

SENT TO LSU AGCENTER/LOUISIANA FOREST PRODUCTS DEVELOPMENT CENTER - FOREST SECTOR / FORESTY PRODUCTS INTEREST GROUP

BIOMASS

This is the take-away from this article: *“Wood chips require 50 percent less raw wood fiber than wood pellets, and the cost to produce the chips is lower, as the steam and electricity needed for the phytosanitization process is being provided by PERC—therefore, there is no need to invest millions of dollars in building a new power facility. And because PERC is considered a renewable energy facility, the carbon footprint is significantly lower compared to other competing systems.”*

Helping Meet EU Renewable Targets with Wood Chips

The newly established New England Woodchip Solutions LLC will house a state-of-the-art phytosanitary system that will meet EU import requirements and include a process to densify wood chips for improved ocean freight stowage.

By New England Woodchip Solutions | October 23, 2019



[Thompson Dryers, which has been in industrial drying for 75 years, is installing its Thompson Phytosanitary System at New England Woodchip Solutions LLC, colocated at the site of Orrington, Maine-based Penobscot Energy Recovery Co.](#)

The European Union has adopted a revised directive establishing a new renewable energy target for 2032 that requires at least 32 percent of its generated energy to be derived from renewable sources. Biofuels, including wood chips, will be instrumental in helping the EU meet the new standard. Focused on opportunity, several U.S. companies and a port in Maine are poised to not only take advantage, but also demonstrate a technological advancement in wood chip processing and supply.

New England is home to an enormous wood basket. Maine alone is 90 percent forested and can sustainably supply more than 2 million tons of low-cost residual wood fiber annually. The challenge, however, is processing the wood into chips that meet EU standards, and then economically delivering them to European markets. That's where a new partnership comes in into play, which will take advantage



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of existing infrastructure, innovative technology and an abundant, sustainable resource.

Penobscot Energy Recovery Company is a waste-energy-facility in Orrington, Maine, near Bangor. PERC has been operating successfully since 1988, repurposing municipal and commercial waste into electricity, as well as steam for use in commercial ventures. Recent system upgrades and process streamlining has opened 30,000 square feet of space at PERC for other commercial opportunities. The newly established New England Woodchip Solutions LLC will be utilizing that space for a wood chip processing facility, which will house a state-of-the-art phytosanitary system that will meet EU import requirements and include a process to densify wood chips for improved ocean freight stowage.

Thompson Dryers, a 75-year-old company internationally known for its industrial drying systems, will install its Thompson Phytosanitary System at the facility. The Thompson system, which has been approved by the USDA and is recognized as the most cost-effective sanitizing method available today, will heat wood chips for the required amount of time to kill pathogens without the use of chemicals.

With easy access to rail transportation and Maine's wood fiber resource, the Port of Searsport, Maine's second-largest deep-water port, will play an important role in the venture. Located on Penobscot Bay less than 25 miles from the NEWS facility, the port can easily load the packaged wood chips onto ocean-going cargo ships for transport to the EU.

Collectively, this approach to provide wood chips to the EU is straightforward. Raw wood fiber is collected from the forests of Maine and delivered to a centralized woodlot adjacent to the Port of Searsport. Here, the raw wood fiber is sorted and classified by species and quality, air dried, then chipped to standard EU woodchip specifications. After chipping, the wood chips are delivered to the NEWS facility, where they are phytosanitized using the Thompson system.

After the wood chips are phytosanitized, they are packaged and transported back to the central woodlot at Searsport for storage and shipping. The packaging protects the wood chips, which extends their useful life significantly, and also allows them to be easily loaded into cargo ships. Once delivered in the EU, the sanitized wood chips can be efficiently added to the current fuel supply at the power facilities that receive them.

The process that has been developed by NEWS and its partners has many benefits. Wood chips require 50 percent less raw wood fiber than wood pellets, and the cost to produce the chips is lower, as the steam and electricity needed for the phytosanitization process is being provided by PERC—therefore, there is no need to invest millions of dollars in building a new power facility. And because PERC is considered a renewable energy facility, the carbon footprint is significantly lower compared to other competing systems.

The EU is leading the world in finding ways to effectively use renewable energy to transition away from fossil fuels. NEWS, Thompson Dryers, and PERC are working to help reach its ambitious goals.



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