

Solar Energy Shines at GIM

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Photo by Pam Johnson/The Guilford Courier

Checking out the new bank of photovoltaic panels installed through the Neighborhood Assistance Act and a Guilford Savings Bank sponsorship are (from left) Guilford Interfaith Ministry/Charlie's Closet Facility Fundraising/Building Chairman John McGuire, panel installer Mark Waldo of Waldo Renewable Electric of Old Saybrook, and project architect Christopher Widmer, AIA, of Green Planet Options in Guilford. **By Pam Johnson Courier Senior Staff Writer**

A bank of photovoltaic panels has found the perfect southerly facing home atop the new Guilford Interfaith Ministry (GIM)/Charlie's Closet facility.

Installed last week, the panels generate 2,500 watts at full power and should cover the needs for most of the electricity required by the building's office-use profile, said architect Christopher Widmer of Green Planet Options in Guilford.

Widmer designed the GIM/Charlie's Closet facility, as well as its neighboring Sachem Hollow facility, a development of the Guilford Housing Authority (GHA). GHA donated space on Sachem Hollow's grounds for the construction GIM/Charlie's Closet, which was completed in the fall of 2009.

Widmer said it was recognized early on that the roof of the two-story GIM office building off State Street would be ideally situated to gather solar energy.

"We knew we had this great south-facing roof that's unshaded by trees. We started finding funding for the project last summer," said Widmer.

Widmer helped to shepherd GIM's applications through the Town of Guilford and on to the state level to earn tax credits for the project via the Neighborhood Assistance Act. Once the credits were issued, Guilford Savings Bank signed on to sponsor the project by purchasing the credits. The project is estimated to have a \$25,000 total cost.

On March 8, work began to install the rooftop grid of 12 photovoltaic sections (approximately 35 pounds each, containing silicon wafers covered with glass panels). The entire job, including a PVC system to feed collected energy into a computerized converter and onto CL&P's power meter, was installed in less than three days by Waldo Renewable Electric, LLC, of Old Saybrook.

Owner Mark Waldo said each panel produces 2.5 kilowatt hours in one hour's time, enough to power a 2,500-watt appliance or to light 25, 100-watt light bulbs per hour. In other words, the panels produce more than enough energy to accommodate GIM's workday use of electricity to power computers and other occupancy needs.

Additional power not needed by GIM is fed over to the Sachem's Hollow building. CL&P also conducts net metering, which actually credits GIM for any unused electricity the panel generates. A display on the system's inverter (which uses a computer program to convert the panel's DC current to standard AC delivery) even indicates the amount of carbon emissions avoided by using the solar energy system.

"We're also saving pounds of carbon emissions," said Waldo.