

Solar Electricity: a good investment

By Kurt Newick, Feb. 3, 2007 - WWW.GOSOLARNOW.COM - Phone: 408/370-9636

How can you save money and help solve global warming and air pollution at the same time? One way is to install a photovoltaic (PV) system.

For average and above electric users, the financial advantages of a solar electric system are compelling. The tax-free annual return on investment is typically 8% for PV! A PV system's initial investment is recovered when the property is sold, making solar one of the most financially attractive home improvement projects. As electric rates rise PV owners effectively save more money. In California there is a net metering law where a contract is signed between the utility and energy generator enabling solar generators to get "paid" retail electric rates. Electric credits are banked during the summer when the meter spins backwards, and used at night and during cloudy winter periods. This net metering billing arrangement is done on a one year billing cycle. No money is owed to the utility if the value of the energy generated equals the value of the energy used. With a time-of-use meter solar credits are banked in the afternoon at triple the rate paid for nighttime usage. This is what makes solar a profitable investment! Participating utilities have generous rebates. Silicon Valley Power has a \$3,000 per kilowatt rebate (max \$9,000) as of January 2006. Palo Alto Utilities pays \$3,000 per kilowatt for residential systems (max \$9,000) through 6/30/07. The California Solar Initiative (CSI) program administered by PG&E currently pays up to \$2,500 per kW for the expected performance based buydown program (\$3,250 for non profits). Also there is an optional CSI performance based incentive program that pays for solar electric kWh production over a 5 year period that one can opt for instead. A typically sized 3.5 kW residential PV system in PG&E territory qualifies for about \$8,400 in rebates. Solar rebates are scheduled to drop on average at 7% a year under the California Solar Initiative. The Energy Policy Act of 2005 created a 30% federal tax credit for solar energy systems (PV & hot water) effective 1/1/06 thru 12/31/08 (capped at \$2,000 for residential applications, no cap for businesses). Tax-deductible home equity loans can be used to finance systems and the payments may be less than your monthly electric bill (if your bill is over \$80 a month). Properly sized PV systems can zero out one's electric bill.

PV systems need access to unshaded areas during midday to work properly. Since shading varies during the year and time of day, it is recommended that one do a shade analysis to determine a PV system's predicted performance. Any type of roof will work, but it is recommended that the roof be in good shape since solar panel design life is 40+ years. PV systems perform wonderfully and owners are elated with their systems. This is a win-win for the owner and all living creatures. The higher your electric bill, the more money you save with solar power.

Note: Solar rebates drop about 7% per year, so going solar sooner rather than later may be smart.

Do you want to learn more about solar electricity? The Loma Prieta Chapter of the Sierra Club sponsors free solar electric informational workshops. These classes cover the installation process, financial issues, benefits to the homeowner and environment, tips on selecting a solar contractor and operational characteristics of PV systems. For a list of current PV classes go to www.gosolarnow.com/morepg.html. PG&E also offers free day-long PV classes; go to www.pge.com/pec for a list of classes. Any of these classes and associated solar home tours are a good place to get your solar questions addressed and learn first hand about this mature and reliable renewable energy technology that is transforming our society with abundant, clean solar power.

Solar Electric Class Schedule Spring, 2007

Is Solar Electricity right for you?

Wondering how it works and what it costs?

Hear about rebates, tax credits, solar electric technologies, and benefits.

Solar electric informational workshops. Kurt Newick, Chair of Global Warming & Energy Committee at the Loma Prieta, presents information on the environmental benefits, system sizing, how to select a solar contractor and an overview of system installation issues. Andy Black, from NorCal Solar will discuss solar financial aspects including life cycle payback, home value increase, solar rebate and tax credits, internal rate of return calculations and address solar technical issues.

Class schedule (more info, email Kurt@GoSolarNow.com or 408-370-9636):

Solar Electric Workshop - Sat., Mar 3, 2007 3:30 pm – 6:30 pm

Milpitas Library, Community Room
40 N. Milpitas Blvd
Milpitas, CA

Solar Electric Workshop * - Sat., Mar. 24, 2007 1:30 pm - 4:00 pm

Morgan Hill Library, Community Room
17575 Peak Ave.
Morgan Hill, CA

Solar Electric Workshop - Sat., Apr. 21, 2007 1:30 pm - 4:30 pm

Saratoga Library, Community Room
13650 Saratoga Ave.
Saratoga, CA

* Andy Black is not co-teaching the Morgan Hill class

Also PG&E has free classes on solar energy & efficiency: www.pge.com/pec/classes
(search for classes in "Primary Topic" category "Renewables" to find solar classes)