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A Sustainable Strategy

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New kid on the block in the North American wood pellet world Peak Renewables has bid farewell to the quiet planning phase and is kicking things into high gear. The company's flagship pellet plant in Dothan, Alabama—a joint venture with Rex Lumber—is in the late stages of commissioning. With a 150,000 tonsper-year nameplate capacity, the plant will run 100% on dry shavings.

Peak Renewables' unique ownership structure as one of six vertically integrated companies owned by the Brian Fehr Group, as well as its ability to refurbish and relocate equipment from other acquired assets, resulted in an impressive turnaround. Groundbreaking to start-up took just nine months.

CEO Corey Woolard couldn't be happier with the speed and quality of start-up. Having worked previously at Drax as senior vice president of operations, Woolard went into the project with high expectations. "It's been an excellent start-up from the perspective of turnaround time and bringing assets up methodically to ensure safe operation and quality of the product being made," he says. "I've been [involved] in numerous startups, so I fully understand the pressures of getting up to full capacity as quickly as possible. This plant should be at full capacity before the end of Q2 this year."

Dothan Dealings

Dothan is nestled in the southeast corner of Alabama, a state where more than 90% of its timberland is privately owned. The pellet plant is a joint venture with partner Rex Lumber, which owns the majority and supplies dry shavings from its sawmills within the area. Peak Renewables is responsible for staffing and plant operations.

The joint venture with Rex Lumber is both in the company's ethos of partnering locally and a practicality of today's market, Woolard says. Rising capital costs, fiber costs, transportation costs—the list goes on to whittle away at the bottom line for pellet producers.

"If you are able to partner with a sawmill that already has dried fiber and you don't have to incur the capital costs of installing and operating a dryer, you're much more economical in the pellet manufacturing process," Woolard says.

Beyond the economics, skipping the drying process eliminates a plant's major source of environmental emissions. "Our GHG [greenhouse gas] footprint is extremely low," Woolard says. "For example, a plant that's 500,000 tons per year where [it's] processing round wood, running several front-end loaders, a







SENT TO LSU AGCENTER/LOUISIANA FOREST PRODUCTS DEVELOPMENT CENTER - FOREST SECTOR / FORESTY PRODUCTS INTEREST GROUP rotary drum dryer and other equipment, then you're going to have to start exploring carbon capture reduction technologies. At smaller-scale operations, our emissions are much lower, making sustainability initiatives readily attainable and aligning with the company's overarching goals."

With their Sustainable Biomass Program certification and Europe's Programme for the Endorsement of Forest Certification in hand, Dothan's wood pellets will soon be heading overseas. Peak signed an offtake agreement with CM Biomass, which distributes worldwide. While exports will get their feet under them, Woolard says the company's end goal is much bigger than third-party sales.

"We envision the need for domestic supply in the U.S. to grow exponentially over the next ten years in part due to the Inflation Reduction Act and other regulatory acts that are coming into play," he says. "Peak Renewables will be positioned to partner with other green energy companies as they progress their carbon reduction initiatives."

Power generation through pellets or wood chips is another option the company is enthusiastic about, particularly in Canada, where some regions don't have access to cheap, dispatchable power. Hydrogen production through wood gasification is another project on the horizon. "Yes, the export market is the beginning, but our long-term play is in North America," Woolard says.

Plant Design

Nearly all equipment in Dothan is refurbished from shuttered assets that closed their doors a few years ago in Prince George, B.C.

Peak Renewables' general manager Mark Cunningham has overseen all interfacing with the construction team for the Dothan startup. Working with refurbished equipment shipped from a single site forced the construction company to be nimble, swiftly installing equipment as it arrived, Cunningham says. "They took a clear site with no civil done, and they've done a ton of work to beat the timelines and provide exceptional service," he says.

As of early March, the company hired and trained around 25 operators and the plant has produced more than 2,000 tons of wood pellets. Training employees during a startup is not without its challenges, Cunningham says, but staff can learn more during a ramp-up than they can at a plant that has been running smoothly for many years.

The Dothan plant is a simple, flexible design. Dry shavings are conveyed from a covered building to two hammer mills. Conveyors then bring material to one of five pellet mills. A shared conveyor under the mills brings pellets to finished goods storage or directly to loadout silos where railcars or trucks can be loaded. "We have a great layout that would enable us to expand to add a drying system if we wanted to add roundwood and chipping to our process," Woolard explains. "We made it very flexible and adaptive. That adaptability includes the footprint to double the equipment, which would effectively bring capacity into the 400,000 tons per year range."





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SENT TO LSU AGCENTER/LOUISIANA FOREST PRODUCTS DEVELOPMENT CENTER - FOREST SECTOR / FORESTY PRODUCTS INTEREST GROUP While running exclusively on dry shavings, the Dothan plant will be testing all incoming shavings loads to both source the material and determine moisture content, which is required to support its certification schemes and to ensure the right fiber mix for pellets.

"A supply of dry shavings is inherent with some variability in moisture content," Cunningham says. "That is different than a lot of plants. You have to be very focused on how you receive the fiber and how you mix and feed it into the plant to make pellets."

Cunningham also credits strong OEM partnerships for the smooth startup. Andritz, being the main vendor, was on site several times to support the used equipment installations, reacting to the site's changing needs.

Peak's Priorities

With Dothan expected at full capacity in early summer, Woolard and the company are turning attention to other wood pellet projects in North America. Two facilities are in the works in British Columbia, Canada, specifically one in Fort Nelson and the other in Chetwynd. Key to both projects is for Peak to lock in local partners, especially with local First Nations.

Even though some challenges exist regarding infrastructure at both sites, Woolard says collaborative conversations are ongoing with key stakeholders and the First Nations groups involved to advance the projects. "Indigenous partnerships are very important," he says. "We want to supply jobs and revitalize communities that industry has left. The key to that is engaging provincial government and First Nations to ensure availability of fiber supply and generate longstanding business opportunities."

Although Peak Renewables has turned the ignition on pellets so far, the company is open to exploring other wood products project as well. Oriented strand board (OSB) is another focus, and, with the right partner, the company is poised to expand its portfolio across North America. "We're currently focused on our next project, which is OSB-related and will have excellent positioning to deliver jobs and economic performance in the southeast U.S.," Woolard says. "Our focus isn't just in one area of bioenergy and wood products but in several areas to ensure the longevity of our company."

Company Connections

Peak Renewables Ltd. as a wood products entity came onto the scene in 2020 as an arm of the Brian Fehr Group. "Brian's name is highly reputable. He has so many connections in wood products," Woolard says. "His network of relationships has enabled him to grow a new business in different arenas."

Fehr's companies include Peak North America, a construction and fabrication company; Peak Renewables Kootenays, overseeing projects in B.C.'s Kootenay region; Formula Contractors, a Prince George, B.C.-based heavy construction company; SmartLam, a mass timber manufacturer with facilities in Montana and Alabama; and Hydrogen Naturally, a joint venture with Northwest Capital to produce hydrogen from lowvalue waste wood.

The companies are uniquely linked in the industry. Peak North America constructed the Dothan pellet facility, which Cunningham attributes in no small part to the swift startup.



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"As we started the construction and worked together for where different components were going to be, it enabled us to adjust quickly and hit very tight timelines," Cunningham says.

Colocation of assets is another perk of the integration. The Dothan pellet plant sits adjacent to the SmartLam mass timber facility in Alabama. "The vertical integration of the Brian Fehr Group provides a competitive advantage when constructing and operating new projects, whether it be green energy or wood products," Woolard adds. "It's a visionary approach that allows for a bright future and opportunity to strategically grow Peak Renewables into a very profitable company."

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