

Costs and Benefits of a Solar-Assisted Hot Water System

Carl D. Martland
Sugar Hill, NH

Panels Face South at 45-degree Angle



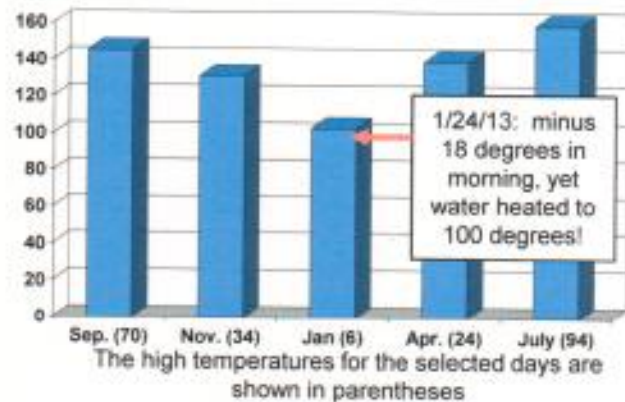
NH and US Incentives
Reduce Installation Cost

Cost of System		\$11,829
Credits		\$5,049
a. NH Rebate	\$1,500	
b. Federal tax credit (30%)	\$3,549	
Net Cost		\$6,780

System Makes Sense Both Financially and Environmentally

Gallons of Oil Saved	190	
Annual Savings, at \$3.89/gallon		\$740
Added Electricity (kwh)	800	
Added cost at \$0.15/kwh		\$120
Net Savings		\$620
ROI, Years 1 and 2		9.1%
Lifetime ROI assuming current energy costs, \$50/year for maintenance, and 20-year life		8.4%
Lifetime ROI, paying \$2000 up front and assuming a home equity loan (or the rest (4%, 20 years))		11%

System Heats Water Above 100 Degrees Even on Coldest Sunny Days



System Includes heavily insulated 80-gallon tank, electrical backup, and safety devices. Gauges Show temperatures of glycol in roof panels, of water in bottom of tank, and of hot water leaving the tank.

