

Why burning trees to make electricity may not be a good choice for the environment

ABC Mid North Coast By Wiriya Sati

Posted Tue 20 Nov 2018, 6:25am

While the Federal Government is under pressure to reduce carbon emissions to tackle climate change, NSW industry groups have been invited to further consider burning forest timber for electricity, also known as biomass.

Biomass has been declared a carbon-neutral renewable energy by the Environmental Protection Authority (EPA), but scientists and conservationists disagree on its worth.

There is a groundswell of opposition internationally to biomass, with opponents arguing it is a falsehood based on flawed accounting.

"It's bad for the climate," said Susie Russell, of the North East Forest Alliance.

"Wood-fired power stations produce more greenhouse gas emissions than burning coal to get the same energy.

"It damages our forests, their catchment values, biodiversity values, and undermines their ability to soak up carbon dioxide from the atmosphere."

A total of 130 organisations from 30 different countries have signed a position statement that opposes biomass for energy.

Reasons outlined in the paper include concerns about climate change.

"To limit global warming to 1.5 degrees, scientists now agree we will need to draw carbon dioxide out of the atmosphere," the statement reads.

"A safe and proven way to do this is to protect and restore natural forests. Logging for biomass does the opposite."

Hubs proposed in three regions

The Department of Primary Industries (DPI) undertook a research project last year that found Australia had 2 million tonnes of timber per year available to power 200,000 homes on the NSW north coast.

Its report proposed three hubs where wood-fired power stations could be developed, in Grafton, Kempsey and Bulahdelah, logging trees from within a 100km radius of each hub.



PHOTO: Power stations like this one in the United Kingdom turn forest matter into biomass energy. (Supplied: Chris Allen)

RELATED STORY: Burning forest waste for energy is 'worse than coal', conservationists say

RELATED STORY: Biomass could be one solution to Australia's energy problems: CEFC

RELATED STORY: An ice-free Arctic and no Barrier Reef: UN report lays climate risks bare



PHOTO: Biomass uses waste from the forest floor, but critics say "waste" can also include trees too small to mill. (Supplied: Bryony Anderson)

In a statement, the Forestry Corporation said it had sought expressions of interest for timber use, but did not suggest any particular use.

It is currently considering those expressions of interest.

The department confirmed it had no plans to build wood-fired power stations on the north coast.

"The DPI Forestry research did, however, look at what opportunities exist to utilise forestry residues and waste from harvesting operations for bioenergy generation," the department said in a statement.

Concerns biomass could drive further logging

National Parks Australia senior ecologist Oisin Sweeney is concerned that biomass could become the driver of the logging industry.

"Biomass becomes the tail that wags the dog," he said.

"It starts off that biomass is just the logs that are left after you cut down the nice trees to get sawlog timber out of it for floorboards and things.

"Because it's such a low-density fuel, it rapidly becomes the driver of those operations.

"Burning wood for electricity is globally being recognised now as an incredibly damaging strategic error."



PHOTO: Senior ecologist Oisín Sweeney says biomass is a false solution to the climate problem. (Supplied: Oisín Sweeney)

Dr Sweeney said other jurisdictions that had embraced biomass, such as in Europe and the Drax Power station in Britain, burnt a lot of forest, which had been shown to be driving deforestation throughout Europe, Russia and North America.

"It's really critical that Australia doesn't follow this model of burning forest for electricity, because it's a false solution to the climate problem," he said.

"If you cut down a 50-year-old tree to burn in a power station, it'll take 50 years for that carbon to be soaked up in that tree again, assuming that tree re-grows.

"We don't have 50 years to deal with climate change. We have to deal with climate change now."

Increase in logging intensity proposed

Forestry residue refers to the parts of a tree left over after posts are milled.

But Ms Russell said the term was misused by including whole trees that were too small or unsuitable for use in a sawmill.

"How they identify it is that if it's a tree that's not going to be able to make a sawlog, then it's waste," she said.

"Their view of waste is a very limited, short-sighted one that has more to do with the dollar signs they can see from creating a new industry than it does to do with anything ecological."

In its report, the DPI said some old-growth forest would be opened up for logging to address an expected timber shortfall.



PHOTO: The DPI says using wood for biomass would be better than using coal to produce the same power. (ABC Central West: Melanie Pearce)

NSW is about to start a new integrated forestry operations approval proposing changes on the north coast, including an intensive harvesting zone.

That zone will be 140,000 hectares of coastal state forest on the mid-north coast.

"That will see for the very first time, legal clear-felling of patches of up to 45 hectares in a single go," Dr Sweeney said.

"The largest legal clear-felling was just a couple of hectares, so we're talking about a massive increase in logging intensity. It's the complete removal of almost the entire area of forest.

"The best way for forests to help us deal with climate change is to leave them to get older. The older they get the more carbon they store."

Dr Sweeney said logs that were left on the forest floor were a crucial part of the forest ecosystem.

"It rots down really slowly and provides nutrients for the soil. It provides germination sites for plants. So dead timber is a good thing," he said.

Regional forest agreements to be finalised

But the DPI report said using wood for biomass would be better than using coal to produce the same power.

The NSW Government is currently considering community and stakeholder input ahead of the finalisation of regional forest agreements later this year.

Dr Sweeney said there was research that showed if all of Australia's logged forests were left to recover their carbon stores, it would be the equivalent of sequestering 136 million tonnes of carbon every year for the next 100 years.

"That's a pretty big contribution to tackle the issue of climate change," he said.



PHOTO: The NSW Government is proposing an intensive harvesting zone in state forest on the mid-north coast. (Supplied: Bryony Anderson)

Topics: environmental-impact, environmental-policy, environmental-management, climate-change, alternative-energy, electricity-energy-and-utilities, port-macquarie-2444, pappinbarra-2446, lorne-2439, kempsey-2440, south-kempsey-2440, grafton-2460, south-grafton-2460, bulahdelah-2423, eden-2551

Contact Wiriva Sati