitable means for meeting many of societies needs from shelter to energy generation. The use of wood in preference to alternative materials will deliver significant economic, social and environmental benefits and should therefore be actively supported by Government and the community.

Environmental Credentials – The Australian plantation timber industry is conscious of community and market support for sustainable management practices. PTAA and its members are actively involved in the development of the Australian Forestry Standard and a number of other certification systems. These are primarily market driven mechanisms and it is important that governments do not seek to exert undue influence in these processes beyond their role as customers and facilitators of a free and transparent marketplace.

Infrastructure Development – The provision of adequate infrastructure, particularly local roads and bridges, is vital to the development of an internationally competitive wood processing industry in Australia. The plantation industry has participated in Timber Industry Road Evaluation Studies (TIRES) in a number of key regions to identify road funding priorities. Further funding of local roads, in the context of regional development, should be supported by additional funding from the Federal Government.

Support for Regional Communities – The plantation timber industry operates in and contributes significantly to regional communities. PTAA members are therefore vitally aware of the difficulties some of these communities are experiencing. Government support for regional communities is required to ensure that people with the necessary skills are willing to relocate to these areas to work in expanding industries like wood processing. Support for the provision of medical, education, communication and other services is relevant in this regard.

Quarantine and Pest Incursion Management – Protection of Australia's timber plantation resource against exotic pests and diseases is of vital importance to the industry and those who depend on it for their livelihood. The industry

makes a significant investment in monitoring for pests and diseases and managing suspected or actual outbreaks. Despite the recent improvements to border quarantine protection, post border surveillance has not been given adequate attention. Continued monitoring of vegetation surrounding points of entry (ports, airports) would be an efficient way of ensuring any incursions which do penetrate the barrier are identified and controlled as soon as possible and before they reach unmanageable levels.