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AFPA submission – Second Draft Report on Australia's climate policy options

Introduction

The Australian Forest Products Association (AFPA) welcomes the opportunity to provide comment on the *Second Draft Report on Australia's climate policy options*.

AFPA is the peak national body for Australia's forest, wood and paper products industry. AFPA represents the industry's interests to governments, the general public and other stakeholders on matters relating to the sustainable development and use of Australia's forest, wood and paper products.

AFPA has previously provided stakeholder input to the Australian Government on the development of domestic climate policy schemes, as well as on international climate change negotiations and related policy measures. This submission builds on earlier AFPA submissions on the development of the Emissions Reduction Fund (ERF) and the Renewable Energy Target (RET) scheme in particular.

Design principles

AFPA supports design principles for climate change policies which deal responsibly with the risks of introducing a price on carbon ahead of our competitors, and reasonably reflect actual carbon flows throughout the economy including along the forest products value chain.

In a perfect market, a price (or cost) on carbon emissions should encourage substitution for low emissions products such as timber and other technology improvements. However, the design of such policies is difficult given the existence of 'imperfect markets', most importantly in this case through carbon leakage – that is, a decrease in domestic competitiveness and an increase in imports and emissions from overseas products without a comparable carbon cost.

Taking these issues into account, the design of any mechanism should:

- be consistent with the strategic national approach;
- accurately reflect actual carbon flows throughout the economy by recognising carbon storage in growing trees and harvested wood products, and their substitution benefits including the use of bioenergy to displace fossil fuel;
- ensure and maintain the international competitiveness of Australian export and import competing industries;
- ensure that the burden of emissions reductions is borne equitably across the economy;
- be underpinned by streamlined, efficient and effective administrative, reporting and compliance arrangements;
- deal responsibly with the adverse cost impacts on domestic producers pending a comparable carbon cost on competing imports (i.e. there needs to be commensurate carbon policies from overseas competitors);
- ensure that there is appropriate transitional assistance for trade-exposed sectors pending a comparable carbon cost on imports; and
- establish stable and long term climate policy settings to provide greater investment certainty.

Sectoral recognition

The draft report (page 32) importantly notes that '*The greater the potential to achieve emissions reductions at a reasonable cost in a sector, the more important it is to have policies in place to capture that potential*'.

The forest, wood and paper products industry is inherently renewable and AFPA believes that, given the right policy settings, the forest, wood and paper products industry can play an important role in Australia's ongoing mitigation effort.

The significant potential for the forest and forest product industries to contribute to climate change mitigation was acknowledged in the 4th assessment report of the International Panel on Climate Change (IPCC), which stated:

> *A sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.*

The major pathways for emissions abatement from the forest products industry include:

- the carbon sequestered in growing forests;
- the carbon stored in harvested wood products;
- the substitution of high emissions materials (e.g. steel, concrete) with wood and other fibre based products that have low embodied energy; and
- the use of woody biomass for renewable energy (including for electricity, process or industrial heating and biofuels), thereby displacing fossil fuels.

Two key examples help to highlight this significant potential:

1. The current commercial plantation estate contributes an emission offset of around 4.5% of Australia's total emissions of 552 million tonnes (or almost 25 million tonnes per year). According to AFPA calculations, the additional planting of a modest 30,000 hectares per year over the next ten years (motivated by such mechanisms as the ERF), would capture and store 5 million tonnes per annum or an additional 50 million tonnes over that period. This is the equivalent of a '450 million trees program', and would represent by itself more than 5% of the Government's total economy-wide cumulative abatement task to reduce emissions to 26-28% below 2005 levels by 2030.
2. The second area where the industry could play a much larger role is in the area of renewable bioenergy, particularly for primary thermal energy (i.e. process or industrial heating) production and biomass cogeneration. It is conservatively estimated that with the inclusion of renewable biomass for large scale thermal energy in the RET, the wood and paper industry could deliver new renewable energy generation in the order of 2000-3000 GWh per annum over the next 5 to 10 years.

AFPA therefore recommends that as one of the few land based and green manufacturing sectors that can contribute positively to national climate change objectives, the forest products sector should be pro-actively encouraged and

certainly not disadvantaged in terms of the design of future climate policies and programmes. As a minimum, current and future climate policies must be able to:

- enable the commercialisation of carbon sequestration in wood production forests and forest products in the ERF and Carbon Farming Initiative (CFI);
- ensure building codes, energy rating schemes and procurement policies fully recognise the life-cycle benefits and low carbon footprint from the use of wood products; and
- facilitate renewable energy opportunities for the industry, including renewable biomass for electricity, process or industrial heating and biofuels.

Policy impediments

However, there remain a number of policy or regulatory impediments that need to be addressed before the forest products sector can contribute more fully to an efficient and effective set of climate policies within Australia. While not an exhaustive list, two key policy impediments are:

- the limited scope for wood plantations and 'for harvest' forestry activities in the ERF; and
- the lack of recognition of renewable thermal energy in the RET.

Wood plantation projects in the ERF

Presently, there is no approved methodology for industrial wood plantations in the ERF, which is inhibiting the ability for prospective wood production projects to bid in the ERF auctions.

Priority must be given to addressing the lack of methodologies for wood plantations and other 'for-harvest' forestry activities in the CFI to facilitate their participation in the ERF.

This would improve the efficiency of the ERF by broadening the base of eligible activities as well as helping to address current investment hurdles for new plantations. It would also address market failure by recognising the joint environmental benefits from carbon sequestration from new wood plantations, while at the same time generating much needed economic activity (e.g. wood production, manufacturing) and jobs, particularly in rural and regional areas.

Recognition of renewable thermal energy in the RET

A second major impediment is the emphasis on renewable electricity in the RET, which has resulted in a low uptake of renewable bioenergy for process or industrial heating and cogeneration applications in Australia. In particular, this has constrained large scale investment in the primary production of renewable thermal energy (e.g. conversion of boilers away from fossil fuel sources to biomass) as well as cogeneration in the Australian wood processing (e.g. sawmilling) and paper products industry. This is largely a function of the large capital costs involved and the need for an adequate incentive for new investment as in the case with solar and wind.

Biomass cogeneration is a prime example of how renewables and cogeneration can be combined. Biomass cogeneration refers to the use of biological material as a feedstock for cogeneration plants, such as agricultural residues, wood waste and residues from food and paper production. This provides a 'double low-carbon benefit' of using renewable energy in a cogeneration mode.

Cogeneration, for example, is a highly efficient form of energy generation through combined heat and power (CHP) production. This is because much of the energy that is usually wasted to the atmosphere in a conventional power station can be usefully converted to heat for an industrial or other process in a cogeneration facility. It is also recognised that there are powerful synergies when cogeneration and renewables work together[1], given the carbon-neutrality of renewable sources such as biomass, geothermal and solar.

However, despite having the highest area of forest per capita of the developed nations and available feedstocks such as wood processing waste, Australia lags significantly behind in the use of bioenergy, which represents less than 1% of electricity production. This is in stark contrast to countries with comparable forest industries. In Finland, bioenergy contributes 16% of renewable power. In Denmark it is 15%. In Sweden more than 7%.

In March 2010, the Pulp and Paper Industry Strategy Group report commissioned by the then Minister for Innovation, Industry, Science and Research, Senator the Hon Kim Carr, undertook a comprehensive review of the paper industry and in regard to energy policy recommended:

[1] International Energy Agency (IEA) 2011. Co-generation and renewables: solutions for a low-carbon future, France. Available at: http://www.iea.org/publications/freepublications/publication/co-generation-and-renewables-solutions-for-a-low-carbon-energy-future.html

'amending the expanded RET rules to enable renewable energy certificate creation from the renewable heat component of cogeneration circuits'.

The recognition of large scale renewable thermal energy from biomass in the RET is sensible public policy for a number of reasons, including:

- the RET already recognises thermal energy via the small-scale hot water scheme;
- it would address market failure by capturing the clean energy benefits from both renewable heat and renewable electricity using biomass, and allow these technologies to compete more equitably with other renewable energy sources such as wind and solar;
- the recognition in the RET of thermal energy from biomass would be consistent with Europe and many other countries that fully recognise renewable heat as part of their climate change and renewable energy policies;
- there are significant opportunities for emissions reductions from the use of renewable thermal energy in many industrial applications;
- a shift to greater renewable energy (both thermal and electrical) from biomass can reduce domestic demand pressure for natural gas, and help alleviate the problem of acute gas supply limitations and rising domestic gas prices; and
- the ability to promote greater waste to energy utilisation and help reduce landfill emissions (e.g. methane).

Summary

This submission has identified the significant climate change mitigation potential of the forest products industry and the role it can play to positively contribute to national climate change policies. In this context, the design of current and future climate policies must be able to:

- enable the commercialisation of carbon sequestration in wood production forests and forest products in the ERF and CFI;
- ensure building codes, energy rating schemes and procurement policies fully recognise the life-cycle benefits and low carbon footprint from the use of wood products; and
- develop renewable energy opportunities for the industry, including renewable biomass for electricity, process or industrial heating and biofuels.

This will help ensure that the carbon emission abatement opportunities from the forest products industry are fully captured in national policy settings, and promote the lowest cost choice of abatement activity across the economy.

Two immediate priorities for improving national climate policy include addressing the lack of a suitable methodology for wood plantation projects in the ERF, and recognising large scale renewable thermal energy from biomass that displaces fossil fuel sources for renewable energy credits in the RET.