

Submission on the

# Carbon Pollution Reduction Scheme Green Paper

Harriett Swift

**The Green Paper on the Carbon Pollution Reduction Scheme did not adequately address the potential of native forests to store carbon or the emissions released when these forests are logged.**

**The study *Green Carbon - The role of natural forests in carbon storage* led by Professor Brendan Mackey of the Australian National University (released 6 August 2008) reveals that the carbon stored in Australia's native forests has been underestimated by a factor of three. For some areas, it is as high as ten.**

## General

Australia's native forests have the potential to sequester 2,000 million tonnes of carbon:

- Protecting them, according to Professor Mackey is no longer an option, it is essential. The carbon stored in natural forests is a larger and more reliable stock than the carbon stored in commercially logged forests and plantations.
- The Mackey research shows that after protecting mature forests, the next biggest greenhouse impact we can make is to allow previously disturbed forest to regrow to maturity.

There is enormous potential for carbon sequestration in forest areas that have been logged, such as in South East NSW, if they are allowed to re-grow undisturbed by further intensive human activities, such as logging.

- The diversity of age and species in a natural forest make it far more resilient against the variations in temperature and water supply that we can expect with climate change.
- The ANU scientists have called on the Australian Government to approach Australia's forests in the same way as those of developing countries. Australia runs the risk of looking hypocritical when we tell neighbouring countries not to log their forests while we continue to woodchip our own.
- The Green Paper recognises the benefits of tree planting, but totally ignores native forest destruction and degradation.
- Native forest logging is one of the biggest greenhouse polluters, nationally and globally. It is 20 % of the global problem and should be the subject of 20% of the solutions, and yet it has been left out as if it is greenhouse neutral.
- Currently, in the Eden region of SE NSW approximately 95% of timber felled is woodchipped. As paper products, these have a life of two to three years. Even manufactured wood products are mostly low value, short lived items such as pallets, which usually end up as landfill or are chipped as mulch within a very few years.
  - Current plantation stocks are sufficient to meet nearly all the national demand for wood and paper products and we do not need to log native forests.

## ***Some Specific Comments:***

***2.17 Scheme obligations would not apply to emissions from combustion of biofuels and biomass for energy; they would receive a 'zero rating'.***

The Green Paper would thus exempt emissions from combustion or processing of native forest biomass for biofuels or electricity. These forest furnace emissions would receive a zero rating.

In other words, burning native forest waste is not only green, it is a zero emitter. This is an absurd proposal. Biofuels or biomass power generation is only as clean or renewable as the fuel it uses.

Even if native forest wood were so-called “waste” from a product such as woodchips, its availability would require the continued existence of the woodchipping industry, a massive greenhouse polluter.

***2.20 All reforestation (as defined for the first commitment period of the Kyoto Protocol) would be included, on a voluntary basis, from scheme commencement in 2010, with design details to be determined.***

Others have commented on the perverse outcome – of causing more native forest logging – that may result from the inclusion of plantations in the Carbon Pollution Reduction Scheme. This would result from the incentive provided to retain plantations in the ground for carbon credits, logging native forest instead.

***2.21 After careful deliberation the Government does not propose to include deforestation in the Carbon Pollution Reduction Scheme. Australian deforestation emissions have reduced markedly since 1990, largely due to increased protections against land clearing.***

In the light of what we now know about the carbon storage and carbon storage potential of native forests, this proposition is indefensible. While it may not be appropriate to include native forest logging in an emissions trading scheme, its consequences must be recognised in Government policy by other instruments.

Even at the most modest price of \$A10 per tonne of CO<sub>2</sub>, the cost of carbon pollution from logging to supply the Eden chipmill is \$181,146,800 per year. If Professor Ross Garnaut’s proposal for a \$20 per tonne price were adopted, this would double.

### **The cost of carbon pollution generated by logging for the Eden chipmill**

Following the release of the “Green Carbon” (Mackey et al) report in August, we are now in a position to make a reasonably accurate calculation of the CO<sub>2</sub> released in logging for the Eden chipmill.

#### **Calculating the CO<sub>2</sub>**

According to Mackey, the average carbon capacity for all the SE Australia eucalypt forests is 640 tonnes per hectare. In those forests in our region where the actual carbon stored is currently less than the carrying capacity, this is entirely due to the previous operations of the Eden chipmill over the past 40 years, so I believe it is valid to use Mackey’s figure of 640.

According to FOI information, in 2006-07 FNSW logged 14,388 hectares in the Eden, South Coast/Southern and Tumut areas.

The figures below do not include the emissions from running the mill, and transport associated with logging contractors or deliveries to the mill.

The calculation is based on:

Area logged x Carbon stock per ha x 40% (loss from logging) x 3.666 (converting C to CO<sub>2</sub>)

Thus, for NSW:

$$14,388 \times 640^1 \times .4^2 \times 3.666^3 = 13,503,080 \text{ tonnes of CO}_2$$

For East Gippsland:

$$4,500^4 \times 700^5 \times .4 \times 3.666 = 4,611,600 \text{ tonnes}$$

### Pricing

- Nicholas Stern calculated a price for carbon cost of approx \$A107 per tonne.
- Australia has not yet set a price for carbon. The Green Paper canvasses an auction based pricing system for permits and media speculation puts a likely price at between \$10 and \$20 per tonne of CO<sub>2</sub>.
- The European price is currently between €20 (\$33) and €27 (\$45), say \$40.

The table below shows that the annual carbon bill for the emissions caused by logging for the Eden woodchip mill would range from \$A181 million at a carbon price of \$10 up to \$1.9 billion at the cost of carbon emissions estimated by Stern.

	Hectares logged	Tonnes CO <sub>2</sub>	Stern \$107	European \$40	Australian ETS \$10
Victoria	4,500	4,611,600	493,441,200	184,464,000	46,116,000
NSW	14,388	13,503,080	1,444,829,500	540,123,200	135,030,800
<b>Total</b>	18,888	18,114,680	1,938,270,700	724,587,200	<b>181,146,800</b>

**5.2 In general, entities with operational control over covered facilities or activities would be liable for emissions obligations arising from those facilities or activities under the scheme.**

- **Where multiple entities exercise a degree of operational control over a covered facility or activity, a single responsible entity would be required to register and meet scheme obligations.**
- **For corporations, obligations would be placed on the controlling corporation of a company group where either the controlling corporation or a member of the group has operational control over a covered facility or activity.**

**Unincorporated entities would also be liable under the scheme if they have operational control over a covered facility or activity.**

<sup>1</sup> “Green Carbon – the role of natural forests in carbon storage” ANU Epress 2008. B. Mackey, H. Keith, S. Berry, D. Lindenmayer: 28. This figure is the South East Australian average. We understand that the actual figure for Eden region forests is considerably higher, but for the present purposes we propose to use 640 tonnes/ha.

<sup>2</sup> 40% of the carbon stored in a forest is lost to the atmosphere when it is logged, even after 150 years.

<sup>3</sup> The weight of a carbon dioxide molecule is 3.666 times the weight of a carbon atom

<sup>4</sup> Approx hectares logged in East Gippsland in 2007.

<sup>5</sup> Mackey: 47

This might, arguably, mean exempting log trucks because they operate within an industry which has – contrary to all scientific evidence- been deemed “carbon neutral.”

One estimate puts the emissions from log trucks taking loads to the Eden chipmill (14.5 million truck kms per year) at a further 2 million tonnes.

If so, this is absurdity piled on absurdity.

**Recommendation:**

While emissions from native forest logging remain uncounted and uncoded, Australia cannot make a meaningful contribution to carbon pollution reduction.

I do not wish to see native forest logging included in an Emissions Trading Scheme but it is imperative that its consequences are realistically addressed elsewhere in other policy instruments.

Because so much of the native forest estate is held in public ownership, the best option is to end intensive logging of native forests to retain their stored carbon and encourage the transition to plantation for wood products.