



**CHRISTINE MILNE**  
**Australian Greens Senator for Tasmania**

Garnaut Climate Change Review  
Level 2, 1 Treasury Place  
Melbourne VIC 3002  
Friday, 18 January 2008  
(By Email)

Dear Professor Garnaut,

Thank you for the opportunity to comment on the Issues Paper 1; Climate Change: Land use – Agriculture and Forestry. The whole area of LULUCF has been treated as something of a sideshow to fossil fuel emissions until now and, as a result, the potential for seriously miscalculating both total Australian emissions and potential avoided emissions is great.

Much more serious work needs to be done on developing measurement tools and assessing ecosystems and land use activities as both sources and sinks before an accurate map of emissions and avoidance options can be developed. Questions yet to be satisfactorily answered include, for example, what is the current carbon carrying capacity of the northern savannahs and what are the biodiversity ramifications and the carbon losses if large areas are to be used for biofuel production? What is the carbon loss from degraded or drained wetlands or the death of the Murray River red gums and conversely what sequestration could be obtained from their restoration?

I am concerned that a number of key experts who may have wanted to comment on the Issues Paper, particularly with regards to emissions from deforestation and forest degradation, have yet to return from their Christmas holidays. In view of this I would urge that this issue receive ongoing consideration beyond today's deadline.

Based on discussions I have had with Professor Brendan Mackey of the Australian National University, concerning his research on various forest types, it is clear that the National Greenhouse Gas Inventory (NGGI) figures on Land Use Change and Forestry are inaccurate, particularly those pertaining to emissions from the clearing or logging of mature natural forest.

Of principal concern is an apparent significant and systematic underestimate of the carbon carrying capacity of natural forest and therefore a significant and systematic underestimate of the emissions when it is logged. In part this is probably because emissions from forest degradation are not included in our 'Kyoto' accounts (because no 'land-use change' is considered to have occurred), so analysis of this source of emissions has not been prioritised to date. These emissions are, however, calculated as part of the more comprehensive 'UNFCCC' accounting framework. As it seems certain that there will be a shift to this more complete accounting of the Land Use Change and Forestry sector for post-2012 commitment periods, particularly given the significant international focus now being given to reducing emissions from deforestation and degradation (REDD),<sup>1</sup> it is imperative that your review recommend adoption of the 'UNFCCC' accounting framework in any calculations of the contribution to our emissions profile from various sectors.

The effect of underestimating the carbon carrying capacity of natural forest is that the NGGI significantly underestimates the total loss of carbon resulting from regular disturbance (ie logging).

It follows that the total amount of emissions that would be avoided, as well as the amount of carbon that could be gradually sequestered, if existing logging regimes were ceased, is similarly undervalued.

Research into this issue is ongoing but the emerging science significantly strengthens the imperative to protect mature native forests and shift away from native forest to plantation-based forest industries. Further, given the low forecast value of pulp, this shift may be one of Australia's cheapest and largest emission abatement options.

The current uncertainty surrounding forest sector emissions accounting raises three issues for your Review:

1. While accounting for carbon sequestered in offset projects involving the establishment of forests on previously un-forested land is relatively straightforward, it is apparent that the accuracy of assessing emissions from clearing or degrading mature forests is currently insufficient to include the native forest sector in a cap and trade system.
2. If the forest sector is to be eventually included in the emissions trading system, it is obviously imperative that there be complete accounting of all carbon gains and losses resulting from both maturation and logging activities in all above and below-ground carbon pools. Carbon stored in long-lived timber products should be included in the accounts.
3. Given:
  - the inherent complexity of accounting for carbon flux in forests;
  - the time that may be required to improve existing methodologies; and
  - the likely ongoing costs of monitoring and verification necessary if the sector is to be included in an emissions trading system,it may be that large-scale emissions reductions from this sector would be best achieved through regulation to phase out logging in mature forest, rather than by inclusion in the trading scheme. Appropriate compensation for the loss of existing logging rights may be one sensible use for part of the revenue raised by the auctioning of emission permits.

My recommendation is that you seek input from Professor Mackey and his colleagues at the first opportunity as their research will inform your conclusions about the inclusion of the forest sector in an emission trading scheme, as well as your understanding about the current inadequacies and inaccuracies in Australia's UNFCCC greenhouse gas inventory and emission abatement opportunities. Further I recommend a rethink on the importance of the whole LULUCF in the Australian accounts and the development of a body of research on all ecosystem and vegetation types to inform the national direction in avoiding emissions whilst sequestering carbon and improving biodiversity outcomes at the same time.

Yours sincerely,

Senator Christine Milne

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<sup>i</sup> It may be worth noting the Bali COP/MOP decision on Reducing emissions from deforestation in developing countries invites Parties to submit, by 21 March 2008, their views on how to address outstanding methodological issues including, inter alia, assessments of changes in forest cover and associated carbon stocks, incremental changes due to sustainable management of the forest, demonstration of reductions in emissions from deforestation, including reference emissions levels, and estimation and demonstration of reduction in emissions from forest degradation etc. See [http://unfccc.int/files/meetings/cop\\_13/application/pdf/cp\\_redd.pdf](http://unfccc.int/files/meetings/cop_13/application/pdf/cp_redd.pdf)