



# CAN BIOMASS COMPANIES STAY AFLOAT?



OUR FORESTS. OUR STRENGTH.

**Shareholder reports paint a promising picture of the wood pellet export business.** Behind record profit quarters is a longstanding pattern of accepting government subsidies just to stay competitive against other forms of renewable energy.

## Here is the truth of the matter:

- European subsidies are the dominant driving force of wood pellet exports from the US South
- Drax, the UK's largest producer of bioenergy, received nearly \$1 billion USD in 2019 to purchase and use American wood pellets.
- Enviva, the world's largest supplier of wood pellets, based in the US South, has received millions of dollars to create a proportionally small number of jobs while they pollute the communities they occupy.
- Wood pellet combustion is simply not competitive without government intervention. "Successful" wood pellet combustion is subsidized heavily through government bailouts and takeovers.

With our need to act swiftly on climate change, we cannot continue to support a noncompetitive, polluting, and forest-destroying industry at the expense of truly low-carbon technologies like wind and solar.

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## Wood pellets from the US are considered carbon neutral in Europe, even though it's not true.

Worldwide climate treaties have created perverse incentives to rely on bioenergy to meet climate goals. International climate treaties like the 1997 Kyoto Protocol establish that carbon emissions from direct combustion (excluding harvest, production and transportation of woody material) are counted as emissions for the country of origin.<sup>1</sup> However, the United States never ratified the Kyoto Protocol.<sup>2</sup> Therefore, imports from the US are considered "carbon free" -- but the carbon isn't actually counted anywhere.

This loophole has been repeatedly magnified by revisions and expansions of renewable energy treaties. The "default" is to count wood pellets as carbon neutral, as evidenced by repeated policies from the European

Union and others.<sup>3</sup> Wood pellets are proclaimed as carbon neutral despite repeated warnings from scientists,<sup>4</sup> concerned citizens,<sup>5</sup> and even the IPCC,<sup>6</sup> the world's leading scientific body on climate change. *The IPCC says, "The production and use of biomass for bioenergy can have co-benefits, adverse side effects, and risks for land degradation, food insecurity, GHG emissions and other environmental and sustainable development goals."*



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## How Many Subsidies Do Wood Pellet Export Companies Get?

Wood pellet export companies have a veneer of success, in part, because they rely on government subsidies to support their business model. These subsidies come from one of three locations:

- Foreign governments looking to support renewable energy goals without recognizing the harmful impact of wood pellet production and combustion
- The federal US government, usually through a mixture of research and development grants

- State and local US governments, under the misguided assumption that wood pellet production companies will bring clean or high paying jobs to their communities.

Given the wide origin of these subsidies, reliable and complete information can be challenging to track down and verify. The best information usually comes from insider publications, shareholder and stock reporting, and media releases.

## It Starts Across The Ocean

The UK-based company **Drax** is a great example of what can go wrong with subsidies in the bioenergy sector. **In 2019, Drax received the equivalent of \$965 million USD in subsidies for burning wood pellets produced predominantly from forests in the US South.**<sup>7</sup> Drax has off-take contracts with at least eight different American wood pellet companies to receive 7.9 million metric tonnes of pellets annually.<sup>8</sup> By our conservative calculation, this means that Drax is responsible for impacting 189,000 acres of Southern forests each year.<sup>9</sup> To make matters worse, Drax's total subsidies received in 2019 was actually larger than their gross profits.<sup>7</sup> In other words: without the subsidies, Drax wouldn't even exist. Subsidies to Drax and other European energy companies drive the American supply of biomass.



## American Subsidies Happen, Too

In the United States, **Enviva** is the largest producer of wood pellets for export, and also receives the most money from subsidies, mostly for claims around providing jobs. **Research shows that Enviva and its various subsidiaries received \$7.6 million USD in subsidies in a five year period (2012-2016).**<sup>10</sup> These subsidies include \$672k in Mississippi (federal government), \$865k in Virginia (state government), and a whopping \$6.1 million USD in North Carolina. Sampson County in North Carolina was the biggest contributor, providing \$2.9 million USD for Enviva to move into their county. Northampton County gave Enviva nearly \$350k while permitting them to pollute the community; and the remainder of the money, \$2.87 million, came from the Department of Commerce through four separate grants.

## What About Wood Pellets Burned Inside The Country?

Intercontinental transportation of wood pellets only adds about 10% extra greenhouse gas emissions to the final impact number. Therefore, burning wood pellets domestically is not that much better in terms of harmful gases in the atmosphere. However, the economic standing of domestic biomass combustion facilities is arguably worse than production facilities. Why? It's simple: wood pellet combustion is a mature technology, and costs aren't going down. Without subsidies, wood pellets are not competitive.

Wood pellet combustion facilities have a very short lifespan in the United States, especially without government intervention. Despite repeated failures in the industry, the biomass industry continues to lobby for this expensive and outdated technology.

### Florida

In Gainesville, FL, a biomass combustion plant had some of the highest contracted rates for electricity in the state, burdening low income residents with an outdated power purchase contract, and hurting opportunities for businesses.<sup>11</sup> The vast majority of time after the Gainesville biomass plant was built, it sat idle. **Citizens were paying around \$70 million/year to the facility while receiving zero electricity in return.**<sup>12</sup> The city ended up purchasing the facility to get out of a bad contract, and now operates it on a much smaller scale, in combination with a number of other, alternative energy producing facilities.

### Maine

In Maine, closure of paper mills and other forest products companies left a gap in employment for people trained in logging. Employment in and around biomass combustion facilities provided a way for those people to continue employment; it also provided an "outlet" for harvested wood that wasn't appropriate for other uses. However, because wood pellet combustion is inefficient and expensive, Maine was forced to provide subsidies to keep the biomass facilities afloat.<sup>13</sup> **These subsidies effectively had the state of Maine paying over \$150,000 for each employee retained.**<sup>12</sup> In 2018, Maine awarded yet another subsidy to a biomass combustion plant, despite it failing to meet two out of three contractual obligations.<sup>14</sup>

### California

**Five wood incineration facilities closed in California as wind and solar became cheaper to produce electricity.**<sup>15</sup> These biomass facilities, originally in place to assist with disposing of agricultural waste, have weathered calls to be repurposed to burn thinning residues and downed trees from the forests where fires can be common. However, logging and transporting is prohibitively expensive in the rough terrain of the Sierras, and logging in the name of fire reduction doesn't actually prevent fires.<sup>16</sup>

## Successful Biomass = Subsidized Biomass

Across the country, it is clear that the only successful wood pellet combustion companies are subsidized wood pellet companies. While cleaner and truly low-carbon technologies, like wind and solar, are competitive in the electricity generation arena, biomass combustion is continuously propped up by local and state governments eager to appease the forestry industry.

### LEARN MORE

- [dogwoodalliance.org](http://dogwoodalliance.org)
- [stand4Forests.org](http://stand4Forests.org)



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**ABOUT DOGWOOD ALLIANCE** • Dogwood Alliance mobilizes diverse voices to protect Southern forests and communities from destructive industrial logging. For over 20 years, Dogwood Alliance has worked with diverse communities, partner organizations and decision-makers to protect Southern forests across 14 states. They do this through community and grassroots organizing, holding corporations and governments accountable and working to conserve millions of acres of Southern forests.