

House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry

Inquiry into the Australian forestry industry

SUBMISSION ON GROWING AUSTRALIAN FORESTRY

1. Opportunities for and constraints upon production

The main opportunities that present in the area of active forest management that may improve production are:-

- a. Use of regrowth thinning for catchment management to increase water yield, and control fuel levels
- b. Harvesting of biomass to increase per hectare forest yields, facilitate fuel reduction and allow low value stands to be harvested commercially.

The main constraints to forest production are:-

- a. The cost of the Community Service Obligations (CSO) on the non-productive portion of a commercial forest estate eg fire fighting, feral animal control, erosion mitigation, faun/flora surveys.
- b. The past history of loss of the most productive , high site quality areas (HCV) to reservation
- c. Cost of regulatory compliance, such as planning requirements, can be so onerous in low-yielding areas that it restricts commercial harvesting.
- d. Lack of adequate fauna/flora database across all land tenures (state forests, reserves, private property) can result in poor management decisions eg special prescriptions or exclusions may be applied to a State Forest harvesting area, based on the existence of a species that may be considered threatened only because its true extent across all landscape tenure is poorly understood. In fact the very existence of such a species in a “working” forest may be attributable to active management such as fuel management, predator control, slight disturbance etc.

2. Creating a better business environment for forest industries

- a. Lack of Resource security. There are numerous past examples of Forest Managers investing in infrastructure and silviculture for a future harvest that never crystallised eg planning, survey, roads, bridges, non-commercial and commercial thinning, inventory etc in State Forest that is converted to reserve or National Park. There is little incentive for long-term

investment in forest management, given the impact of short-term political decisions.

Such capital and silvicultural investments if unrealised are a huge economic burden on the forest owner.

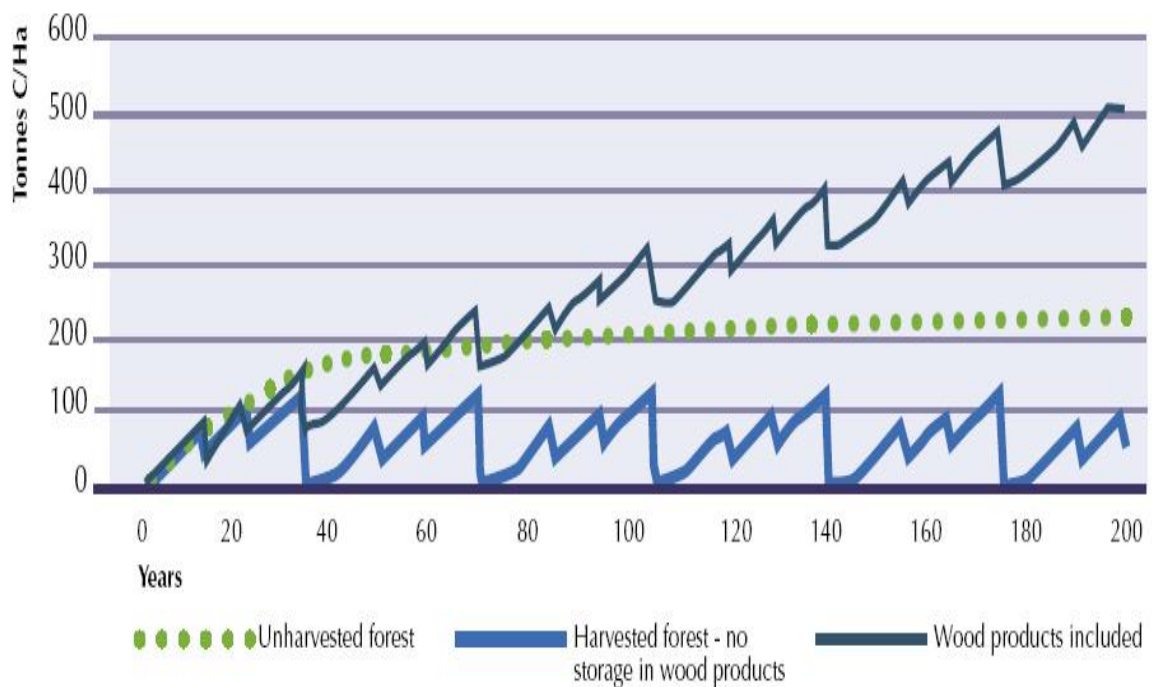
3. Potential energy production from the forestry sector

The United Nations 2007 Intergovernmental Panel on Climate Change report stated.

“In the long term, 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 [1].”

In general Australia is failing to capitalise on the contribution that forest management aimed at producing energy can make to climate change mitigation, despite the below scenario:-

Figure 10 Carbon storage in harvested and unharvested forests

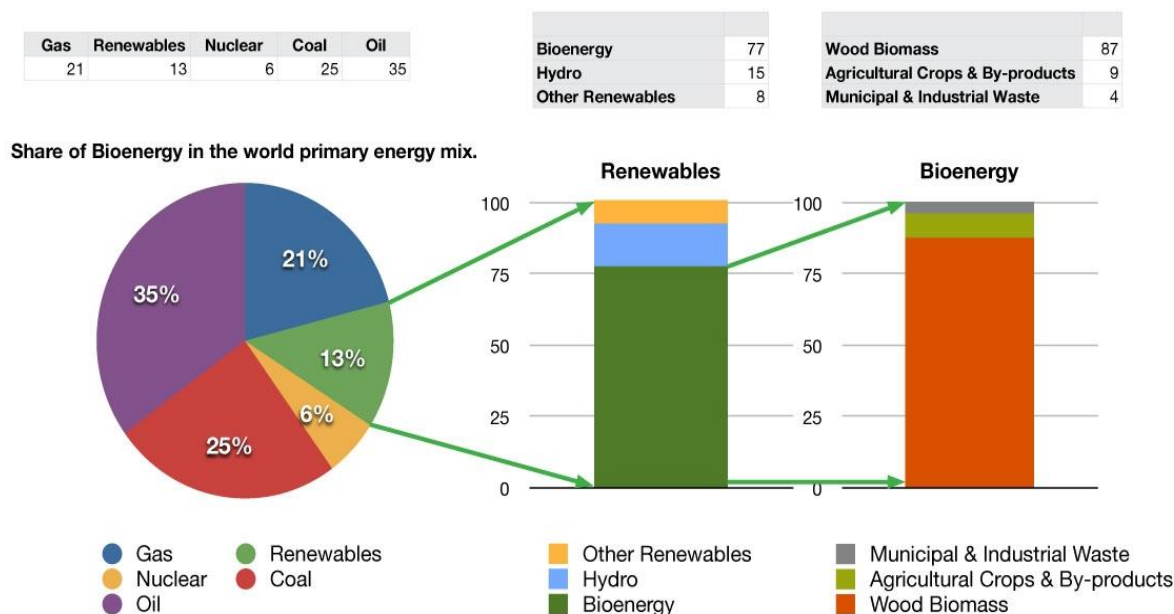


Based on a NAFI project, funded by the Australian Government, it is estimated that there is currently enough wood waste from forest industry activities in Australia (i.e. wood processing and harvest residues) to viably generate around 3,000 Gigawatt hours (GWh) of renewable energy per year. With the MRET for 2020 set at 45,000 GWh, this represents a 7 percent contribution (3,000 GWh pa) towards this target. It should be noted that this is a conservative estimate as by 2020, Australia will have expanded its commercial forest resources (through plantation expansion), meaning the MRET contribution could be as high as 10%.

A potential primary energy contribution of 10% from woody biomass in Australia is consistent with the current potential realised on a world scale as Figure 1 below demonstrates:-

Figure 1

Share of Bioenergy in the World Primary Energy Mix



Source: based on IEA (International Energy Agency), 2006; and IPCC, 2007

Extrapolation from the above IEA 2006 chart shows that woody biomass contributes $13\% \times 77\% \times 87\%$, or 8.7% of the world primary energy mix. In 2006 woody biomass contributed only 0.81% in Australia (13.13% in Finland)

Opposition to the utilisation of native forest residues as biomass in Australia is totally against the global trend, when it is recognised that 60-70% of the worlds' wood production (most notably North America, Russia, Europe and Scandinavia) is derived from a native forest resource. This means at least 5% of the worlds primary energy is derived from native forest biomass.

The 2 main factors limiting the potential for energy production in the forestry sector are restrictions on fuel eligibility, and unsupportive Federal and State policy and regulatory framework:-

a. Fuel eligibility

Although fuel eligibility criteria for renewable energy production is linked directly to the policy and regulatory framework, it warrants separate treatment.

The main Federal policy that impacts on fuel eligibility of forest residues is

the_Renewable Energy (Electricity) Regulations 2001.

Under Native vegetation clearing - Regulation 9 (c) it states that 'biomass from a plantation must be taken from land that was not cleared of native vegetation after 31 December 1989 to establish the plantation.' It is ridiculous to not allow biomass from plantations legally established under State control to be eligible for renewable energy generation. For example, as of 30 June 2006, Gunns Ltd's plantation estate was 124,200 hectares. Of this area, 63,778 hectares, or 51 per cent of the total estate, was plantations established on land legally converted from native vegetation after 31 December 1989. A potentially valuable biomass resource will have to be burnt on site after harvesting with no energy recovery for presumably all future rotations.

This clause also specifically places a condition on timber plantations that is not applicable to other energy crops or crop wastes. For example, bagasse from sugarcane crops planted on land cleared after 31 December 1989 is eligible under the Regulations "*Biomass from a native forest: Regulation 8 (2)*"

There is no need for a high value test as existing legislative frameworks that govern native forest harvesting already determine that forests must be harvested for their highest value use.

I recommends the removal of all state-based regulatory barriers (most notably in NSW) which restrict the use of certain forms of wood waste (particularly from native forests) in renewable energy generation.

The only criteria that should be applied to fuel eligibility for biomass purposes is **environmental sustainability**. This requirement can be incorporated into the regulatory instruments that cover Forest Management, rather than being embedded in Electricity generation legislation.

Currently it is legal to harvest native forest biomass to be made into wood pellets for export to an overseas power generator, or convert it to biofuel, but it is illegal to generate power from native forest biomass in NSW.

These are the type of anomalies that can occur when Green elements in the Upper House, with the balance of power, force through a piece of ill-conceived legislation that cuts across both energy and forest policy.

b. Government Renewable Energy Policy

The Australian REC system served a short-term purpose of supporting widespread rooftop solar, but is no longer functioning to encourage the development of large-scale renewable energy projects, something they were broadly expected to do. Indeed, companies placed large bets on the continued value of the REC market. For example, one of Australia's largest renewable baseload generators, NSW Sugar Milling Co-operative, faces receivership unless the REC price nearly doubles. We need to move to a moderate, **gross feed-in tariff** across all Australia and all

eligible renewable energy technologies, to ensure a sustainable long-term future for medium to large commercial projects.

The uncertainty of a fluctuating market based REC system has resulted in a general lack of enthusiasm for investing in projects generating power from biomass.