## I want to go Solar!

"I don't want to pay the electric company any more. I would like to be independent and produce my own electricity. I want to help reduce CO2 emissions and lower our dependency on foreign oil. The price of electricity keeps going up."

It all sounds great and easy. Buy a bunch of solar panels and electronic equipment and I will be bill free forever! Ha. But there's even an easier way to help out and save money at the same time and doesn't cost anything! Just by being conservative and choosing energy saving products' have done this while living in my house and there isn't any noticeable difference in the way we live. It is bright, it's very warm, there's a refrigerator and chest freezer, toaster, an electric coffee maker, an over the range microwave, (propane range and oven), a Hoover vacuum cleaner, Trome washing machine, small TV, stereo, two computers, exhaust fans and lots of hot water. With all these amenities, we are still only using an average of 4 to 5 kilowatts a day. A fraction of the household average of 20 kilowatts per day. How can this be so different from your house hold? One of the main things that I've learned from living in a house that is "off the grid", is that simple and conscientious conservation will reduce your usage dramatically. In order to use solar and make it practical, this is the first step in readying your house for the addition of the solar panels. Where do you begin? A great tool for analyzing your electrical consumption is the Kill-a Watt meter or for more detailed analysis, The Energy Detective. This inexpensive meter, available on EBay for \$15 can tell you exactly what an appliance is using at that moment as well as per any length of time that it is left plugged in, such as 24 hours or per day. This is important for checking to see if your old refrigerator is using much more than a new "energy star" rated one. As well as old refrigerators, washers, TV's, and most radically, incandescent light bulbs. To prove it to yourself, take a desk lamp with a 100 watt incandescent bulb and plug it in to the Watt meter and see for yourself what it is using. If left on for 5 hours per day, 30 days a month, you will be able to actually see what that one lamp would use and cost in a month. Then do the same with a "compact fluorescent" bulb, which puts out the same lumens of light, yet is only consuming 23 watts of energy. Outdoor incandescent flood lights are often left on unattended, consuming 150 watts and more, per hour. Adding a motion detector to these will turn them on when needed and off after a short period of inactivity. TV's are often left on while not being watched. A large 32" CRT screen TV will use 350 watts per hour or more. The larger the TV the higher the consumption. Even when it is turned off, there is an electrical draw required to keep the TV warm for fast start up. Refrigerators are a large user of energy as well, especially the side by side. Be conscious of the amount of time that the door is open. Improper ventilation or dusty condensers at the compressor can reduce efficient cooling of the compressor requiring longer run times. Putting an insulation blanket on the electric water heater can save more energy. Turning a coffee maker off after the coffee is made. Shut computers with large screens off when not in use. Most desktops PC's with a large flat screen monitor are consuming well over 150 watts per hour. The list goes on and is related to everyday living. "Waste not, want not". If you don't reduce your usage, then a PV system to supply a large demand will cost upwards of \$50,000. That will take a lot of years to pay back, though you will be helping, (in a minuscule way) of reducing pollution and dependency on oil. Americans are notorious for being over fed and wasteful of all resources. The number one answer to reducing the pollutants and dependency is conservation of everything. This is something that every person can join into do and it doesn't cost anything! You save all around.