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CELEBRATING 55 YEARS

ReVision Energy and the Seacoast Area Renewal Energy Initiative install solar hot water system at Ellis School

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Imagine an extended growing season that started in the spring and continued all year round. You could plant all varieties of vegetables and plants in the fall, and have them come out healthy and full throughout the winter right up to March and beyond. For Ellis School, with the help of ReVision Energy and the Seacoast Area Renewal Energy Initiative (SEAREI), this dream has been realized.

This past September, ReVision volunteered their time, designing and engineering services, and two solar hot water collectors with a solar storage tank to the Ellis School for use in their greenhouse. This will benefit the students understanding of agricultural and farming studies, as well as the school's lunch menus and of course the school's energy independence.

"The school uses the greenhouse to grow house plants and vegetables for their plant sales to benefit the community," said Heather Fournier, manager of ReVision's New Hampshire branch. "They can also serve the food that's made on the school's lunch menu and of course don't forget the invaluable lessons to be taught on the sun as fuel and energy use."

Ellis School had received a $5,000 grant called the "Toolbox For Education" grant from Lowe's Home Improvement. They used the money to improve their greenhouse and to switch to solar energy.

The Lowe's in Epping referred Jen Rydeen and John Herrman, both from Ellis School, to ReVision because of their success in installing solar systems around New Hampshire and Maine.

As it happened, ReVision had another connection to Ellis School, which made the partnership between the two even more organic. "I live in Fremont and my daughters attend Ellis School," said Fournier. "So I was able to get more involved by being a resident and a parent."

With SEAREI and other local volunteers committing to this project, Ellis School received the help it needed to install this solar hot water system. New plant beds were built by Fremont residents and students, while other volunteers helped out winterizing the plants and clearing and cleaning out the greenhouse.

ReVision's Fournier explains how the system works. "The solar panels are mounted on an adjacent steel storage structure and a pipe run is installed from the collectors to inside of the greenhouse where the solar storage tank holds the hot water. Then, food-grade propylene glycol transfers heat from the collectors to the tank; there is a coil in the tank for the glycol which indirectly heats the water. Water then gets transferred to the plant beds to provide heat and extend the growing season."

With the installation of the solar hot water system, the students will have a much more elaborate education in the science of botany, agriculture and renewable energy. They will learn about commissioning and decommissioning the solar hot water system, have hands-on experience on how to run the system and read the controls, as well as gain an understanding of the science behind the

technology and how the system helps the gardens survive the brutal winter months.

This is a big step for Ellis Schoolâ€”and for public schools in general. It's important for children to learn about the science behind alternative energy systems, as well as all the benefits that come with it. ReVision has helped a number of others schools in Maine and N.H., incorporate solar energy systems and reduce their use of fossil fuels and the money they spend on them.

"ReVision Energy's mission is to reduce CO2 emissions," said Fournier. "We can help people, schools and businesses transition away from fossil fuels to using healthy, sustainable solar energy."