

AMC Community Solar Energy Raiser

2 Solar Collectors Can Lower CO2 Levels as Much as Planting Over 400 Trees



Cardigan Mountain Lodge - Alexandria, NH

In November of 2009, The Appalachian Mtn Club joined the Plymouth Area Renewable Energy Initiative (PAREI) to install two Apricus 30 Evacuated Tube Solar Collectors on the south facing deck of the Cardigan Mtn Lodge. An additional water storage tank was installed in the mud room to serve as a solar pre-heat tank. The collector and the solar tank are connected by a pipe overhead that circulates an anti-freeze called glycol. The glycol is heated when it runs across the top of each of the tubes and heat pipes in the solar collectors' manifolds. The heated glycol, moved by the circulator pump, then travels down into the coiled heat exchanger in the tank. Here the solar heated glycol heats the domestic water used by guests for showering, dishwashing and laundry. This solar water heating system generates over 60,000 BTUS on average everyday. The energy produced by the sun saves hundreds of gallons of oil each year, reduces air pollution and carbon emissions, saves money and helps reduce our community's overall energy consumption. This project was made possible in part from a Greenhouse Gas Emissions Reduction Grant through PAREI and the NH Public Utilities Commission

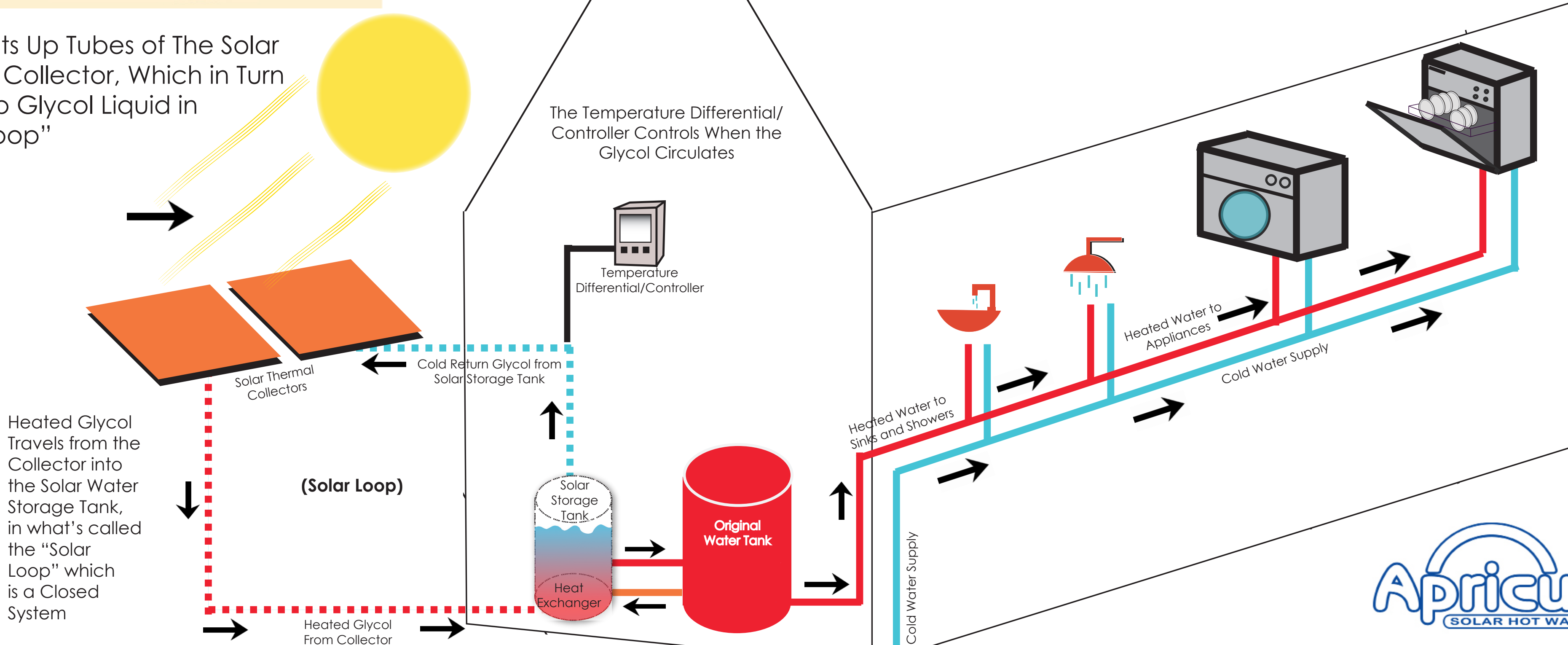


What's Inside a Solar Thermal Collector?



Solar Thermal Collector System

Sun Heats Up Tubes of the Solar Thermal Collector, which in turn heats up Glycol liquid in "Solar Loop"



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