SUPPLEMENTARY SUBMISSION

Senate Select Committee on Climate Policy: inquiry into policies relating to climate change

May 2009

Design elements of an emissions trading scheme

In the context of this inquiry into broad climate policy, the National Association of Forest Industries (NAFI) supports the introduction of a cap-and-trade emissions trading scheme (ETS) for enabling the transition of the Australian economy to a lower emissions future. Furthermore, NAFI has consistently advocated the full inclusion of forestry activities in an ETS such as the proposed Carbon Pollution Reduction Scheme (CPRS), given its significant potential for providing low cost emission abatement.

Australia's forest industry can make a significant contribution to Australia's emission reduction task, potentially contributing 81 million tonnes of CO_2 equivalent or up to 20% of required abatement by 2020[1]. The industry's ability to deliver on this contribution depends largely on its treatment under the development of climate change related policy and the underlying design features for a CPRS.

However NAFI is concerned that the current CPRS design provides limited commercial incentive for the voluntary 'opting in' of reforestation activities. These issues were highlighted in our submission to the Australian Government on the CPRS exposure draft and provided to this inquiry. In summary, the main impediments to voluntary forestry participation included:

- 'Cascading' liability provisions related to forest maintenance obligations. These enforcement obligations may seriously inhibit investment in reforestation projects given a break in the connection between the owner of the carbon credits and any future liabilities (i.e. surrender of units). These obligations are to be imposed on the forestry right owner irrespective of whether they hold such proprietary interests. Such arrangements are unprecedented with respect to the rest of the scheme.

[1] National Association of Forest Industries (2008). Playing a Greater Role in Australia's Future: A strategy for the development of Australia's sustainable forest industries, pp. 14-15.

- Uncertainty over carbon estimation methods to be adopted under the scheme, including the proposed use of the National Carbon Accounting Toolbox (NCAT) approach. There remain significant issues surrounding how the NCAT system would apply across the range of forest and project types, its degree of accuracy and flexibility in incorporating project specific carbon estimation information provided by forest entities.

- Non-recognition of multiple land titles as part of eligible reforestation projects. This is a major impediment given the high propensity for carbon pooling arrangements and multiple land titles for reforestation projects.

- Trading restrictions on the exports of emission units compared to unlimited imports of eligible international units under the scheme. Such trading restrictions impede domestic potential and investment for reforestation activities for emission removal exports to high cost emitters, while allowing imports of units including some eligible forestry activities from developed countries under the Kyoto Protocol.

- Inflexible carbon crediting approach. Based on the White paper, the regulations detailing the crediting approach for removals are likely to be limited to 'average' crediting rather than provide a choice with 'annual' crediting. This may be less suited to some commercial business models that may prefer annual crediting to take advantage of early tree growth while managing inter-year fluctuations.

CPRS fuel credit scheme

More alarmingly, NAFI is concerned that forestry was not included in the proposed fuel credit scheme and is not being equitably treated with respect to other primary industries receiving the fuel credit (i.e. agriculture and fisheries). This inequity was confirmed in the exposure draft of the CPRS Fuel Tax Adjustments Arrangements Bill released by the Treasurer on 7 April. There appears no logical rationale why the fuel credit scheme should not equally apply to eligible forest industry businesses. NAFI, in its submission to the Treasury on this issue, has estimated that such inequity will result in an additional cost to the industry of at least $9 million per annum. More significantly, this would equate to an additional cost of around $14,000 per harvesting contractor and place significant financial stress on small businesses.

Full inclusion of forestry activities

NAFI therefore regards the current CPRS design as a 'missed opportunity' for forestry to fully contribute to the national emissions reduction task. Furthermore, it is imperative that the CPRS be forward looking with regard to forestry emission reduction opportunities rather than taking a more limited Kyoto constrained view. In this respect, NAFI endorses the broad inclusion of forestry activities under a domestic ETS and related climate change policy. This is because forestry is an inherently renewable resource and there are a significant number of carbon abatement

opportunities available from Australia's forest industry due to the highly integrated nature of the industry. Two of the main opportunities include:

- Carbon in wood products: NAFI continues to advocate that carbon storage in harvested wood products should be recognised from scheme inception given their contribution to a longer term carbon pool; and

- Article 3.4 forests (pre-1990 forests): allowance should be made for the inclusion of these forests (native forests and plantations) under the scheme, but treated initially as net neutral until the finalisation of carbon accounting methodology (e.g. treatment of non-anthropogenic forest disturbances).

NAFI takes the view that the Australian Government should give these issues a high level of priority in the ongoing international negotiations under the UN Framework Convention on Climate Change, the Kyoto Protocol and any post Kyoto Protocol agreement, given their relevance to providing low cost greenhouse gas abatement and possible inclusion under a domestic ETS.

As reflected at a recent international workshop of climate change research and policy experts, there is growing global recognition of the role that forestry and forest product industries can play with respect to providing multiple emission abatement options:

Forests play manifold roles in climate mitigation:

a) They sequester carbon from the atmosphere when they grow, store carbon in living and dead biomass and forest soils.
b) They deliver wood as raw material which offsets greenhouse gas (GHG) emissions due to substitution of more energy and emission-intensive, non-renewable material.
c) They produce wood for energy which can substitute fossil energy.
d) Wood products are a pool of carbon that delays its release to the atmosphere.

The different aspects of forests and forest products in reducing GHG (carbon stored in forest, in harvested wood products and wood-based biofuels) are inherently connected.[2]

This inherent connectivity between the various stages of forest growing and processing activities, from tree planting right through to wood product use, recycling and long term disposal (e.g. landfills), may provide significant emission abatement opportunities. The UNECE/FAO workshop report goes on to state:

A 'cascaded' use of harvested wood – first for wood products that can be recycled, then for energy – is in most cases preferable to the direct use of wood for energy from the point of GHG emissions. Accounting for carbon stored in HWP [harvested wood products] can be an incentive to use wood as material before using it for energy generation following 'cascade' principles.

In formulating climate change policy, it is therefore important that strategies and incentives for the forest sector take a holistic point of view by taking into account carbon sequestration by forests, storage in wood products and substitution of fossil fuels and energy intensive materials. It is only by taking a holistic view of the supply

[2] United Nations Economic Commission for Europe/Food and Agriculture Organisation (UNECE/FAO). Proceedings of the Workshop on Harvested Wood Products in the Context of Climate Change Policies, 9-10 September 2008, United Nations Palais des Nations, Geneva, Switzerland.

chain of the renewable forest based industries that such 'cascading' principles and multiple benefits can be fully appreciated and the opportunities identified when designing regulatory frameworks. These principles would need to be consistent and complementary across key climate change policies such as an ETS, building design regulations and renewable energy policies.

Reductionist approaches: a formula for perverse outcomes

With this in mind, NAFI is very concerned that 'reductionist' approaches to the treatment of forests and forestry for climate change purposes can be very misleading. For example, a recently released report by the Australian National University entitled 'Green Carbon: The Role of Natural Forests in Carbon Storage'[3] has received considerable attention as a preliminary assessment of the carbon storage potential of allowing the native forest estate in south-eastern Australia to be grown to full maturity in perpetuity.

While NAFI has previously raised a number of issues with respect to the methodology and limitations of the study, the main observation is that the policy conclusions do not adequately take into account important factors dealing with:

- sustainable forest management and wood utilisation to provide multiple abatement opportunities consistent with 'cascading' principles; and
- natural disturbances, such as fires, on long term carbon storage in forests.

With respect to sustainable forest management and efficient wood utilisation, the net sequestration benefits of accounting for successive rotations of harvested forests and carbon stored in wood products are generally well known (refer Figure 1) and provide a significant pool of 'green' and embodied carbon. However, in this case the 35 year rotation represents only one wood growing scenario available to industry and does not include combined bioenergy and recycling options, for example, which would increase net abatement over time. Further detailed carbon accounting, fuel substitution and product life cycle research is therefore required across the forest industry supply chain to better inform future climate policy and the innovative transition of the economy to a lower emissions future.

In pursuing the objective of developing comprehensive and transparent accounting frameworks, NAFI would support the view of Mackey *et al* (2008) that:

> Comprehensive carbon accounting is needed that includes carbon uptake and emissions from all human activities associated with commercial logging and processing the associated wood-based products, as well as carbon storage in products.

This is because failure to account for emissions and removals across industry sectors can produce perverse policy outcomes. This, in effect, would be implied by a reductionist approach that focused solely on maximising the carbon sequestration potential of standing stocks of native forests, without looking at the significant

[3] Mackey BG, Keith H, Berry SL and Lindenmayer DB (2008). Green Carbon: The Role of Natural Forests in Carbon Storage. The Fenner School of Environment and Society, The Australian National University, E Press.

emission abatement and other economic and social benefits from a $19 billion forest products industry.

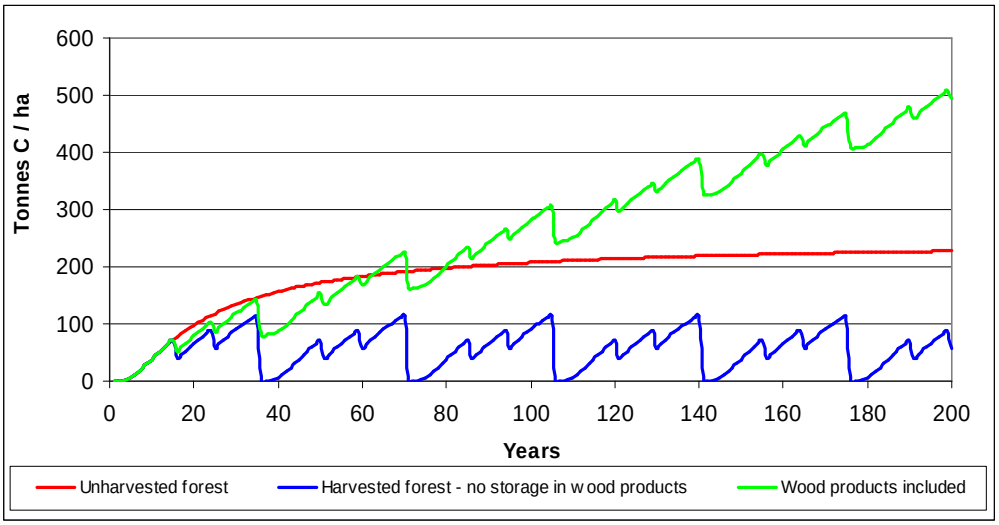

Figure 1: Long term carbon storage with active forest management and recognition of carbon in wood products[4]

A second related issue concerns the frequency and intensity of natural disturbances such as fire on the amount of carbon stored in growing and mature forest over time. NAFI is concerned that inadequate attention has been placed on the impact of fires on the long term estimates by Mackey *et al* (2008) of carbon that can be stored in south-eastern Australian native forests. In 2003, for example, wildfires in south-eastern Australia resulted in emissions of 190 million tonnes of CO_2 equivalent from existing forest lands[5]. This compares with annual allowable emissions of 591.5 million tonnes of CO_2 equivalent during the first commitment period under the Kyoto Protocol.

A reductionist approach to national forest policy that restricted multiple-use activities such as commercial logging for the single objective of maximising storage in standing forests would lead to a direct build up of fuel in the forest, amongst other significantly adverse impacts. Managing fuel loads is a significant land management issue with respect to the frequency, spread and intensity of forest fires in a changing climate and potential impacts on rural population centres across south-eastern Australia.

In simple terms, the higher the amount of fuel the higher the fire intensity. This is illustrated with respect to woodland savannahs in northern Australia but the principles would equally apply to southern forest ecosystems (figure 2). Fuel loads of native forests can vary between 10 to 40 tonnes per ha for key eucalypt types, and without ongoing fuel reduction and other fire mitigation management actions, present a significant fire risk.

[4] Forest and Wood Products Research and Development Corporation (FWPRDC) (2007). Forests, Wood and Australia's Carbon Balance.
[5] National Greenhouse Gas Inventory 2005. Department of Climate Change

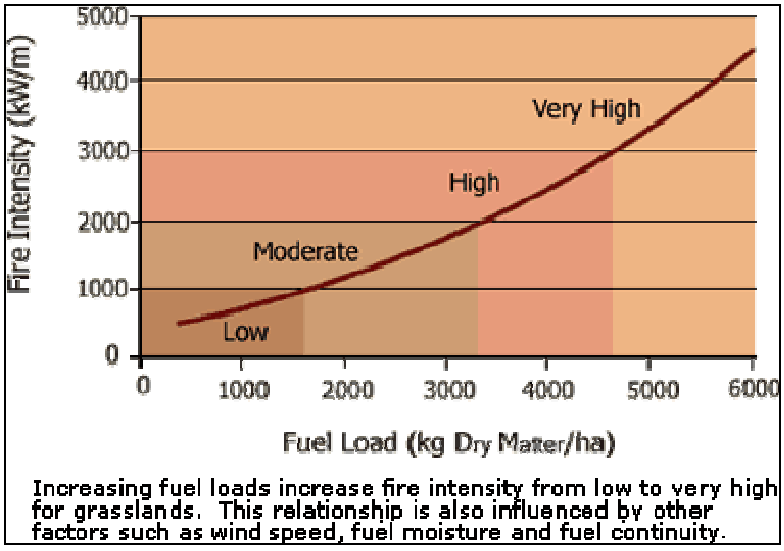

Figure 2: Relationship between fuel load and fuel intensity[6].

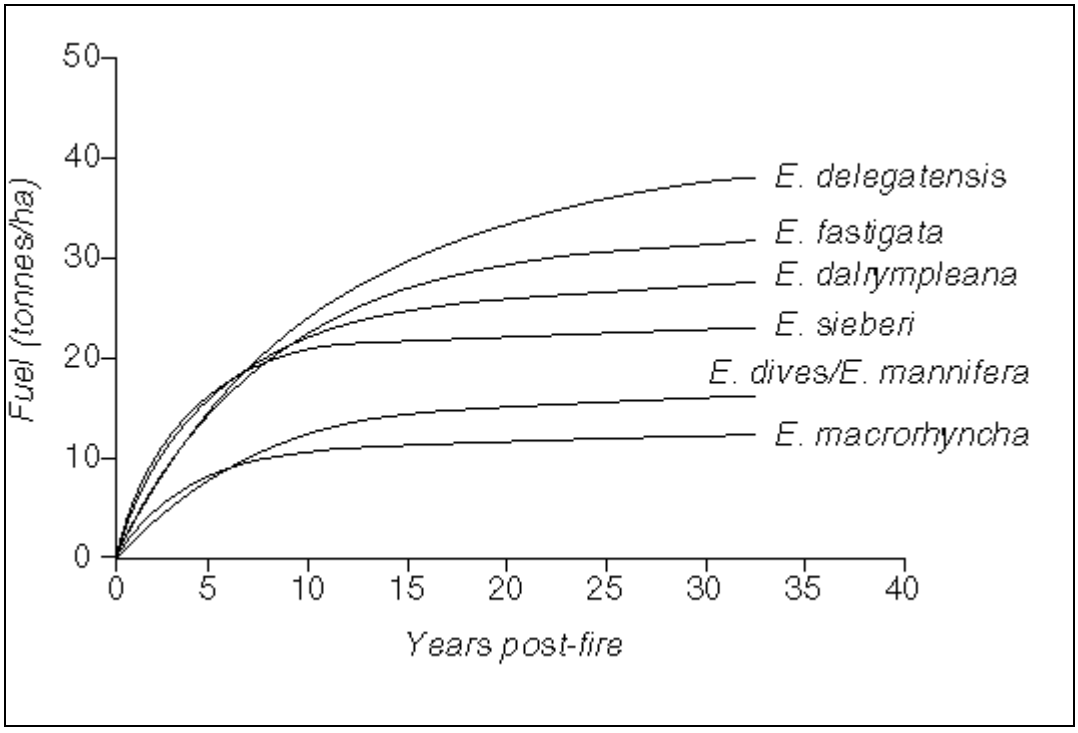

Figure 3: Relationship between years post-fire and fuel build up for eucalypt forest types[7]

[6] Charles Darwin University, Tropical Savannas CRC.

[7] Department of the Environment, Water, Heritage and the Arts. Biodiversity and fire: the effects and effectiveness of fire management. Accessed at: http://www.environment.gov.au/biodiversity/publications/series/paper8/index.html

NAFI believes that a passive approach to conservation forest management over many decades has contributed to some of the long term underlying causes and risks of extreme fire events in south-eastern Australia. Hence a balanced approach to climate policy is required across all forest land tenures to reduce fuel loads, create forest sector jobs and wealth, promote carbon sequestration and protect biodiversity. In addition, there are likely to be a range of innovative and holistic management options for fuel reduction and fire management, including ecological thinning in reserves and utilisation of woody biomass for bioenergy across tenures that can provide multiple economic and environmental benefits.

Consultation

NAFI is also concerned about the relatively short time frame for industry consultation on the proposed CPRS, given its significant and wide ranging impact on the Australian economy including both the forest growing and processing sectors. Despite the announcement by the Australian Government to delay commencement of the scheme to 2011, the underlying design of the proposed scheme are being decided now as part of the legislative program for the year.

Given the significant opportunities identified above, NAFI is willing to work constructively with the Australian Government and other relevant stakeholders in maximising the contribution of the forest sector in climate change policy and ensuring the best possible outcomes for the Australian environment and economy.