Green Cities Blue Waters



A blog by Connecticut Fund for the Environment, and its program Save the Sound

Shagbark Lumber: From two-man farm to solar farm

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This entry in our occassional guest series highlights the transition of a local family farm to solar power. Take a step back in time, 30 years ago, to 1985. Take a Saturday drive to East Haddam, CT to visit Gillette Castle State Park, named "one of the last great places" by the Nature Conservancy. On your way, you will pass Shagbark Farm Supplies on the corner of Route 82 and Mount Parnassus Road. You can order your grain, and you will meet Uncle Bud and Fred Hunt, the owners who manage the store all day and make deliveries at night.

Flash forward thirty years. The Shagbark you see today is a 36,000 square foot sprawling lumber yard, hardware store, and farm store. The newer roofs are covered with more than 540 270-watt solar modules. You are still likely to meet Fred Hunt, who still works seven days a week. A farmer at heart, Fred still hays the fields, keeping enough bales for his own livestock and selling the rest.



Given their farming roots, Fred and his sister Joanna are inherent environmentalists, and desired to "go solar" for many years, but until recently it wasn't economically feasible. Connecticut incentives now make solar panels affordable, and Shagbark took advantage of two available programs. <u>C-PACE (Connecticut Property Assessed Clean Energy</u>), an energize CT program administered by CEFIA (Clean Energy Finance and Investment Authority), allows owners to finance clean energy improvements at low interest rates by placing a voluntary assessment on their property tax bill. Shagbark also took advantage of the ZREC (zero emissions renewable energy credit) program established when Connecticut passed the 2011 Energy Act. Shagbark made a successful bid during the required auction process resulting in a ZREC contract. Shagbark will receive a fixed ZREC price for each kW of energy produced, for fifteen years. These two incentive programs made clean energy a reality for Shagbark.



Because of Shagbark's unique rural location, we started our solar research with the <u>Connecticut Farm Energy Program</u>'s Coordinator to discuss REAP (Rural Energy for America Program). Shagbark determined that the best option would be to install a system that would provide 100% of the company's electrical power needs. PurePoint Energy in Norwalk, CT was selected to design the largest solar system (150 kW) in East Haddam, CT, and mount more than 540 rooftop panels. PurePoint even agreed to compensate for the 80 year old Shagbark Hickory overhanging one of the roofs in their design, thereby preserving the namesake tree!

The project was completed on schedule, and on June 21, 2014, the first day of summer, Shagbark celebrated its new status as an energy independent company with a barbecue, live music, environmental and energy exhibitors, and family fun. To date, the solar system has reduced monthly electricity bills by eighty percent. Although one hundred percent of our electricity is produced by the system, utility demand charges must still be paid. Additionally, we have overproduced 10,000 kW of electricity, which we hope will carry us through the shorter days of the winter months when we are producing less power.



Shagbark is proud to be environmentally responsible and to have made the world a cleaner place for our children and future generations.

Our solar system will:

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- Provide 100% of the electrical power used by Shagbark
- Produce enough energy to power 20 homes
- Produce enough energy to run a desktop computer continuously for 120 years
 - Offset 146 tons of carbon each year, equivalent to
 - Driving 324,000 miles in a standard car
 - 15,000 gallons of gas
 - Planting 729 trees

Most recently, Shagbark Lumber installed an electric vehicle charging station. We expect "green technology" to greatly influence our sales in the construction sector, and therefore we are continuously increasing our "green" inventory. Shagbark has high hopes of once again operating a family farm, but this time Management's vision is a solar farm!

Posted by Controller Julia Leonardo of Shagbark Lumber.