



Comments - RET review

14th May 2014

It appears that the government is committed to burning native forest wood to generate electricity. In the terms of reference we read

The review is also to consider the Government's election commitment to reinstate native forest wood waste as an eligible renewable energy source.

The question we are asked is:

What administrative and regulatory arrangements should be put in place to ensure that the reinstatement of native forest wood waste is consistent with the sustainable management of native forests?

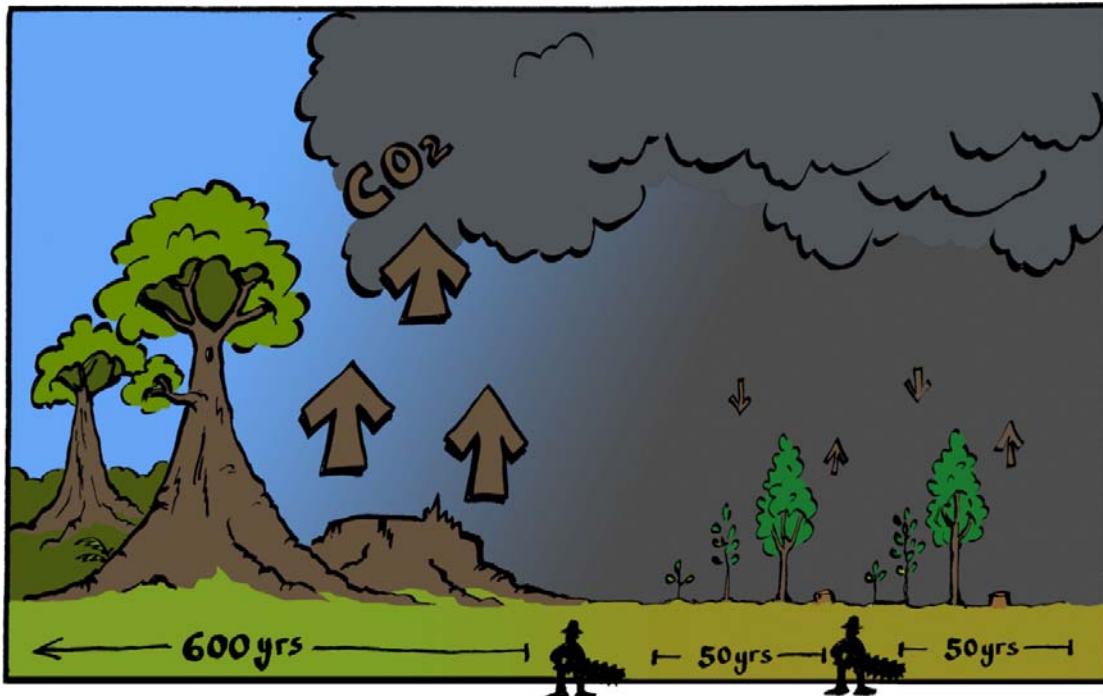
Although it is stated under 6.3 "This review will consider the issues to be addressed in implementing this commitment", we consider the intention is like trying to mix oil and water. History has shown that 'waste' wood ends up as 80% - 100% of a forest's trees. But clearly the government does not want to address this shocking statistic. We must wonder how serious this review is.

The environment movement and a large part of the environmentally aware and concerned voting public have no trust in the Liberal or Coalition government any longer. However EEG will submit our comments – more to avoid the accusation that we don't take the opportunity to comment when offered. Having made our cynicism clear, our comments follow. We will also include various graphics to help illustrate our points.

Current logging unsustainable and illegal

Firstly, there is no way to ensure that forests are managed sustainably. Only when the shoddy RFAs are demolished and a new system of genuine forest management and stewardship is introduced can this happen. See the EDO document [One Stop Chop](#) for the sound evidence of the current illegal and unsustainable nature of logging (link) that is approved by the Federal government.





Forests are our biggest land based carbon stores. Hundreds of years of stored carbon is lost into the air as carbon pollution when a natural forest is logged. That amount can never be reabsorbed by a forest again when the regrowth is always cut down while young, as part of government logging practices.

Forests as climate moderators.

Native forests are the best land based carbon capture and storage devices on the planet. To allow the logging and burning of trees that have stood for hundreds of years is deliberately adding to climate chaos. The term 'waste' is nonsense. It's only waste once it's cut down.

Woodchipping industry dead in SE Australia

We assume the addition of native forest wood is in anticipation of the demise of SE Australia's export woodchip industry, based at Eden NSW. This is currently in collapse and has sent shockwaves through the logging industry. It has been promoted by the logging lobby groups and industry associations that an alternative use of native forests must be found. This is absurd. Now is the perfect time for government to alter the way it values forests an alternative to woodchipping public forests,

The water filtering, oxygen making, wildlife sheltering publicly owned forests must not continue to be shovelled up a conveyor belt – changing from the woodchipping machine at the end, to the furnace.

Logging to supply electricity furnaces Just as woodchipping has driven the clearfelling of forests since 1970, so too would an industry based on the need for burning forest wood. This is extremely dangerous monster to create. There was no intention to regulate the woodchip industry and there is still no will to regulate a biomass burning industry if it ever starts up. Governments of all leanings have surrendered to the demands of the logging mafia over the decades.



Figure 1. Logging coupe burn - tonnes of stored CO₂ released.

The 'waste' of forests – financial loser

Burning logging residues will increase carbon emissions and could encourage an out of control spiralling of ongoing logging. Some of our SE forests have been found to be the most carbon-dense in the world. These forests if left standing have the potential to earn significant carbon credits in the not too distant future. Why destroy this potential for a short term deal with a

dying, highly subsidised industry?

Biomass energy based on forest 'waste' will not use the smaller branches, twisted trunks or understorey species. Trucks are designed to carry intact logs so the remainder of the forest will also be sent skywards to add to the CO₂ pollution. Burning forests after logging is standard practice and was introduced years ago to create a convenient method of conversion of a forest into a tree cropping area.

Given that global awareness is starting to see through the spin and denial generated by the powerful polluters, this type of land management is likely to soon carry heavy financial burdens.

The below image illustrates the massive amount of waste generated by the myth of a 'sawlog driven industry' – conveniently for the woodchip industry.

No social licence

Logging of native forests is as unpopular as whaling. Using forests as polluting biomass will be even more difficult to sell to the public, even with the best spin doctoring money can buy. Forests are the lungs of the land, the best climate moderators we have and habitat for much loved Aussie wildlife.



The economy of waste



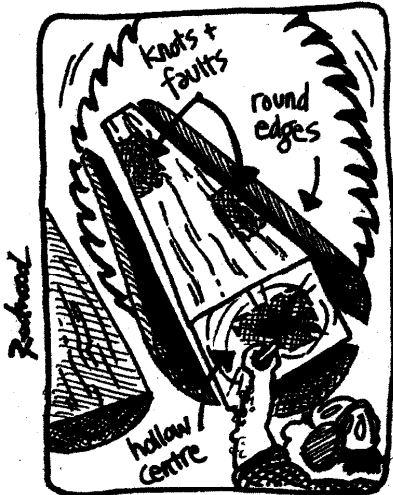
Half of a forest is classed as "waste" even before logging starts



That means only 10% of a forest's total parts are chosen for sawlogs



only half of a tree's bulk is taken, which bumps the "waste" up to 95%



on average, about 1/3 of a log is useable

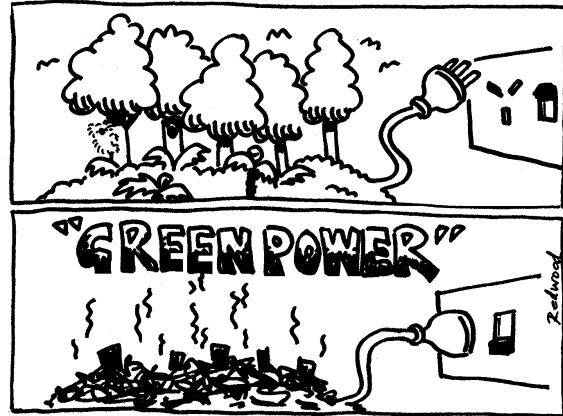


final sum - 98% of a forest is "waste" and is burnt or woodchipped

(all percentages are arrived at using government documents + figures) illustration by Jill Redwood

No market for more power

The wholesale price of power (take out the carbon price) has fallen to another low in latest round of power auctions. At about \$40 per megawatt hour it is a 10 year low. Solar installations are now seriously threatening the coal based electricity industry. This is a deadly spiral of another kind. The more people turn to solar the less traditional power companies can sell, the less profitable they are, the more they need to charge, the more people turn to solar. Another 10 megawatts of solar was installed on Victorian roofs in March this year alone. This trend will continue.



The government might define incineration of forests as 'green' or 'renewable' but it won't wash; it won't con the public. Trying to clear the way for this is a poorly thought out plan, financially irrational and a politically unsound path to contemplate.



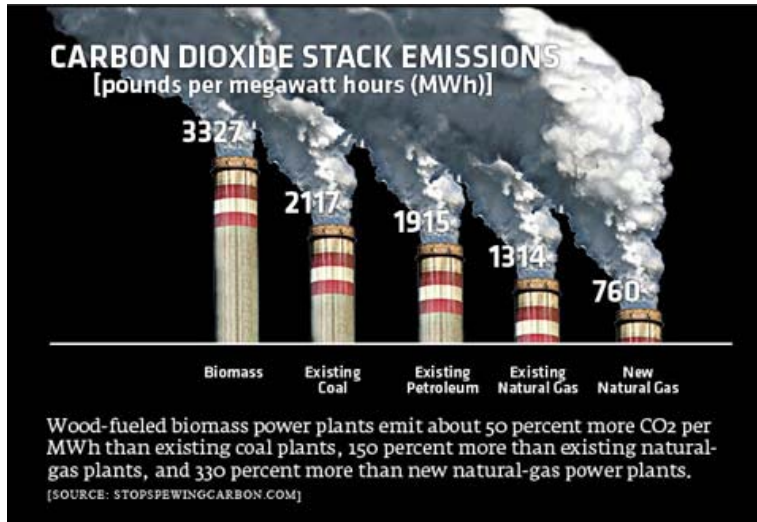
Many of our existing coal fired power stations are in mothballs. Paving the way for a dying industry to be assisted to build costly power stations or even co-generate, is thinking stuck back in the last century. In fact this is Middle Ages technology being encouraged in 2014 - especially so when the world's position on energy and climate is changing so quickly.

Standing forests more valuable to aid climate and energy targets

The Australian Governments 2011 climate report "The Critical Decade" [Climate Commission, 2011] recognises the need to protect native forests immediately as a key climate change mitigation strategy. Global studies, including the Stern Report by economist Nicholas Stern [2008] have found that protecting native forests is the easiest, cheapest and most effective means we have for absorbing carbon dioxide (CO2) from the atmosphere. Protecting Australia's native forests will reduce emissions by tens of millions of tonnes of carbon dioxide per year [Blakers, M 2011] equal to all of Australia's transport system [Blakers, M, 2009].

Burning native forests to make electricity is not a climate friendly option for trees cut down from a living forest ecosystem. The industry lobbyists claim that it is "carbon neutral". This is not true. Burning wood releases more CO2 than burning coal to produce the same amount of

energy [MCCS, 2010]. With less mature forest, less carbon can be reabsorbed from the atmosphere. This must be taken into account when claiming carbon neutrality. It can also take around 600 years to recapture that carbon which has been released in a matter of days or weeks. [*Rate of tree carbon accumulation increases continuously with tree size*, Nature/Vol 507/6 March 2014]



Overseas experiences

Also worth noting is the trend away from biomass burning overseas. Rather than try to play catch-up after the world is walking away, Australia would be more sensible to learn from others' mistakes. See attachment 1.

Toxic pollutants

Also see Attachment 2 regarding the toxic pollutants created from biomass burning and how this would impact on people's health.

In summary

It costs far too much to set up new power stations unless massively subsidised by the government – a millstone around its neck. And as it so often says – 'the age of entitlement is over'.

Burning forests as part of the RET scheme is uneconomic, unpopular, unethical, unenvironmental, and unnecessary. Biomass is a dead loss industry on all levels.

Jill Redwood
Coordinator

Biofuelwatch, Dogwood Alliance & Global Justice Ecology Project

1 April 2014

Bad news for biomass industry: failed investment marks a sobering conclusion to annual industry event in Florida

Last week the annual International biomass industry conference was held in Orlando, Florida. Industry executives from around the world attended to learn about the latest technologies, discuss biomass "supply chains" and network together. This year's event featured a special "pellet supply chain summit" where the topic of discussion was the rapidly escalating export of southeastern U.S. forests to Europe, where they are burned in old coal plants or stand-alone biomass electricity facilities.

But even as the conference attendees were out on the golf course making deals, or laying plans for pellet supply chains, **Scottish and Southern Energy (SSE) announced they would withdraw financial backing for several major biomass electricity facilities that those supply chains would likely have served. The facilities affected by the decision, owned by Forth Energy, include two 100MW biomass electric facilities in Grangemouth and Rosyth (already approved), and a third in Dundee (not yet approved.) [1]**

Scot Quaranda from Dogwood Alliance, a group working to protect forests in the Southern U.S. stated, "The loss of finance for Forth Energy facilities is great news for our forests! European energy companies are setting up shop throughout the Southern U.S., cutting and pelletizing trees and shipping them across the Atlantic to be burned as so-called renewable energy. We even found them targeting remaining pockets of endangered Atlantic coastal forests." [2]

Rachel Smolker, Codirector of Biofuelwatch, an organization that works on both sides of the Atlantic and worked with community groups opposing the facilities, stated, "Residents in the communities where Forth wants to build biomass facilities are rightly concerned about air pollution. Burning biomass is filthy - resulting in even more particulates and CO2 per unit of energy generated than coal, but nonetheless subsidized as clean, green and renewable." [3]

Meanwhile, Anne Petermann, from Global Justice Ecology Project added, "**The tree biotechnology industry has their sites aimed at supplying massive amounts of wood for energy, including future plantations of genetically engineered (GE) eucalyptus trees across the southern tier of the U.S. But with growing public resistance to GE trees and investor wariness in both the GE trees and biomass industries, their scheme is poised to fail.**"

Notes:

[1] Reported by the *Dundee Courier* here:

<http://www.thecourier.co.uk/news/local/dundee/dundee-biomass-plant-scrapped-campaigners-hail-great-news-1.288988> and confirmed over the phone by Forth Energy on 27th March 2014.

[2] Dogwood Alliance documented the use of whole trees and destruction of ancient wetland forests in the southern US by pellet supplier Enviva, who export to the UK. Forth Energy had indicated potential to source pellets from this area. For more information see Dogwood Alliance campaign "Our forests aren't fuel"

<http://www.dogwoodalliance.org/campaigns/bioenergy/> and Biofuelwatch's new report "Biomass: the Chain of Destruction" <http://www.biofuelwatch.org.uk/2013/chain-of-destruction/>

[3] For a list of studies into the carbon impacts of biomass electricity:

<http://www.biofuelwatch.org.uk/resources-on-biomass/> Also see "Dirtier than coal?" published by RSPB, Friends of the Earth and Greenpeace.

http://www.rspb.org.uk/Images/biomass_report_tcm9-326672.pdf

For an overview of health impacts from biomass facility air pollution

<http://saveamericasforests.org/Forests%20-%20Incinerators%20-%20Biomass/Documents/Briefing/>

And statements from medical professionals here:

<http://www.energyjustice.net/biomass/health>

[4] For an overview of tree biotechnology plans for the southern US: <http://nogetrees.org>

<http://globaljusticeecology.org/publications.php?ID=615>

ATTACHMENT 2

<http://www.pfpi.net/trees-trash-and-toxics-how-biomass-energy-has-become-the-new-coal>

Electricity generation from biomass waste is more polluting and worse for the climate than coal, according to a new study by an environmental advocacy firm.

The report, put together by the Partnership for Policy Integrity (PFPI) and delivered to the U.S. Environmental Protection Agency (EPA), concludes that biomass power plants emit more pollution than comparable coal plants or commercial waste incinerators, according to a news release from the group.

The group characterizes biomass energy as primarily generating from the burning of wood. The study, "Trees, Trash, and Toxics: How Biomass Energy Has Become the New Coal," analyzes 88 pollution permits for biomass power plants in 25 states. The report adds that biomass power plants are subsidized by state and federal renewable energy dollars.

“The biomass power industry portrays their facilities as ‘clean,’ “ said Mary Booth, director of PFPI and author of the report. “But we found that even the newest biomass plants are allowed to pollute more than modern coal- and gas-fired plants, and that pollution from bioenergy is increasingly unregulated.”