

FUEL FOR CHANGE



PHOTOS BY KENNETH AARON

When the college flips the switch on its new state-of-the-art biomass heating system, it's going to do away with 320 tons of fossil fuel emissions a year.

The wood-pellet fueled boiler will heat all of the college's academic buildings. But Kate Glenn, the college's sustainability coordinator, says that's only a start.

The entire campus as well as the Paul Smith's College VIC will eventually be heated with biofuel.

"This project is not just about supporting our long-standing pledge to become carbon neutral as part of the Presidents Climate Commitment – it's also about supporting the development of a local market for a responsibly harvested, renewable energy source that comes right from the Adirondacks," Glenn said. "As the College of the Adirondacks, we have a responsibility to design our campus infrastructure to reflect the kind of energy economy we want to see here in the North Country. This system has important implications for the future of renewable energy development in rural communities."

The VIC installation is scheduled for this summer, and that system should be online and fully operational for the next heating season. After that, the goal is to tie together a few buildings at a time and to have every building on campus running on so-called mini-district heating grids by 2029.

The current boiler is one of the first uses in New York State of a high-efficiency and low-emission wood pellet boiler heating system to heat multiple buildings. The college is one of five sites in the North Country planning to install this technology.

Other sites include the Olympic Regional Training Center in Lake Placid, North Country Community College's Sparks Athletic Complex in Saranac Lake, the Indian Lake School and the North Country School in Lake Placid.

LEFT: Kate Glenn, sustainability coordinator at Paul Smith's, stands next to a silo that will store wood pellets for heating the college's academic buildings.



LEFT: Glenn with a handful of pellets, which are made from trees harvested in the North Country.

locally sourced wood pellets and makes use of thermal storage, a technology that increases the efficiency of the boiler. The current system heats a total of 70,000 square feet, saving the college up to \$50,000 a year. The system will pay for itself in 15 years.

It also supports the local forest industry. Bulk wood pellets from Curran Renewable Energy in Massena, N.Y., are sourced from local, sustainably harvested, FSC-certified woodlots. And it keeps jobs in the local economy. Heating with imported oil sends 75 percent of the money out of the state. Now, all the energy dollars will remain in the region.

"Perhaps the biggest benefit for the Adirondack region is the example we've set with this technology," says Steve McFarland, who as the college's vice president for capital Projects has overseen the project since its inception. "This could feasibly become the standard for renewable heating throughout the region, and we're proud to serve as the example."

—BOB BENNETT

This new technology is being advanced by Renewable Heat NY, which encourages growth of the high-efficiency, low-emission biomass heating industry. The program also supports quicker development of this industry, raises consumer awareness and encourages local sustainable heating markets and sustainable forestry.

So far, the project has cost \$600,000. More than half of that money came from a New York State Energy Research and Development Authority grant through the Cleaner, Greener Communities Program, which encourages local

communities across the state to become more sustainable and energy efficient. NYSERDA has monitored the design and installation of the project to ensure its energy and environmental performance.

The system itself is pretty simple. A silo erected behind Freer Hall is connected by augur to a boiler, which is automatically fed wooden pellets. The heat produced by the boiler flows into the existing heating system of Freer, Cantwell and Phelps Hall.

It displaces 28,000 gallons of heating oil with

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