



ALBIOMA CONVERTING COAL POWER PLANTS TO BURNING WOOD PELLETS

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All Photos: Dogwood Alliance

Summary

Albioma is in the process of converting its coal power plants on Réunion and elsewhere to burning wood pellets. The company has already entered into two pellet sourcing agreements with the world's largest pellet producer, Enviva and is expected to do the same for the two Réunion coal plants, where they could burn as many as 1.2 million tonnes of wood pellets a year.



Bois Rouge power station, Photo: B.navez, Wikimedia

Enviva produces its pellets in the Southeastern USA, sourcing wood from highly biodiverse forests, as well as from tree plantations to which such forests are being converted. Their activities cause serious harm to biodiversity, and to communities, who not only lose their forests but who are also affected by air pollution, wood dust and noise.

Burning wood emits at least as much CO₂ than burning coal. In the best-case scenario, new trees will re-absorb the same amount of carbon, but this would take many decades. It is incompatible with the urgent need to reduce carbon emissions as fast as possible in order to try and prevent warming greater than 1.5 or even 2 degrees, as hundreds of scientists have warned. Instead, the coal plants need to be closed as quickly as possible and replaced with genuinely low-carbon renewable energy, especially solar and wind power.

2. Albioma's coal-to-biomass conversions

In 2018, Albioma converted its first coal power facility to biomass on the island of Martinique. The company had [previously stated](#): “*The model that we generally follow in our power plants is based primarily on the use of bagasse*”. However, even before that conversion was completed, Albioma entered into an [agreement](#) with the world's largest wood pellet producer, Enviva, who have been supplying the biomass for that plant ever since. This was soon followed by a new biomass plant in 2020, on Guadeloupe – also to [wood pellets from the same supplier](#). That same year, the company commissioned to carry out their conversion in Martinique, [announced](#) that Albioma was in the process of converting all their coal plants to burning wood pellets (i.e. not sugar cane bagasse or other local sources of biomass).

Now, Albioma has started converting the Bois-Rouge plant on Réunion to wood pellets, to be followed by the Le Gol plant assuming that, conversion, too, is permitted. Between them, those two plants would burn 1.2 million tonnes of wood pellets every year. [Enviva is expected to supply those wood pellets](#), too. Even if some sugar cane bagasse might end up being burned in the two plants in future as well, this and other local biomass could only supply a [small fraction](#) of the biomass needed to operate the two plants.

3. Enviva's wood pellet production harms forests and communities in the Southeastern USA

Enviva is based in the Southeastern USA, where it operates [nine pellet plants](#), producing over 5 million tonnes of wood pellets from twice as much freshly cut wood every year. All of those pellets are exported. As demand for wood pellet increases, Enviva and other companies are [developing ever more pellet plants](#) across that region.

Enviva sources wood for their pellets both from the clearcutting of coastal hardwood forests, and from monoculture pine plantations.

Enviva pellets from coastal hardwood forests

Across the SE USA, hardwood trees are only found in natural forests. Those forests lie at the heart of a [global biodiversity hotspot](#). They are home to a large number of plants, amphibians and other animals, many of them found nowhere else.



NGOs as well as investigative reporters have been [documenting for years](#) how Enviva routinely sources wood, including whole logs from mature trees, from clearcut hardwood forests.



Enviva pellets from monoculture pine plantations



Across the South Eastern USA, [more than 13 million hectares of biodiverse forest ecosystems have been lost](#), while the area of monoculture pine plantations has increased by over 16m hectares. Demand for wood pellets is fuelling this trend further. Monoculture tree plantations provide little or no habitat for wildlife. They deplete soil fertility and freshwater, and they are highly [prone to intense fires](#).

Environmental injustice:

Pellet mills in the SE USA are [predominantly sited](#) in places where their air and wood dust pollution and noise disproportionately affect black and low-income communities, communities often already exposed to high levels of industrial pollution and social deprivation. A 2018 investigation by the Environmental Rights Project in the USA showed that more than half of the region's wood pellet plants did not comply with the US Clean Air Act.

4. Climate impacts:

For each unit of energy generated, burning wood for energy emits at least as much CO₂ to the atmosphere as burning coal. Proponents of wood energy argue that those emissions can be ignored because new trees will grow back and sequester the same amount of carbon in future. Even if this happens, it will take many decades, far longer than the time we have left to bring down CO₂ emissions drastically to have any hope of keeping warming to 1.5 or even 2 degrees. 800 scientists have signed a letter stating: *"Even if forests are allowed to regrow, using wood deliberately harvested for burning will increase carbon in the atmosphere and warming for decades to centuries – as many studies have shown – even when wood replaces coal, oil or natural gas. The reasons are fundamental and occur regardless of whether forest management is "sustainable.""*

Furthermore, monoculture tree plantations store far less carbon than forest ecosystems, so when natural forests are cut down and replaced with monocultures, a lot of the carbon will not be sequestered again.

Finally, there are significant fossil fuel carbon emissions from producing pellets and shipping them long-distance. However, by far the greatest climate impact comes from turning carbon stored in forests into CO₂ emitted to the atmosphere when the wood is burned.

5. What should happen?

To prevent the worst impacts of climate change, we need to rapidly phase out burning fossil and other carbon-rich fuels, and we need to protect and restore as many forest and other natural ecosystems as possible. This means replacing fossil fuels with the lowest-carbon renewable energy sources, which are solar and wind energy, together with investments in energy storage. Réunion lies in a region with a high solar power potential yet, between 2015 and 2020, just 3 MW of solar power capacity and 11 MW of wind capacity were added, compared to 93 MW of biomass. Albioma's solar PV investments on Réunion are a small fraction of what they are investing in biomass. In order to genuinely reduce Réunion's carbon emissions, coal burning needs to be phased out rapidly and replaced with solar and wind power, not with burning wood pellets.