

To the Review Secretariat, Garnaut Climate Change Review

Sir/Madam,

I appreciate the opportunity to comment on this paper. My comments focus primarily on the issues of mitigation and offsets, particularly in the forestry sector.

1. It is important to analyse the agriculture and forestry sectors separately.

Further analysis of climate change issues and potential responses in the two sectors (agriculture and forestry) should be done separately. The two sectors are different in a number of ways. As the paper identifies, this includes a stark difference in their current emissions footprint, with agriculture being a net emitter and forestry a net sink. This in itself casts the central climate change proposition for each sector differently. For agriculture the task is to reduce its impact and for forestry it is to capitalise on its value.

The paper's combined analysis of the two sectors is not helpful and tends to obscure the positive contribution forestry can make in the future to addressing climate change. For example, in reference to whether the two sectors should be included in a trading scheme, the paper says "*Even if the agriculture and forestry sectors are excluded from an ETS they are likely to be impacted through increases in the cost of fuel . . .*". In a narrow sense this is true. But an inference is that forestry would be (negatively) impacted further if included in an ETS which may not be true.

Another example is the following statement (Section 3.4): "*The agriculture and forestry industries have considerable potential to provide carbon sinks through changes in land use management practices.*" Whilst this is true of many forms of agriculture the most obvious potential for increasing carbon sinks through the forestry sector is from there being land use change to forestry, rather than changes to forestry practices per se.

Another feature that distinguishes the two sectors (and should be a reason for separating further analysis) is their structures. Forestry is not characterised by the myriad of small enterprises that exist in agriculture. It has a relatively centralised structure and hence may be easier to practically incorporate in an ETS than agriculture. The practicalities of including the forestry sector in an ETS should not be clouded by generalising the very different structures of the two sectors.

2. Forestry should be seen as separate to land use change practices that involve the removal of forests.

Forestry is often linked, or even thought of as synonymous, with land use changes such as:

- the clearing of native forest to establish plantations; and
- the logging of native forests as part of clearing and conversion to agriculture, particularly in developing countries.

However, to come up with an effective and least cost response to climate change it is important to distinguish forestry: the practice of growing and harvesting timber for productive use, from these separate land use change activities. The clearing of forests and other vegetation certainly needs to be recognised and addressed as part of any climate change response. For example, emissions from the the clearing of native forests for plantation establishment should, on face value, be subject to the same regime applied to clearing for any other purpose. But forestry should be defined and focussed on separately because of its potential contribution to mitigation.

3. Forestry has multiple benefits to offer regarding mitigation and sinks.

Forestry has three distinct characteristics of value to a climate change response:

(a) its ability to biosequester carbon and store it as living biomass or in the soil, as well as reduce net methane and nitrous oxide emissions compared to alternative agricultural land uses;

(b) its ability to biosequester carbon and store it as timber in use (eg houses, furniture) and

© the capacity for timber to substitute in the marketplace for materials with much higher embedded fossil fuel emissions such as steel and aluminium.

In essence, a production forest is a factory that uses carbon dioxide and solar energy as two of its primary inputs. Hence it is particularly disappointing that the paper does not canvass (c) above and only briefly touches on (b).

The review should consider the issue of carbon contained in timber products and its potential inclusion in any ETS or other instrument being considered.

The introduction of an ETS has the potential to capture reductions in energy related emissions by stimulating the substitution of timber for more fossil energy intensive building products such as steel. This should be the case even such a scheme were to apply only to the stationary energy sector in the first instance. However the more embracing an ETS can be the stronger the stimulus should be for this substitution.

4. It is important to capture broader public benefits from establishing forests for sink purposes.

There are currently a range of largely uncosted benefits of well planned tree growing, be it for forestry activities or non- forestry plantings on agricultural land. These include greenhouse benefits, wildlife conservation, soil erosion control, salinity mitigation and water quality enhancement.

Not all tree plantings offer the same benefits for carbon or these other largely public goods. There is a risk of one dimensional and suboptimal decisionmaking regarding tree planting should an ETS increase market incentives to bio-sequester carbon. The downsides of any mono-dimensional "treerush" are exacerbated by the long term

nature of tree growing. Decisions to plant particular types of trees in particular locations are not as easily changed as changing annual crops.

Nor is there a significantly large land resource to work with that might allow these outcomes to be delivered in separate locations. The paper correctly recognises the issue of land competition between forests, biofuels and agriculture. This can be broadened to include these other public goods. Often the sites that will best sequester carbon are going to be those most needed for habitat restoration or salinity control.

Conversely, the introduction of greenhouse induced incentives to grow trees (or retain existing trees) offers a significant opportunity to advance multiple environmental and resource management agendas. To achieve this it will be necessary for an ETS or other market instrument focussed on carbon to interface with planning and incentive mechanisms being put in place to advance these other agendas. This may result in compromise in the location, type and design of plantings to ensure the greatest overall benefit, rather than simply the best sequestration outcome.

5. There are risks of distorted decision making if agriculture and forestry were only partially included in an ETS.

Ideally agriculture and forestry should be full participants in an ETS. The staged inclusion of agriculture and forestry in an ETS as mooted in section 3.3 (where there would be a period that these sectors could provide credits to other sectors but not be liable for emissions) would be of concern if it led to distorted decisionmaking. It would be preferable to avoid such a period. As a minimum, accounting methodologies would need to ensure that any marginal increases in emissions involved in providing sinks were captured in the ETS.

The points made under point 4 above are also relevant to the extent that partial inclusion of these sectors in an ETS encouraged a rush to plant trees for sink purposes.

Thankyou again for the opportunity to comment on this paper. I am interested in reviewing any further papers produced covering the agriculture and forestry sectors.

Yours sincerely

Geoff Clare