APPENDIX 2

FORESTRY IS A LEGITIMATE LAND USE

Australian Forest Growers seeks:

- *to achieve recognition by all levels of Government and the community that appropriate placement and management of trees in the landscape provides multiple benefits, including environmental solutions addressing salinity, declining water quality and biodiversity;*
- *to ensure that the associated costs and benefits of these environmental solutions are apportioned equitably;*
- *to pursue the acceptance of ecologically sustainable forest management as a legitimate agricultural land use; and*
- *to promote an enhanced relationship between forestry and other forms of agriculture.*

Background

Forestry policy in Australia has traditionally been concerned with wood supply, but that emphasis is now increasingly balanced with environmental management and community development objectives. Shifts in government environmental policy in the late 1970s ultimately gave rise to the *National Forest Policy Statement* (1992), which envisaged significant changes in management of native forests, together with renewed emphasis on plantation and farm forestry development. The core framework driving this policy shift was ecologically sustainable forest management (ESFM) - the management of forests for all their values. This was derived from international agreements signed by Australia following the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992. Additional policy impetus was given to plantation growth by the development of *Plantations for Australia: The 2020 Vision* (1997), with renewed support for a revised version of this initiative given by all levels of government in 2002.

The Australian, State and Territory Governments, along with major conservation groups, have recognised that trees have the capacity to address multiple natural resource management (NRM) issues concurrently, while providing a commercial return on investment. Farm and plantation forestry are therefore widely promoted as cost -effective approaches to meeting a range of triple bottom line objectives, in their capacity to provide a mix of social, environmental and commercial benefits.

Farm forestry enhances other forms of agriculture – it enhances local and regional land use sustainability, for example it reduces soil loss, offsets greenhouse gas emissions, provides livestock shelter and may reduce stock losses during periods of critical exposure e.g. during and following lambing. There is a need to increase mutual understanding of the production needs and benefits of agriculture and forestry, as complementary rather than competing enterprises.

In spite of well established scientific recognition of the positive roles forestry can play in meeting multiple objectives of production and social and environmental benefits, farm and plantation forestry and private native forest management continue to draw community concern in some regions. Much of this concern arises from lack of understanding or ignorance of the many benefits of forestry, and is often fuelled by anti-forestry groups and individuals with vested political interests.

Discussion

To achieve revegetation on the scale required to address Australia's land degradation issues, commercial forestry must be part of the solution. The currently small area of exclusively environmental plantings in the agricultural landscape, make a negligible contribution to catchment scale NRM objectives. Developing new farm forestry initiatives amongst the farming community is imperative. However, this holistic land use perspective is not extensively disseminated and community concern regarding the timber industry still suggests that forestry is not yet widely accepted as a viable and beneficial complement to other rural land uses.

Community resistance to forestry needs to be addressed by the industry in a given region, demonstrating that forestry activities do contribute to the triple bottom line. At the same time, forestry must not be treated differently from other agricultural land uses by government policy and regulation. The positive and negative impacts of all land uses, and the combined effect of the diversity of land uses in the landscape must be addressed, compared and accounted for equitably and constructively for the benefit of all. In an integrated planning and management framework, the social and environmental costs and benefits of forestry and farm forestry would be acknowledged and accounted for, along with the economic benefits.

Aligning NRM programs with forest and timber industry development could provide cost effective solutions to land degradation and associated environmental problems. For example, appropriately located tree plantings of sufficient scale would enhance environmental protection, biodiversity outcomes and improve soil and water quality, and also provide an opportunity for regional enterprise development.

Recent studies of the socio-economic impacts of plantation forestry have revealed that plantation establishment can contribute significantly to stable economic growth while at the same time conferring added environmental protection in regional areas. Furthermore, improved income risk diversity exists for landholders and other members of the community in areas where significant forestry and agricultural industries co-exist. Community engagement is therefore an important component of ESFM, and is supported by the growing recognition of the corporate social responsibility within the forestry industry.

Communities must have access to technical expertise to ensure that planning decisions are based on rigorous science. If sound analysis ensures that land and environment capability is matched with sustainable resource protection and suitable production yields, and that potential projects are capable of delivering desired outcomes, then community resistance may be reduced or avoided.

Ensuring that forest management practices are ecologically sustainable, and furthermore are seen to be so, are critical requisites in building greater community support for the forestry industry. Adapting ecologically sustainable forest management principles in land use planning and management, together with complementary regulation and certification, is supported as a useful approach.

Ecologically sustainable forest management is '*the integration of commercial and non-commercial values of forests so that both material and non-material welfare of society is improved, whilst ensuring that the values of forests, both as a resource for commercial use and for conservation, are not lost or degraded for current and future generations'* (from the *National Forest Policy Statement* based on a definition provided by the Forestry Working Group on Ecologically Sustainable Development, 1991).

Preferred Outcomes

- Broad agreement that all rural land users will be assessed within planning and regulatory frameworks against the same set of economic, social and environmental criteria and on the basis of well established and broadly accepted science.
- An analytical framework for natural resource management capable of assessing forestry as a real alternative or complement to other dryland agricultural crops by taking into account the positive and negative effects of all land uses and their respective contributions to social, economic and environmental objectives.
- Development of direct and lasting linkages between plantation and farm forestry strategies and natural resource management goals.
- Robust science forming the basis of future land use policy (both productive and environmental) and fair and equitable treatment of all rural land use options.
- Increased understanding of complementary strategies involving agriculture, forestry and farm forestry, and of desirable opportunities for mutual land use benefits, including environmental and natural resource protection, commercial sustainability and on-farm energy and greenhouse gas management.

APPENDIX 2

DEALING WITH PUBLIC PERCEPTIONS OF FORESTRY

Australian Forest Growers seeks:

- *a coordinated, cooperative and modern approach by industry at local, state and national levels to promote private and native forest management, including responding to media misinformation and promoting individual case studies in regional media;*
- *that the Australian Government commits to funding the Bureau of Rural Sciences to continue to regularly monitor and publicly report on the social, economic and environmental benefits and impacts of plantations in regional Australia; and*
- *that the Bureau of Rural Science broaden their scope to publicly report on the socio-economic and environmental benefits and impacts of sustainable private native forest management.*

Background

Public perceptions of forests and of the valuable contribution they make to the social, economic and environmental fabric of Australia is not well recognised or understood. Information about forestry (sustainable management of private native forests, plantations and farm forestry) can be distorted and misunderstood due to media misinformation and anti-forestry groups. The forest industry itself has been reluctant to represent itself in community discussions thus exacerbating community concerns about forestry.

Anti-forestry propaganda disseminated through many media outlets by extreme environmental groups does lead to a misconception about forest management practices and value. Timber production throughout Australia is managed to high standards and growers must adhere to legislation that ensures sustainable and environmentally friendly forest management practices.

Providing communities with new information underpinned by rigorous science, which often differs significantly from accepted belief, is a complex process requiring a strategic approach from both government and industry. The *Bureau of Rural Sciences* (BRS) is almost exclusively responsible for monitoring, preparing and disseminating information that accurately depicts the social, economic and environmental benefits and impacts that forests have in Australia. BRS provides an important link between government and industry, by coordinating centralised information dissemination. BRS's imperative role is often threatened, as it is not always subject to core funding. This has resulted in downsizing, causing staff losses and reappointments at staggered intervals, culminating in a significant loss of skills and expertise.

Discussion

Declining rural livelihood is a commonly occurring theme throughout Australia, and the removal of existing forest industries, the stifling of private native forest management and new or expanded plantation industries, and the growing expanse of national parks is perpetuating this further. A number of BRS reports focusing on specific forest industry regions in Australia, as opposed to regions dependent on agricultural productivity alone, are revealing a common message: where there is a significant forest industry established, rural communities are wealthier, they retain more young people, diverse job opportunities are created and alternative income opportunities emerge for landholders'.

Public perceptions of forests and their management and value must be made under a fair and equitable information sharing environment. Knowledge in forest sustainability is limited amongst many Australians. Yet there are many ethical concerns about biodiversity being destroyed through unscrupulous reporting of timber harvesting practice – an almost unfounded, unscientific scenario perpetuated by extreme environmental groups and media sensationalism. BRS is effectively one of few independent agencies that has the ability to deliver sound repeatable science, in a form understandable for society to interpret, regarding the real issues faced by the Australian forestry industry.

For example there is a growing understanding of the role that timber plantations have in providing important habitat, even amongst ecologically focused scientists. The real issues of plantations' role in providing habitat and being an important aspect of the rural landscape are in many cases only made available to the public via reports and articles prepared and disseminated by BRS.

It is clearly evident that decision makers are heavily influenced by public opinion, and less influenced by sound science, as demonstrated by the legislative disincentives to participate in forest enterprises. Hence, there is an urgent need for public information regarding contemporary domestic forestry industry issues to be based on repeatable science drawn from industry professionals, scientists and forest managers.

The key to establishing and maintaining sustainable forests and forest product industries is through influencing public perceptions, and increasing society's understanding of the social, economic and environmental benefits of forests. The aim should be to rationalise society's expectations of forests, by circulating information that explains the multi-disciplinary aspects of sustainable forest industries. This role has been conducted at an exceptional standard by BRS, however the message needs to be articulated regularly to the community to ensure it is well appreciated.

Forestry organisations, such as Australian Forest Growers, are also significantly under-resourced, compared to environmental groups, some of which enjoy substantial community and government funding.

This disparity is compounded by the need for organisations supporting forest and wood products to allocate resources to combat anti-forestry propaganda produced and disseminated by extreme green groups.

The forestry industry needs a unified approach including support from local, state and national government to communicate to the general public the true manner to which Australia's forests are managed.

Preferred Outcomes

- Through campaigning and promotion, the public considers forestry and forest management as an important industry that contributes to the triple bottom line in Australia.
- BRS is maintained as the principal, centralised organisation for researching, preparing and disseminating information relating to the environmental and socio-economic aspects of forest and timber industries in Australia.
- BRS is provided with core and ongoing government funding to deliver information on advances in forestry science and monitoring that can be interpreted by the general public.
- All levels of the forestry industry work together to promote the sector and respond immediately and appropriately to misinformed media stories and publications.
- Organisations promoting forestry and timber products are assisted with a proportionate level of support and resources to access media channels and provide a balanced view of plantation and private native forestry issues.

APPENDIX 2

PRIVATE NATIVE FORESTRY

Australian Forest Growers:

- *recognises that production native forests are the most benign and long term sustainable primary production system in Australia;*
- *recognises that profitable production from native forests is an integral part of good quality forest management;*
- *seeks to achieve community recognition and support for sustainably managed private native forests as a renewable resource for both production and conservative outcomes;*
- *promotes and advocates public policy conducive to the profitable and ecologically sustainable management of private native forests to the extent of the elimination of the pernicious effect of sovereign risk;*
- *promotes and advocates public policy that provides a simple incentive system that rewards good stewardship of actively managed private native forest holdings;*
- *seeks that stewardship incentives should be part of any change of law or regulation that detracts from prior use of the forest area;*
- *seeks that stewardship incentives should be available if any change of law results in loss of commercial return to the landowner;*
- *encourages its members and the wider forest-growing community to maintain and enhance the environmental values of private native forests, especially in regard to biodiversity, wildlife habitat, land water protection and energy management;*
- *promotes the potential of well managed private native forests to contribute to regional and national development through the profitable production of wood and other products; and*
- *seeks that social, environmental and economic outcomes attained through managing private native forestry are recognised.*

Background

Private native forests are affected considerably by many aspects of legislation in Australia.

More than a quarter of Australia's native forest estate, including woodlands, tall eucalypt forests and rainforests is privately owned, about 38 million hectares in total. In some Australian timber production regions, 50% or more of the processing sector's wood intake is from this private native forest resource. As such, the commercial values of private native forests and their productive management are poorly recognised in public policy, even though they make an important contribution to the economic welfare of landholders, rural communities and regional and national economies.

Unlike Australia's crown native forests, only a small amount of the private native forest estate forms mature and pristine stands worthy of preservation. A large number of private native forests have been either previously harvested or become re-established on land once cleared for agriculture. This forest estate overall has had very little scientifically informed management intervention, therefore rendering much of it both silviculturally impoverished and ecologically-compromised. Widespread decline in forest health and much reduced or negligible productivity have become common characteristics of a vast proportion of the private native forest estate in Australia.

Discussion

Far from being fragile and increasingly scarce, eucalypt forests can be productive, adaptable, resilient and persistent. However, the financial and other benefits of active native forest management are not widely accepted as providing adequate incentives for investment. Compounding this is the indelible perception of sovereign risk, which is supported by uncertainty about landholders' legal rights to manage and harvest maturing regrowth forest. Regulatory requirements are often complex and obstructive, and generally discourage the acceptance of private native forestry as a viable land use. This perception puts the forests themselves at risk from neglect, as such forests require scientifically sound, high quality silvicultural management in order to maintain vigorous and healthy growth and to deliver the best in biodiversity and other environmental benefits.

Native forestry can be readily integrated into agricultural systems through property management plans. Unfortunately, low awareness of the nature and potential of private regrowth forest resources, coupled with intergenerational loss (or non-existence) of a forestry culture and associated skills among landholders, means that much of the private regrowth resource suffers from suboptimal management and utilisation. Private native forests require skilful nurturing and management to realise their highly productive potential and to provide a broad basket of environmental services, sustainable natural resources and commercial products.

Thinnings and other non-sawlog yield currently comprise up to 80% by volume of the total production of private native forests. However, an historic pre-occupation with large, high quality and/or large diameter sawlogs has contributed to a lack of capacity in most regions for processing lower grade or smaller diameter products. A common mismatch between silvicultural

yield and appropriate processing effectively precludes the broad adoption of cost-effective practices and strategies inherent in effective silviculture of maturing native forests in most Australian regions today. There is emerging evidence that new sawing technologies are now being adopted which is a positive plank.

While there is continuing demand for the final products, unfortunately investment in the necessary chipwood processing facilities at the start of the production line has so far been impeded by public policy. Australia has an almost $2 billion annual trade wood products deficit, yet it offers a standing forest resource greater than many major timber export countries. Uncoordinated and frequently ill-founded conservation policies have prevented private native forests from providing the necessary resource security to attract suitable processing infrastructure urgently needed for the forests to be commercially viable.

Restoration and development of the private native forest resource on an ecologically sustainable management basis is fundamentally dependent on access to a full range of markets for all native forest products. Without commercial viability (sometimes referred to as market pull-through), these forests will continue to suffer neglect and poor utilisation. As a result, neither their owners nor the community at large will be convinced that private native forests are highly desirable assets to be managed and valued accordingly. Neglect of these forests does not equal preservation.

Preferred Outcomes

Inventories and evaluation

- Completion of reliable and accurate inventories of the extent, distribution, types, uses and values of private native forests, to assist in the formulation of public policies and programs affecting private forest resources.

Legislation and regulation

- Recognition of legitimate forestry production purposes and associated activities, including sustainable timber harvesting, as existing and continuing lawful use of naturally afforested private agricultural landholdings;
- Operation of private native forests under uniform codes of practice, acceptable to AFG, with reasonable public compensation for all reservations outside of the public estate;
- Official acceptance that where a Regional Forest Agreement is in place, private native forests not reserved under that process may, subject to compliance with uniform codes of practice, be managed for commercial forestry purposes; and
- Official acceptance that compliance with Codes of Forest Practice constitutes compliance with all Commonwealth, State and local regulations and controls affecting the regeneration, management and harvest of private native forests.

Silvicultural and environmental management

- Delivery of education and training in silvicultural and environmental management of native forests, for private forest owners and managers extending to the development of property management plans that include the expansion of commercial native forest onto previously cleared land.
- Provision of competent forest management extension and advisory services to private landholders.
- Good stewardship of actively managed private native forests, recognised by government policy and incentive programs. This is particularly important in the situation where any change of law results in loss of commercial return to landholders.

Marketing silvicultural yields

- Collection and dissemination of information on prices and marketing of forest products.
- Promotion of markets and encouragement of investment in processing infrastructure to enable utilisation of the full range of native forest products in silviculturally balanced proportions. This would provide effective capture of silvicultural benefits and productivity improvements to the remaining forest stand, allowing for economically viable utilisation of all thinnings and residues produced as an inevitable silvicultural surplus (such as for solid and liquid fuels).

APPENDIX 2

ENVIRONMENTAL SERVICES MARKETS

Australian Forest Growers will pursue the development of policy frameworks that recognise and reward environmental services provided by private native forests and plantations. This should include mechanisms for assigning meaningful economic values to these services, and for achieving community recognition of such values.

More specifically, Australian Forest Growers seeks the establishment of an Environmental Services Market framework to put economic values on the contribution landholders make to boosting biodiversity, mitigating salinity and improving land, air and water quality through the planting of trees and management of new and existing trees and forests.

Background

Landholders plant trees and manage native forests for a myriad of reasons, including for positive landscape health outcomes. These public goods, such as improving water quality through the correct placement of trees in the landscape, are often initiated by the landholder, and have inconsistent recognition by Federal and State Governments, and little recognition by the community, of the resultant benefits.

There is currently a disconnect between society's expectations of environmental public goods, which is what consequently influences decision makers, and what growers are already achieving on their properties. Landholders are often subject to regulations which aim to boost biodiversity, or preserve a particular forest type. However, often the attitude chosen by the government is to legislate for the land to be 'locked up and left' in order to achieve these outcomes without any compensation to the landholder for recognition of the management services provided or other opportunities foregone. In many cases, the same or better outcomes could be achieved through the establishment and operation of environmental services markets, where the public pays for a service according to the established value to the community. Increasingly, the public demands quality environmental assets and services, however generally there is no recognition that these outcomes are at least in part already being achieved by landholders, e.g. through compensation for the opportunity forgone to a landowner.

An important element in boosting landscape health outcomes is to develop a means of recognising and valuing the environmental services provided by commercial trees.

The creation of environmental services markets can provide an important link between the environment, society and the economy, which is the key to sustainable development within the rural landscape. AFG acknowledges that the design of environmental services markets is not without challenges. One important challenge is how public benefits from land use change can be captured as a 'commodity' suitable for trade or purchase and by whom. The creation of environmental services markets needs to be researched, designed and co-ordinated between State and Federal Governments, whose responsibility will be to provide a robust framework, and landholders who have the means to provide this service. The government (on behalf of the community), philanthropists and corporations seeking to enhance community service or some other obligation and others may also participate in these markets, but this is a separate process to the design and facilitation of such frameworks.

Discussion

Forestry brings deep rooted perennial vegetation into the rural landscape in various forms, including in managed stands and native vegetation. Knowledge and understanding of the role that forestry plays in simultaneously addressing a variety of natural resource management issues is becoming more widely understood. For example, appropriately located trees can contribute to reducing salinity by controlling water table fluctuations. Trees contribute to soil management by reducing erosion and acidification, and enhance water quality and wastewater management through filtration. Additionally, biodiversity can be boosted by creating or maintaining, linking and restoring forest habitat. Farm forestry is therefore an important natural resource management tool, yet the environmental services that farm forestry can provide have yet to receive broadscale recognition in Australia.

It is well known that one of the major factors driving land use decisions and the adoption of environmental management strategies are financial incentives and returns. Financial security and opportunity in environmentally targeted forest management activities improve the likelihood of environmental awareness being transformed into active pursuit and achievement of environmental outcomes on a broad regional scale.

A well-designed and managed farm forestry enterprise generates environmental and socio-economic benefits that flow through to the wider community. These environmental services are public goods, and it is imperative that more direct ways be found of communicating the value to the community. To date, consumers have demonstrated only limited willingness to pay for these services in the price of wood and paper products. In any event, it is too restrictive to place the financial burden of all services solely on individuals who will not reap exclusive benefits.

In recent years, significant advances have been made in the development of more sophisticated tools for capturing the value of community services. Market-based instruments hold promise of providing a means of

achieving targeted outcomes. However, there are knowledge gaps limiting our practical ability to define and use these instruments, including those for carbon, salinity, water filtration and biodiversity credits.

However, even in the absence of well developed trading markets, these instruments, when properly defined, can be used to secure returns from customers who value one or other environmental services. Recent examples are the *Caring for our Country Environmental Stewardship* program which provides funds to help land managers provide long-term protection, rehabilitation and improvement of targeted environmental assets on their land. NatureAssist is another example, an initiative by the Queensland Government, used to identify which tenders submitted by Queensland landholders offer the best value for public money in protecting and managing identified conservation values.

Preferred Outcomes

- The environmental services provided by plantations and native forests are recognised and rewarded in market based frameworks, alongside commercial benefits. These should include, but not be limited to, their role in mitigating salinity, promoting biodiversity, improving land, air and water quality and contributing to aesthetic and amenity values.
- The development of useable, transparent rules and market systems that allow all forest growers (including small-scale growers) to access and participate in environmental services markets.

APPENDIX 2

NATURAL RESOURCE MANAGEMENT

In respect of natural resource management (NRM), Australian Forest Growers seeks:

- *improved public and private investment in sustainable land management initiatives through joint partnerships between the two sectors;*
- *an increased application of forest and land management practices that combine production and conservation objectives in order to create better value for money in achieving public and private benefits;*
- *to increase the capacity of landholder groups, farm forestry networks, NRM agencies and other land managers to promote and adopt innovative, best practices of forest and land management, for example through the provision of government extension and technical support services;*
- *that NRM initiatives and investment strategies incorporate farm and plantation forestry projects in recognition of the NRM benefits that will be attained from intelligent, scientifically informed placement and management of trees in the landscape. Suitable forest management projects can and should be used to address problems of soil salinity, soil erosion, declining water quality, the maintenance of tree cover and biodiversity, for example, while also capitalising on commercial revegetation opportunities;*
- *the development of on-ground forest initiatives in lower rainfall areas (i.e. less than 600mm per annum), including catchment-scale pilot schemes, such as "The Action Plan for Tree Farming in Western Australia"; and*
- *that Federal and State Governments continue to work with plantation growers and processors to develop policies and incentive measures (including tax provisions) to encourage positive NRM outcomes. Commercial plantation forests have the capacity to provide an even greater contribution to the achievement of cost effective natural resource management outcomes.*

Background

The role that farm forestry can play in achieving positive natural resource management outcomes is often underestimated by policy makers, and frequently left out of initiatives that aim to improve both productivity and environmental capital within the Australian landscape.

The *Caring for our Country (CfoC) Program* is the Federal Government's natural resource management initiative which takes a business approach to managing Australia's natural resources. However, farm forestry (also known as agroforestry) has had inconsistent inclusion in the Business Plan. The 2009-2010 *CfoC Business Plan* had a goal "to increase by 6700 farmers in priority regions adopting activities that contribute to the ongoing conservation and protection of biodiversity over four years". However agroforestry was specifically excluded from achieving this outcome. AFG has strongly argued that farm forestry should be consistently included under appropriate initiatives in the *CfoC Business Plan* in recognition of the role it can play in achieving mutually positive outcomes for landscape health and productivity. The specific inclusion of "agroforestry" within the Sustainable Practices priority area of the 2010/2011 *CfoC Business Plan* is a welcome development.

Positive outcomes in natural resource management will be achieved by Federal and State/Territory Governments working with and supporting regional communities and industry groups. A principal objective should be to formulate regional plans to address land management problems such as salinity, habitat loss and tree decline, with appropriate revegetation strategies which harness both commercial and environmental benefits. The Federal and State/Territory Governments need to provide a strong framework to lead the coordination of participants and agencies at the local level, so that the ability of farm forestry to beneficially address multiple natural resource management issues, at a local, regional and national scale, is realised.

Discussion

Landscape health strategies and outcomes are consistent with strategies and outcomes for improved productivity e.g. through intelligent and scientifically informed placement of trees in the landscape via farm forestry.

Farm forestry can complement farming systems through informed, case-specific strategies and implementation and is therefore readily adaptable to landholder objectives. Well placed trees in the farming landscape improve water quality by minimising sediment run-off and erosion, preventing/controlling salinity, sequestering carbon, improving biodiversity through habitat connectivity, and providing competition to invasive species. These and other benefits from investment in farm forestry will accrue across the community and will be available to future generations if implemented correctly.

However, there are gaps in local expertise, e.g. in identifying land capability and resource condition and matching potential productivity gains and environmental benefits with suitable projects that are capable of delivering the locally desired outcomes. Landholder access to high quality technical expertise is critical to achieving mid- and long-term goals in improved landscape quality, both in regards to initial planning and on-going implementation. All levels of government have an important role to play in funding capacity-building and educating landholders about innovative, sustainable farm management. This should include encouragement of natural resource management groups to work with

forestry experts and landholders in regional planning.

Decision-making by landholders has primarily been influenced by expected financial outcomes. Governments at every level can assist in this decision-making process by providing appropriate financial incentives which are targeted to the building of NRM capacities and skill levels among landholders and land managers. Initiatives such as *The Action Plan for Tree Farming in Western Australia*, now suspended, marries positive NRM outcomes with tree farming in low rainfall areas. AFG supports this type of program and seeks like-minded Action Plans in other jurisdictions throughout Australia.

Historically the Commonwealth has allowed greater than 100% tax deductibility for minimum tillage equipment and fodder storage in farming enterprises. A similar concession should be made available to encourage environmental stewardship for NRM outcomes.

Preferred Outcomes

- Commitment by Federal, State and Territory Governments to maximising opportunities to develop public-private partnership investment in farm and plantation forestry. This can be achieved through land management planning that matches enterprise development with improved environmental and productivity outcomes.
- Recognition within Federal, State and Territory Government NRM programs of the positive environmental outcomes that can be delivered by well designed and managed farm forestry.
- Establishment and evaluation of NRM catchment scale pilot schemes and other on-ground initiatives in lower rainfall areas.
- Continuing availability of technical advice provided or supported by government for landscape site design to achieve positive NRM outcomes.
- Regional NRM groups making regular use of forestry expertise in development of NRM plans and investment strategies.
- Whole-of-government approach to implementing NRM outcomes.
- Greater than 100% tax deductibility for on-ground environmental works.
- Promotion of the environmental benefits of forestry and farm forestry, in areas such as water quality improvement, salinity prevention and control, erosion prevention and control, biodiversity and carbon sequestration.

APPENDIX 2

FORESTRY FOR MULTIPLE PURPOSES

Australian Forest Growers advocates Federal Government investment in multi-purpose forestry, specifically using the Great Barrier Reef (GBR) catchments in north-eastern Australia as the pilot for a larger, Australia-wide initiative in forestry investment for multiple purposes.

AFG advocates a strong focus on the utilisation of integrated forestry for multiple outcomes that includes:

- *proactive repair of riparian landscapes to improve water quality and river health, both insitu and downstream thereby benefiting ecology, fisheries and downstream assets like the Great Barrier Reef;*
- *positive and community friendly responses to climate change by using production forests as carbon sequesters;*
- *managing salinity, especially to maintain or re-establish potable water supplies;*
- *enhancing biodiversity and ecosystem resilience;*
- *production of sustainable forest products; and*
- *provision of sustainable sources of biomass for renewable fuels and electricity.*

Background

Australia has a history of extensive land clearing which has led to environmental degradation, especially of key public assets like our rivers and the community benefits they provide. Frequently, policies and initiatives regarding environmental health or natural resource management outcomes are developed individually rather than integrated with other sectors to achieve multiple policy outcomes for the Australian community. This can translate into inefficiencies both with government investment and in terms of land use productivity and environmental protection, and consequently result in short-lived funding for policy outcomes and land use solutions which are less than optimal in the medium and long term.

There are multiple government initiatives that would benefit from longer term and multi-objective investment. One such example is Reef Rescue which is funded through *Caring for our Country*. This initiative seeks to improve agricultural practices in the Great Barrier Reef catchments, to reduce the pollution of downstream rivers, estuaries and most importantly, the highly valuable Great Barrier Lagoons and Reefs.

Reef Rescue has identified sediment export, nutrients and chemicals as major causes of pollution to the Reef. Reef Rescue secured $200 million in Federal Government funding to address these issues. AFG promotes farm forestry as the most natural, suitable solution. Intelligent planting of trees in the landscape acts as an anchor for soil, reduces surface runoff and filters water, thus acting as a natural preventer of sediment runoff. Trees are also a part of the natural landscape and foster a more healthy and resilient ecology. Further, tree planting also increases stock and crop productivity, thus reducing landholder reliance on fertilisers and chemicals (herbicides and pesticides) to boost productivity.

Reef Rescue is just one example where trees can play a pivotal role in achieving environmental outcomes. All levels of government are recognising that climate change will impact on biodiversity and environmental health. AFG advocates that farm forestry could have a central role both in mitigating atmospheric carbon and assisting with adapting ecosystem services and productivity. Moving towards a national program of revegetation and plantation forestry [both farm and industrial scale] is an essential component of responding to climate change. Equally important, as outlined above, such a national program will also deliver to water quality, river health, soil health and farm profitability objectives.

AFG promotes returning trees to the landscape to reach an improved balance between landscape health and other productive land uses. Further, AFG promotes joint public and private initiatives and integrated land management policies designed to ensure that investment money works harder alongside productivity returns and is thereby sustainable due to support from multiple sectors.

Discussion

Farm forestry has a defining role to play in addressing Australia's land degradation issues and needs to be supported by all levels of government. Too frequently policies for forest industry development and natural resource management outcomes are seen as mutually exclusive events. This reflects a naivety, absence of innovation and lack of initiative by policy makers.

Integrated, broad spectrum policies would create value for money, and potentially reduce administration costs including government spending inefficiencies and help prevent policies from being short-lived and reactionary. The role of forestry in natural resource management and addressing climate change, and the need for forest industry development should not be underestimated. AFG believes in a proactive, multilateral approach to policy development and policy objectives which will assist in demonstrating the multiple benefits that forestry delivers to these, and other issues facing Australia.

For example, in the case of Reef Rescue, both Federal and State Governments could work with landholders to plant trees as part of their property management plans. The emphasis on planting would be case specific and outcomes achieved would address natural resource

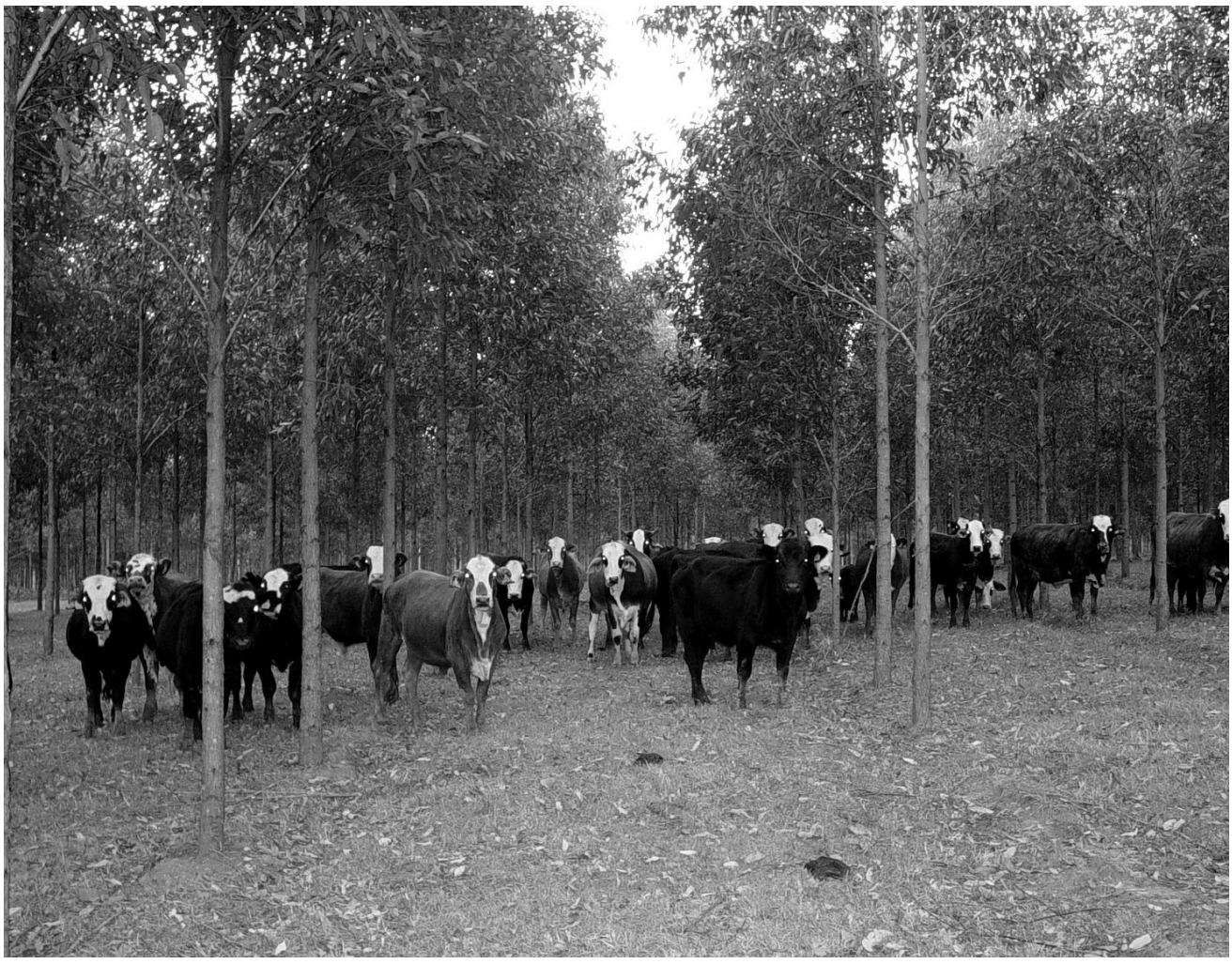
management and ecosystem health outcomes, encourage plantation development and mitigate carbon, with the size, shape and species planted varying accordingly. Further, plantings would provide landholders with an additional source of income through the production of sustainable forest products. AFG suggests an investment of capital for government support services and on-going development of NRM/forestry officers to continually educate and assist landholders, and report against targets.

This could then translate to a nationwide initiative, with a national inventory to determine where natural resource management needs, forest industry development goals and carbon mitigation objectives could be grouped and consolidated. This second phase could build on lessons learnt in the GBR catchment. Additionally, there could be a policy matching of farm forestry objectives and boosting biodiversity by encouraging and educating farmers about the potential of bio-rich plantings. AFG encourages policy makers to be innovative in developing broad-scale policies which utilise all of the multiple benefits of farm forestry.

AFG requests all levels of government to take the initiative and to recognise the potential of farm forestry in achieving multiple landscape outcomes, including in areas of environmental health, carbon sequestration, and environmentally sustainable productivity e.g. as a source of renewable fuel for bioenergy production. Further, the development of the farm forestry sector will positively address triple bottom line issues favouring the environment, the economy and social fabric of individual rural communities. AFG seeks innovative policies which marry the benefits of farm forestry with other sectors (natural resource management, renewable energy, forest industry development) to create sustainable, intelligent, cost-effective, and long-lasting policies which make a real difference to Australians, their productive communities and their environment.

Preferred Outcomes

- A proactive approach by all levels of government to integrate policies regarding natural resource management outcomes, farm forestry profitability and climate change adaptation.
- Programs that ensure value-for-money in public investment in improved landscape health, effective climate change adaptation and sound industry development outcomes.



APPENDIX 2

CLIMATE CHANGE

Australian Forest Growers:

- *recognises the potential negative impacts of climate change on Australia's future forest and agricultural environments and their productivity;*
- *supports continued investigations into ways forestry can adapt to climate changes which are observed and predicted for particular (site-specific) regions of the country;*
- *participates in informed scientific debate on climate change, particularly in relation to environmental and productivity effects and the use of forest sinks to reduce the net impacts of climate change; and*
- *advocates that all debate on climate change be underpinned by sound, transparent and repeatable science.*

Background

The forestry industry will be presented with opportunities through mitigation and challenges through adaptation as a result of climate change. Forests sequester carbon and have an important role to play in addressing climate change as forests and wood products provide long term carbon storage. However, some forest operations or processing of timber also influence the release side of the carbon cycle. Management of Australia's plantation and native forest estate will therefore need to adapt to changes in climate in a proactive and scientifically informed manner in order to realise maximum opportunities and benefits both for forest productivity and for the environment.

The area considered commercially viable for plantations may shift geographically, shrink or in some cases expand due to effects of climate change. The native forest estate may also be affected. As identified in the *National Climate Change and Commercial Forestry Action Plan 2009-2012*, "among the highest impacts of climate change on forests will likely be a higher risk of bushfires, new pest and disease incursions, increased forest mortality, increased soil erosion, changes in water quality and quantity, and potential damage from extreme weather events".

On the other hand, commercial forestry in Australia is a major CO_2 sink, where harvested wood products hold carbon stores for the life of the timber product post harvest. Although some uncertainties will always remain regarding the prediction of climate change scientifically, it is widely understood that wood production through commercial forestry would be significantly expanded, in order to sequester additional atmospheric carbon. It is well established that such a strategy can and will contribute significantly and positively towards a reduction of CO_2 in the atmosphere in the short and mid-term future, through carbon storage.

Future policy making regarding the need to adapt to a changing climate and to reduce greenhouse gas emissions needs to be underpinned by sound, repeatable science. The scientific literature demonstrates that actively growing forests have a significant role to play in climate change mitigation, and AFG will remain actively engaged as the national policy response evolves to fully recognise this.

The *National Climate Change and Commercial Forestry Action Plan 2009-2012* is a positive framework that aims to address how forest industries can adapt to climate change. AFG supports the whole-of-government endorsement of the plan, and looks forward to each of the actions being achieved, as outlined in the plan.

Discussion

Australia's native forest estate has evolved under varying climatic conditions, from the cold alpine heathlands, to the tropical rainforest and monsoon forests in the north and the vast dry woodlands and savannah of the interior. Each of these ecosystem types stands to be impacted in some way by numerous physical and biological effects of climate change (Steffen *et al.* 2009), including for example predicted impacts on biodiversity and the function of native forest ecosystems, and the flow-on effects to socio-economic outcomes such as water catchment health.

While our native forests and plantations will almost certainly be impacted by climate change, carefully managed forests can also be used to combat or to ameliorate the likely environmental risk of such change. Actively growing forests sequester CO_2 which is captured in wood products, especially structural and furniture timbers, which effectively store carbon for the life of the product. Even paper has a positive carbon storage life. Alternative resource materials such as steel and concrete have very limited capacities to store carbon and large volumes of greenhouse gases are emitted in their production. Wood production through forest management and harvesting is not only biologically renewable, but replanting and regeneration of forests provide a cost-effective, sensible and readily attainable approach to amelioration of the perceived causes and effects of climate change. Thus, appropriately managed, commercial forestry constitutes a net carbon store in perpetuity, while at the same time contributing significantly to other environmental, economic and social benefits.

As the national and international responses to climate change gain momentum, improved means to sequester carbon will be sought, e.g. through achievement of 'carbon offsets' and similar mechanisms. The planting of trees is one such method, however AFG does not support the permanent planting approach sought by the Australian Government, as there are many negative outcomes that could result. AFG considers that permanent plantings, that are effectively 'locked away' and on a large scale, are likely to have a deleterious impact on regional communities and social infrastructure, and are likely to be poorly managed and

to create unintended environmental difficulties. In utilising trees to address climate change, AFG supports a holistic approach to rural resource management, where forest plantings and private and public native forests are integrated with agriculture in the rural environment. This comprehensive systems approach will produce many significant and concurrent benefits for the community and the environment, including carbon sequestration. Furthermore, such benefits will be provided indefinitely and on a sound economic and environmental basis.

The permanent plantings argument disregards the fact that timber stores carbon for the life of the product, during growth and after the tree has been harvested, while on the contrary, unhealthy and poorly managed forests and vegetation risk becoming net emitters of carbon due to the effects of reduced growth and increased risk of fire and disease. There is therefore no reason why the goal of sequestering carbon should be separated from that of producing a timber product and every reason to suggest that establishing proper links between the two is the only way to ensure that healthy, beneficial outcomes for both carbon storage and resource management prevail.

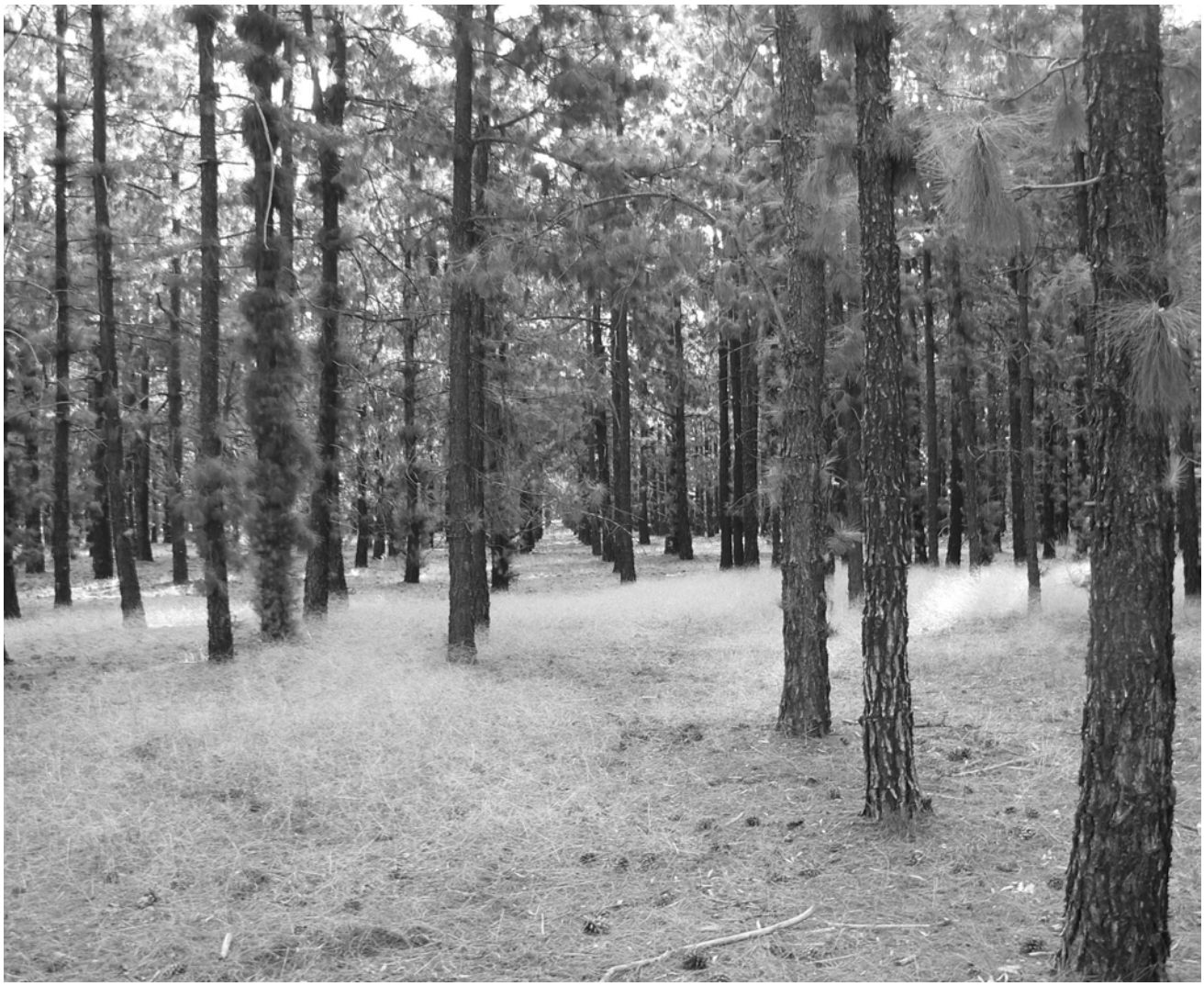
Preferred Outcomes

- A whole-of-government approach to enhancing the capacity of the Australian forestry sector, specifically to combat the predicted effects of climate change through carefully managed long-term capture and storage of atmospheric CO_2.
- Assurance that an actively growing forest's capability to reduce society's net carbon emissions is considered equitably, both economically and environmentally when developing policy that impacts on the use of forests, especially existing native forests.

Sources

Council of Australian Governments 2009, '*National Climate Change and Commercial Forestry Action Plan 2009-2012*', Department of Agriculture, Fisheries and Forestry, Canberra, viewed 13 September 2010, <http://www.daff.gov.au/__data/assets/pdf_file/0008/1386431/climate-change-061109.pdf>

Steffen, W, Hughes, L, Kitching, R, Lindenmayer, D, Musgrave, W, Stafford-Smith, M & Werner, PA 2009, *Australia's Biodiversity and Climate Change*. CSIRO Publ., Collingwood Vic.



APPENDIX 2

EMISSIONS TRADING

Australian Forest Growers advocates that government initiatives to address known or predicted effects of climate change are consistent and transparent, reflect AFG policy objectives and provide certainty to the forestry industry.

Specifically, AFG advocates the following design principles be included in any emissions trading scheme, such as the proposed Carbon Pollution Reduction Scheme (CPRS):

- *benefits from carbon accumulation by trees are passed on to the forest grower;*
- *the forest grower is able to trade the carbon sequestered in trees planted since 1990, including sequestered carbon accounted for in the Australian Government's calculations of the national carbon balance since 1990, from all types of forest (plantations, native forests and woodlands) for the purposes of meeting formal and informal international obligations;*
- *carbon sequestered in all harvested wood products is recognised and accounted for, including biochar which is produced from wood waste and forest residues and acts as a long term carbon sink;*
- *biofuels remain carbon neutral in any emissions trading scheme which is developed;*
- *the harvest sub-rule (Marrakesh Accord 2b) be retained;*
- *an accessible and transparent voluntary carbon market be supported;*
- *that the competitiveness of all sectors of the wood products industry, including pulp and paper, be maintained; and*
- *wood used in building and construction is recognised for its low embedded energy—it is noted that proposed compensation of export exposed industries such as aluminium, steel and cement effectively negate the emission benefits of the use of wood in buildings.*

Background

Australia is a signatory to the Kyoto Protocol, an international agreement which sets binding targets for reducing greenhouse gas emissions in member countries. The Carbon Pollution Reduction Scheme (CPRS) was proposed to be the Federal Government's main means to reduce Australia's greenhouse gas emissions. It is to be a cap and trade system, whereby a limit is set on Australia's greenhouse gas emissions. This was to be achieved through issuing permits equal to the set target of emissions, and price signals are created to abate the excess carbon. The Federal Government has delayed the implementation of the proposed CPRS until 2013 and the fate of the enabling legislation is still uncertain.

Forests sequester carbon dioxide from the atmosphere through the processes of photosynthesis and biomass allocation which sustain forest growth. The sequestered carbon is stored for the life of the timber product. Under an emissions trading scheme, reforestation projects which sequester carbon are the only means by which emission permits can be generated. Forestry practices employ the most efficient and cost effective means of carbon sequestration available. Forestry therefore has an important role to play in promoting and implementing environmentally sound, cost effective responses to climate change, in particular in assisting the Federal Government to achieve a low carbon future.

Discussion

The *CPRS Green Paper* signalled the Federal Government's intention to include commercial forests defined under the Kyoto Protocol as 'reforestation', from scheme inception, with participation on an 'opt-in' basis. AFG supports this position and considers the retention of the 'opt-in' component as integral to the schemes' success.

However, the design principles for Reforestation in the proposed CPRS as outlined in the *Reforestation Discussion Paper: Design Issues Relating to Reforestation—October 2009* are disappointing and seem to culminate in a disincentive for small scale growers to participate in the proposed CPRS. AFG seeks design principles and objectives that are robust, take account of best practice forest management, are user friendly, and reward private forest growers for the valuable service they are providing through forest carbon sequestration.

AFG strongly recommends that the following design principles form the basis of the proposed CPRS, or any emissions trading scheme developed by the Federal Government.

Proposed Permanent Plantings

AFG does not support the proposed permanent planting approach proposed by Government in the existing CPRS design. This would lead to forests being planted for carbon sequestration alone and to their dangerous and wasteful neglect thereafter. AFG supports an integrated forest management system, whereby trees are integrated into the landscape for multiple environmental and commercial benefits, including carbon sequestration.

Inclusion of Harvested Wood Products

The assumption that a plantation sink becomes a substantial or total carbon emitter at harvest is erroneous. Wood products actually store carbon for the life of the product and only emit carbon dioxide when they are burned, or decay. Forest systems after harvest, unless managed unsustainably, retain a fair proportion of

their natural carbon store in stumps, roots, and larger residue pieces for some time, unless burned. Any proposed emissions trading scheme should play an important role in promoting the use of wood to replace energy intensive alternatives, through the inclusion of carbon stored in wood products from commencement of the Scheme. In addition to sending the right message to consumers about the emissions profile of wood products, this would create an incentive for the strengthening and expansion of sustainable forest industries with positive long-term benefits both economically and environmentally.

Carbon Accounting
AFG advocates that benefits from carbon storage provided by the actions of private forest growers be passed onto the grower. This remuneration should accurately reflect carbon flux. AFG believes that the proposed National Carbon Accounting Tool (NCAT) is an overly conservative accounting system and consequently the sole reliance on NCAT to credit unit limits and entitlements is problematic.

Voluntary Market
AFG supports the development of voluntary carbon markets as a means to address the causes of climate change and to reward growers for the service they are providing. Any voluntary market should be accessible, demonstrate fairness through transparency, and have low barriers to entry.

The regulations and design principles for reforestation under the proposed CPRS will determine the willingness of forest entities to enter the scheme, and consequently how much accountable carbon will be sequestered by forestry. Under any emissions trading scheme, reforestation design principles need to be consistent with best practice forest management, to streamline compliance and to directly reward growers for the valuable service they are providing.

Preferred Outcomes

- A tradable carbon right that is capable of channelling value back to the grower and reflects the real flux in forest and wood carbon storage.
- Inclusion in any proposed emissions trading scheme of carbon stored in harvested wood products from the scheme's commencement, including wood, paper and carbon stored in long-life landfill.
- Inclusion in any proposed emissions trading scheme of forests defined under Article 3.3 of the Kyoto Protocol (reforestation since 1990) on an opt-in basis.
- Forests defined under Article 3.4 (plantations and native forests from before 1990) are accounted as neutral in emissions.
- Australia takes the position in the international framework and within any proposed emissions trading scheme that the post-2012 re-establishment of a plantation on Kyoto-compliant land should be no worse off than the establishment of a new plantation on Kyoto-compliant land.
- Incentives to promote inclusion (on an opt-in basis) for small scale forest growers. This would need to include rules to minimise reporting obligations.
- Energy rating schemes in Australia acknowledge the energy embodied in construction materials—including energy required in manufacturing and transporting the materials.

APPENDIX 2

BIOENERGY

Australian Forest Growers advocates that any emissions trading system recognises the benefits of energy produced from woody biomass (bioenergy). Bioenergy should be seen as a positive alternative to non-renewable, emissions intensive fossil fuel energy. Eligible forest products for bioenergy production in any emissions trading system should include: harvested wood, forest and sawmill residues and silvicultural surpluses from both plantation and native forests.

More specifically, Australian Forest Growers advocates:

- *the commitment of all Australian governments to facilitate and accelerate the responsible use of forest biomass to produce solid, liquid and gaseous fuels. This includes removal of regulatory impediments to growth in existing biomass-based electricity production industries, and incentives available to all levels of industry—from the forest grower to the production plant operator;*
- *that research and development of woody biomass for energy be strengthened, including investment in the upscaling of technology to promote regional, small to medium scale, electricity, thermal energy and biofuel production;*
- *that the amendment of the Renewable Energy (Electricity) Act 2000 (as amended) includes Renewable Energy Certificates (RECs) for renewable energy for biofuels, and from other renewable energy outputs, not just electricity;*
- *a review of the Renewable Energy (Electricity) Act 2000 (as amended) high value test application; and*
- *that bioenergy is recognised by Government and other stakeholders on an equal footing with other renewables such as solar and wind power, as it is in many other countries.*

Background

The rapid development of biomass-based energy and fuel production systems should be a key focus of renewable energy policy in Australia as our response to climate change gains momentum. The use of wood for power generation is already practiced in Australia, however does not form a major component of electricity supply as it does in some countries. Further, woody biomass is better placed to provide baseload energy than other renewable energy sources, as the amount of fuel is easily quantifiable.

The last 20 years of technological development has seen dramatic improvements in energy harnessing and efficiency, while delivering significant reductions in emissions. Modern wood and charcoal-fired power plants emit almost pure carbon dioxide throughout operation, while coal-fired power plants emit a combination of carbon dioxide, carbon monoxide, sulphur dioxide and nitrogen oxides. Wood and charcoal as biofuels also have an important connection with relative greenhouse gas accumulation in the atmosphere. For example when wood and charcoal are burned, it is immediately recycled carbon dioxide which is released into the atmosphere, with the next forest growing cycle absorbing equivalent amounts of carbon through renewed growth and photoassimilation. As wood and charcoal-fired power generation can replace or coexist with coal-fired generation, the net effect is a significant reduction of greenhouse gas emissions by pro rata replacement of fossil fuel emissions.

At present there is a substantial, but largely untapped resource of biomass residue that accumulates from forest harvesting and processor operations. This could and should be utilised for the production of renewable biomass based electrical and thermal energy (bioenergy) and liquid fuel (biofuel). Forest industry residue capture for biomass energy production alone could be significantly increased to partially replace or supplement the use of fossil-fuel sources. Processor surpluses such as sawdust and wood scraps provide a clean, readily available resource for future bioenergy production. Forest operation surpluses also include underutilised logging residue, non-commercial thinnings and silvicultural residues whose practical and commercial use for bioenergy would add significant value and efficiency to existing forest production.

Promoting commercially viable deep-rooted crops for marginal lands is of critical importance for a range of environmental and economic reasons, not least for farm income diversification. Biofuel production is a potential new industry that could utilise the resource grown from woody perennial crops. The range of deep-rooted crops suitable for biofuel production is enormous and could include many native tree and shrub species. Farmers in medium to low rainfall zones are in need of commercial forestry and land management solutions. The placement of biomass to liquids processors, supplied by crop resource in several agricultural areas, could reinvigorate rural economies and deliver broad environmental benefits (such as salinity abatement), while also supplying liquid transport fuel to the market and participating growers. If markets became more established, primary producers in the future may also have enough incentive to establish commercial crops exclusively for bioenergy production, or in multiple use applications.

Discussion

The methods and mix of electricity generation systems in Australia need to change dramatically if we are to address the inevitable rise in power consumption, and

consequent rise in greenhouse gas emissions from fossil fuel based electricity generation, as the economy continues to grow. The proposed Carbon Pollution Reduction Scheme (CPRS) was anticipated to take the first necessary step in addressing this, by attributing a cost to the carbon emitted by power generators. Uncertainty surrounding the establishment of a legislative framework to provide for a functioning carbon market is a handicap to the widespread development of renewable energy technologies.

However, the Federal Government has committed to attaining 20% of Australia's energy from renewable sources by the year 2020, and recently launched the Renewable Energy Future Fund to aid in reaching this goal. AFG advocates that funding should be provided for research, development and extension into biofuel and bioenergy technology, including upscaling the technology to a commercial scale. This will assist in the achievement of Australia's renewable energy targets and provide Australian farmers and tree growers with another source of income through sales of woody biomass.

Increases in wood utilisation in forest operations, as a result of commercially viable biomass-to-energy market options, will result in enhanced economic return to forest owners and managers generally. This in turn would lead to a greater investment in maintaining the integrity of the forest estate and assist towards meeting the environmental needs of properties and the rural landscape as a whole. Real government commitment to biofuel development in Australia will not only deliver economic returns to forest growers, but will also support rural communities, while delivering a broad range of environmental benefits. This should be initiated through the Renewable Energy Future Fund on both a large and small scale.

The potential of bioenergy is recognised in the *National Climate Change and Commercial Forestry Action Plan 2009-2012*, which is a guiding action plan for both the forest industry and governments. AFG supports Focus Area Three: Bioenergy and looks forward to the prescribed outcome: "Examines the new market opportunities for electricity and liquid fuel from wood-derived biomass, and proposes strategies for new and pre-commercial technologies to be developed and deployed". Furthermore, AFG supports Actions 12-14 and its outcomes to capitalise on the opportunity of bioenergy in Australia.

Other transport biofuel production systems, in addition to ethanol-from-lignocellulosics, also deserve serious government investigation and support, one example being biomass gasification and catalytic production of synthetic diesel fuel. Large scale commercial biomass-to-liquid fuel production systems are currently nonexistent in Australia. Continued R&D as well as industry 'kick-start' funds in these areas should be a greater priority for the Government, such as through the Renewable Energy Future Fund. Woody biomass presents a carbon-neutral alternative to technologies hitherto dependent on fossil fuels, and wood products should play a key role in the development of an emissions-reduced Australian economy.

Preferred Outcomes

- The Renewable Energy Future Fund is used to finance support for developing bioenergy and biofuel production systems on a larger scale in Australia, and for supporting the reforestation efforts of small scale forest growers towards the objective.
- Any emissions trading scheme developed in Australia attributes zero emissions to bioenergy and biofuel production as outlined in the Australian Government's CPRS Green Paper.
- The Renewable Energy Target recognises all legally sourced wood products as eligible sources of supply for biomass-based electricity generators and is expanded to include biofuel production.
- The Renewable Energy Target recognises other forms of energy output from biomass sources, such as heating and cooling, instead of just electricity, in the same way as it recognises heating outputs from solar hot water systems.
- Government support for the development of regionally based biofuel production plants to utilise resource from forest and wood processor residues and crop residues, as well as from short rotation biomass crops.
- Removal of regulatory impediments to growth in existing biomass-based electricity production industries, and incentives available to all levels of industry—from the forest grower to the production plant operator.
- Energy rating schemes in Australia acknowledge the emissions profile of all construction materials—including energy required in manufacturing and transporting the materials.
- Recognition of thermal energy in the generation of Renewable Energy Certificates (RECs).

Source

Council of Australian Governments 2009, '*National Climate Change and Commercial Forestry Action Plan 2009-2012*', Department of Agriculture, Fisheries and Forestry, Canberra, viewed 13 September 2010, <http://www.daff.gov.au/__data/assets/pdf_file/0008/1386431/climate-change-061109.pdf>.

APPENDIX 2

MARKET ACCESS AND COMPETITION

Australian Forest Growers seeks development of mechanisms to allow private forest growers to access all levels of the market place and to monitor marketing practices to ensure the full implementation of National Competition Policy.

Background

For the past decade, the *National Forest Policy Statement* (1992) and *Plantations for Australia: The 2020 Vision* (2002) have embodied the industry's development aims. As envisaged by those policies, the Australian timber industry has undergone significant restructuring over the past decade, including reduced access to the public native forest resource, privitisation of government forestry enterprises, increased value-adding, the emergence of managed investment scheme companies, and the growth of farm forestry.

Although there has been a dramatic increase in plantation establishment since 1997, it has been mostly in short rotation investments. More investment is needed in longer rotation hardwood plantations to replace and augment the diminishing resource available from native forests and to better capture the inherent benefits of trees in the landscape. More softwood plantations are also needed where current resource scale is insufficient to support long-term integrated processing. Now and in the future, a greater proportion of the forest resource will need to come from farm forestry, to meet the requirements of estate scale, and to enhance the achievement of environmental and social objectives.

Many small-scale growers have established long rotation plantations but the volume of wood is very small compared to total demand. Processors seeking efficiencies and security of supply are often reluctant to accept small parcels of resource. Small scale growers therefore struggle to access markets and face high transaction costs and competition from larger suppliers. Marketing options have not yet developed to a point where small-grower supply is well-coordinated among individuals nor has adequate value been placed on standing timber sufficient to encourage significant expansion of the farm forestry sector.

Discussion

Restricted market access and limited availability of information are two key impediments for non-corporate private plantation growers. If small-scale growers do not expect to sell their wood for a reasonable price, they are discouraged from planting or managing forests, regardless of incentive programs. This is reinforced by lingering disillusion with previous government programs that left growers without markets for thinnings or for sawlogs. The need for improved market access is recognised at the national policy level. For example, Action 9 in the revised *Plantations for Australia: The 2020 Vision* seeks to "encourage the development of cooperatives or brokers to increase small growers' market strength and effective use of resources".

AFG recently released a web-based market access tool, *MarkeTree* (www.marketree.com.au). *MarkeTree* is a trading facilitation mechanism for growers, sellers, managers and processors to connect wood products and forest resources online. Sellers will be provided with a range of helpful information for quantifying and marketing their product, buyers will have access to a one -stop-shop to source wood and wood products or standing forest resource anywhere in Australia. The range of product sales pooled on this site aims to encourage large and small traders and opportunistic client interest. This, and other business models that could assist growers and/or groups of growers to achieve viable scale, should be prioritised for development. Improved market intelligence would also help smaller-scale growers to access the market and processors to respond to national and international opportunities. Improved price signals might prompt better resource co-ordination and better equip small-scale operators to participate in the market place.

For the economics of long rotation plantations to be attractive, markets are required for the products of the rotation, as well as for the environmental services that farm forests provide. The latter are critical in lower rainfall areas favoured for plantation expansion in contemporary natural resource management policy. Regional markets for surpluses and harvesting and processing the main sawlog crop from conventional plantations, are either largely non-existent or not accessible to small-scale producers. The immediate challenge is to aggregate sufficient scale of resource and then gain acceptance of such residues as a renewable energy source, e.g. in electricity generation or ethanol production, and to encourage the development of regional processors.

Another serious gap is in the dearth of trade in immature standing plantations (secondary markets). Effective secondary markets could mean that prospective investors no longer require harvest guarantees, thereby providing a way to overcome the long-term lack of liquidity that makes investment unattractive to many.

It has been accepted wisdom for years that 'secondary markets' have been hindered by inappropriate tax treatment. However, analysis suggests that it is the limited differentiation of investment products and the lack of publicly available, reliable market information and indicators that are the key barriers to secondary market development.

The structure and scale of the forestry industry and its operations lends itself to concentration of market power. It is imperative that markets operate freely and fairly. While there is a reasonable level of competition for wood products, there are nevertheless relatively few

processors, particularly in some regional areas. The free flow of market information would do much to empower small-scale growers, but it would not be a sufficient safeguard on its own. As the grower representative body, AFG will continue to champion fair trading practices and the implementation of National Competition Policy across all sectors of the industry.

Preferred Outcomes

- A focus by government on facilitating the development of industries, markets and mechanisms for all products of a forest rotation and on assisting small-scale grower participation, particularly where such assistance will address market failure and support 'public good' outcomes.
- Success demonstrated by the regional market linkage of many successful farm forestry enterprises with industrial growers and processors.
- Participation by small-scale enterprises in a competitive market that is based on principles of National Competition Policy and whose activity is described by readily available, credible market indicators.
- Government and industry support for the web-based market facilitation tool *MarkeTree*, resulting in improved market access for small-growers.

APPENDIX 2

MARKET ACCESS AND TRANSPARENCY

Australian Forest Growers seeks support for the establishment of an appropriate institutional mechanism for forest product marketing research, information and intelligence.

Background

The lack of readily accessible, reliable and regular market information has long been identified as a major impediment to new investment in the plantation forestry sector at all scales.

Information such as log prices related to grade, regional processing capacity, volumes and values of products is difficult to obtain in Australia. The historical development of the industry has been concentrated and fragmented reporting activities. Long-term supply agreements are necessary to provide the resource security for processing investment, however the terms of these commercial agreements are usually confidential. In addition, a common source of market intelligence in agricultural industries—the public spot market—is very limited for timber.

The little information there is available to assist in market analysis, e.g. ABARE's annual publication 'Australian Wood and Forest Products Statistics', relates mainly to supply.

Discussion

Analysis of plantation investment requires information such as log prices related to grade, regional processing capacity, sales volumes and values of products, among other indicators. This is essential for expanding and diversifying the sources and levels of investment in the plantations and farm forestry sectors, which are necessary for industry development and the success of government initiatives in trade, regional development and natural resource management.

A proportion of new plantings will produce products competing in export markets. To maximise returns, Australian exporters need to better understand real-time markets providing greatest opportunities for Australian plantation products, the relative competitiveness of these products, and the realities of accessing the markets.

Domestic price and trade information is also needed. AFG supports the continued availability of the Australian Pine Log Price Index (APLPI) and will continue to participate in and support discussions that are being held on the development of a similar index for hardwood. While such indices are limited by the input information and the method of reporting, they nevertheless represent useful progress in the development of market indicators.

Discovering the necessary information is difficult and costly. Presenting this information so as to achieve its purpose, whilst protecting privacy and confidentiality, is also difficult. These tasks cannot be done effectively on an *ad hoc* basis. Regular and reliable collection, analysis and publication of such information by an independent and trusted agency acting on behalf of the community is necessary, as occurs routinely for agricultural commodities. This is particularly important where collection costs outweigh benefits, as benefits cannot then be retained by an individual acting alone.

The availability of market information is a necessary condition for a free, fair and efficient market.

Preferred Outcomes

- An appropriate institutional mechanism to routinely compile market information for forest products, inclusive of the many players in those markets and the dynamics of market access, to provide a trusted and reliable source of information and intelligence about those markets. This could be achieved through a new independent centre, or supported by the industry's existing Research and Development Corporation.
- The continued availability of the Australian Pine Log Price Index (APLPI) and development of a similar index for hardwood.

APPENDIX 2

AVAILABILITY OF MARKET INFORMATION

Australian Forest Growers is committed to ensuring that market performance indicators for price, demand and supply are readily available to all participants in the forestry market place. AFG advocates that transactions involving publicly owned forestry assets are transparent, thereby enhancing participation capacity by small growers in the existing market. The continuation of the Australian Pine Log Price Index and the compilation of a hardwood price index is critical.

Background

The Bureau of Rural Sciences (BRS) now has the capacity to collect, analyse and distribute integrated comprehensive biophysical and social data. The Australian Bureau of Agricultural and Resource Economics (ABARE) compiles and publishes Australian Wood and Forest Products Statistics.

This data is used in a variety of important ways, such as informing national forest policy processes and strategic planning, land use and industrial development scenarios; evaluating the performance of government and industry initiatives (for example, *Plantations for Australia: The 2020 Vision* and the national plantations strategy); evaluating the sustainability of the wood and paper industry; and improving understanding of the social impacts of resource use change.

In addition to harvest, supply and planting trends, data on prices and demand are needed to assist market transparency and participation by small growers. Present funding of ABARE's publication of market and industry statistics is insecure as BRS capacity has been constrained by *ad hoc* funding arrangements.

Discussion

Collection, analysis and dissemination of essential market statistics have long been accepted as a legitimate function of central government. These core statistics form the basic building blocks to understanding the status quo of the forest industry sector. Identifying and analysing market and development opportunities are, like basic research, of broad benefit to the whole community and are more effectively gathered via a collective public effort.

Independent, reliable quantitative information on Australia's plantation resource and associated regional communities is essential to guide the government and industry in policy formulation, decision making and strategic planning for natural resource management. It is also required to meet reporting commitments under international agreements.

Reliable statistics about the supply of forest and wood products and of economic performance are also essential. Together these data also inform industry planning and the identification of development and trade opportunities. They could also provide policy makers with important information about innovation and future infrastructure requirements and patterns of community growth and decline, especially where such trends are associated either directly or indirectly with wood product markets and industry.

In the absence of reliable statistics as a decision-support tool, government policy, investment and industry planning processes are poorly informed, delivery against stated objectives cannot be measured or refined, and debate is poorly informed and based on anecdote and innuendo.

For individual traders and groups, some initiatives are improving the availability of price and demand data. The Australian Pine Log Price Index (APLPI) is a valuable resource and should be continued. The development of a similar index for hardwood is an urgent priority. The new AFG website *MarkeTree* is a web-based market access and facilitation tool. This website will provide a mechanism to better incorporate small grower resource information into the market and should be supported by government.

Preferred Outcomes

- Maintenance of nationally significant data collection, with the results made readily and freely available, so that the value of work already done is not lost.
- Future government policy and industry development strategies are based on sound information, and that forestry programs fit well with whole-of-government policy objectives.
- A long-term commitment to core funding of BRS and ABARE forestry and forest product data collections. Australian Forest Growers estimate $10 million over 4 years would secure and enhance them in ways that will add and return value, e.g. publishing marketing data to facilitate improved investment analysis, and to facilitate improved wood flow to encourage best use of sustainable surplus by processors.
- Continued support for the Australian Pine Log Price Index (APLPI) and the development of a similar index for hardwood as an urgent priority.
- Support by government for the AFG website *MarkeTree* which provides a web based market facilitation tool to better incorporate small grower resource information into the market.

APPENDIX 2

WATER

Australian Forest Growers advocates that:

- *policy on water use needs to recognise and reflect regional hydrological differences within and between catchments;*
- *any policy on water use should take into account issues of water quality as well as quantity;*
- *plantation forest management is a water-affecting activity and plantation owners should be recognised as stakeholders in any water allocation planning;*
- *plantation forests in Australia are generally non-irrigated. Forest trees along with other deep rooted perennials have water-using characteristics that are different to those for irrigated crops. Trees in plantations and native forests access water primarily through interception of rainfall via the soil, that is by accessing soil moisture and perched layers above the clay. Trees generally tend to be opportunistic water users with responsive physiological capacity for water use regulation, consequently their water demand and use are to a large degree dependent on spatial and temporal patterns of water availability rather than according to a fixed amount. This needs to be acknowledged and carefully accommodated in mechanisms and protocols for water entitlement allocation;*
- *plantation forests are recognised as a valuable agricultural land use and decisions and planning in relation to water use by plantations should be considered in context within the overall discourse on water use by all agricultural and rural enterprises;*
- *policy on rainfall interception and water use by plantations must be evidence-based and underpinned by sound, repeatable and reliable science;*
- *clauses 55-57 of the National Water Initiative should only be implemented as written, that is, applying to land use change not pre-existing land uses;*
- *water allocation in streams should be regulated by governments to allow for equitable distribution of water to environmental flows and all users within a catchment;*
- *if plantation forests are included as a water-affecting activity in regional water allocation plans (WAP) then other non-irrigated crops should also be included in WAP; and*
- *native vegetation, especially regrowth and most importantly stream side regrowth, must also be recognised as an interceptor and user of water, but whether it is included in water allocation plans should be determined at a local or regional policy level.*

Background

For at least two decades, scientists, environmentalists and other stakeholders have urged that trees be restored in the landscape on a massive scale, primarily because deep-rooted perennials can better utilise groundwater and lower the rising water table (caused primarily by excessive clearance of native vegetation), thus helping to ameliorate dryland salinity. Government revegetation and plantation programs have been established and continue to be promoted on the strength of this expert advice.

While addressing dryland salinity (and associated waterlogging) remains a policy priority, the recent drought years and growing awareness of declining water quality in the nation's river systems, have promoted greater concern regarding the restoration of environmental flows.

In the context of the current debate, plantation forest growers are being criticised for the perceived detrimental impact of plantings on environmental flows. Trees now supposedly use too much water because they are wrongly located or are too many in number. However, the detractors are failing to consider tree water use in context, by not simultaneously examining water use by all land users, and by the distortion of debate through misuse of otherwise valuable scientific work. For example, recent BRS research explains that plantations in upper parts of catchments and in low rainfall regions are unlikely to have a significant impact on stream flow.

This approach has unnecessarily inflamed poorly informed public opposition to plantations. It has helped to create the misconception that all plantations are excessive water users with detrimental effects on water balance on environmental flows, rather than the potential for some plantations in some parts of some catchments to reduce environmental flows to some extent. This also masks points on which broad agreement exists or is possible, and overlooks the significant role plantations are playing in reversing salinity in badly affected regions.

Discussion

Original native vegetation coverage in Australia kept soil water levels in balance. However, as a consequence of extensive land clearance to support agricultural production, this balance was altered and soil water levels began to rise. Agricultural land uses are now reliant upon the increased water yield that resulted from vegetation clearance, and most recent plantation establishment is on cleared agricultural land that was previously forested.

Restoration of water balance and flows should be considered in light of pre-clearance water yields. The accepted base yield should then be defined by assessment of existing land uses from environmental, economic and social perspectives, rather than assuming current clearance land uses, or unimproved pasture, as the baseline.

Strategic location of plantations in a catchment can maximise the beneficial impacts of afforestation. However, if a landscape planning approach is to be pursued, the impacts of all land uses on water yield and quality should be considered.

The focus should be on changes in yield throughout a catchment, rather than solely the reduction of water yield resulting from specific land use changes at the property scale. That is, other aspects of the landscape must be considered, and the positive and negative impacts of each particular land use assessed, to develop a comprehensive understanding of a catchment landscape.

The science is far from clear. Given the complexity of the issue and its context-specific nature, inconsistent knowledge is to be expected. Arguable, there is more credible information available on trees and their use of water than there is for other land uses. However, generalisations must be drawn with care as results cannot always be extrapolated without introducing bias. Yet, if the science is lacking on the comparative impacts of different practices in non-irrigated agricultural enterprises, then it is inequitable to penalise plantations by acting on what is known (about forests) rather than on what is not known about other land uses.

Successful resolution of water policy issues can be achieved only by implementing a framework capable of recognising forests as a legitimate land use—like other non-irrigated crops. The methodologies and discussion for change must be supported by the best available science. Within this, the potential of trees as a commercial crop and a natural resource management solution must be taken into account.

Any changes in water rights resulting from policy change will undoubtedly come at a cost, and AFG argues that all levels of government must be prepared to assist in bearing a substantial portion of that cost.

The debate has focused on getting more water into river channels, apparently to meet environmental needs. Such an approach ignores water quality issues, which is where plantations add significant value. Recent analysis in the Murray-Darling system demonstrates that more water does not necessarily equal less salt. Also ignored is that 'fast' water creates concerns such as turbidity and erosion.

The notion that water captured by private landholders, especially via their own infrastructure, can be captured back to the public is also challenged. Water that falls on private land, and is captured there, must be viewed as an asset of that land. Any removal of this enshrined right must be compensated for, including infrastructure and lost opportunity costs.

Preferred Outcomes

Effective water management policy should meet the following requirements:

- account for the positive and negative effects of all consumptive and environmental water uses;
- develop water planning strategies and deal with the over allocation of water resources in an equitable manner for both water interception activities (i.e. rainfed) production systems such as forests, and dams; and extraction users; as well as for the environment;
- acknowledge there is a proportion of the water allocation which must be dedicated to maintenance of hydrological processes and environmental sustainability, as well as for consumptive use;
- be transparent and auditable;
- promote continuing research towards improved analysis of the water uses and related impacts of all agricultural enterprises, including those relating to crops, pastures, plantation and native forests and horticulture;
- ensure appropriate evaluation of water use policy and related strategies and issues in terms of social, economic and environmental impacts;
- recognise the multiple environmental benefits and productive benefits of appropriate placement of trees in the landscape, including benefits such as protection and improvement of water quality;
- recognise that water use should be considered as one of several important elements in the holistic assessment of impacts of tree planting and forest management on natural resources and environmental processes; and
- include appropriate consultation with all stakeholders, adequate recognition of issues raised, and a concerted effort to develop a mutually agreeable outcome.

APPENDIX 2

TAX AND 'FORESTS AS SUPERANNUATION'

Australian Forest Growers advocates that the Australian Government:

- *explicitly recognise that amending the taxation rules applying to superannuation and biophysical self-generating assets (such as private forests) can help achieve its retirement policy objectives;*
- *amend the rules applying to self-managed superannuation funds (SMSF) so that plantation forests established and managed to provide retirement income can be transferred into SMSF;*
- *implement further revision to the conditions of the Farm Management Deposits (FMD) Scheme to remove discrimination against private forests;*
  - *enable FMD to be made on behalf of partnerships and family companies;*
  - *redefine the withdrawal threshold in relation to death or retirement from primary production (allowing roll-over into superannuation funds of the beneficiaries), with a specific provision for private forests, or any primary production enterprise with long-term/lumpy return characteristics, of three years or more; and*
  - *increase the maximum limit of funds held in deposits from $365,000 to $500,000 of annual farm turnover.*

Background

Many private plantations have been, and continue to be, established and managed as an important component, and in some cases the totality of the growers' 'superannuation'.

Despite this admirable intention, such growers are subject to severe discrimination within the superannuation regulatory system. This failure takes two major forms.

One is the endemic problem of 'lumpy returns', whereby the grower receives 'superannuation' income at harvest in one lump sum, almost all of which is taxable at the highest marginal rate, rather than at any form of concessional rate such as that applying to monies withdrawn from a superannuation fund.

This problem is made worse for most private plantation growers by the limited and highly conditional access they have to the major income averaging provision available to other primary producers. First, Farm Management Deposits (FMD) are only available to primary producers with 'off-farm' incomes less than $65,000, which eliminates many private plantation growers. Second, any eligibility quickly evaporates if the grower doesn't carry on primary production after final harvesting (most common), because any income placed with an FMD must be withdrawn within only 120 days of when primary production ceases.

The second important manifestation is the treatment of a private plantation with respect to its contribution to a grower's self-managed superannuation fund (SMSF). Although a private forest may be part of an SMSF in circumstances where the forest operation is commenced by the fund, transfer of an established forest into an SMSF can only occur in very specific and very rare circumstances that satisfy a number of the SMSF tests, such as 'sole purpose', 'related party' and 'business real property'.

Most private plantations now approaching harvest age were established well before the SMSF 'revolution', and have no chance of being made to fit the current SMSF conditions that would allow the growers to take advantage of the tax treatment of superannuation funds.

Discussion

For more than a decade, policy makers in Australia have realised that, with an ageing population that will live longer, steps must be taken to encourage individuals to fund their own retirement.

Over roughly the same period, State and Federal Governments and industry have driven a plantation industry development strategy, *Plantations for Australia: The 2020 Vision*, and have recognised the simultaneous contributions that private plantations and farm forestry can make to natural resource management as well as social and economic development objectives.

However, many of the private growers who established long-rotation plantations decades ago in order to 'fund their own retirement' are now suffering personally from that decision. They are confronted by a tax regime that penalises 'long term forest enterprises with one final harvest', and that also prevents them converting an older form of 'superannuation' (plantation forests) into a contemporary form (SMSF).

Further, anecdotal evidence abounds that many potential farm foresters and private plantation growers are being discouraged from growing plantations because they learn from existing forest growers of the severe tax penalties they will face at the time of harvest.

All of these problems are separate from, but not unrelated to, the fact that the system also discourages trading in immature standing plantations (secondary markets), which, if it were readily available, would provide more flexibility and choice for private plantation growers, and perhaps diminish the pressure for 'superannuation' change.

Preferred Outcomes

- Australian Government recognition that amending the tax rules applying to superannuation and biophysical self-generating assets (such as private forests) can help achieve its retirement policy objectives.
- A Farm Management Deposits Scheme (or equivalent) that recognises and accommodates the unique characteristics of private forests and does not discriminate against forest growers.

APPENDIX 2

RESEARCH, DEVELOPMENT AND EXTENSION

Australian Forest Growers advocates:

- *that research and development outcomes in line with AFG policy priorities are pursued for private forestry through the appropriate research and development providers with an enhanced focus on private grower research and development funds from Forest and Wood Products Australia invested in farm forestry and managed private native forests;*
- *research and development into tree species which suit a wide range of environments and markets;*
- *to broaden the levy base to include biomass wood;*
- *coordinated national infrastructure for technology transfer, established to realise the benefits of successful public research and development;*
- *continued support for the levy on growers for the purposes of research and development and marketing and promotion, at the rate of 5 cents per cubic metre (of timber sold at mill door), subject to the following conditions being met:*
  - *state-owned growers' continued commitment to voluntarily contribute the same levy for at least five years;*
  - *the constitution and legislation reflect the capacity of private growers to reconsider their position should any State grower withdraw its contribution;*
  - *if the new company structure continues to have industry representative organisations, AFG must be an industry representative organisation;*
  - *AFG is part of the negotiating team from industry in the development and negotiation of the initial company constitution and enabling legislation; and*
  - *the AFG Board agrees to the final model.*

Background

Both government and industry in Australia have a long-standing commitment to cost-effective research. A number of organisations, such as Forest and Wood Products Australia (FWPA) and the CRC for Forestry demonstrate this commitment within the forestry sector.

The purpose of research and development is to improve, build and apply knowledge, and research and development in the forestry sector ensures that the Australian forestry industry remains competitive and innovative. Extension gives real-world meaning to R&D findings by implementing outcomes which may have been determined in a controlled environment. 'Extension' refers to the resourced provision of information and advice to the community, particularly to land managers whose challenges are unique to their property and require an understanding of specific on-site issues. The benefit of extension services associated with research and development ensures much added value for research investment and it enables more growers to benefit from research findings and outcomes.

AFG identifies the need for research and development in assisting the forestry sector adapt to changes in climate. Australia is for the most part an arid, highly seasonal and climatically diverse country and growing conditions vary considerably from place to place geographically and from season to season and year to year within such a large continent. AFG strongly supports an effective R&D focus on resilient commercially viable tree species for all tree-growing regions in Australia. Research and development should be dedicated to ensure all levels of the forestry sector are able to build on and refine best practice, ecologically sustainable forest management, and as such remain competitive in the international timber market. Further, AFG seeks that as work is pursued on multiple products from Australian tree species, such as electricity, extracted oils and liquid fuel, the potential for farm-scale methods of extraction and production are not neglected.

Discussion

The Federal Government has matched research and development funds from industry as part of cost-sharing research and development priorities for the forestry sector. This has been achieved through a levy of 5 cents per tonne on timber sold at the mill door, and the funds are matched by Government to finance the FWPA. The FWPA "directs investment into research and development projects that are vital to the expansion and innovation of forest and wood product-based industries". Further, AFG supports the voluntary contributions made by state owned forestry organisations for the purpose of research and development.

However, some markets of the forestry industry do not pay a levy; there is no levy on forest biomass, and as such research priorities are not dedicated to this important innovative sector through FWPA. AFG advocates that a levy be paid on biomass, including forest waste used for bioenergy, to further support research and development into this important sector. As Australia's response to climate change gains momentum, renewable energy is increasingly pinpointed as a key mechanism to reduce Australia's emissions. The technology for bioenergy is already available and implemented in Europe, however Australia is behind in embracing and implementing the technology. As such, extension is required to elevate the technology from the laboratory to industry.

Small-scale growers, particularly farmers, require support in research and development to improve their land stewardship for holistic outcomes and to increase farm-scale efficiency. It is vital that governments continue to

contribute to forestry research and development at a time when regulatory constraints on the ability of farmers to effectively manage their land are increasing.

It is imperative that ongoing research and development and subsequent extension services are provided with attention to all levels and sectors of the forestry and wood products industry. Research and development results should be published in a form understandable to Australian growers and be easily accessible, i.e. through the FWPA website. The extension component of research and development is pertinent to ensuring that research and development findings are put into practice by those in the industry, and this can feed further improvement into the practice or technology. The extension component needs to be supported by government, just as research and development priorities are.

Further, FWPA is essential for the provision of resources for whole of industry promotion to counter competing products and retain international market access. Additionally the implementation of a grower levy on innovative forms of forest harvest e.g. for biomass, will see a greater research and development focus on priority grower research, development and extension. The ongoing voluntary contribution of state owned forest growers will underpin a whole of industry input into silvicultural and other grower focussed research.

Preferred Outcomes

- Priorities of government, joint venture and other appropriate research and development organisations that reflect the priorities and outcomes sought by contemporary private forest growers.
- A fully supported FWPA continuing its research and development expenditure as well as providing generic forestry sector marketing and promotion.
- An FWPA that is more responsive to grower research and innovative development needs.