Submission to:

Native Forest Wood Waste in the Renewable Energy Target: Consultation paper

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Submission to The Department of Climate Change, Energy, the Environment and Water regarding Native Forest Wood Waste in the Renewable Energy Target

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" Native Forest wood waste is neither clean nor renewable"

Extract from speeches by Anthony Albanese and Mark Butler during the second reading of the Renewable Energy (Electricity) Amendment Bill 2/06/2015.

Introductory comments

Thank you for the opportunity to contribute to the Review of the eligibility of native forest wood waste as a source of renewable energy.

The credibility of the renewable energy sector and associated pace of uptake by the community, the veracity of the Government's emission reduction targets and Australia's ability to meet its fair share of emissions reduction to help meet the goals of the Paris Agreement, all rest on the government's ability to demonstrate that all sources of renewable energy genuinely reduce carbon emissions in the time frames set by the Paris Agreement. All our efforts must be front-loaded in order to rapidly reverse the emissions trajectory we are on and prevent highly dangerous overshoot of 1.5 degrees.

At the same time the community also expects all sources of energy to be produced without harming the environment and preferably by ensuring production is positive for people and Nature.

Our submission demonstrates that Native Forest wood waste fails against all these criteria and should immediately be excluded as an eligible source of renewable energy under the Renewable Energy (Electricity) Act. This can be simply and quickly achieved by reinstating the Gillard Government regulation that excluded all native forest biomass as a source of renewable energy.

Given the potential scale of this industry in Australia (described below) a market signal must be sent now so that due diligence and other assessments by coal fired power generators are not distracted by false assumptions that replacing coal with native forest biomass is an acceptable business alternative to rapid phase out of coal.

In the medium term (this term of government) a more secure legislative basis for excluding native forest biomass from energy generation should be developed. The implications for atmospheric GHG concentrations of burning all forms of wood biomass should also be independently assessed, given the rapid global expansion of bioenergy plantations of questionable mitigation value, which in many cases have resulted in demonstrable harm to food production, biodiversity and local communities.

Protecting the Purpose of the Renewable Energy (Electricity) Act (REE Act)

The success of this piece of legislation has been remarkable with uptake of wind and solar power generation consistently outpacing projections especially in recent years. As emissions reduction targets increase and timelines for emissions reduction shorten, pressure will mount to exit coal and other carbon emitting sources of energy more quickly.

While the REE Act fosters the illusion that burning wood is clean and renewable a policy and economic incentive will exist to delay the rapid transition needed to a low carbon energy future – competing with and delaying greater uptake of carbon free alternatives.

Burning wood is carbon intensive. The science on emissions immediately released into the atmosphere from burning wood to generate electricity is unequivocal. Burning wood is more emissive per unit of energy than burning coal. (https://doi.org/10.25904/1912/4547)

Understanding drivers for native forest logging and the meaning of 'wood waste'

Markets have always influenced logging intensity, extent and which forests are economically viable to log. They also influence what categories individual logs are placed in – a sawlog one year can be a pulp log or by product the next, depending on market and price signals.

Waste is a flexible concept in the native forest sector. It is commonly defined as any tree for which there is no higher value. Because the volume of 'by products or waste' wood is usually far higher than the volume of sawlogs, venerer and medium grade products combined, the gross income generated by waste logs is often far higher than that from higher grade logs. Waste is not defined by volume and constitutes a large proportion (and often the majority), of the area of forest logged. A market for waste adds substantially to the income from logging determining which areas and what trees are viable to log. It is common in Tasmania for 90% of the trees cut in a logging coupe to be classified as a by product of producing sawn timber– and in southern NSW and East Gippsland in Victoria, 80% or more of the trees cut.

Its important to recall that export woodchips were introduced to Australia in the early 1970's in the name of utilising waste arising from sawlog production. The

resulting changes to logging practices and volumes of trees logged are well documented in Forestry Professor John Dargavels' book, Fashioning Australia's Forests 1995, in which he describes the impacts of markets in shaping the way in which forests are logged. Wood chipping paved the way for clear-fell logging and resulted in a near 40% increase in wood volumes from logging to satisfy demand for woodchips "doubtless leading to more trees being cut …(and) radically refashioning the structure (age) of stands and the landscape of … forests…. At the same time employment fell by 36%".

As demand for Australia's native forest woodchips wanes, new markets are being sought to cross subsidise native forest logging to improve the ever- declining viability of the sector.

The viability of commodity production is dependent upon maximising volume and minimising unit costs. Clear-fell logging, which will be encouraged by the creation of an energy market for wood waste, maximises volume and lowers unit costs

The scale of the potential impact on native forests of converting just one small coal fired power station at Singleton in NSW is illustrated below.

In 2019 the entire volume of all native forest wood production in NSW, including pulp logs, was 1 million tonnes per annum – exactly the same amount of wood the proponents of converting the defunct Redbank coal fired power station to a native forest wood fired power station, say is needed to supply the project in order to generate 151 megawatts of power. The proponents say they have an assured wood supply from within a 300 km radius of the power plant.

The scale of market interest in burning wood instead of coal

There are energy generators already utilising wood to generate power. Delta Electricity is co firing at Vales Point Power Station with wood, as is Quinbrook Infrastructure at Cape Byron Power Plant. Claims made by Quinbrook Infrastructure that it isn't using native wood are disputed by scientists on the ground – illustrating the difficulty in regulating sources of wood supply.

According to the Government's consultation paper, only one electricity generator (in Western Australia) has applied for Large Scale Generation Certificates, creating a false impression that there is nothing much to worry about.

Just a little research reveals that Stanwell Corporation is proposing to convert its coal-fired power stations in Queensland to woody biomass: "The use of wood pellets will be explored as part of Stanwell's broader study into bioenergy options for co-firing at its power stations." Concerns over what kind of wood and how it will be sourced are raised by the mostly welcome announcement from the government of Queensland re phasing out coal fired power by 2030 and re-purposing the power stations. The announcement is silent on the details although bioenergy (from unspecified sources) is being promoted as a major new source of energy for Queensland.

Details of the proposed conversion of the Redbank power station in NSW from coal to native forest biomass (above) are readily available. Redbank proponents

are now mooted to be considering utilising native forest biomass to generate green hydrogen and green ammonia.

The CEO of Alinta Energy recently confirmed that his company is also considering converting the Loy Yang B power plant in Victoria from coal to wood biomass and has visited Drax in the UK to learn how to do it.

This demonstrates that there is a very real chance that the native forest wood bioenergy industry will take off at a large scale in Australia as it has overseas, unless it is prevented now.

Heed the lessons from Canada, the US and Europe

The consultation paper is silent on the unfolding disaster for forests and emissions reduction targets in countries that are now heavily dependent on wood biomass to 'meet' their renewable energy targets. In Europe, the industry is contributing to intensification of logging resulting in forests in several countries switching from a net sink to a net source of GHG emissions.

Recently, a senior UK minister publicly questioned the sustainability of the massive Drax biomass co firing power station in Yorkshire; and the OECD is investigating Drax's claims re sustainability of wood pellets sourced from Canada.

Deception is rife re sources of wood to feed this industry. A recent BBC Panorama programme revealed that contrary to claims by Drax, the company is sourcing wood pellets from old growth/rare hinterland rainforests in British Columbia in Canada. Canada has ostensibly lead the world on forestry regulation – regulations that have proven inadequate to constrain this industry. The economic drivers are clear. It is highly profitable to log forests in Canada and transport wood pellets via the Panama Canal to Europe.

Tragically, rare centuries old forests in Romania and Slovakia, have also been lost to feed this industry.

To be effective renewables must reduce atmospheric CO_2 by 2030 and 2050.

Replacing coal with wood fails even the most basic common sense test of 'renewability' given that any forest older than 30 years cannot recover from logging before 2050; and that taking carbon once safely stored in a living forest and emitting it straight into the atmosphere is far worse for the atmosphere than keeping the forest standing or even leaving forest residues on the ground where they slowly add to the biological health of and carbon storage in, forest soils.

Its important to note that cumulative emissions from a power plant (and their carbon debt) accrues with each passing year creating an ever increasing carbon debt until the first year's debt is paid back.

The illusion of carbon neutrality of logging is created by a carbon accounting system that enables emissions from logging to be offset by forests re-growing elsewhere in the production estate, thus creating the false impression that there is no carbon debt from logging.

Logging native forests is never carbon neutral and never renewable in relevant time frames.

The mitigation value of Native forest protection

Australia's native forests are some of the most carbon dense on Earth. Unlogged cool wet temperate forests in Tasmania and Victoria store as much as 70% more carbon than wood production native forests.

The optimum climate mitigation action in forests is increased protection to maintain and increase carbon storage. Australia could deliver the fastest and least risk draw down of CO_2 simply through fostering recovery of lost forest carbon stocks. Forests sequester more carbon, more securely in the last two thirds of their life than in the first third.

Notably, IPCC AR6 WG 111 identifies that 'actions that protect have the highest total and per area mitigation value of any action in the AFOLU sector'.

Peer reviewed evidence also shows that native forest logging makes forests more flammable and leads to elevated fire severity.

The nexus between biodiversity loss and climate change

Nowhere is the nexus between the biodiversity and climate crises more evident than in our native forests. Decades of intensive native forest logging, has resulted in forests dominated by young re-growth stands, significantly altered forest composition and structure, loss of critical habitat features for wildlife and increased vulnerability to drought and fire. Carbon stocks in production native forests are on average 50% below their carbon carrying capacity.

Australia should be mindful of the increasing calls to integrate climate and biodiversity action by prioritising synergistic outcomes in land, forests and other ecosystems.

The first ever joint workshop of IPBES and the IPCC (2021) made the relationship and synergies between each crisis clear noting that: 'each crisis amplifies the other; neither crisis can be solved unless they are solved together; if we fail on one we fail on both; and urging synergistic action to protect and restore carbon and species rich ecosystems including forests.'

Given the parlous state of biodiversity in Australia and escalating risks of species loss from a range of interacting threats including logging, fire and climate change, it is imperative we shift the focus of managing native forests to ecological recovery in order to increase forest stability and resilience.

Intensified logging of Australia's native forests – a very real risk while native forest biomass remains an eligible source of renewable energy under federal law - must be prevented.

We must reduce the pressure on our native forests and not increase it.

The time to Act is now

Reinstating the exclusion of native wood biomass from the Renewable Energy Act is the easiest way to prevent the native forest wood bioenergy industry from taking off in Australia.

Burning native forests for power will be deeply unacceptable to the Australian community. Research conducted for the timber industry published by Canberra University in 2018 found that "Native forest logging was considered unacceptable by 65% of rural/regional and 70% of urban residents across Australia, and acceptable by only 17% of rural and 10% of urban residents.

If there is only one generator with Large Scale Generation Certificates, transition arrangements should be straightforward.

ACCU's can also be generated through several ERF waste management methods. that depend upon the current regulation in the REE Act allowing native forest 'waste' as a renewable source of energy. This loophole would also disappear if the Gillard government regulation is restored.

Please contact Virginia Young, Director, Wilderness Australia on 0417 223280 if you have any questions relating to this submission.

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