



Submission

To

The Productivity Commission's

Annual Review of Regulatory Burdens on  
Business – Primary Sector

June 2007

## Table of Contents

INTRODUCTION .....	3
RESOURCE BASED REGULATIONS .....	3
Native forest resource .....	4
Impacts of reduced resource access .....	5
Forest management regulations .....	6
Plantation resource .....	6
Land-use regulations – treatment across sectors .....	7
Water management policy and regulations .....	7
Wood waste for renewable energy .....	8
The EPBC Act .....	9
MARKET BASED REGULATIONS .....	9
Environmental regulations for buildings .....	9
Rating schemes .....	11
Consistency in procurement requirements .....	11
Emissions Trading .....	13
CONCLUSION AND RECOMMENDATIONS .....	14
APPENDIX 1 – Submission: National Reserve System Programme Evaluation 2006 ....	15
APPENDIX 2 – Submission: Australian Government Discussion Paper – Bringing Down the Axe on Illegal Logging: A Practical Approach .....	22
APPENDIX 3 – Submission: Colac Otway Shire Rural Land Strategy .....	26
APPENDIX 4 – Submission: National Water Commission’s First Biennial Assessment of the National Water Initiative .....	31
APPENDIX 5 – Submission: Issues Paper – Prime Ministerial Task Group on Emissions Trading .....	44

## **INTRODUCTION**

The National Association of Forest Industries (NAFI) appreciates the opportunity to comment on the Productivity Commission's Annual Review of Regulatory Burdens on Business for the Primary Sector.

NAFI is Australia's peak forest industry body representing the interests of the industry to the public, governments and public authorities on matters relating to the national development and use of Australia's forests and wood products.

Australia's forest industry is underpinned by an extensive and complex regulatory framework which applies to all of its activities. Broadly speaking, these regulations can be classified as either resource based, in that they impact upon the growing and production of forest resources, or market based, meaning they impact upon the utilisation and marketing of timber products. This submission examines these regulations based on their classification into one of these two categories.

The level of impost resulting from these regulations is an important issue for the forest industry. It is often a critical factor in determining if Australian forest and timber resources are effectively utilised and marketed both domestically and overseas and are not disadvantaged when compared with competing industries and the alternative materials and products they may offer.

These regulations apply at the federal, state and local government levels. Perhaps the most prominent jurisdiction affecting the industry in terms of the regulations applied, is the state government. While a number of national policy objectives are set for the industry, the fulfilment of these objectives is not always consistent with the stipulation of regulations which apply at other levels of government.

The future development and competitiveness of Australia's forest industries is largely dependent on the industry's capacity to be able to operate consistently with its broader national policy objectives. Unfortunately, the existence of unsuitable regulations, which are not confined to any one level of government, often result in contradictory policy outcomes that do not fulfil these objectives and have a negative impact on the industry's ability to develop and remain competitive.

As it is acknowledged that this Review by the Productivity Commission is focussed on Commonwealth and not state and local government regulations, the following submission highlights how the implementation of regulations at all levels of government can lead to outcomes which are contrary to the stated national government policy objectives. Also included as appendices are some previous submissions from NAFI which serve as examples to highlight these concerns over perverse policy outcomes resulting from the development and subsequent implementation of undesirable regulations.

## **RESOURCE BASED REGULATIONS**

Over the past 30 or so years, Australia's forest industry has been subject to an increasingly significant amount of regulations, many of which are state government

based, governing the utilisation and management of its forest resources. This has largely been in response to an increased community focus on environmental awareness associated with managing these resources.

Unfortunately, for the forest industry, it has often been the target of campaigns by certain environmental groups based on a misguided and false perception that the industry is somehow not responsible for the management of its forest resources. In many cases, the influence of these campaigns has led to the development of undesirable policy and regulations for the industry that contravene their stated objectives of achieving the desired social, economic and environmental outcomes.

This section provides some examples of the more prominent policies and regulations which have impacted on the industry's ability to achieve these triple bottom line outcomes.

### **Native forest resource**

Perhaps the most significant impact brought about to the industry by regulations and policy decisions has been the changes in the availability of forest resources for timber production to the industry. This has mostly occurred since Australia's adoption of the National Forest Policy Statement in 1992 and the 10 Regional Forest Agreements (RFAs) that followed across Australia's major forestry areas.

As a result of the RFAs, over 11 million hectares of Australia's public native forests, previously available for timber production, have been placed into conservation reserves. This has led to a substantial reduction in hardwood timber availability to the industry. Hardwood sawlog production in Australia has fallen from 4.3 million cubic metres in 1994 to 2.8 million cubic metres in 2004, a reduction of 35%.

Perhaps, of greatest concern to the forest industry with the transfer of production forests to conservation reserves has been the failure to achieve the desired environmental outcomes for which the reserves were created. State governments have regularly transferred once well-managed production forests into conservation reserves, based largely on political decisions, where the resulting mismanagement of these reserves leads to suboptimal outcomes for the conservation of biodiversity.

The less-than-active management approach adopted in reserves is very different to the active management practices which occur in production forests. This can have severe consequences on biodiversity as the failure to conduct timely prescribed burning in reserves often leads to large build-ups of fuel contributing to intense and destructive wildfires. Also, the failure of reserved area managers to adequately monitor biodiversity outcomes from their management approaches means there is no way of determining if the 'reserve-only' approach to conservation management is achieving the desired environmental outcomes.

These undesirable outcomes clearly defeat the purpose of national policy objectives on achieving environmental outcomes in forests such as those contained within the National Forest Policy Statement and Australia's commitments to the Convention on Biological

Diversity. Appendix 1 contains a submission from NAFI on Australia's National Reserve System (NRS) which highlights these issues in more detail.

### **Impacts of reduced resource access**

One of the key objectives of the various RFA processes in Australia was to provide the forest industry with future forest resource security and industry investment certainty. Unfortunately, the reduction in access to native forest resources resulting from the RFAs, and further political decisions by state governments to 'lock-up' more native forest resource, has led to a significant 'downsizing' of the native hardwood industry. This failure to secure the forest resources required over the longer term often limits the industry's ability to commit to further investment in areas such as value adding for downstream processing.

Australia currently has a \$2 billion annual deficit in the trade of its forest and wood products. This large deficit is partly a result of the restriction on resource access for the forest industry. Limitations on utilising Australia's forest resources have drastically reduced the nation's capacity to move towards self sufficiency in meeting its requirements for forest and wood products. It has also led to an increased reliance on alternative materials to timber which do not possess the same environmental credentials (as discussed in more detailed in the section on Market Based Regulations).

This has also lead to an increased reliance on the importation of wood products from overseas countries. Unfortunately, these wood products are often imported from countries which lack Australia's comprehensive and rigorous legal framework applying to their forest management activities. The result is the importation of wood products to Australia derived under forestry practices which carry no guarantees in relation to their legality and sustainability. Around \$400 million, or about 9% of Australia's total annual imports of forest and wood products are suspected to be obtained from illegally logged forests<sup>1</sup>.

Australia's increased reliance on overseas timber obtained from questionable sources is a clear contravention of national policy objectives to utilise timber which is derived from forests which are sustainably managed, as is the case for Australian production forests. Appendix 2 contains a submission from NAFI to the Australian Government's Department of Agriculture, Fisheries and Forestry, which examines this issue in greater detail.

While the forest industry has continued to operate within the regulatory framework governing resource access, this has come at a significant cost to the industry, particularly the native hardwood sector. In some jurisdictions, the viability and competitiveness of this sector has been severely depleted and the impacts on dependent rural and regional communities have also been significant. Variations in the impacts of the regulations across jurisdictions, is often a reflection of an inconsistent jurisdictional application of these regulations.

---

<sup>1</sup> Jaakko Poyry (2005). *Overview of Illegal Logging*. Prepared for the Australian Government.

## **Forest management regulations**

Regulations, most of which are state based, applying to the management of both native and plantation forests have increased dramatically and become increasingly complex over recent years. The management and harvesting of these forests is now strictly controlled by regulations designed to ensure the protection of the full range of forest values, including threatened flora and fauna species, soil and water values, and cultural heritage values.

These regulations effect both the planning and operational phases of forest management. The planning phase often requires costly and time consuming survey work for forest managers and extensive auditing and reporting requirements for external regulators. In the operational phase there are a number of regulations which restrict what can take place in the full range of forestry activities such as harvesting, planting and roading etc.

There is a great deal of variation in the make-up and application of these regulations across the various state jurisdictions. For example, certain native forest harvesting practices are permitted in some states but not others despite the fact that the same forest types with the same silvicultural requirements may occur across these states. This restriction on the forest managers ability to implement the most appropriate silvicultural practice often leads to a decline in the health and productivity of these forests over time.

The combination of these complex set of regulations has resulted in a significant cost burden affecting the economics of all forestry activities from harvesting through to processing. As a result, the industry has been forced to re-examine the cost structures of its operations to ensure that it remains viable and competitive. Achieving this outcome has not always been assured.

## **Plantation resource**

As a consequence of the reduced access to native forest resources in Australia, a commitment was made by governments and industry to expand Australia's plantation resources to limit the impact on wood production. The *Plantations for Australia: 2020 Vision*, endorsed by the Australian Government in 1997 and in 2002, has been the main initiative to guide plantation policy and direct government involvement in shaping the future of the plantation industry.

The overarching principle of the policy is '...to enhance regional wealth creation and international competitiveness through a sustainable increase in plantation resources'. The aim of the 2020 Vision is to increase Australia's plantation base, which is currently around 1.8 million hectares, to 3 million hectares by the year 2020.

Despite the relatively steady rate of plantation expansion over recent years, there are a number of regulatory and non-regulatory impediments which have the potential to limit the expansion and competitiveness of the plantation sector. Some of these are discussed in more detail below.

## **Land-use regulations – treatment across sectors**

As with the native forest sector, the tree plantation sector is subject to a complex set of regulations, many of which are not always applied consistently across other agricultural land uses. Commercial tree plantations are often treated as a competing land use in the agricultural landscape. This is often reflected in the development of policy and regulations which may disadvantage plantation development at the expense of other land uses.

For example, the establishment of a tree plantation compared to a vineyard in Tasmania highlights a number of these inconsistencies. The following requirements are required for a plantation to be established in Tasmania:- a development application with local council, a forest practices plan with a detailed assessment of a full range of values (i.e. threatened flora and fauna, roading requirements, visual management, geomorphology, cultural heritage, hydrology etc), and the need for a Private Timber Reserve to help provide some protection for future resource security. In addition to this most forestry organisations in Tasmania manage their plantations in accordance with voluntary third party forest certification (e.g. the Australian Forestry Standard).

For a vineyard to be established in Tasmania none of the above regulatory requirements for a tree plantation are needed, apart from a dam licence in the situation where a dam is required for the vineyard. Clearly there is a considerable degree of inequity in the treatment of these two different land use activities.

The regulation of plantation development can be spread across all three levels of government with varying degrees of regulatory authority applying to each level. For example, in Tasmania there are 29 local governments, many of which have displayed differing policies, despite some attempts to display uniformity, with regard to the value of plantation forestry within their jurisdiction.

Perhaps the most prominent example in Tasmania is the local government of King Island, which recently made the decision to ban plantation development within its jurisdiction. Other local councils have attempted to regulate plantation forestry when it is unclear if they possess the required specialist expertise to do so. This sort of unnecessary regulation results in undue complications which is against the principle aims of the 2020 Vision, which is to ensure government regulations applying to plantation development are not overly complex and meet the needs of industry.

NAFI, through its affiliated plantation industry body (Tree Plantations Australia) recently made a submission to Victoria's Colac Otway Shire Council on its recommendation to limit the expansion of tree plantations on 'high value agricultural land'. This submission, which is contained in Appendix 3, refers to the many contradictions of national policy objectives within the shire's proposal.

## **Water management policy and regulations**

The implementation of water management policy and regulations in response to national water policy initiatives represents another area of concern for the forest industry. In the National Water Initiative (NWI) 'large-scale plantation forestry' has been singled out as a

land use change activity that has the ‘potential to intercept significant volumes of surface and/or groundwater’. This has occurred in the absence of any adequate scientific definition or quantification of this potential water use.

The forest industry has some serious concerns that the development of water policy in state jurisdictions, in response to the NWI, may result in perverse policy outcomes which threaten the triple bottom line benefits of plantation forestry in regional areas. These benefits include carbon sequestration, enhanced biodiversity, reduced salinity and water inundation, as well as the many socio-economic benefits for rural communities.

For the NWI to be delivered effectively, broader national policy objectives (including forest policy) must be adequately considered. Therefore, the forest industry would support a greater role from the Commonwealth Government (through the National Water Commission - NWC) in working with state governments and industry to ensure that policy development in response to the NWI is applied equitably and transparently across all land uses and is consistent with national policy objectives.

Failure for this to occur could lead to the forest industry being dealt with in a manner which does not adhere to a number of the over-arching requirements of the NWI. Appendix 4 contains a detailed submission from Tree Plantations Australia on the NWC’s First Biennial Assessment of the NWI. This submission highlights the forest industry’s concerns with the development of state-based water policy and regulation which do not adhere to the over-arching national objectives. A case study is also provided in the submission on current water policy development in south-east South Australia.

### **Wood waste for renewable energy**

The use of wood waste for renewable energy production (i.e. electricity, biofuels) represents an efficient, low emissions and sustainable feedstock which could make a valuable contribution to Australia’s efforts to lower its emissions and address climate change. There is enough wood waste in Australia from existing forest industry activities to produce 3 million MWh of electricity per annum, providing a permanent reduction of 3 million tonnes in CO<sub>2</sub> emissions and producing 30% of Australia’s renewable energy target<sup>2</sup>.

Unfortunately, utilisation of wood waste for this purpose is currently not widespread in Australia, largely due to preventions through regulations which occur at different levels of government. Perhaps the most prominent restrictions are those imposed through state government regulations (e.g. in New South Wales and Victoria) which prevent the use of native forest harvesting wood residues for bioenergy purposes. This has occurred despite the existing legal and regulatory frameworks in place to ensure the environmental sustainability of the wood waste produced.

At the Commonwealth level there are also some aspects of the *Renewable Energy (Electricity) Regulations 2001* which are restrictive in terms of permitting the practical utilisation of both native forest and plantation wood waste for renewable energy purposes. This again highlights the unnecessary complication of regulations across various levels of

---

<sup>2</sup> NAFI (2006), The environmental benefits of using wood waste for renewable energy, [http://www.nafi.com.au/bioenergy\\_factsheets/WWFS03.pdf](http://www.nafi.com.au/bioenergy_factsheets/WWFS03.pdf)

government. Restricting the use of wood waste as a sustainable renewable energy source represents a contradiction of the national policy objective of lowering Australia's greenhouse emissions.

### **The EPBC Act**

The Commonwealth Government's *Environment Protection and Biodiversity Conservation Act (EPBC) 1999* represents a major concern for Australia's forest industry. While the EPBC Act recognises the rigour of the RFAs by providing exemption for forestry activities carried out in accordance with them, it creates difficulties in achieving investment in significant downstream value-adding processing facilities.

The forest industry supports regulation to ensure the protection of 'matters of national environmental significance' but it is concerned with the constant legal challenges to major projects, the RFAs and the EPBC Act itself. This leads to undue costs, delays and uncertainty for the forest industry. For instance, the Gunns Ltd pulp mill proposal in northern Tasmania is now subject to legal challenge under the EPBC Act. As demonstrated in this case, even the Federal Environment Minister is subject to challenge under the Act.

There is clearly a need for greater industry certainty in terms of the industry's ability to complete legitimate projects and activities in the absence of lengthy and complicated legal and approval processes resulting from the EPBC Act. Failure to achieve this will only hinder the industry from achieving further investment, resulting in a reduced capacity for it to operate viably and competitively with overseas markets and other products.

### **MARKET BASED REGULATIONS**

Regulations governing the marketing and utilisation of forest and wood products have become increasingly prominent over recent years. The development of these regulations has occurred across all levels of government often without the required level of collaboration and consistency to ensure the achievement of practical policy and regulatory outcomes.

Like resource based regulations, many market based regulations for the forest industry have arisen in response to an increased community focus on environmental awareness associated with managing forest resources and utilising timber products. Undesirable policy and regulatory outcomes are often the result of a misguided perception that use of timber may not achieve the desired environmental outcomes.

This section provides some examples of the more prominent policies and regulations which have impacted on the industry's ability to effectively market timber as a material that has significant environmental benefits over alternative products.

### **Environmental regulations for buildings**

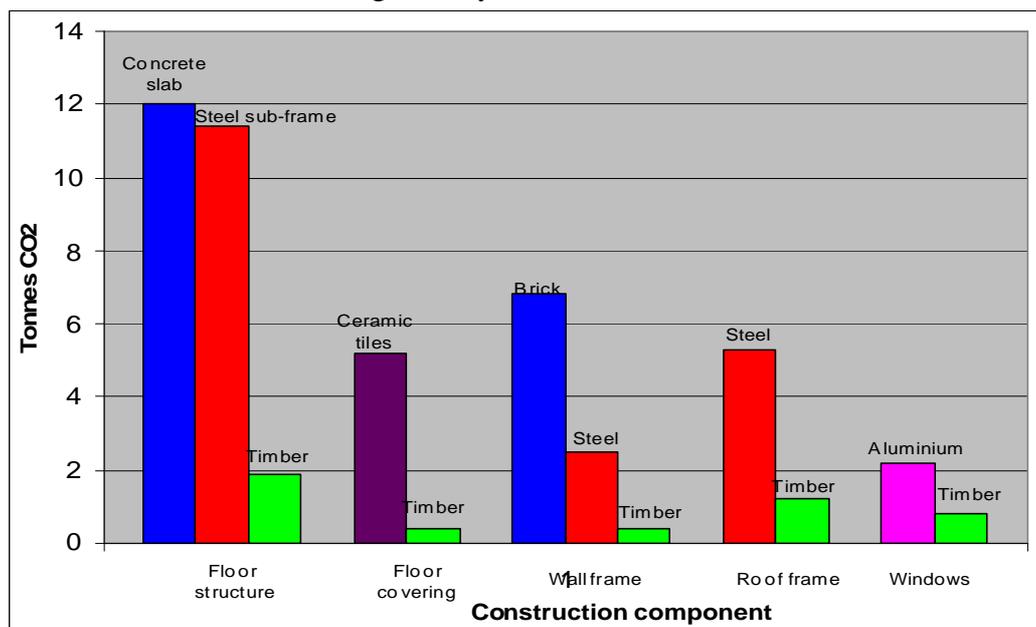
In recent years there has been a marked increase in the development and adoption of policies and regulations for the purpose of assessing the environmental performance of

products and materials in the built environment. As stated by the Forest and Wood Products R&D Corporation (FWPRDC) ‘policies development in response to growing environmental awareness has often occurred without timber industry consultation and has had a detrimental effect on wood product markets’<sup>3</sup>.

For the forest industry, many of these regulations have arisen out of concerns over sustainability, misconceptions about forestry practices, and discrepancies between industry operations and public environmental anxiety. These are concerns that have largely influenced the development of policy framed to regulate the use of wood from perceived unsustainable practices or illegal logging, and to limit exposure to wood product emissions<sup>3</sup>.

In addition to the many significant environmental advantages over alternative materials, wood products are effective in actively storing carbon from the atmosphere. Use of timber from Australia’s sustainably managed forests in building construction should be promoted as it will assist in lowering Australia’s emissions levels by reducing the use of building materials such as steel, concrete, plastics and aluminium, which emit high amounts of CO<sub>2</sub> in their manufacture. This is shown in Figure 1 below.

**Figure 1:** Greenhouse gases emitted in the manufacture of building materials used in an average family house in Australia<sup>4</sup>.



Unfortunately, current building codes and energy rating schemes do not fully recognise the carbon benefits of wood products as they are typically not based on full life cycle assessments. For instance, they are often based on operational energy which favours higher mass materials (i.e. concrete and steel) and do not consider the superior embodied energy credentials of timber over these materials.

<sup>3</sup> FWPRDC (2007). *Policy, regulations and guidelines affecting wood product markets in Australia’s built environment*.

<sup>4</sup> FWPRDC& CRC for Greenhouse Accounting (2006). *Forests, Wood and Australia’s Carbon Balance*.

The FWPRDC's recent publication, *Policy, regulations and guidelines affecting wood product markets in Australia's built environment* is recommended to the Productivity Commission as a valuable source of information. It provides greater detail on the market based regulations which affect Australia's forest and wood products industry. This publication can be viewed at [www.fwprdc.org.au](http://www.fwprdc.org.au).

### **Rating schemes**

The recent introduction of 5-star energy efficiency ratings for all new house design and construction activities in Victoria has severely disadvantaged timber in the flooring market. There have been large reductions in the sales of Tasmanian and Victorian timber flooring into the Victorian market. This has resulted from confusion amongst architects, builders and authorities about the new 5-star requirements in Victoria.

While Victoria's new energy efficiency regulations have been introduced as a means of reducing greenhouse gas emissions, it is ironic that the impact on Victoria's flooring market is causing the reverse effect. Recent research by the CRC for Greenhouse Accounting indicates that utilising a concrete slab-on-ground in preference to a suspended timber floor produces a net increase in CO<sub>2</sub> emissions of 15 tonnes per home<sup>5</sup>.

The forest industry has outlined its serious concerns with the effectiveness of energy efficiency rating schemes and in particular their failure to recognise many of the environmental benefits, including low embodied energy, of using timber in buildings when compared with alternative materials. Many of the industry's concerns were reinforced in a Productivity Commission Inquiry Report, *The Private Cost Effectiveness of Improving Energy Efficiency*, released in 2005.

Despite these concerns, the Australian Building Codes Board (ABCB) proceeded with its decision to introduce national mandatory 5-star energy efficiency regulations in the Building Code of Australia (BCA) from May 2006. Many States chose not to adopt these new regulations based on similar concerns that the regulations may fail to achieve the desired outcomes. Therefore, the result has been an apparent failure to achieve national consistency.

### **Consistency in procurement requirements**

This failure to achieve national consistency is not limited to the 5-star regulations. Timber procurement guidelines and regulations in Australia are extremely variable and are often driven by sustainability and political concerns that seek to promote timber from one particular source and restrict or exclude timber from another.

In general, they accept or favour plantation, certified and recycled timber and recommend against timber from some or all native forests despite the assurances given on legality and sustainability. Unfortunately, these requirements are far from consistent. Contained in Table 1 below is a summary of the requirements found during a survey by the FWPRDC of 34 government agencies, 44 municipal governments and other organisations<sup>3</sup>.

---

<sup>5</sup> CRC for Greenhouse Accounting, <http://www.greenhouse.crc.org.au/Research/a3.cfm>

**Table 1: Summary of timber certification and source requirement of surveyed government and other organisations<sup>3</sup>**

Organisation	Type of requirement	Certification					Source of timber								
		Certified	AFS	FSC	ISO 14001	RFA	Sustainably managed	Plantation	Regrowth	Recycled	Native forest	Non-timber	Rainforests	High conservation	Old growth
<b>Australian Government</b>															
Department of Defence	negotiable		Y												
Australian Greenhouse Office	guideline						Y	Y	Y						
<b>State Government</b>															
ACT Government Procurement Board	guideline						Y	Y							
ACT Planning and Land Authority	guideline						Y								
ACT Planning and Land Authority	guideline							Y							
Queensland Department of Public Works	guideline	Y					Y	Y	Y			N			
SA Dep. of Admin. & Information Services	guideline							Y							
SA Dep. of Admin. & Information Services	guideline							Y	Y						
VicUrban	regulation		Y	Y				Y		Y					
<b>Local Government</b>															
Leichhardt Council	negotiable							Y	Y	Y		N		N	
Manly City Council	negotiable							Y	Y	Y		N		N	
North Sydney Council	negotiable	Y								Y					
Sutherland Shire Council	negotiable							Y	Y	Y		N		N	
Sydney City Council	regulation	Y	Y	Y	Y	Y									
Willoughby City Council	negotiable			Y				Y	Y	Y		Y	N		N
Brisbane City Council	guideline			Y				Y	Y	Y			N		N
Moreland City Council	negotiable	Y	Y	Y					Y	Y					
<b>Non-government organisation (NGO)</b>															
Australian Environmental Labelling Assoc.	guideline		Y	Y				Y	Y						
Green Building Council of Australia	guideline			Y						Y					
Greenpeace	guideline	Y	Y					Y			N				
Royal Australian Institute of Architects	guideline														N
The RIC Good Wood Guide	guideline	Y	Y					Y	N	Y	N		N	N	N
Wilderness Society's One Stop Timber Shop	guideline							Y		Y	N				N

**Notes** Y equals a statement that this choice is accepted, recommended or required  
N equals a statement that this choice is unacceptable, not recommended or prohibited

The Green Building Council of Australia's GreenStar environmental rating tool for commercial buildings provides another example of an inconsistent approach to timber procurement. It contains criteria for timber specification (i.e. Mat 8) that are highly restrictive and impractical, in that they effectively remove the ability for building designers in Australia to specify and use local sustainably grown timber. The criteria states that credit points will only be awarded for the use of either recycled timber, or timber certified by the Forest Stewardship Council (FSC).

The requirements effectively mean that virtually no major building projects will be able to meet the criteria as in reality no major Australian project could currently be totally built from recycled or certified timber of any persuasion. The volume of recycled or labelled certified timber simply does not exist in Australia at present.

Also, by specifying 'FSC only' timber and not recognising Australian Forestry Standard (AFS) certified timber, GreenStar also effectively excludes the use of all Australian native forest timber (as FSC currently does not certify any native forests in Australia) and a large proportion of Australian plantation timber. Therefore, under the Green Star rating tool, any use of FSC certified hardwood sawn timber would need to be sourced from high embodied imports (transport), meanwhile hardwood timber sourced from sustainably managed forests in Australia is ineligible for use.

While the GreenStar system is a voluntary tool, it is increasingly being taken up for use in building construction within both the public and private sectors. The real danger for the forest industry and any other industries which may have been discriminated against is like many voluntary rating tools, widespread uptake often leads to mandatory adoption through regulation. There have been a number of Australian Government procurement decisions to utilise this voluntary scheme which effectively prevents the use of sustainably produced Australian native timbers.

### **Emissions Trading**

Australia's forest industry has the potential to play a significant role in addressing climate change concerns through the benefits of carbon sequestration and storage in forests and wood products. However, the forest industry is mindful that these benefits need to be adequately recognised in the development of any emissions trading system which may be adopted into regulation in Australia.

Current conditions on existing international trading schemes (based on the Kyoto Protocol) do not adequately recognise the benefits of forests and wood products. Of primary concern, schemes do not recognise the fact that carbon remains stored in harvested wood products for significant periods as they make the false assumption that all carbon is emitted at harvest.

Therefore, the design and implementation of a potential domestic trading scheme is of critical importance to Australia's forest industry. This must be conducted through a consultative and transparent process and should be based on the best available science to ensure these significant benefits are appropriately recognised.

The forest industry would encourage the consideration of the unique conditions in Australia compared to overseas countries in the development of a national emissions trading system. This may require establishing a position which is more independent of the Kyoto Protocol, suiting the characteristics of Australia's economy and emissions objectives, while necessarily interfacing with the overarching international objectives and reporting frameworks.

NAFI also encourages the development of an emissions trading scheme which gives adequate consideration to Australia's broader government forest policy objectives. Therefore, the forest industry would encourage the development of a trading scheme that occurs in consultation with all levels of governments to review potential policy and regulatory implications, and to establish complimentary policy objectives. Appendix 5 contains NAFI's submission to the Prime Minister's Task Group on Emissions Trading which discusses this issue in greater detail.

## **CONCLUSION AND RECOMMENDATIONS**

As highlighted in this submission there is a number of resource and market based regulations across all levels of government which underpin and influence the activities of Australia's forest industry.

The forest industry acknowledges the need for a rigorous regulatory framework governing its activities. However, concern arises where these regulations are unnecessarily complex and contravene broader national policy objectives. This has the potential to impose undue costs on the industry and reduces its ability to operate competitively with other industries.

There is clearly a need to achieve greater consistency within Australia's regulatory framework in order to effectively meet national policy objectives and minimise unnecessary duplication and complication of regulations. As the peak level of government in Australia, the Commonwealth Government has a key role to play in this area. This could be achieved through the following:

- A greater role should be taken by the Commonwealth Government in ensuring that national policy objectives are not contravened through the implementation of perverse policy and regulations across all levels of government.
- The Commonwealth Government could be provided with greater powers in stipulating the roles of other government jurisdictions in developing policy and regulations particularly if they are likely to impact on national policy objectives.

NAFI appreciates the opportunity to comment on this important inquiry and is willing to assist the Productivity Commission by providing any further information which may be required.

## **APPENDIX 1 – Submission: National Reserve System Programme Evaluation 2006**

**February 2006**

### **Introduction**

The principle objective of the National Reserve System (NRS), as stated in the *Directions Statement*, is to achieve an Australian system of terrestrial protected areas as a major contribution to the conservation of our native biodiversity. While it is important to protect ecosystems and biodiversity through the creation of the reserve system across the varying land tenures, that protection can only be conferred on the reserves through the implementation of appropriate and effective management regimes.

The management regimes should be accompanied by an ecosystem-dependent monitoring and reporting framework. This will allow the program of management activities to be reviewed and altered, if necessary, to deliver the outcomes sought when each reserve was created and added to the NRS.

The National Association of Forest Industries (NAFI) has some serious concerns that the NRS Programme has failed to deliver on its principle objective as the focus of the programme continues to be almost solely on increasing the size of the NRS. Adequate consideration must be given to the consequences of conserving biodiversity that has arisen from this ‘reserve-only’ approach.

Without being able to identify the individual areas, particularly the areas of public land that have been added to the NRS, it is difficult to determine whether the NRS programme is meeting its objectives. NAFI is interested in finding out if the newly protected areas have been added to the CAR reserve systems created during the RFA process and if so, then the reasons why those additional reserves have been created. However, this information on the individual areas added to the NRS is not readily available. It is therefore almost impossible to comment on or evaluate the success of the NRS programme.

The fundamental measure of a Comprehensive, Adequate and Representative (CAR) NRS should not be a simple statistic such as the area of ecosystems or forest types held in reserve. Rather, it should be the real capacity for the NRS to deliver the long-term conservation of biodiversity against a range of threatening processes, where they are effectively management. There is increasing concern that this is often not the case (Dudley *et al.* 1999).

The following submission outlines NAFI’s concerns over the NRS Programme’s likely failure to achieve its objectives. This follows on from a previous submission made by NAFI in April 2004 to the NRS Taskforce on the development of *Directions for the NRS – A Partnership Approach*.

## **Forests in the NRS**

There are currently over 21 million hectares of forests in the NRS and the development of the CAR reserve system is a major component of Australia's approach to ecologically sustainable forest management. While the Regional Forest Agreements provide an important basis from which to consider the further expansion of the NRS, it is essential to recognise that a major effort in terms of resources and funding is still required to deliver the sustainable management of the current forest estate within the NRS.

Interestingly, there is a growing body of scientific and other information indicating that the reserve-only approach to biodiversity conservation has led to a decline in the health of many forest reserves over the past decade. Jurskis (2005) states 'passive management of nature reserves in Australia has failed to maintain healthy ecosystems.' In NSW alone, it is estimated that between 20 and 30% of the coastal forests are already suffering from a moderate decline in forest health due possibly to the lack of active management regimes for those "protected" areas (Jurskis, 2004).

## **Conservation achievements outside the NRS**

It is acknowledged in Section 1.4 of the *Directions Statement* that 'conservation management may be undertaken in areas managed primarily for other purposes, such as forestry' and these areas 'play a substantial contribution to the collective conservation effort.' It is unfortunate that the conservation achievements of areas outside the NRS, such as multiple-use forests incorporating timber production, are considered separately to the conservation achievements contained within the NRS.

Conservation objectives can be achieved in the forests used for timber production by establishing formal and informal reserves and through the appropriate regulation and monitoring of forest management activities. Therefore, the contribution that the production forests can make to conservation objectives of the NRS should be recognised in areas outside this system as a means of assessing whether the NRS program is achieving targeted biodiversity outcomes.

Section 3.1 of the *Directions Statement* states that multiple-use forests cannot be classified as a category IV protected area in the NRS 'where the purpose for management is generally for harvesting of forest products, and not primarily for protection of biodiversity as required for a protected area.' It should be noted that the protection of biodiversity is an important objective of multiple-use forest management. While this protection of biodiversity is stated as the primary objective of areas in the NRS, the current area-based approach does not in any way guarantee that it will be achieved.

## **Objectives of the NRS Programme**

Section 1.7 of the *Directions Statement* states that the key areas of concern associated with the development of the NRS include:

- 'the lack of clear, agreed and measurable national targets for the NRS'
- 'the lack of clear and agreed national guidelines as to what types of protected areas comprise the NRS'
- 'the lack of an agreed national plan of action for the NRS'

For the forest industries, it is concerning that despite acknowledgement of the NRS Programme's failure to identify agreed national guidelines for increasing the system of protected areas, the *Directions Statement* for the NRS clearly specifies 'the highest priority needs to given to progressing reserve system comprehensiveness.'

The current primary focus of the NRS Programme is to 'progress comprehensiveness' by continually increasing the size of the NRS without giving due consideration to the implications this may have on 'the conservation of biodiversity.' For instance, under the directions to 'progress comprehensiveness' it is stated that there is a need for 'examples of at least 80% of the number of extant regional ecosystems in each IBRA (Interim Biogeographic Regionalisation for Australia) region are to be represented in the NRS.'

NAFI agrees with the statement made in Section 3.0 of the *Directions Statement* that 'if lands included in the NRS are not sufficiently secured with respect to purpose and management standard, their values are at risk of being lost or degraded, and reserve system planners may well have foregone opportunities to conserve the relevant ecosystems. For this reason a **precautionary approach** needs to be taken in deciding what is included in the NRS.'

However, this contradicts the *Directions Statement* definition of the '**Precautionary Principle**' as being a key principle in reserve system planning and design. It states 'the absence of scientific certainty is not a reason to postpone measures to establish protected areas that contribute to a comprehensive, adequate and representative national reserve system.'

Within this precautionary approach to reserve creation, some consideration should be given as to whether the addition of new areas of ecosystems already protected in the NRS and the management regimes applied to those ecosystems will provide any additional environmental benefits beyond simply meeting a targeted area of reserve creation.

There is a current lack of 'scientific certainty' surrounding the contribution of the NRS to national biodiversity objectives. Without an appropriate monitoring and reporting system in place for reserve managers, it is impossible to measure the outcomes in terms of biodiversity and ecosystem protection. Therefore, the costs and benefits of allocating more areas to reserves are unknown, meaning there may not be any justification for including additional areas of certain ecosystems in the NRS.

### **The need to monitor the effectiveness of the NRS**

It is not adequate to evaluate the comprehensiveness of certain reserved areas by simply calculating the area of certain ecosystems held in reserve. Nor is it acceptable to rely solely on the development and application of plans of management if the actual management outcomes are not properly evaluated. Rather, a system needs to be put into place to monitor the actual biodiversity outcomes, whether positive or negative, of these reserved areas. It is a poor assumption that the comprehensiveness, adequacy and representativeness of reserves is enhanced by increasing the area of the NRS if there is no measure of the biodiversity outcomes with a management framework and regime in the

place with the capacity for being changed across time if the biodiversity targets are not being achieved.

It is noted that Direction 12 in the *Directions Statement* stipulates that for States and Territories to monitor the progress of NRS development ‘biennial reports are to be prepared on the comprehensiveness, adequacy and representativeness of ecosystems in the NRS as per the NRS Scientific Guidelines.’ While the merit of this direction is acknowledged, the level of current monitoring of the reserved areas comprising the NRS is highly questionable.

At present, no State or Territory has the capacity to effectively evaluate the health and vitality of its forest ecosystems (National Forest Inventory, 2003). Also, there is no generally accepted methodology that can be applied and there is no organisation with direct responsibility or the resources to collate any such information (Hockings and Phillips, 1999). Therefore, if this direction is to be effective, the implications on biodiversity of reserving areas under the NRS must be adequately monitored and reported in these biennial reports.

Section 3.4 in the *Directions Statement* highlights the need for there to be ‘regular reporting on a set of basis attributes of the system (NRS).’ These attributes are limited to ‘area, location details, ecological communities represented, comprehensiveness, adequacy and representativeness and IUCN category’ but fail to include the most important reasons for creating the additional reserves and the monitoring of biodiversity.

### **Certification and monitoring of forest management within the NRS**

In addressing the problems of inadequate management regimes and monitoring of the biodiversity outcomes within reserves, it is important to look outside the NRS and note the directions in place for certifying management and monitoring outcomes within Australia’s multiple-use forests. An appropriate monitoring and reporting framework would also indicate whether additional funds and resources are required to truly ‘protect’ these additional reserves.

Independent certification of Australia’s forests managed for multiple-uses, including timber production, has become increasingly important in recent years as consumers of timber products seek reassurance that the forests supplying these products are sustainably managed.

An example of such certification in Australia’s timber producing forests is the recent development and implementation of the Australian Forestry Standard (AFS) by forest managers and industry. Currently, over 5 million hectares of forest on both private and public land throughout Australia is certified under the AFS.

The AFS is a nationally endorsed Australian Standard developed within the recognised international framework of the Montreal Process Criteria and Indicators (1995) and the ISO 14000 series of voluntary international environmental management standards. Importantly, the AFS also takes account of local operating conditions by recognising the unique character of Australia’s forest ecosystems and the particular requirements for sustainable forest management.

The criteria stipulated under the AFS are used as the primary tests for forest managers to demonstrate that they are applying the principles of ecologically sustainable development to their management practices in both planted and native forests. By monitoring the outcomes of their current forest management practices and gaining recognition for their efforts by certification against the standard, forest managers can gain some independent assessment of environmental performance and some direction on where they can improve their forest management practices.

As occurs within Australia's production forests, the management of conservation forests within the NRS, should incorporate a monitoring program to determine the effectiveness and sustainability of forest management approaches, based around the Montreal Process Criteria and Indicators.

The AFS defines sustainable forest management according to a set of nine criteria. These criteria address the management system itself, effective and cooperative public participation and governance to support the development and implementation of the standard, and management performance to maintain the various environmental, social and economic values of the forest. For each criterion, the AFS imposes a number of requirements that must be met in order to achieve certification.

Although the AFS was developed as a standard for timber producing forests, it contains sufficient criteria and indicators for biodiversity protection, reserve creation and ecosystem management, that could be adopted for forest management in Australia's NRS.

The criteria specified in the AFS, as shown in Attachment 1, would be relevant for the certification of forest management in the NRS.

The utilisation of a suitable criteria and indicators framework would assist in monitoring the effectiveness of forest management in Australia's NRS. Currently, without a system of monitoring and management criteria in place, it is difficult for reserve managers to explore and adopt alternative options that would help to achieve the desired management outcomes from the NRS.

It is important to note that whether forests are managed for timber production or conservation, the principles of ecological, social and economic sustainability must be applied, as all forests, whether managed actively or passively, are dynamic ecosystems. These principles will most likely be compromised, irrespective of management regime adopted, if there is not a clear set of objectives and if there is inadequate monitoring of the outcomes of the management strategies adopted.

As stated by Hockings and Phillips (1999), 'many protected area managers are not able to systematically review the results of their efforts. In the absence of such reviews, however, money and other resources can be wasted on programmes that do not achieve their objectives. Protected area managers must expect to come under ever greater pressure to introduce systems of monitoring and evaluation.'

## **Recommendations**

NAFI proposes that the following recommendations be considered in the evaluation of the NRS Programme, given that there is a critical need to improve the way that the existing NRS is being managed and monitored.

1. Instead of relying on simple area targets for the NRS, the NRS Programme should require that any future investment in biodiversity conservation and ecosystem protection should be supported through an adaptive and flexible approach to reserve management.
2. An effective and nationally consistent monitoring program should be established to assess the on-going health and vitality of ecosystems in the NRS.
3. No future expansion of the NRS should occur unless the areas added to, and those already contained within, the NRS are required to meet the standards of forest management set out in an independently-audited certification standard, such as the AFS or an equivalent standard.
4. A report should be produced on the actual outcomes, including biodiversity conservation achievements, which have been and are being delivered by the NRS Programme.
5. State, Territory and Federal Governments should recognise the conservation and biodiversity outcomes associated with production forests and the utilisation or conservation of forests on private land as a complement to the environmental outcomes provided by having elements of the same forest types managed in the NRS.

## **References:**

Dudley, N., Hockings, M. and Stolton, S. (1999). *Measuring the effectiveness of protected area management*. In S. Stolton, and N. Dudley, (editors), Partnerships for Protection. Earthscan, London.

Hockings, M. and Phillips, A. (1999). *How well are we doing? – some thoughts on the effectiveness of protected areas*. In Parks. Vol 9. IUCN.

Jurskis, V. (2004). *Forest health decline in coastal New South Wales*. In Proceedings of Forest Management Workshop, Canberra, 23-25 March, 2004.

Jurskis, V. (2005). *Eucalypt decline in Australia, and a general concept of tree decline and dieback*. In Forest Ecology and Management. Science Direct.

National Forest Inventory (2003). *Australia's State of the Forests Report 2003*. Bureau of Rural Sciences, Canberra.

**Monitoring Framework for Sustainable Forest Ecosystem Management**

<b>AFS Criteria</b>	<b>Outcomes from each criteria</b>
Forest management shall:	
1) be undertaken in a systematic manner that addresses the range of forest values;	Provide reserve managers with a framework for establishing and achieving forest management objectives and enable ongoing improvements in forest management. <i>E.g: Forest management plans, audits, monitoring records.</i>
2) provide for public participation and foster on-going relationships to be a good neighbour;	Facilitate effective and cooperative participation with stakeholders and neighbours on forest management strategies and decisions. <i>E.g: Record inputs from stakeholders and community including level of support and handling of disputes and grievances.</i>
3) protect and maintain the biological diversity of forests, including their seral stages, across the regional landscape;	Reserve managers could assess and identify the biological diversity values of forests and evaluate the impacts on these values from various management strategies and disturbance events such as wildfires. <i>E.g: Plans and operational procedures for managing and monitoring biodiversity.</i>
4) maintain the productive capacity of forests;	For this criterion, it is the ability of conservation outcomes in production forests to complement the biodiversity and ecosystem protection outcomes in the NRS. This will have implications for the management of forests in the NRS. <i>E.g: Biodiversity assessments of forests with varying productive capacities.</i>
5) maintain forest ecosystem health and vitality;	Assist reserve managers to prepare protecting forest ecosystems against damaging agents such as insects, disease, vertebrate pests and non-endemic species. <i>E.g: Assessments of pest and disease impacts and prioritisation of prevention/control and rehabilitation measures.</i>
6) protect soil and water resources;	Suitable management of forests to protect soil structure and fertility, water quality and water flows. <i>E.g: Operational plans, codes of practice and records for monitoring soil and water quality.</i>
7) forests' contribution to carbon cycles;	Through good management of the forest ecosystem biomass and carbon pools, reserve managers could maintain the capacity of forests to act as net carbon sinks. <i>E.g: Consideration of greenhouse gas emissions in planning and management procedures.</i>
8) protect and maintain, for Indigenous and non Indigenous people, their natural, cultural, social, recreational, religious and spiritual heritage values; and	Provide a participatory and consultative approach to support the protection of cultural heritage sites and values. <i>E.g: Record inputs from Indigenous and non-Indigenous groups including any dispute resolution outcomes.</i>
9) maintain and enhance long-term social and economic benefits.	Enable reserve managers to meet community needs from forests such as recreation and tourism, employment, income and social well-being, in perpetuity. <i>E.g: Educational programs, recreational plans and environmental and socio-economic reporting.</i>

## **APPENDIX 2 – Submission: Australian Government Discussion Paper – Bringing Down the Axe on Illegal Logging: A Practical Approach**

### **Introduction**

The National Association of Forest Industries (NAFI) appreciates the opportunity to comment on the Discussion Paper, *Bringing Down the Axe on Illegal Logging: A Practical Approach*, prepared by the Department of Agriculture, Fisheries and Forestry (DAFF).

Australia's forest industry supports the lead role being taken by the Australian Government in seeking to address the many problems which arise from illegal logging activities. As highlighted in the Discussion Paper, illegal logging is a serious concern as it threatens the viability of Australia's own environmentally sustainable forest industry.

NAFI supports 'in principle' the approach being taken by the Australian Government towards addressing illegal logging as outlined in the Paper. The following submission provides feedback on the Paper and its recommendations for dealing with the problems associated with illegal logging. We have also requested some further expansion on certain elements of the Paper and provided some additional suggestions on how illegal logging issues can be addressed.

### **Dealing with overseas timber imports**

While it is clear that a firm stance needs to be taken on illegal timber imports to Australia, NAFI agrees with the Federal Government's proposal to proactively work with overseas countries to 'develop their capacity to deal with illegal logging issues'. A blanket ban on suspected illegal timber imported into Australia would do little to solve the 'global problem' and would only shift it elsewhere.

However, urgent action is needed to increase Australia's assurance that the timber products being imported are from legal and sustainably managed forests. While NAFI supports Measures 6 to 8 and the associated actions contained in the Discussion Paper, a greater level of detail is required on the implementation of these proposals. This will provide a better understanding on how these proposals can address the problems associated with illegal logging.

In developing bilateral arrangements for legal assurances of forest products imported into Australia (Action 6.1), the Australian Government, in collaboration with the forest industry, should stipulate some key requirements which must be met by exporting countries within specified timeframes. This would provide Australia with some measurable confidence on the efforts of these countries to provide demonstrated legality of their timber exports.

Australia's forest industry is committed to working with other countries on illegal logging issues. For example, NAFI is currently working with the Australian Government on a project to boost relationships between Australia and China on forest certification. As part of the Australia-China Cooperation Agreement (ACACA), reciprocal visits to each

others' respective countries will be made by Chinese and Australian forest industry representatives. This will enable Australia to aid China in the development of its own forest certification scheme and will encourage mutual recognition between the two countries on forest certification.

NAFI would like to see this approach, with the support of the Australian Government, applied to other key countries, such as Papua New Guinea.

### **Timber procurement policies**

NAFI supports Action 5.1 to 'encourage the development and adoption of voluntary private sector procurement policies and guidelines to assure consumers that all products they purchase, both domestically produced and imported, are legally sourced'. However, care must be taken in the implementation of this action to avoid the contradictory policy outcomes which are currently taking place in Australia through some existing private sector procurement policies.

For example, the Green Building Council of Australia's (GBCA) Green Star environmental rating system for buildings delivers a perverse environmental outcome in terms of utilising 'home-grown' Australian timber products. Green Star takes an exclusive approach to forest certification by advocating the use of Forest Stewardship Council (FSC) certified timber only. Effectively, this precludes the use of the vast majority of timber produced in Australia, particularly if it is derived from native forests, as any FSC certified hardwood timber must be imported from overseas due to the fact that there are no native forests certified under the FSC in Australia.

Also, the FSC has a 'mixed sources policy' for labelling some of its certified products, whereby only 10% of material needs to be derived from FSC certified forests for those products to be labelled as FSC certified. Under this policy, Green Star would support the use of FSC certified wood (possibly imported), even though up to 90% of the material content could be derived from non-FSC certified forests with potentially dubious origins.

The Green Star rating system fails to recognise Australia's largest and only national forest certification standard, the Australian Forestry Standard (AFS). Recognition of the AFS under Green Star would allow the use of Australian native hardwood timber, as the AFS certifies extensive native hardwood production forests throughout Australia.

While NAFI supports the Australian Government's proposed actions to encourage private and public sector procurement policies which provide assurance of legally sourced timber, these policies should also encourage preferential use of sustainably and legally sourced domestic timber products over imported timber. This would avoid the perverse outcomes which are currently being delivered under procurement policies such as that of the GBCA.

Procurement policies must also be realistic in terms of specifying certified timber products relative to their availability in the market place. If these policies 'set the bar too high' by specifying certified products which are not available, builders and designers will be forced to use alternative products to timber which do not possess the same environmental and life cycle credentials.

The Australian Government must assert a strong influence over the development of both public and private sector procurement policies. This is essential to ensure that these policies recognise the legality and sustainability of Australian timber products over imported products which may have dubious origins.

### **The impacts of forest reservation**

Section 1.4 of the paper reiterates the Australian Government's 2004 federal election commitment that increasing the reservation of Australia's native forests should not lead to an increased domestic reliance on potentially illegally sourced overseas timber imports. Unfortunately, past and ongoing reservation of these forests has, and will continue to, only exacerbate Australia's reliance on these imports.

Over 11 million hectares of Australia's timber producing native forests have been placed into conservation reserves since 1994 as a result of Government policy on forests (i.e. RFAs). This has led to a substantial reduction in Australian hardwood sawlog availability, falling from 4.3 million cubic metres in 1994 to 2.8 million cubic metres in 2004, and a fall in hardwood sawn wood production from 1.53 million cubic metres in 1994 to 1.03 million cubic metres in 2004.

While Australia is expanding its plantation resource in an attempt to help offset this loss of native forest resource, many plantations are being grown for short rotation wood fibre production, largely for export, and not sawn timber. Also, sawn timber that is sourced from plantations may not contain the same qualities of native hardwood timber, such as strength, durability and appearance.

NAFI would like to see a stronger commitment from the Australian Government in working with the respective state governments to ensure that there is no further undue reservations of commercial native forests in Australia which has the potential to increase Australia's reliance on illegally sourced overseas timber imports. This is an important priority which should be included in the list of actions under Measure 2.

### **Recognition of certified and non-certified forest products**

#### ***Certified forest products***

While Australia is rapidly increasing its area of certified commercial forests and plantations (currently over 9 million hectares), the reality is there is a limited amount of certified timber products available in the market place.

For instance, the Australian Forestry Standard certifies the largest amount of forests in Australia with over 8.5 million hectares of forest certified across all states, on both public and private tenures. However, the availability of labelled AFS certified timber products in the domestic market place is extremely limited. This is mainly due to the current lack of consumer awareness and demand for certified timber products and the slow uptake of chain of custody certification throughout the supply chain.

Greater recognition and availability of certified timber products in the Australian market place is a critical issue for Australia's forest industry and one which it is currently seeking

to address through fostering greater uptake of chain of custody certification. There is a major opportunity to increase the availability of certified Australian timber products under the AFS for instance, with such a large volume of timber produced from the extensive area of certified forests.

NAFI strongly encourages greater collaboration with, and support from, the Australian Government in increasing the recognition and availability of certified forest products in the market place, through an increased uptake of chain of custody certification. While, this recommendation is partly covered in Action 4.1 of the Discussion Paper, NAFI would like to see a greater level of detail from the Australian Government in terms of how it proposes to achieve this outcome.

### ***Non-certified forest products***

NAFI strongly endorses Action 4.2 which aims to demonstrate the legality and sustainability of Australian forest products which are not certified or managed under the RFAs. This is particularly important for timber which is sourced from small private growers, who do not have the capacity or incentive to adopt forest certification as part of their routine operational practices.

The development of a system which recognises the legitimacy of these forest products is a priority for Australia's forest industry. While not all Australian native forests and plantations are currently certified, they are all grown and managed in accordance with the legislative and regulatory requirements (e.g. codes of practice) which operate in each state and territory. That is, the timber is supplied from legally logged sources. From NAFI's perspective, Australian forest products should be acceptable to the domestic and international market independent of whether or not they come from forests that are certified.

### **Conclusion**

NAFI endorses the many measures and actions for addressing illegal logging as proposed in Section 3 of the Discussion Paper, and would be interested in liaising with DAFF to gain a more detailed understanding of how these measures could be implemented. Addressing illegal logging is critical to strengthening Australia's sustainable forest industry as well as ensuring a similar level of environmental consideration is adopted by the overseas countries which export timber products to Australia.

NAFI looks forward to further consultation with DAFF during the Australian Government's ongoing efforts to address the many problems associated with illegal logging. We would be most willing to expand on our submission and answer any queries that may arise regarding illegal logging issues and the implications for Australia's forest industry.

## **APPENDIX 3 – Submission: Colac Otway Shire Rural Land Strategy**

2 March 2007

### **Introduction**

Tree Plantations Australia (TPA) appreciates the opportunity to make a submission to the Colac Otway Shire Council in reference to the proposed changes to its planning scheme, as outlined in the *Colac Otway Shire Rural Land Strategy*.

TPA represents the interests of a number of Australia's largest plantation growers and processors. A significant number of people are employed by TPA's member companies in regional areas across Australia, including throughout the Colac Otway Shire.

TPA welcomes the strategy's recommendation to ...*continue to encourage the forestry industry within the Shire due to its significant contribution to the Shire economy and employment*. However, TPA has serious concerns over the impacts of the following two recommendations in Section 3.5:

- *Develop a plantation local policy that would seek to discourage plantation forestry on land in excess of 40ha in areas of high agricultural capability north of the Otway Ranges.*
- *Include in the schedule to the Farming Zone the area of 40 hectares as the maximum size for which no permit is required to use land for timber production in areas of high agricultural capability north of the Otway Ranges.*

These recommendations are likely to severely contradict broader policy objectives at a number of jurisdictional levels. They are discriminatory against plantation forestry which is a legitimate agricultural land use, and have the potential to cause widespread negative social, economic and environmental implications within and beyond the Colac Otway Shire.

This submission briefly highlights a number of key industry concerns and TPA supports the similar reasons for concern as outlined by Midway Pty Ltd in their submission.

### **Highest value landuse, landuse diversity and equity**

TPA is concerned that the above mentioned recommendations will restrict the ability to promote highest value land use within the Colac Otway Shire. This is generally considered a high priority for any local council which is looking to enhance its local economy by maximising the productivity and economic return from its land. Inefficient land use will only put an undue strain on the shire's economy and its communities.

A diverse economic base is important for any regional area particularly as many communities experience the effects of rural decline. It can only be assumed that the recommendations will move the focus of multiple agricultural activities to other more concentrated pursuits such as dairy farming. Encouraging a focus on limited individual

sectors will only serve to increase the local economy's exposure to risk surrounding a potential downturn in those sectors.

By contrast, broadening the economic base by including equal scope for plantation forestry development can provide greater security for communities. Further, plantations can be harvested when market conditions suit to avoid exposure to market downturns and they are also not subject to the same level of risks from drought as other agricultural activities.

Results of a study, released by the Bureau of Rural Sciences (BRS) in 2005, investigating the economic and social impacts of plantation forestry, found that as plantation resources grow to a critical mass, there are significant employment and positive flow-on effects for regional communities. As a result of these new employment opportunities, areas with a sufficient area of plantations experience either a growth in population or a lower rate of decline than nearby areas. Importantly, regions with a more diverse economic base experience higher rates of growth in the working age population. Other key findings from the study include the constant source of employment with plantation growing and processing, even in the drought years, and the relationship between industry expenditure and economic growth.

TPA is not advocating that plantation forestry becomes the dominant land use in high quality farming areas, however it should, along with all other sectors, be considered as a legitimate land use and a means of diversifying the local economy. It is essential for any local rural economy to diversify the type of land use so that risk associated with market fluctuations can be avoided.

Land-use equality may also be compromised as residents of the shire will not have the freedom to choose what they want to farm and where this can occur. Also, by discriminating against the existence of plantations, the Colac Otway Shire would be setting a dangerous precedent and is taking an approach to local planning which is unlikely to be consistent across other local government areas.

### **Rationale for discrimination against plantation forestry**

TPA has serious concerns over the basis for which the recommendations to restrict plantation forestry development in high value agricultural areas were made in the strategy paper. These recommendations do not appear to be based on any substantiated evidence that there is a need to restrict the establishment of plantations in a particular agricultural area.

Plantation forestry is a legitimate agricultural land use and should be considered on an equal setting with other land uses. It is difficult to comprehend how the Colac Otway Shire's Rural Land Strategy would endorse plantations and their socio-economic benefits, but at the same time unfairly restrict the areas in which they can be established.

### **Perception of plantation management activities**

TPA is concerned that plantation forestry may have been singled out for unfair treatment within the land strategy due to an unsubstantiated negative perception of the industry's plantation management activities.

It should be noted that all activities associated with the management of tree plantations are subject to an extensive and rigorous legal and regulatory framework. Strict codes of practice are also enforced for these activities which may include planting, harvesting and the use of pesticides and herbicides. Many plantation managers have also gone a step further by adopting independent third party certification of their management activities, such as through the Australian Forestry Standard.

The extensive nature of mandatory and self-imposed regulation surrounding plantation forestry is a clear demonstration of the industry's commitment to achieving the full range of triple bottom line outcomes. This level of regulation and commitment is often not shared by other industries which may be utilising similar areas of land.

TPA is strongly opposed to the development of these recommendations on the misguided basis that plantation management activities are in any way detrimental to broader environmental, social and economic objectives in the Colac Otway Shire.

### **Potential environmental implications**

The discrimination against plantation forestry in high agricultural capability areas could have severe environmental implications. Plantation forestry delivers a number of environmental outcomes which are recognised in broader government policy objectives including; reducing land degradation (i.e. salinity and water inundation), improving water quality, enhancing biodiversity on cleared farmlands and providing carbon sequestration to address climate change.

Multi-purpose plantations have been successful in providing solutions in the Goulburn-Broken catchment, as identified through work undertaken by the CSIRO as part of their Commercial Environmental Forestry (CEF) project. The promotion of environmental solutions from plantations such as these should be encouraged through an appropriate planning scheme in the Colac Otway Shire.

The Victorian Civil and Administrative Tribunal (VCAT) recently indicated that a new tree plantation in the Gellibrand River catchment was likely to improve the quality of water resources. VCAT also found that in comparison to grazing, over the life of the timber plantation, the quality of water harvested from the land will be improved.

From a broader environmental perspective, tree plantation expansion is essential for Australia to meet its Kyoto target of 108% of 1990 emissions. In 2004, commercial tree plantations in Australia removed nearly 18 million tonnes of CO<sub>2</sub> emissions from the atmosphere (this is equivalent to taking 3.6 million cars off the road for a year).

### **Inconsistency with broader policy objectives**

The recommendations proposed by the Colac Otway Shire may compromise a number of State and Commonwealth policy objectives on the development of plantation forestry.

For instance, the National Forest Policy Statement states *'governments have several objectives in relation to Australia's plantation resource: to increase commercial plantation development on cleared agricultural land and, where possible, to integrate plantation enterprises with other agricultural land uses'*. The NFPS also states *'to achieve the Governments' objectives it will be necessary to ensure the impediments to plantation development are minimal in areas such as...planning and access to information.'*

The West Victoria Regional Forest Agreement (RFA), which encompasses the Colac Otway Shire and which the Victorian and Commonwealth Governments were party to, states *'a significant expansion in the extent of hardwood and softwood plantations on previously cleared land in the West Victoria Region.....would be desirable and note that a range of programs, including initiatives through the Plantations for Australia - 2020 Vision, have been established to encourage investment in plantations.....'*

A number of objectives of the *Plantations for Australia – The 2020 Vision* are also potentially compromised by the land strategy's recommendations. In particular, Actions in the Vision state that the policy and regulatory framework should *'facilitate better regional planning for plantation expansion'* and *'promote development of legislation covering the rights to plant, harvest and trade plantations and their products'*.

The Colac Otway Shire's restrictive proposed approach to the development of plantation forestry is not consistent with any of the above policy objectives.

### **Industry future**

The future viability and development of the plantation industry will be severely jeopardised if these recommendations are adopted. Industry investment in value adding downstream processing facilities in regional Victoria are reliant on a certain level of resource supply which may not be achieved if plantations are unfairly discriminated against as an illegitimate land use.

Plans for new industry developments such as pulp mills, wood processing facilities and export facilities, which will greatly benefit rural economies and communities, could be under threat. A reduction in industry confidence due to resource insecurity would jeopardise the future of current planned forest industry developments across Australia which are valued at around \$4.5 billion.

It is also a concern that a decision to limit tree plantation establishment to low quality land will set a precedent for other shire councils, both in Victoria and interstate. This could have devastating impacts on not only local economies, but on the industry as a whole.

Australia currently faces a \$2 billion deficit in wood and paper products, while the forest industry contributes \$18 billion or 3% of Australia's GDP. The Australian economy and regional communities have become increasingly reliant on tree plantation expansion as

more native forests have been removed from production and placed into conservation reserves.

### **Conclusion**

TPA strongly opposes the land strategy proposal for the Colac Otway Shire to restrict the established of tree plantations in high quality agricultural areas. The proposal is discriminatory against plantation forestry as a legitimate agricultural land use and is likely to result in a number of contradictions to broader government policy objectives.

The existing and future employment values of the industry, environmental benefits of tree plantations and the economic benefits for rural communities are under serious threat if these recommendations proceed to implementation. TPA urges the Colac Otway Shire Council to reconsider the proposal in light of the serious ramifications which may result.

**APPENDIX 4 – Submission: National Water Commission’s First Biennial  
Assessment of the National Water Initiative**

**February 2007**

**Summary**

Tree Plantations Australia (TPA) appreciates the opportunity to make a submission to the National Water Commission’s (NWC) First Biennial Assessment of the National Water Initiative (NWI).

TPA recognises and supports the overall objective of the NWI that is ‘to achieve a nationally compatible market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes’. However, the forest industry is concerned that there is scope for the NWI to be wrongly interpreted and implemented thus resulting in the delivery of inequitable and contradictory policy outcomes at a regional, state and national level.

TPA is concerned that ‘large-scale plantation forestry’ has been singled out in the NWI as a land use change activity that has the ‘potential to intercept significant volumes of surface and/or groundwater’ (clauses 55-57). This use has not been quantified, nor defined throughout the entire NWI and appears to have led to forest activities being dealt with in a manner which does not adhere to a number of the over-arching requirements of the NWI.

TPA has some serious concerns that the development of water policy (in response to the NWI) may result in perverse policy outcomes which threaten the triple bottom line benefits of plantation forestry in regional areas. Therefore, the implementation of the NWI must be conducted through a consultative and transparent process to ensure industry receives recognition of the significant role it plays in regard to these outcomes.

For the NWI to be established effectively, broader policy objectives (including forest policy) must be adequately considered. Therefore, the forest industry would support the NWC to work with governments and industry to ensure that policy development in response to the NWI is consistent with broader government policy objectives.

TPA has reviewed the draft forest water policy of the South-East Natural Resource Management Board in South Australia in the context of the objectives of the NWI. TPA has some concerns over the proposal and will be seeking to work with SENRMB and South Australian Government to address industry concerns.

The following submission addresses the 8 priority elements of water management in the NWI in the context of TPA’s concerns with the interpretation and implementation of the initiative. TPA’s concerns, which the NWC should consider during the assessment process, are as follows:

- Equity in processes and opportunities for access entitlements and trading;
- Consistency in relation to meeting broader policy objectives;
- How triple bottom line outcomes are delivered;

- There is transparency, accountability and adequate stakeholder engagement;
- Industry certainty and resource security;
- Account is taken of regional significance versus cross-jurisdictional abilities; and
- Clarity of key definitions, terms and requirements.

To ensure the implementation of the NWI is achieving optimal resource outcomes, TPA seeks that the NWC address the following:

- Consideration of broader policy objectives in developing regional water policy;
- Water allocation plans must be developed and implemented under a nationally consistent and defined process to ensure water entitlement transferability opportunities are possible and equitable for all stakeholders;
- Remove the uncertainty of the NWI by clearly defining the stakeholder and water planner requirements to achieve maximum water efficiency and accountability;
- Ensure delivery of the NWI is effective and meets its' intended purpose;
- Ensure stakeholder consultation is done in an open and objective manner while ensuring the process is inclusive and transparent;
- Establishing a consistent triple-bottom line approach for use in assessing water entitlement efficiencies at the regional, state and national levels;
- Treating each land-use in a fair and equitable manner;
- Ensure opportunities to trade, share or lease water entitlements are inclusive;
- Adequate consideration is given to long-term affects of the water entitlement process on industries to provide resource security and certainty.

## **NWI Priority Elements of Water Management**

### **i. Water Access Entitlements and Planning Framework**

The aim of the first element of water management is to ‘restore surface and groundwater systems to environmentally sustainable levels’ through water plans providing ‘certainty for consumers and allowing them greater scope to plan’. However, the non-prescriptive nature of the NWI has led to significant scope for misinterpretation, meaning the implementation processes fail to deliver the required certainty and ability to plan for entitlement holders. Clauses 25.i and 25.xi specifically refer to the need for certainty, security and the role of land-use change. Resource and investment security for the forest industry may be severely jeopardised if there is no certainty with regard to securing access to water resources.

Clauses 2 and 23 of the NWI highlight the responsibility of governments to balance the environmental sustainability of the water resource while optimising economic and social benefits. These are not being adequately assessed as intended under the NWI in some jurisdictions. An example of this is in South-East South Australia (case study later in submission) where the draft forest policy developed by the SENRMB provides limited certainty for industry to plan for future development. If implemented without due consideration of environmental, social and economic impacts, the proposed forest policy in the SE could have significant immediate and future regional impacts (more detail is provided in the case study). TPA will be seeking to work with the SENRMB and South Australian Government to address industry concerns.

### **Recommendations for the NWC**

The forest industry seeks that:

- A clearly defined, consistent and transparent approach is established by the NWC to determine water access entitlements through effective economic, environmental and social analysis.
- Downstream benefits such as effective and fair trading opportunities and cross-jurisdictional equity are considered for all stakeholders.
- Terminology must be clarified for use in water access entitlement planning.
- Clarification of investment certainty for investors or financiers when entitlements are provided under short-term arrangements.

### **ii. Water Markets and Trading**

This element aims to ‘remove institutional barriers to trade in water’, and provide the ‘widest possible geographic scope, and will not be restricted to within catchment areas’. The NWI requires that every effort is made to encourage and facilitate the establishment of water trading opportunities within and external to their local jurisdictions (clause 23.v and 31.iii). From this it could be assumed that the intention of the NWI is to embrace water trading and make it as inclusive of the various stakeholders as possible.

Despite this apparent support for water markets and trading, the forest industry appears to be facing the inequitable situation of limited opportunity for participating in a fair and

open water trading market when compared to other stakeholders (i.e. irrigators). The proposed forest policy delivered by the South-East NRM Board (SENRM) in South Australia is an example where various aspects of trading may potentially be unavailable to the forest industry, other than within their specified management boundaries. Despite the NWI requiring market and trading arrangements to 'facilitate the operation of efficient water markets and the opportunities for trading' (clause 58.i), there is a limitation on plantation managers to transfer or trade water into or outside of plantation estates under the proposed SE water plan.

Attachment A of the NWI states that, 'entitlements will have characteristics to allow their free and open trade, and will only be able to be cancelled by governments in the case of water users not meeting their conditions of entitlement'. Despite this, the lack of clearly defined expectations and mechanisms for policy developers within the NWI has led to interpretations that conflict with the objectives of the initiative.

### **Recommendations for the NWC**

The forest industry encourages:

- Equity in scope for all water users to participate in an open and transparent water trading market.
- Removal of artificial boundaries within regional plans that restrict the potential for water trading across management zones.
- The clearly defined expectations of the NWI to be passed onto those preparing water plans at the regional level, to support and encourage potential to participate in water trading in both inter and intra-jurisdictional zones.

#### **iii. Best Practice Water Pricing**

This element is intended to create 'water pricing and institutional arrangements under the NWI will promote economically efficient and sustainable use of water resources', while providing 'appropriate mechanisms for the release of unallocated water'. Despite this, without clearly defined processes and consistent interpretation and planning arrangements, the NWI may fail to deliver truly efficient and sustainable use of water.

It is critical that pricing and institutional arrangements are supported by policy settings that facilitate water use efficiency and innovation (clause 23.viii). There appears to be limited incentive (either through cost or capping arrangements) for water users to become more efficient in their use. Additionally, there appears to be a lack of current policy settings that address water use and efficiency which are consistent with broader government policy objectives.

Despite the NWI expectations, there is potential for the forest industry to be treated in an inconsistent and inequitable manner. Pricing and institutional arrangements are required to 'facilitate the efficient functioning of water markets, including inter-jurisdictional water markets' (clause 64.iii). For water markets to be inclusive and efficient the assumption is made that water use can be accurately measured at any point in time. At present however, with the limited scientific research and knowledge, it is impossible to accurately measure water use by forests and ultimately will result in a market driven by distorted outcomes.

Best practice water pricing requires provision of appropriate mechanisms for the release of unallocated water. While clause 64.vi specifies that water pricing and institutional arrangements provide appropriate mechanisms for the release of unallocated water, there is no indication as to the process required to make unallocated water available. States or Territories can make unallocated water available for release (clause 70). However there is no indication as to what substantiates the release or refusal to release water under this discretionary action. It appears that the lack of definition surrounding the requirement to release unallocated water, or otherwise, provides water planners/managers with the option to refuse making water available to users, despite the opportunity for this to occur.

While best practice water pricing may provide consistent requirements for inter and intra-jurisdictional trade, without clearly defined expectations on water use efficiency, triggers for release of unallocated water, and establishing and maintaining an effective water market, water pricing will not be an effective tool.

### **Recommendations for the NWC**

The forest industry would encourage:

- Clearly defined expectations as to what constitutes ‘economically efficient and sustainable use of water resources’.
- Methods to avoid water pricing and markets which create distortionary outcomes.
- Clarity about what substantiates a release of unallocated water.
- Confirmation about what alternative methods are available to make unallocated water available for use if a release is justified, however mechanisms such as trading, leasing or sharing of water entitlements are not allowed within a jurisdiction.

#### **iv. Integrated Management of Water for Environmental and Other Public Benefit Outcomes**

The key aim of this priority element is the ‘identification of the environmental and other public benefit outcomes sought for water systems and to develop and implement management practices and institutional arrangements that will achieve those outcomes’. This implies that water managers are required to outline environmental and other public benefit outcomes when developing water management systems and processes.

The forest industry has some serious concerns that this objective of the NWI is not being met. For instance, development of water policy stemming from the NWI as it applies to plantations may be contrary to a number of other government policies which are designed to deliver environmental and socio-economic outcomes.

If water policy development leads to a reduction in the current and future area of tree plantations throughout Australia, several broader policy objectives may be compromised. These policies were formulated in recognition of the positive benefits of plantations such as addressing land degradation problems (i.e. salinity and water inundation), enhancing biodiversity on cleared farmlands, providing carbon sequestration to address climate change, and providing various socio-economic benefits for rural and regional communities. These benefits must be considered in the water allocation planning process

(clause 25.iii) as they are necessary to achieve these broader government policy objectives.

An example of a process whereby there has been an attempt to take full consideration of the triple bottom line impacts of changes to forest management has been the Regional Forest Agreements (RFA). Australia's native forest industry has been subjected to 10 RFAs throughout the country's major forestry regions as a means of determining the future management of forests. Each RFA involved extensive review and reporting procedures of all aspects of forests and forest management as well as in depth consultation with the full range of stakeholders including communities, industry, government, expert scientists and environmental groups.

It was recognised in the RFAs that there would be widespread ramifications for many stakeholders on the outcomes of the process so the scope of assessment and consultation was extensive accordingly. As the implications of proposed forest policy may be similar in scope to the RFAs for the forest industry, it is highly questionable why the same level of assessment process has not been adopted.

As with the RFA processes, the forest industry expects adequate consideration of triple-bottom line outcomes and the development and implementation of systems within the water resource planning framework being 'identified and considered in an open and transparent way' (clause 25.iii), rather than solely achieving water management outcomes. These environmental outcomes are necessary as a sustainable water industry requires the maintenance of healthy surface and groundwater systems. Governments must consider the environmental outcomes, while requiring management and accountability to meet those expectations. If water must be recovered to assist achieving the identified environmental outcomes, this must be carried out on a cost-effective basis and in a manner to minimise the economic and social impacts.

## **Recommendations for the NWC**

The forest industry strongly advocates the purpose of integrated management for environmental and other public benefit outcomes. In doing so the forest industry would like the NWC to consider:

- How the environmental benefit outcomes are being considered within the water planning framework for each region. If they are not, they should be incorporated into the nationally compatible economic, social and environmental assessment process.
- How each outcome is assessed within the overall objectives of the NWI?
- How is clause 25.iii met where outcomes must be considered in an 'open and transparent way'?
- What evidence is required to substantiate an outcome that requires consideration within the water planning framework?

### **v. Water Resource Accounting**

This element aims to 'ensure adequate measurement, monitoring and reporting systems are in place, to support public and investor confidence in the amount of water being traded, extracted for consumptive use, and recovered and managed for environmental and

other public benefit outcomes'. It covers a number of elements required under the NWI, however, a critical aspect is the management and impact of water being extracted for consumptive use. A number of clauses in the NWI have the potential for interpretation which could specifically affect the future viability and development of the forest industry. Clauses 55-57 refer to 'Large-scale plantation forestry' as an example of a land use change activity that has the 'potential to intercept significant volumes of surface and/or groundwater'. This has led to forest activities being dealt with in a manner which does not adhere to a number of the over-arching requirements of the NWI.

The NWI requires the significance of activities such as forestry to be assessed 'based on an understanding of the total water cycle, the economic and environmental costs and benefits'. Interpretation of the interception clauses has allowed water planners to draw unsubstantiated conclusions from limited scientific, social and economic assessment, and apply these in a retrospective manner. This is despite the NWI framework on interception being intended to 'apply to future proposals for land-use change rather than retrospectively' (NWI Attachment A). Further to this, Attachment A discusses the basis of the Council of Australian Government (COAG) agreement on the interception clauses. It states, 'the intention of the NWI framework on interception is not to pre-determine whether an activity is a significant interceptor, but instead to determine whether the volume intercepted from any land-use change activity is "significant" in the context of the water system within which it occurs'.

Due to the terminology of the NWI there is a considerable amount of uncertainty regarding the interpretation of the interception clauses. Clause 57.ii requires those systems approaching full allocation to require a water access entitlement, while under Appendix A it stipulates the system must be fully allocated for additional proposals to require a water access entitlement. Where systems are not fully allocated, land-use change activities can proceed providing the pre-determined threshold level has not been reached. Only where systems are fully allocated can land-use change activities require an access entitlement where interception is considered 'significant'. Therefore, classifying all large-scale plantations as 'significant interceptors' goes against the baseline assessment for water interception under the NWI. Not only is there no definition of what constitutes 'significant' but there is also no definition of what is considered 'large-scale'.

## **Recommendations for the NWC**

Water resource accounting covers a broad range of issues that without clear definition or process could easily be mis-interpreted and implemented. The forest industry would seek:

- A defined national approach is developed to assess the environmental and other public benefit outcomes.
- All industry groups to be treated in an objective, equitable, and transparent manner with regard to interception.
- Impacts on resource security and investor certainty should be considered by water planners to minimise impacts on long-term regional GRP and employment.
- Consideration must be given to regional significance (or uniqueness) in partnership with inter-jurisdictional opportunity to embrace water planning aspects such as trading or sharing.

## **vi. Urban Water Reform**

While Urban Water Reform is not specifically related to the forest industry, we note and support the initiative to ‘facilitate water trading between and within the urban and rural sectors’. TPA would encourage this to be managed in a fair and equitable manner. Water trading has been previously discussed, however TPA would support the opportunity to participate in trading between the two sectors. This opportunity should not be restrictive and should be equitable to all stakeholders.

### **Recommendations for the NWC**

As previously indicated the forest industry would seek to:

- Have the opportunity to participate in a fair and open water market inclusive of all land use types and locations.
- See water trading between urban and rural settings be implemented in a transparent and accountable manner in both inter and intra-jurisdictional areas.

## **vii. Knowledge and Capacity Building**

The forest industry strongly endorses the objective to increase the knowledge and capacity building process for the implementation of the NWI. It is clear the current lack of knowledge to substantiate the planning processes as required under the NWI is placing a great deal of uncertainty on the proposed water plans. This has emerged through the extrapolation of limited scientific knowledge and subsequent application of dubious methods for determining water use and thresholds across jurisdictions.

As indicated in clauses 56 and 57.ii, ‘estimates’ of water use can be made with limited knowledge and understanding. The forest industry is concerned the decision-making process may be ineffective and supports the NWC to increase the knowledge base. An example of this is use of the ‘hundreds’ water management zones in the SE. These boundaries do not resemble the groundwater landscape of the region. If these boundaries are used, there is potential for estimations of allocation to be grossly inaccurate. Therefore studying the regional hydrogeology to improve the regional knowledge base is imperative to establish accurate grounds for determining water entitlements.

TPA is concerned over the lack of clarity surrounding when knowledge improvements can be adopted into the water allocation planning process. Discussions with the NWC, DWLBC (SA) and the SENRMB have failed to provide a conclusive statement about the timing implications for research outcomes. Currently, water managers are able to interpret when knowledge improvements can be adopted into the water planning process.

### **Recommendations for the NWC**

TPA would seek the NWC to:

- Establish clearly defined timing implications to ensure new information is utilised in a timely manner.
- Facilitate availability of information and encourage knowledge improvements and support industry progress research projects to quantify decisions made by the water planners.

- Utilise knowledge and capacity-building opportunities to support regional economic, social and environmental outcomes and ensure water efficiency is maximised.

### **viii. Community Partnerships and Adjustment**

Community partnerships and adjustment are critical to achieving fair and equitable solutions for all stakeholders. The aim states ‘government are to engage water users and other stakeholders in achieving the objectives of the Initiative by improving certainty and building confidence in the reform processes’. It continues ‘transparency in decision making; and ensuring sound information is available to all sectors at key decision points’. These requirements are stated in clauses 21, 95.i, 95.iii and 97.i where decisions may ‘affect the security of water access entitlements or the sustainability of water use’.

While representatives of the forest industry and government agencies participated in the ‘facilitation process’ in the SE as required under the NWI, TPA is concerned the outcomes of the consultation did not meet the expectations of the participating stakeholders. Examples demonstrating industry concern are:

- The SENRMB did not reveal to participating stakeholders their position on forestry water use until the second last of fifteen facilitated meetings, hence providing industry representatives limited opportunity to work with the Board and determine the projected impacts the policy may have on forest estate and sawlog supply contracts.
- The forest stakeholders sought direction from the Board over their intended approach to conduct their economic, social and environmental sustainability assessment. To date, the Board has yet to provide how social or economic impacts have been accounted.
- Forest industry stakeholders sought clarification over the Board’s interpretation of the NWI’s ‘retrospectivity’ reference. It was not until the release of the draft forest water policy document following the conclusion of the facilitation process that industry was made aware of their position.

While stakeholder facilitation processes are being run, no defined process exists for what is required by water planners and as a result no certainty is gained for participating stakeholders. Despite the potentially significant impacts upon sustainability and security of water access, recognition and inclusion of stakeholder views can be limited.

### **Recommendations for the NWC**

Stakeholder involvement in the development and implementation of water plans is crucial where decisions may impact on resource security and certainty. TPA would support:

- Ongoing stakeholder engagement in the decision-making process.
- Increased involvement of affected stakeholders in distilling information into water allocation plans to ensure objectivity and equity in the decision-making process.
- Transparent and accountable outcomes by water planners as a result of the facilitation processes.
- Clearly defined processes for negotiation with government and water planners during the facilitation and development of water allocation plans to ensure outcomes are consistent with the NWI and stakeholder expectations.

- Timely access to supporting or background data to verify policy decisions.

### **Case Study: South-East Natural Resource Management Board Forest Policy and Water Allocation Planning Process**

#### **Introduction**

Forestry is a significant contributor to the regional economy of the Limestone Coast of South Australia. Despite the economic, social and environmental benefits of forestry, the South East Natural Resource Management Board (SENRMB) has signed off on a draft water policy that may impact on forestry in the SE. “Forestry and the Groundwater Balance” is the result of the SENRNB’s facilitated process to manage the groundwater use impacts of forestry expansion into former agricultural land. This has raised serious concerns for the forest industry.

The draft policy does not appear to be consistent with the intent of the NWI in that it does not adequately consider the full regional environmental, social and economic impacts. Additionally, the policy is proposed to be applied retrospectively, despite the NWI stating it will only apply to future proposals for land-use change activities.

#### **Regional Forestry Benefits**

The plantation industry in the SE provides a range of social, environmental and economic benefits. These include:

- \$664 million (44%) of regional GDP<sup>6</sup> of the primary industry sector.
- 7,100 full time jobs (36%) of all primary industry sector employment.
- 1% of allocated water used by forestry generates 2.2% of regional GRP.
- Each ML of allocated water used by forestry directly raises gross regional product by \$1,875.
- Regional GRP contributions from forestry activities will increase as large-scale blue gum harvesting commences in 2009/10.
- Providing opportunity for participation in emissions trading through carbon sequestration activities.
- Sequesters around 1.35 million tonnes of CO<sub>2</sub> from the atmosphere each year.

#### **SE Forest Policy and Water Allocation Planning Process**

In previous WAP development processes the impacts on water resources by forestry have been recognised and precautionary allowances have more than accounted for rainfall interception and groundwater extraction. During the consultation process of 2002, an acceptable level of water use by both existing plantations and expansion of a further 59,000ha was determined. Above this level of plantation establishment, growers would be required to purchase a water entitlement to offset the impact on the water resource and to other users. This was agreed to by the SA Government in 2004, under the understanding that it was consistent with the requirements of the NWI.

Forestry activities occupy 135,000ha (13%) of the region and of the 11,300GL of average annual rainfall only 6% is used by forestry while 62% is used by agriculture. Of the total

---

<sup>6</sup> Econsearch (2006). Estimates of Economic Impact and Water Use for Forestry and Agriculture in SE SA.

water to be allocated by the NRM Board, less than 20% is used by forestry (in the form of additional recharge interception and groundwater use by the trees). The review of water use in the region concluded that 189GL of rainfall is intercepted by forestry and 75.5GL extracted from groundwater. The use of 264.5GL is only slightly higher than the previous WAP which was based solely upon interception.

Use of the artificial water management areas created by 'hundreds' is concerning. Despite regional water resources not being fully or over-allocated, use of these have brought areas into over-allocation. As a result, water allocation within the region is artificial and does not resemble the true nature of the resource.

Limited science and extrapolation across the jurisdiction have underpinned the decision-making process. As mentioned previously, evidence of regional economic, social or environmental assessment has not been provided by the SENRMB to support the proposed policy on water as required under the NWI and NRM Act 2004.

### **Regional Implications**

Implications of implementation of the proposed forest policy are significant for the industry. Despite forestry being recognised to have significant future growth and benefit for the SE region, the SENRMB forest policy poses a serious threat to current and future regional plantation developments. Potential impacts include threatening the development of the proposed Penola and Heywood pulp mills and a number of sawmill and pulp mill expansions and upgrades in the SE. Plantation growers may be required to purchase additional water entitlements if reductions are implemented in volume per water share, or may be forced to reduce the planned future and/or existing plantation estate area.

Costs to the region would be significant, particularly on the basis that the draft policy takes a 'retrospective' approach to water allocation that is inconsistent with the NWI. The overall potential impact to the region is around a 19% reduction of the current plantation area. If the draft policy is approved, the hardwood sector may need to remove or relocate 12,000ha (35%) of the current estate to other parts of the region during the 2010-2015 period. The situation is similar for the softwood sector with an immediate reduction in plantation area of 13,000ha required if additional water entitlements cannot be secured. Preliminary estimates show an immediate reduction of regional GRP of around \$126 million and a loss of around 1,350 full time jobs would result.

Future socio-economic consequences would be far more severe as the forest industry plans to expand in the region through an increased availability of wood resource volume. The proposed policy creates considerable sovereign risk for the forest industry and will highlight the SE as an area to avoid in regard to investment potential.

### **Conflicts with NWI Objectives**

TPA recognises and supports the objectives of the NWI, however the development of the SE forest policy has contradicted the intent of the NWI and failed to achieve its stated overall objective to 'optimise economic, social and environmental outcomes'. Additionally, consumer certainty and the ability to plan future activities are reduced as

entitlements have been restricted to a 5-year term. Forestry activities are long-term in nature and rely heavily on investment certainty.

There is no direct identification within water resource planning frameworks as to the environmental and other public benefit outcomes for the region as required under the NWI. There is no mention as to the benefits (whether environmental or other) that are brought to the region by forestry, nor the impact on these if adoption and implementation of this proposal was initiated.

### **Conflicts with Broader Policy Objectives**

The forest policy for the SE will create considerable contradictions with key National and State policy objectives. These include:

- Significant economic and social impacts in contradiction to the State Regional Development Plan.
- Impeding plantation development and jeopardising the National and State endorsed Plantations Vision 2020 policy.
- An immediate reduction in the State's contribution to the 'Kyoto target' by reducing carbon sequestration from the existing resource by around 283,000 tonnes CO<sub>2</sub>e per year, or the equivalent to the CO<sub>2</sub> emissions of 57,000 cars. This does not consider the potential carbon sequestration losses from future plantation expansion, nor the increase in CO<sub>2</sub> emission where agriculture replaces forestry.

### **Recommendations for the NWC**

TPA would like the NWC to:

- Undertake a detailed examination into the delivery of the key objectives of the NWI within the proposed draft forest policy.
- Determine if the SE forest policy is consistent with the intent of the NWI.
- Establish why forestry has been uniquely assessed within this region, while not acknowledging its regional benefits.
- Confirm why forests have been dealt with in a retrospective manner, despite the NWI stating activities of 'land-use change'.
- Review the interpretation and development process that has been done by the SENRMB to determine if it was done in an accountable, transparent and objective manner.
- Clarify the methodologies for determining water use by forest (and other) activities within the region.
- Determine if each of the NWI priority elements of water management have been met within this process.
- Establish and quantify upon what basis a triple-bottom-line assessment has been undertaken during the development process to substantiate the policy outcomes.

### **Conclusion and Recommendations**

Large-scale plantation forestry has been identified as a land-use change activity that has the 'potential to intercept significant volumes of surface and/or groundwater' (clause 55). As a result, despite no understanding as to what is 'large-scale', forestry activities are under review. This focus on forestry activities is not consistent with the aim of the NWI

that stipulates that surface and groundwater resources must be managed to optimise economic, social and environmental outcomes. Competing outcomes for water access entitlements must involve validated scientific and socio-economic analysis to determine water efficiencies and regional benefit and impacts of entitlement adjustments.

## **APPENDIX 5 – Submission: Issues Paper – Prime Ministerial Task Group on Emissions Trading**

**March 2007**

### **Introduction**

The National Association of Forest Industries (NAFI) appreciates the opportunity to make a submission on this important Issues Paper on Emissions Trading prepared by the Prime Ministerial Task Group.

NAFI acknowledges the aim of the Task Group ‘to advise on the nature and design of a workable global emissions trading system...and to report on additional steps that might be taken, in Australia, consistent with the goal of establishing such a system.’ NAFI also recognises the importance of establishing an emissions trading system in Australia as a means of addressing the ongoing concerns over climate change.

Australia’s forest industry has the potential to play a significant role in addressing climate change concerns through the benefits of carbon sequestration in managed native forests and plantations, the use of carbon storing and environmentally sustainable wood products, and the use of wood waste for renewable energy.

However, the forest industry is mindful that these benefits need to be adequately recognised in the development of any emissions trading system for Australia. Therefore, the design and implementation of the trading scheme must be conducted through a consultative and transparent process and should be based on the best available science to ensure these significant benefits are appropriately recognised.

The forest industry would encourage the Task Group to consider the unique conditions in Australia compared to overseas countries in the development of a national emissions trading system. This may require establishing a position which is more independent of the Kyoto Protocol, suiting the characteristics of Australia’s economy and emissions objectives, while necessarily interfacing with the overarching international objectives and reporting frameworks.

NAFI also encourages the development of an emissions trading scheme which gives adequate consideration to Australia’s broader government forest policy objectives. Therefore, the forest industry would support the Task Group to work with governments to review potential policy implications, and to establish complimentary policy objectives for inclusion into an emissions trading system.

This submission highlights some of the key issues that NAFI believes the Task Group should consider in undertaking this review. These issues include:

- Recognising the imbalance of abatement measures.
- Recognising and incorporating the full benefit of carbon sequestration and storage through wood products, plantation development, the use of wood ‘waste’ for bioenergy, and active management of Australia’s native forests.

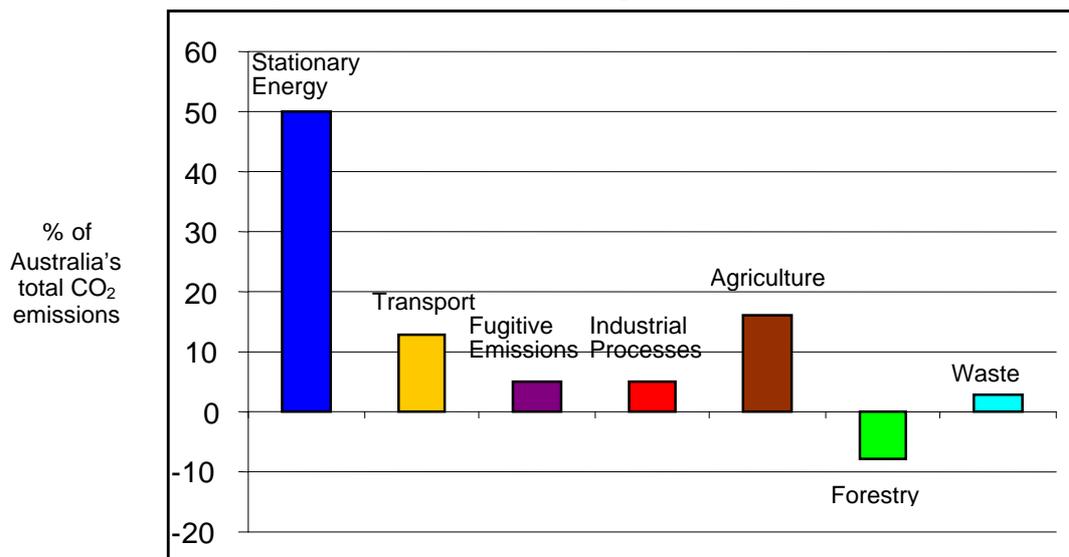
- Ensuring the development, introduction and implementation of an emissions trading system for Australia is fair and equitable for all parties involved.

### **Imbalance of abatement measures**

The forestry sector makes a substantial contribution to carbon emissions abatement in Australia and has significant potential to offset emissions from other sectors. As shown in Chart 2 of the Issues Paper, many of these sectors have markedly increased their emissions since 1990. The forestry sector is the only carbon positive sector, as Australia's plantations and commercial native forests removed a net 43.7 million tonnes of CO<sub>2</sub> from the atmosphere in 2004<sup>7</sup>.

By contrast, around 50 percent of Australia's annual greenhouse emissions (280 million tonnes of CO<sub>2</sub>) come from the stationary energy sector. Agriculture is the second largest emitter, contributing 16 percent (90 million tonnes CO<sub>2</sub>), while transport is the third largest accounting for 13 percent (76 million tonnes CO<sub>2</sub>) of Australia's annual emissions<sup>8</sup>. See Figure 1 below.

**Figure 1: Australia's net CO<sub>2</sub> emissions by sector for 2004**



For the Commonwealth Government to achieve the self-imposed domestic target of meeting 108 percent of 1990 emission levels by 2010, it has facilitated a number of 'measures' aimed to reduce emissions (by 85 million tonnes CO<sub>2</sub>). The main focus of these abatement measures are within the stationary energy sector where around 38 million tonnes of CO<sub>2</sub> abatement is expected. The land use and land-use change sector is also expected to lower emissions by 18 million tonnes of CO<sub>2</sub>, mainly through a reduction in land clearing activities for agricultural purposes<sup>9</sup>.

<sup>7</sup> Forest and Wood Products R & D Corporation (2006). Forests, Wood and Australia's Carbon Balance.

<sup>8</sup> Australian Greenhouse Office (2006), National Greenhouse Gas Inventory 2004; Australia's National Greenhouse Accounts.

<sup>9</sup> AGO (2005). 2005 Tracking to the Kyoto Target: Greenhouse Emissions Trends 1990 to 2008-2012 and 2020

Currently, forestry is grouped with the greenhouse emissions from land use and land-use change for reporting purposes. This is unfortunate as, the linkage between forestry and land clearing or other land-use change does not fairly represent the true value of sustainable forestry and the use of wood-products in contributing to carbon sequestration and storage<sup>10</sup>.

The imbalance of abatement measures is evident when the agriculture sector is the second largest emitter, while the expected abatement requirement is around 1 percent for the sector (under 1 million tonnes CO<sub>2</sub>)<sup>3</sup>. The forestry sector on the other hand has increased its removal of CO<sub>2</sub> from the atmosphere since 1990, when 34.1 million tonnes CO<sub>2</sub> was removed, compared to currently where over 43 million tonnes CO<sub>2</sub> is removed. This represents an emissions reduction of 79%<sup>11</sup>. Over this same period the agriculture and stationary energy sectors have increased their emissions by 5% and 50% respectively.

Ideally, all sectors should endeavour to devote equal effort towards Australia's carbon emissions abatement targets. While, the opportunities and costs for abatement may not be spread evenly across all sectors this should not be used as an excuse by certain sectors not to explore opportunities to deliver on their responsibilities in relation to carbon abatement contributions.

### **Adjusting to a 'carbon conscious' economy**

While Australia is on track towards achieving the Kyoto target for 2010, maintaining or reducing the emission levels onwards will be considerably more difficult as a result of the diminishing low-cost abatement options. This need is demonstrated by Australia's requirement for an additional 76 million tonnes CO<sub>2</sub> emissions reduction by 2020, over and above the 85 million tonnes CO<sub>2</sub> reduction target for 2010.

Each sector represents different opportunities to contribute to Australia's overall emissions abatement targets and there will be a varying level of risk between these sectors in relation to their attempts to meet these targets. For Australia to manage the potential economic impacts from adjusting to a 'carbon conscious' economy there must be opportunities to mitigate the impacts felt by the most vulnerable sectors.

Significant periods of time and expense may be required by some sectors to eventually meet their carbon abatement targets. The opportunities for readily available low cost abatement solutions may be limited within those sectors. This is where the forest industry may be able to play a pivotal role in providing immediate 'low cost' abatement solutions for other sectors, effectively 'buying time' for them to adjust to low emission processes and technologies.

For instance, the stationary energy sector is currently exploring a variety of alternatives to current coal-fired electricity generation (e.g. clean coal technology) in its efforts to lower emissions within the sector over the longer term. The options available may require lengthy periods of time and expense to explore and develop and readily available low cost abatement solutions within the sector appear limited. The forestry sector could provide

---

<sup>10</sup> Forest and Wood Products R & D Corporation (2006). Forests, Wood and Australia's Carbon Balance.

<sup>11</sup> AGO (2006). Forestry Sector Greenhouse Gas Emissions Projections 2006.

these more immediate solutions (i.e. carbon offsets in plantations and wood waste for renewable energy) to the stationary energy sector. This would help to manage the economic impact during the interim period within the sector and for the broader Australian economy.

### **Full benefits of forests and wood products**

Some key points surrounding the benefits of forests and wood products for consideration by the Task Group in the development of an emissions trading system include:

- The accumulated storage in Australia's forest plantations and wood products is about 323 million tonnes of carbon, of which wood products store more than 230 million tonnes of carbon<sup>4</sup>.
- Australian plantations and commercial forests act as a carbon sink, removing a net 43.7 million tonnes of CO<sub>2</sub> from the atmosphere in 2004<sup>4</sup>.
- Solid wood products such as sawn timber for buildings and construction are renewable and have very low embodied energy in their manufacture compared to alternative materials. They also store carbon for significant periods of time.
- Paper products, though having a shorter life compared to other wood products, also act as a carbon store in the longer term, as waste paper is often disposed of in landfill.
- The use of sustainably harvested wood waste biomass to generate renewable energy permanently eliminates atmospheric emissions that would otherwise have resulted from the use of fossil fuels.
- Storage of carbon in harvested wood products from managed production forests represents a more secure way of 'locking up' carbon as unmanaged conservation forests may be at greater risk of carbon emissions from intense wildfires, diseases and mortality.

### **Adequate recognition of these benefits**

From the forest industry's perspective, for an emissions trading system to be fully effective there must be adequate recognition of the full net carbon benefits of forests and wood products. As the blueprint for the design of an emissions trading system, the NSW Greenhouse Gas Abatement System (GGAS) and other trading systems in general, do not account for the long-term storage of carbon in harvested wood products. Recognising this reality in any emissions trading system has the potential to:

- Take advantage of the significant role forests and wood products can play in offsetting emissions from other sectors, thus making carbon trading a more attractive proposition for the forest and wood products industries.

- Increase the value of carbon sequestration in forests, as the penalty currently paid due to the false assumption that all carbon is emitted at harvest would effectively be removed.
- Encourage the establishment of more plantations for carbon sequestration, providing greater investment incentives for growers to participate.
- Increase the use of carbon storing wood products, as a substitute for less desirable and high carbon emitting materials.
- Encourage the utilisation of wood waste residues for energy generation and biofuels, thereby reducing the reliance on the use of fossil fuels and permanently eliminating atmospheric emissions that would have otherwise resulted.
- Provide a benefit in terms of storing carbon in landfills in the form of unrecoverable waste timber.

Clearly, there are significant opportunities for Australia’s forest industry in the development of a domestic emissions trading scheme, providing the scheme gives due recognition to the realities of carbon sequestration and storage in forests and wood products. The structure and function of existing schemes which fail to fully recognise these realities, should not be used as a reason to also not fully consider them in the development of an emissions trading scheme in Australia.

### **Strategies for reducing and offsetting greenhouse gas emissions**

NAFI proposes a number of strategic options to the Task Group which should be promoted in the development of an emissions trading system. These strategies would assist in reducing and offsetting greenhouse gas emissions from other sectors, thus helping Australia to achieve an ‘emissions-conscious’ economy. These options, as summarised in Table 1, are expanded on in more detail below.

**Table 1: Opportunities for emissions offsets from forestry**

Sector	Potential Forestry Offsets			
	Plantation offsets	Wood waste for renewable energy	Wood waste for biofuels (i.e. ethanol)	Use of carbon storing wood products
<b>Stationary Energy</b>	✓	✓		
<b>Agriculture</b>	✓			
<b>Transport</b>	✓		✓	
<b>Building and Construction</b>	✓			✓

*\*Please Note: While all options are potential offset opportunities for sectors, in this example the most directly related options have been highlighted.*

## ***Plantation development***

Continued plantation development in Australia, through the delivery of strategies such as the *Plantations for Australia: The 2020 Vision*, would produce an estimated 50 million tonnes of CO<sub>2</sub> offsets a year (under the 2020 Vision, Australia would have 3 million hectares of plantations by the year 2020). This could be achieved by reinforcing commitment to the strategy in the context of the benefits for emissions reduction and climate change.

Additionally, the development of an extra 1 million hectares of ‘carbon specific’ plantations grown in low rainfall areas of Australia could abate an estimated 25 million tonnes of CO<sub>2</sub> a year by 2020. This proposal could be driven by enhancing the taxation arrangements for growing plantations for wood and carbon by providing the same deductibility arrangements for investors growing trees for carbon sequestration purposes as investors growing trees for wood products or environmental benefits. It could also be achieved by facilitating the development of a secondary market for immature plantations and reaffirming the current taxation arrangements for growing trees for wood products.

It is also important to ensure the development of other government policy (e.g. water and the allocation of water entitlements) reflects the economic, social and environmental benefits (including carbon benefits) of tree plantations and wood products. There is currently a concern held by the forest industry that water policy development in response to the National Water Initiative may unfairly restrict plantation establishment and development while failing to recognise other significant benefits such as the role of plantations as carbon sinks.

Given the strong land use link between the tree plantation sector and the agriculture sector, it seems logical for plantations to play a major role in offsetting emissions from agriculture. Tree plantations, many of which are established on previously cleared farmland, removed 17.8 million tonnes of CO<sub>2</sub> from the atmosphere in 2004.

## ***Wood products***

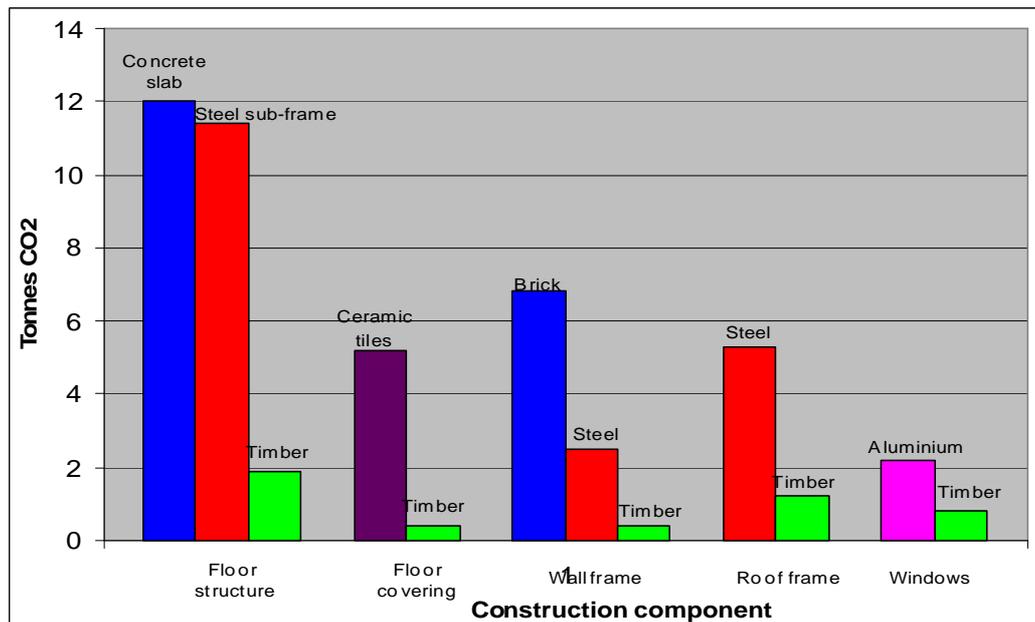
In addition to the many significant environmental advantages over alternative materials, wood products are effective in actively storing carbon from the atmosphere. As noted by the Forest and Wood Products R & D Corporation (FWPRDC), the key focus of recent research into carbon in Australia has been to quantify the benefits of carbon sequestration in forests. However, each year 25 million m<sup>3</sup> of logs are removed from Australian forests, the equivalent of around 8 million tonnes of carbon or about 30 million tonnes of CO<sub>2</sub>. Depending upon the type of product manufactured and the disposal method at the end of its life, the sequestered carbon will remain locked up in the product for many decades<sup>12</sup>.

Use of timber from sustainably managed forests in building construction should be promoted as it will assist in lowering Australia’s emissions levels by reducing the use of building materials such as steel, concrete, plastics and aluminium, which emit high amounts of CO<sub>2</sub> in their manufacture (see Figure 2).

---

<sup>12</sup> Forest and Wood Products R & D Corporation (2006). Carbon Storage in Wood Products in Australia; a review of the current state of knowledge

**Figure 2:** Greenhouse gases emitted in the manufacture of building materials used in an average family house in Australia<sup>4</sup>.



For example, recent research indicates that utilising a timber floor as opposed to a concrete floor produces a net saving of 15 tonnes of CO<sub>2</sub> emissions per home<sup>13</sup>. If half of Australia's new homes were built using timber for flooring instead of concrete, around 800,000 tonnes of CO<sub>2</sub> emissions would be saved each year. This is equivalent to the emissions from 160,000 cars for one year.

Additional emission savings can be obtained by the promotion of other timber products, for example, structural framing and furniture. It has been shown that by choosing wood products wherever possible in house construction, greenhouse gas emissions, equivalent to more than 25 tonnes of CO<sub>2</sub>, could be saved per house<sup>7</sup>.

The forest industry would encourage the Task Group to work with governments to amend procurement policies and processes to recognise and endorse the use of Australia's sustainably managed native forest and plantation timbers and wood products. It is also important to ensure building codes favour the use of timber over emission intensive alternatives.

Unfortunately, current building codes and energy rating schemes do not fully recognise the carbon benefits of wood products as they are typically not based on full life cycle assessments. For instance, they are often based on operational energy which favours higher mass materials (i.e. concrete and steel) and do not consider the superior embodied energy credentials of timber over these materials.

The forest industry would support the Task Group working with State and Federal Governments to ensure energy efficiency rating schemes reflect the low energy emissions and subsequent carbon benefits of wood products in construction applications.

<sup>13</sup> CRC for Greenhouse Accounting, <http://www.greenhouse.crc.org.au/Research/a3.cfm>

## *Use of Wood Waste*

The choice of disposal option of wood products has a direct impact on the overall environmental performance of the product. Encouraging and extension of the life-cycle of timber products prior to disposal is an option to extend the carbon cycle. For example, this could see 'waste' timber products being converted to engineered wood products such as particle board, thus extending their product life by deferring disposal in landfill or being burnt.

The use of wood waste for bioenergy and biofuels is currently not widespread throughout Australia. However, experience from overseas indicates that wood waste is an efficient, low emissions and sustainable feedstock which could make a valuable contribution to Australia's efforts to address climate change.

Greater consideration should be given to allowing increased access to residual harvested wood waste in native forests. Over 50% of the biomass in the trees is currently left in the forests following harvest operations. This biomass is left to decay over time or is burnt, contributing to greenhouse gas emissions. The use of part of this resource for the generation of bioenergy would have two main advantages:

- Reduction of greenhouse emissions due to decay or burning of residues; and
- Generation of renewable energy that will permanently displace emissions due to the use of fossil fuels.

There is enough waste in Australia from existing forest industry activities to produce 3 million MWh of electricity per annum, providing a permanent reduction of 3 million tonnes in CO<sub>2</sub> emissions<sup>14</sup>.

Bioenergy production from wood waste provides an alternative waste disposal mechanism for timber product manufacturers, the building and construction sector, commercial enterprise and other sectors. The forest industry encourages the Task Group to work with all levels of Government to ensure there are no unfair impediments to the use of wood waste for use as bioenergy and biofuels, while ensuring appropriate entitlements are made available for producers and consumers.

Currently, trends indicate that burning the wood to waste or for energy generation is almost exclusively restricted to processing activities. Government policy directions could significantly enhance the energy generation from commercial, construction and demolition sectors. This would have the potential to significantly increase the energy outputs from the use of wood waste and divert timber products from landfills.

The forest industry could play a major role in reducing emissions from the stationary energy sector. The use of wood waste as renewable bioenergy has significant potential to reduce emissions from current electricity generation in Australia which is mostly

---

<sup>14</sup> NAFI (2006), The environmental benefits of using wood waste for renewable energy, [http://www.nafi.com.au/bioenergy\\_factsheets/WWFS03.pdf](http://www.nafi.com.au/bioenergy_factsheets/WWFS03.pdf)

generated by coal-fired power stations. Renewable energy from wood waste reduces CO<sub>2</sub> emissions by 95-99% for each MWh of electricity generated when compared to coal-fired electricity generation<sup>8</sup>.

In addition, the forest industry may also play a role in reducing emissions from the transport sector. The use of wood residues for the production of renewable biofuels such as ethanol is an option with significant potential to reduce the existing large amount of emissions from the burning of fossil fuels within the transport sector.

### *Active management of native forests*

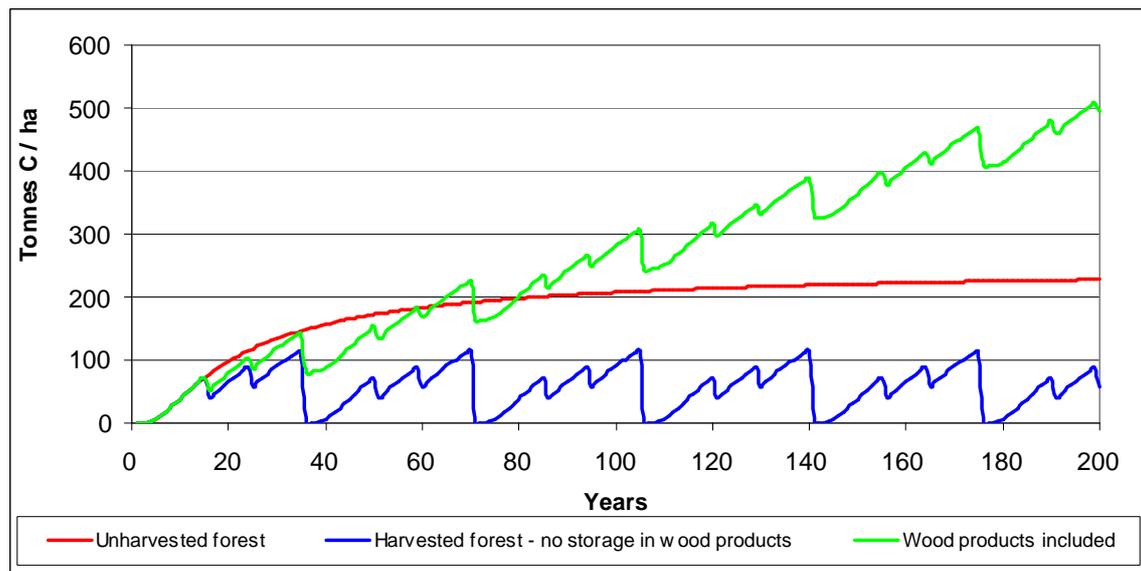
Over 11 million hectares of public native forests previously available for timber production have been placed into conservation reserves since 1994. The management regimes adopted within these reserves, particularly relating to fire, are very different to those previously practiced while the areas were more actively managed as production forests.

The current 'passive' approach to managing Australia's conservation reserves is creating a significant risk to Australia's carbon emissions from bushfires. Passive management of forests in these reserves may lead to a significant build up of fuel loads and an increase in the risk of high intensity wildfires. This is a factor often not well considered by governments in the creation of reserves.

Commercial native forests are actively managed to reduce fuel loads within their estates. This is achieved through managed burning programs to control excessive fuel-load build-ups within these forests. This effective management system should be recognised within a domestic emissions trading scheme as it minimises the risk of significant emissions from wildfire, such as the 130 million tonnes of CO<sub>2</sub> that were emitted during Australia's 2002/03 bushfire season (this is quarter of Australia's total annual greenhouse emissions).

As shown below in Figure 3, by actively managing and harvesting forests for timber products which 'lock-up' carbon, the carbon benefit can be significantly increased over time. When the storage of carbon in wood products is appropriately accounted for, the carbon benefit of a production forest is more than double that of a forest which remains unharvested.

**Figure 3: Carbon storage in a harvested and unharvested forest<sup>4</sup>.**



### **Emissions trading to suit Australian conditions and objectives**

Current rules on carbon trading from the Kyoto Protocol are potentially restrictive on opportunities for carbon abatement by the forest industry and do not reflect the true nature of the carbon benefits of forests and wood products.

Australia's forest industry would like to see the development of an emissions trading system, or other emissions reduction arrangement, that suits the characteristics of Australia's economy and emissions objectives. This should support the necessary international reporting frameworks, and allow credit trading internationally if required. These should be the primary objectives of any national emissions trading scheme, which may be independent to the expectations of the Kyoto Protocol.

Emissions trading consistent with certain aspects of the Kyoto Protocol may fail to reflect the true nature of carbon benefits from the forestry sector. For example, the failure to recognise carbon storage in harvested wood products and the issue of permanence (a minimum carbon stock must be maintained within the carbon pool on a 'permanent' basis) will limit the forest industry's ability to fully utilise the benefits it can provide in emission trading.

The development of an emissions trading scheme in Australia should not be constrained by the failure of other schemes, both in Australia and internationally, to adequately recognise the realities of carbon sequestration and storage in forests and wood products. There is a real opportunity for Australia to 'set the standard' by recognising these realities in emissions trading. This would be a critical step towards realising the full carbon benefits of forests and wood products which may then be more widely adopted in the development of other similar systems throughout the world.

## **Conclusion and Recommendations**

NAFI recognises that a national emissions trading scheme may play a significant role in Australia's efforts to lower its greenhouse emissions. While there are significant opportunities for the forest industry to provide a range of carbon abatement solutions in emissions trading, the realisation of these opportunities will depend greatly on full recognition of the carbon sequestration benefits of forests and wood products.

NAFI considers that the following issues must be addressed in developing an emissions trading system to adequately provide the forest industry with full recognition of the beneficial role it can play in meeting Australia's emissions targets:

- Establishing an emissions trading system that suits Australia's emissions objectives, supporting the necessary international reporting frameworks, and allowing credit trading internationally if required. These should be the primary objectives of a national emissions trading scheme, independent to the expectations of the Kyoto Protocol.
- Consideration must be given to the broader forest policy objectives in the development of an emissions trading system to ensure consistency with these policies.
- Adequate consideration of the full net benefits of forests and wood products in terms of carbon sequestration and storage in the development of emissions trading. This can play a pivotal role in Australia's endeavours to meet its future emissions reductions targets.
- Strategy options including increased plantation development, increased uptake and use of wood products, effective use of wood waste products and active management of native forests can all assist in reducing and offsetting greenhouse gas emissions, thus helping Australia to achieve an 'emissions-conscious' economy.

NAFI and the broader forest industry intend to be actively involved in any strategies to develop emissions trading within Australia. NAFI is currently involved in the National Emissions Trading Taskforce's (NETT) process to consider a national emissions trading scheme.

NAFI is willing to answer any queries from the Task Group in relation to this submission. We look forward to further consultation with the Group over its considerations on emissions trading in Australia. This is a critical step towards achieving carbon abatement outcomes for Australia thus mitigating our impacts on climate change.