

**Submission  
No 144**

## **SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW**

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**Date Received:** 13 September 2019

## Submission

1. The capacity and economic opportunities of renewable energy.
2. Emerging trends in energy supply and exports, including investment and other financial arrangements.
3. The status of and forecasts for energy and resource markets.
4. Effects on regional communities, water security, the environment and public health.
5. Opportunities to support sustainable economic development in regional and other communities likely to be affected by changing energy and resource markets, including the role of government policies.

I am a member of Northern Rivers Guardians, North East Forest Alliance, and Biomass Action Group.

BIOMASS/ BIOENERGY is a major looming threat to Australia's forests. A complex, intact Forest system is the single most important carbon capture technology we have. The EU has made the dire mistake in counting burning trees as carbon neutral, which is insane. You cannot put anything through a combustion process and deem it carbon neutral. We have spoken with Cape Byron Power Company, operating a biomass power plant on the north coast of NSW, and CO<sub>2</sub> is indeed released from its stacks. Right now, they are burning through failed MIS plantations, but once those trees are all gone, and that land is converted to pasture, nothing will grow back to re-capture that carbon- all of this goes un-noticed, and un-monitored. They also could not answer where their future feedstocks were going to come from, and that they rely on 'hope' that the forests are replanted. This is also insane.

Burning wood for energy is much worse in climate terms than burning gas or even coal, but these loopholes in the way emissions are counted are concealing the damage being done. It is up to the government to make the right choices and take this destructive and dodgy practice off the table completely, and stop funding it in any way, shape or form, as it only encourages the destruction of biodiversity, water stores, and as mentioned important carbon sinks.

From an article in New Scientist online titled 'The EU's renewable energy policy is making global warming worse'

"[Biomass] is not a great use of public money," says Duncan Brack of the policy research institute Chatham House in London, who drew up [a] report [on the subject]. "It is providing unjustifiable incentives that have a negative impact on the climate."

The money would be better spent on wind and solar power instead, he says.

It is widely assumed that burning wood does not cause global warming, that it is "carbon neutral". But the report, which is freely available, details why this is not true.

**More emissions**

Firstly, burning wood produces [50% more] carbon dioxide, methane and nitrogen dioxide per unit of energy produced than coal. When forests are logged, their soils also release carbon over the next decade or two (the water catchments and quality are also destroyed and take upwards of 20/30 years to recover). There are also emissions from the transport and processing of wood, which can be considerable.

By contrast, forests that are left to grow continue soak up carbon. This is true even for mature forests, the report says. Older trees absorb much more carbon than younger trees, so despite the death of some trees, mature forests are still a carbon sink overall. As for the idea that all the CO<sub>2</sub> emitted when wood is burned is eventually soaked up when trees regrow, this can take up to 450 years if forests do indeed regrow, the report says. To avoid dangerous climate change, however, emissions need to be reduced right away.

Supporters of bioenergy claim the industry is only using waste from sawmills and such, rather than whole trees. Producing energy from genuine wood waste that would otherwise be left to rot can indeed be better than burning fossil fuels.

But in reality, there simply is not enough waste wood to meet demand. What waste there is often contains too much dirt, bark and ash to burn in power plants, or is already used for other purposes. Instead, there is substantial felling of whole trees for energy, the report says.

“I think the evidence is pretty strong,” says Brack. Official definitions are so poor that companies can cut down whole trees and count them as waste, he says.

There is also no evidence that new forests are being planted to meet demand for bioenergy, as some bioenergy enthusiasts claim. For instance, forest area in the southern US, which provides much of the wood pellets burned in the EU, is not increasing.”

Read more: <https://www.newscientist.com/article/2122115-the-eus-renewable-energy-policy-is-making-global-warming-worse/#ixzz5zNYGn1bn>

Short rotation crops or plantations are not the answer either.

In another article: "life-cycle analysis takes account of factors such as the carbon released as the roots of cut trees rot in the ground and the fertilisers, herbicides and pesticides applied to tree plantations. The conclusion: logging in North Carolina emits 44 million tonnes of carbon dioxide a year. Such comprehensive studies have never been done for other states or the rest of the world. If they were, Talberth says logging would turn out to be one of the top three or four sources of carbon emissions globally. (over agriculture) The life-cycle approach should be adopted nationally and internationally to provide a full picture of emissions, he says.

<https://www.newscientist.com/article/2215913-logging-study-reveals-huge-hidden-emissions-of-the-forestry-industry/#ixzz5zNb1Xm4P>

The inputs for plantations are overlooked, and if they are incentivised, Forestry continues their (again un-monitored) practice of converting biodiverse native forests into mono crops which only serve their bottom line- completely unsupportive of life, poisoning any life form that threatens their seedlings.

Most of Australia's threatened wildlife depend on tree hollows. And guess why they are threatened?? Because forestry chops their trees down before they have a chance to develop hollows! There is evidence of entire state forests with a severe lack of recruitment hollow-bearing trees. And even NSW's auditor general has reported the lack of monitoring and failure of Forestry to properly manage our forests.

The Biomass industry prefers to contract Forestry Corporation, because they are able to provide large-scale industrial amounts of woody biomass, and are awarded for the taking of mature Native trees from public and private native forests with Renewable Energy Credits!! How can that be justified when those forests are losing soil carbon, stripped of biomass, transported by burning fossil fuels (releasing CO2 into the atmosphere), and then burnt???

Because they have conveniently termed the takings as 'forest waste', but the industry itself is left to determine what is 'waste', and since the RECS incentivise the burning, instead of letting forest material slowly compost (releasing the carbon slowly over time, as the surrounding, intact trees soak it up in a balanced way).

And so, Biomass is starting to slowly take hold here. And this is very scary.

Not only is it destructive to forests, but it's destructive to the TRUE renewable markets- solar, wind, and wave power. We MUST stop digging, chopping, burning our way to powering the grid JUST for the sake of 'jobs', when there are more 'jobs' in PASSIVE, non-destructive technologies, as well as tourism dollars for intact forests!

Forestry corp runs at a loss, supported by subsidies- OUR public money. Foreign Biomass companies running in the UK are only profitable due to massive subsidies under the guise of being carbon neutral. Those subsidies need to go to passive renewables. You need to make sure the biomass/bioenergy trend stops here, before it really takes hold. Aren't our forests burning enough?!?

If you want to be 'sustainable', encourage land owners to keep trees where they belong - in the ground- by giving RECS to them, not companies who are burning them, releasing the carbon. Also, provide incentives for solar and wind, and electric cars that can be hooked up easily to these free power supplies. Also, biomass/timber exports to Asia and the EU need to end- that is not sustainable either.

Attaching three supporting documents

**Attachments included with submission**

*Burning Biomass for Energy: A Fast Track to Climate Change and Adverse Health Impacts*, National Toxics Network, 2016

*National Position Statement Against Forest Bioenergy*, Australian Forests & Climate Alliance Inc.

*Misguided strategy – Burning wood to mitigate climate change*, The Platform Forest Climate