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The Secretary
Senate Select Committee on Climate Policy
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SUBMISSION TO SENATE SELECT COMMITTEE ON CLIMATE POLICY

INTRODUCTION

Australian Forest Growers (AFG) is the national association representing the private forest growing sector, and the comments in this submission are focused on issues of interest to forest growers. AFG's members include farm plantation growers, private native forest managers and private commercial plantation companies. Since 1969, AFG has been advocating responsible establishment and management of plantations on agricultural land, which provide the multiple outcomes that the community increasingly demands. The growing of commercial plantations and active management of private native forests by our members has been delivering improved landscape health outcomes for decades, as well as complementing existing productive agricultural land use practices.

The Australian forest industry comprises three main sectors: the native forest and plantation growing sector, the pulp and paper sector and the solid wood sector. Each sector of the forest industry has an interest in the Carbon Pollution Reduction Scheme (CPRS). The sectors are linked through supplier-customer relationships and corporate structures, so the effects of the CPRS on one sector will flow through to other sectors.

The Carbon Pollution Reduction Scheme (CPRS) presents challenges as well as opportunities for private forest growers in Australia. Trees sequester carbon from the atmosphere and store the carbon for the length of their life. Wood products, especially structural lumber and furniture timber effectively store carbon for the life of the product. Australian Forest Growers strongly advocates that any benefits from carbon accumulation by trees are passed on to the forest grower. Valuing the carbon stored in small growers' plantings and in private native forests may provide a crucial financial incentive to make small scale growers more financially viable.

AFG supports forests grown for multiple uses, including carbon. The debate that proposes permanent vegetation plantings is, in AFGs view, flawed. Permanent plantings are:

- ➤ likely to have a deleterious impact on regional communities and social infrastructure;
- ➤ likely to create environmental difficulties by acting as a harbour for noxious plants and animals and enhance fire risk; and are
- > unlikely to be commercially viable.

AFG believes that an integrated multipurpose forestry resource is the most appropriate vehicle for effective adaption to carbon reduction technologies.

A history of key recommendations made by AFG to the Federal Government regarding climate change and the CPRS is as follows:

SUMMARY OF RECOMMENDATIONS TO THE GARNAUT CLIMATE CHANGE REVIEW (ISSUES PAPER 1: AGRICULTURE AND FORESTRY)

- Government commitment to provision of funding for long term research and development programs on climate change, industry adaptability and new and emerging renewable energy industry possibilities such as those utilising woody biomass. Programs supporting sector-specific research, such as Joint Venture Agroforestry Program (JVAP), Forests and Wood Products Australia (FWPA), and Rural Industries Research and Development Corporation (RIRDC) are of critical importance.
- 2. Government endorsement of carbon accounting methodology that accurately tracks the flux in carbon storage crediting liabilities for emissions, as and when they occur.
- 3. Inclusion of reforestation (new forests) since 1990 in an Australian Emissions Trading Scheme (ETS).
- 4. The ETS should recognise carbon stored in harvested wood products.
- 5. The New Zealand proposal for tenders/grants offering up-front payment to small landowners in return for carbon rights should be investigated in consultation with Australian growers.
- 6. Government funding for industry development and research into biomass-based renewable electricity production, heating, transport fuels should be enhanced.
- 7. AFG opposes an excise on biofuels. Should there be any excise on biofuels, it should be no greater than the excise on fossil fuels. To promote consumer adoption, a differential (lesser) excise should be applied.
- 8. Further research in consultation with industry to determine robust benchmark formulae for easy and cost effective calculation of on-farm carbon balance status and the number of trees required to offset on-farm emissions.
- 9. Federal government should compel states to remove legislative and policy impediments to sustainably managing private native forests for the improvement of carbon absorption rates.
- 10. The model for the oil mallee industry's development should be drawn on to support development of other renewable bioenergy and biofuel facilities.

SUMMARY TO CARBON POLLUTION REDUCTION SCHEME GREEN PAPER

- 1. The pulp and paper industry is of critical importance to forest growers in Australia and needs close consideration as Emissions Intensive Trade Exposed industry.
- 2. Harvested wood products should be included in the Carbon Pollution Reduction Scheme from scheme commencement.
- 3. The inclusion of forests defined under Article 3.3 of the Kyoto Protocol is supported. The opt-in basis of this inclusion is important and should be retained.

- 4. Significant work is required to assess the implications of opt-in inclusion for small scale forest growers and forestry that is not included at Scheme commencement (those defined under Article 3.4).
- 5. Forests defined under 3.4 (plantations and native forests from before 1990) should be recognised as neutral in emissions.
- 6. The Climate Change Action Fund should be used to finance support for developing bioenergy and biofuel production systems on a larger scale for Australia.

This submission outlines a range of areas that AFG anticipates will need close and ongoing attention as the climate change debate evolves. The following submission discusses issues of specific interest to AFG's member base, particularly those relevant to farm forestry, including the emerging integrated oil mallee industry.

EMISSIONS TRADING

Emissions trading must provide a simple, transparent and all encompassing market framework, which encapsulates both emissions and sequestration. There is substantial potential for the Australian forest industry to be a major on-going sink for atmospheric carbon, as wood products store high amounts of carbon over the life of the product, whilst also providing a source of energy that can be harnessed to offset the use of fossil fuels. Wood waste can be salvaged from harvesting and processing operations or specially grown for energy production of liquid biofuel and stationary energy production.

Any trading framework must mimic a fair, efficient market with low barriers to entry. This will be best achieved through a variety of mechanisms and services. It will require government-sanctioned, internationally consistent rules for verification, registration and market operation. If these are not carefully crafted, the risk for small-scale operators will be the cost of participating in the market outweighing the benefits. For example, adding the cost of accounting for credits in order to participate in the market could make the cost of establishing the forest sink unattractive. Facilitating the pooling of credits may be one way of resolving this issue.

1990 START DATE

Australian Forest Growers strongly advocates that any benefits from carbon accumulation by trees are passed on to the forest grower. Any emissions trading system should ensure that the grower is able to trade in any carbon sequestered in trees since 1990 or in any sequestered carbon that the Australian Government includes in its calculations of Australia's emissions and carbon balance since 1990 for the purposes of meeting formal or informal international obligations.

Valuing the carbon stored in small growers' plantings and in private native forests may provide a crucial financial incentive to make small scale growers financially viable. Many of AFG's members are farm foresters and small scale forest managers who struggle to make their production systems financial, as tree plantings in the farm setting are often established with multiple benefits in mind. Aside from commercial products, forests are also managed for services such as shelter and fodder for livestock, farm windbreaks, protection of water quality and biodiversity services. Irrespective of the purpose for which they were planted, these trees store carbon.

PULP & PAPER INDUSTRY IS CRITICAL FOR FOREST GROWERS

It is of critical importance to forest growers that the pulp and paper industry is not disadvantaged by the CPRS – growers need the industry to expand, not contract.

The pulp and paper industry in Australia is critical for establishing market diversity that supports farm forestry in regional Australia. In regions where pulp and paper manufacturing is present, greater competition for wood products is apparent compared to areas where only export markets apply. As a result, growers can choose who they sell to and are in a better bargaining position.

The generation of income from pulpwood is an integral part of the management of softwood and hardwood sawlog plantations and private native forests. The ability to make a return on thinning waste is a key determinant of financial viability. Thinning operations are necessary in all timber production systems aiming for sawn timber end product, and thinning produces small diameter waste wood in quantity. The sale of pulp logs represents a significant component of total income in all private forestry operations of this nature.

Much of Australia's pulpwood plantations supply export markets. However it would be best for growers, for regional communities and for the Australian economy if the pulp and paper sector was to play a greater role on a domestic level.

CARBON STORED IN HARVESTED WOOD PRODUCTS

The assumption that a plantation sink becomes a carbon emitter at harvest is erroneous. Wood products actually store carbon for the life of the product. AFG calls on the government to include harvested wood products in the Carbon Pollution Reduction Scheme from scheme commencement as a means of continuing international leadership on this issue and demonstrating a simple and robust methodology that can be implemented. A robust methodology for inclusion of harvested wood products is important for forest growers.

The creation of a tradable credit for carbon stored in wood products would provide additional value to the wood product – a value that accurately reflects the emissions profile of that product. This would act as an incentive for forest growing, and would encourage additional new forests to be established.

BIOENERGY AND BIOFUEL

The forest growing sector has the potential to make a significant contribution towards the expansion of renewable energy production in Australia as it represents feedstock suppliers for biomass-to-electricity (bioenergy) and biomass-to-liquid fuel (biofuel) production systems.

The Green Paper position that emissions from bioenergy and biofuel production are zero is supported by AFG.

The benefit for biomass based electricity (bioenergy) and liquid fuels (biofuel) from the CPRS is that other forms of energy will need to bear the burden of their carbon cost. As a result the price of non-renewable energy and fuel, in general, will rise, increasing the viability of bioenergy and biofuel projects.

Bioenergy production systems need to be supported by significant investment and coordinated research and policy. The climate change action fund should be used to finance this support. Complementary policies are also important, for example the excise on biofuels needs to be adjusted to ensure it is always less than the excise on fossil fuels. This needs to be complemented by promotion of biofuels and expansion of the biofuel industry to inspire consumer confidence in this alternative to fossil fuels and to increase consumer demand.

In addition to incentives provided by the CPRS, the Renewable Energy Target (RET) should also provide a financial incentive for bioenergy (though not relative to other renewable sources).

OIL MALLEES

There is an urgent need to develop strong new industries in tree growing that can contribute to renewable energy production and the replacement of fossil fuels. One such example is the developing oil mallee industry.

Mallee eucalypts are multi-stemmed trees that grow in a bush-like, branching habit and are harvested on a short-rotation basis. Harvests remove the stems but roots, including the lignotuber (the woody root mass at the base of the tree) remain. Following the harvest, mallees coppice (re-sprout) to grow new stems. The root system stores a significant proportion of the carbon held by the tree, but is not removed from the site for several rotations.

The main driver of mallee planting in WA has been to supply an integrated processing plant planned for Narrogin that produces activated carbon, electricity for biomass, and eucalyptus oil. A pilot plant has been successfully established and investment is being sought for its expansion into a commercial-scale operation.

Plantings of mallee purely for offsetting carbon emissions have also occurred in Western Australia, New South Wales and other states since the 1990s.

The Oil Mallee Association, as well as the efforts of state and federal research agencies, has been integral to the development of this exciting new emerging industry that will see enhanced uptake of renewable energy production within the farming landscape. Support for associations that take the lead in initiating new industries, in addition to ongoing research and development funding (e.g. through the Joint Venture Agroforestry Program) is of critical importance.

Legislation surrounding the management of mallee plantations should be robust enough to ensure that best practise management is still able to occur whilst being a Scheme participant. Current best practise for planting oil mallee's is to plant in rows of two, equalling a width of 5m. However due to limitations in remote sensing in carbon accounting under Greenhouse Friendly the mallee belts have had to be planted in rows of four, equalling a width of 10m. There could be a disincentive to participate in the CPRS if regulations in the legislation interfere with best practise management.

BIOCHAR AND OIL MALLEES

Planting of oil mallees within existing farming systems provides above and below ground carbon sequestration as well as assisting to reverse salinity, erosion and loss of habitat and regional jobs.

The mallees need to be coppiced every few years to prevent incursion into neighbouring cropland and to maintain vigorous growth. The carbon sequestration achieved in the initial plantings can be repeated in a continuous cycle if the coppiced mallee is then converted into biochar and renewable electricity in local pyroloysis and generation units. This process is continuously carbon negative. Each tonne of mallee that is converted to biochar locks up (net) approximately 1 tonne of CO2e in the biochar. This is a carbon negative process that continuously and permanently withdraws CO2e from the atmosphere. In addition, another 0.5 tonne of CO2e of fossil fuel emissions are avoided by the renewable electricity generated as a coproduct of this process. AFG seeks that the Government include biochar in the Scheme as a valid method of capturing and storing carbon.

ADAPTATION AND RESEARCH NEEDS

It is difficult to predict the effects of climate change that forest industries will experience, as consequences of climate change will be regionally specific. Without information on the likely regional changes to variables such as temperature and rainfall that are key to forestry, we are unable to speculate on this.

There is urgent need for sound, repeatable science surrounding the likely impacts of climate change on forests – both planted and natural, in all forested regions of Australia. Two critical factors are necessary to apply and adapt this experience to the challenge of climate change:

- 1. Information relevant at a regional level on changes in climatic patterns, changes in climatic risk profiles and particularly changes in extreme events (e.g., low summer rainfall, extreme fire weather) over 30-50 year timeframes.
- 2. Research and development into: improved genetic material (e.g., tolerance of climatic extremes); adaptive management practices (e.g., site preparation, thinning); opportunities for new products (e.g., bioenergy); and production techniques (e.g., reduced energy consumption in paper production).

The role of research and development (R&D) programs such as those coordinated by the Joint Venture Agroforestry Program (JVAP), Forests and Wood Products Australia (FWPA), and the Rural Industries Research and Development Corporation (RIRDC) needs to be acknowledged. Long term research into adaptability issues for forestry should be complemented by research into the development of new and emerging renewable energy industries such as those based on woody biomass. This research is dependent on secure funding and commitment from Government. Private forestry support is strong in this area, and AFG members have endorsed a policy for a levy on industry to support the work of FWPA and AFG senior management sitting on the committee advising JVAP. Future opportunities to support the work of R&D bodies will be actively sought by AFG.

The Australian Government should put in place incentives to assist in elevating renewable energy technology from laboratories into the commercial arena. The upscaling and expansion of renewable energy technologies into a commercially viable

industry requires public investment for research and development, and funding for promoting and educating prospective consumers. The capacity to use woody biomass as an alternate source of fuel, e.g. ethanol from lignocellulosics, is an industry that is yet to reach its full potential. The expansion and adoption of bioenergy technology will require further input from the Australian Government, and recognition through inclusion in robust legislation that it is a viable and sustainable industry.

CPRS AND REFORESTATION

AFG is concerned that the Reforestation legislation under the CPRS does not lend itself attractively to smaller growers due to its rigidity. The narrow window for reporting, the three levels of compliance and the possible conservative nature of NCAT do not present an enticing package to smaller growers who are particularly concerned, and exposed to, risk. Further, AFG remains concerned that compliance costs may outweigh the carbon market participation benefit. While a fuller understanding of the practical cost effects of the process need cogitation and consultation, AFG is yet to be convinced that the CPRS will be a revenue positive exercise.

Issues of concern to Australian Forest Growers in the CPRS exposure draft are:

- Forest stands which sequester carbon post 2007, but do not choose to enter the market until a later date (five year period) will not have the opportunity to trade that carbon sequestered for the period beyond five years prior to entering the market. This is despite carbon being sequestered by the forest stand to which they own the right to being otherwise uncommitted and otherwise scheme eligible. This limitation could prove to be challenging particularly for small growers. Australian Forest Growers advocates that where sequestration took place post 2007 and all other requirements are met, there should be financial recognition for the eligible carbon sequestered by a forest stand prior to entering in the market, whatever the period or entry date. The bill must recognise the long term nature of the sequestration event. No other emission or sequestration operates under similar physical constraints.
- The required reporting period as outlined in the exposure draft is a maximum of every year or a minimum of every 5 years. This frequency of reporting, not unreasonable, may prove to act as a disincentive for a small scale grower depending on how arduous the reporting process is. The CPRS should be designed in such a way that the benefits of being involved in the Scheme outweigh the transaction costs that will be involved in measurement and reporting to remain compliant in the Scheme.
- ➤ AFG deems privacy in the locality of forest growers participating in the scheme as imperative. The Register of Reforestation Projects, if published and available for the general public, should not include GPS or other spatial property identifiers pertaining to the locality of a forest stand participating in the Scheme. DCC should reengage with the states to establish what notifiers exist from notations on title. Alternatively, a mechanism for individual accreditation to obtain private and delegate information should replace the current clauses.
- AFG advocates that the maintenance obligation be adjusted to ensure that, in the event of non-compliance with the relinquishment obligation where it is enforced, that the entity that is responsible, be held responsible. The legislation indicates that if relinquishment obligations are not met, and units

are not relinquished as required, the forest owner will become subject to a forest maintenance obligation, and either have to re-establish the forest if it has been cleared, or maintain the existing forest. In the circumstances where the owner of the forestry right is not the same as the owner of the carbon right, this obligation would be imposed on the owner of the forestry right and not the owner of the carbon right. AFG advocates that the maintenance obligation should be directed at the entity that profited from selling permits, the owner of the carbon right, and not the owner of the forestry right.

➤ The use of NCAT as the sole program for carbon sequestration evaluation seems problematic. Assurance needs to be provided to participants in the reforestation Scheme that the NCAT is appropriately calibrated; that numbers generated regarding quantity of carbon sequestered and hence number of AEU's designated to a particular forest stand are not conservative. A third party assessable option should be included in the CPRS, or at least be able to inform NCAT. In addition, AFG advocates that funding for training to use NCAT be made available as it is currently the only tool to participating in the Scheme.

AFG appreciates the opportunity to provide input into this important review. The impacts of climate change on private forest growing in Australia will be significant, and the best way to prepare for them is still uncertain. However, as growers of the most efficient and cost effective carbon sequestration method available, forestry clearly has a role in the response to climate change.

Perhaps the most exciting element of forestry's role is through renewable energy industries utilising biomass (including electricity and fuel production) that are already emerging. It is important to note that the role of trees in reducing Australia's greenhouse emissions is not limited to their value as a carbon sink, but includes their substantial capacity to provide alternate sources from fossil fuels for electricity generation; ethanol production; diesel production; and heating fuel. Discussions on emissions trading are important but are not the limit of AFG's interest in this issue.

Thank you for the opportunity to make a submission. AFG looks forward with anticipation any opportunity to input into rules that will underpin the operation of the Carbon Pollution Reduction Scheme.

Please do not hesitate to contact the undersigned on 6162 9000 should you wish to discuss any of the issues raised.

Yours sincerely

Warwick Ragg **Chief Executive**