DESTROYING SOUTHERN FORESTS FOR INTERNATIONAL EXPORT

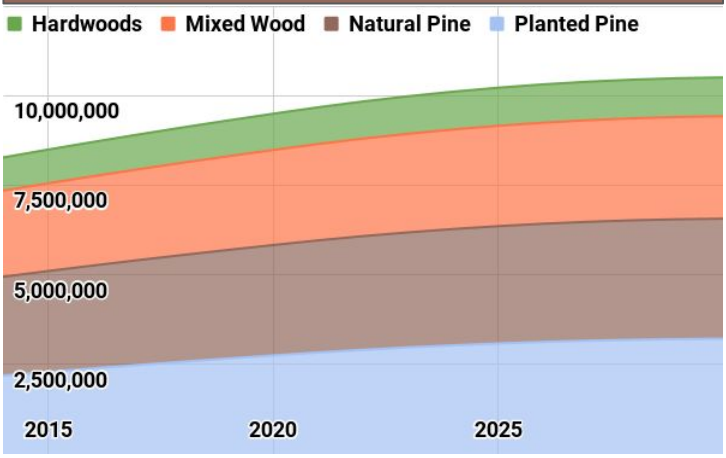
EU Demand Is Stripping Our Forests

Due to increasing demand from the EU for "renewable" or "green" energy sources, U.S. companies are deforesting southeastern forests at an astonishing rate. Biomass pellet and processing facilities in the southeast produced more than 9.6 million tons (8.7 MMT) of wood pellets and exported more than half that to EU in 2015. [1] The burden on American forests is only expected to increase. The U.S. International Trade Administration expects consumption by the top 10 U.S. export markets to average 230 million tons (208 MMT) annually in the next two years! Exports from the southeast are expected to increase from 10.6 million tons (9.6 MMT) in 2019 to more than 15 million tons (13.6 MMT) in 2030. [2]

An analysis by Key-Log Economics examined the number of acres affected by this increased logging pressure from current and future growth of the biomass industry. Looking at the conversion rates for different types of forests, management regimes, and biomass pellet inputs, we calculated the annual rate of forest harvest and total acres of managed forest required to meet future demand.

Hundreds of thousands of tons of wood pellets are shipped each year from Wilmington, NC to meet EU demand.

Figure 1 shows that more than 10.5 million acres will be in active management by 2030, almost five times more land than Yellowstone National Park.



How Many Acres Will It Take?

To estimate how many acres of forest a pellet processing plants will need, multiply the plant's annual production capacity by 0.024. [3] To estimate hectares instead, multiply by 0.01.

Here's an example; there are four Enviva facilities around the North Carolina – Virginia border with a total estimated annual capacity of 2.08 million tons, which comes to **nearly 50,000 acres (20k ha) of southeastern forest cut down each year**! That's a larger forested area than all of Washington, D.C. [4]

To meet current demand, we will have to cut down 80,000 acres (32k ha) of southeastern forest in 2017, while actively managing nearly 9 million acres (3.6 million ha). By 2030, these figures jump to 280,000 acres (113k ha) of forest cut down annually, with more than 10.5 million acres (4.2 million ha) under active management.

While some argue that increased biomass production leads to more forests, it is important to remember that for every ton of wood product harvested, there are habitats destroyed, watersheds degraded, carbon stocks lost, and pollutants emitted from the logging, transport, and processing of this fuel.

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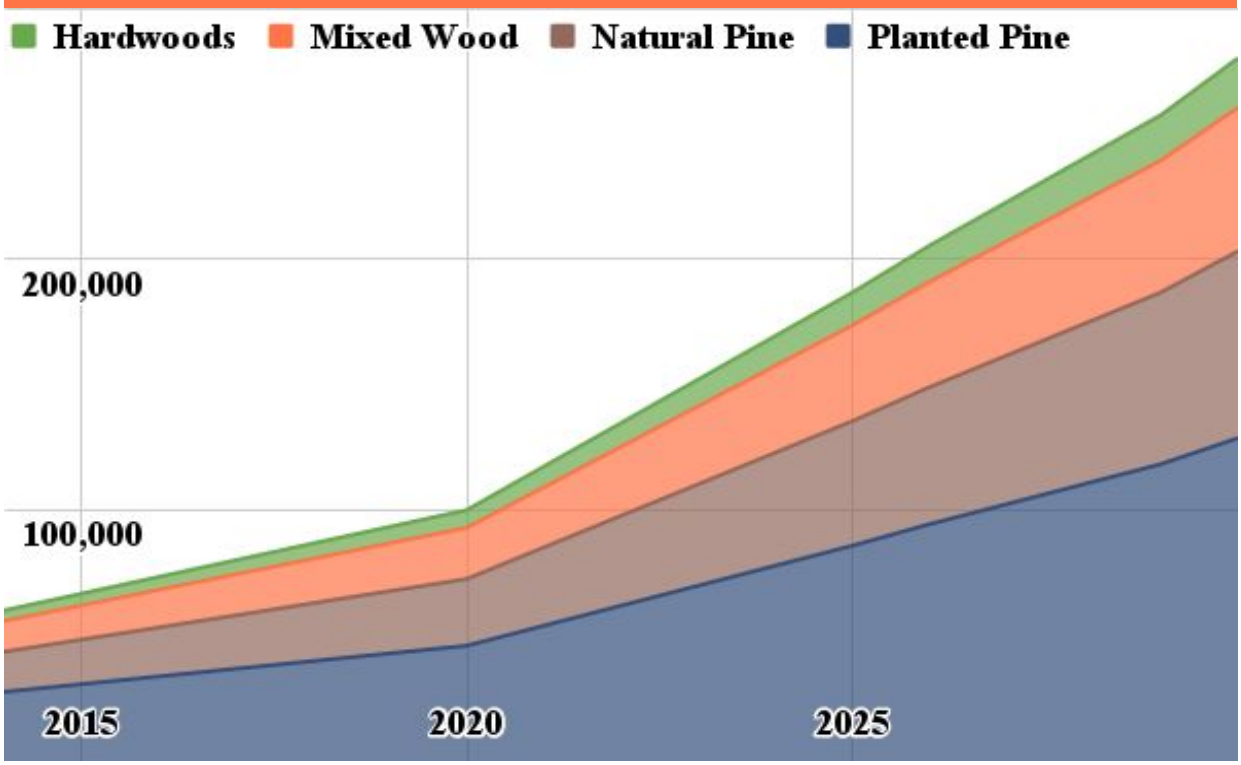
Stop Southern Forest Destruction

The southeastern US is being logged at four times the rate of the South American rainforest, and we have lost more than a fifth of our forest interior in the last twelve years. [5] As EU demand for biomass increases, southeastern US forests will continue to shrink at rapid rates. This is driven primarily by misguided notions that electricity produced from burning trees is carbon neutral. In fact, wood pellets emit roughly 1.5 times more emissions than coal, not to mention other air borne pollutants. Cutting down the forest of the southeastern U.S. to meet EU export demand is a shortsighted and destructive practice that will cost us our cherished landscapes.

Figure 2 shows that by 2030, companies will be cutting down 280,000 acres of southeastern forests annually.



References

1. Energy Information Administration, Monthly Densified Biomass Fuel Report, January 2017. http://bit.ly/2tFsGSe
2. Walker et al. 2015. "An Analysis of UK Biomass Power Policy, US South Pellet Production and Impacts on Wood Fiber Markets"
3. Total Acres of Forest Harvested = ([Plant Capacity in tons per year * .52(weighted average of plant capacity to harvested wood by type minus residue wood] *3.274 (ratio of green tons of harvested wood by type to dry tons)/ 70.15 (weighted average total number of tons per acre over average life of the stand). Simplifies to biomass plant capacity in tons per year * 0.024. 1 acre = 0.404 hectares.
4. Enviva operates four facilities around the region, Southampton (510,000 metric tons annual capacity), Northampton (510,000 metric tons), Ahoskie (370,000 metric tons), and Sampson (500,000 metric tons).
5. Hansen et al. (2013) Science 342:850-853; Riiters et al. (2016) Landscape Ecology 31:137-148