



Living with Solar

What is it like to live with a solar electric energy system?



You don't **need** to
change a thing about
your lifestyle to use
solar energy

But you will **want** to!

Efficiency First

- Cuts pollutants
- Saves money
- Reduces the cost of your system

Efficiency First

Compact Florescent Lamps



Efficiency First

Eliminate phantom loads



Wall Warts



TV's and clocks

Efficiency First

Most Efficient Appliances



Parts of a system

- Inverter
- Net metering
- Batteries (optional)
- Panels and racks
- Additional meters (optional)

Inverter

- Changes DC to AC
- You use normal wiring and appliances
- You sell excess power to the utility
- Use with or without batteries



Net Metering

- Acts as power storage
- Power you sell is deducted from your bill
- The price to buy and sell is the same



You may **want** Batteries

- Personal choice
- May need maintenance
- Need to be replaced
- Let you be independent



Panel placement

Solar electric panels that are perpendicular to the sun's rays produce the most electricity



Fixed position panels

- Fixed position panels are simple
- Easier to install
- Produce less electricity
- Less noticeable
- Set them at 45 degree angle



You may **want** adjustable racks

- Racks are more difficult to install
- Adjust the angle 4 times per year
- Increase electricity produced
- Safety issues if installed on roof
- Less expensive than a tracker



Or you may **want** a Tracker

- Follow the sun through the sky
- Produce the most electricity
- Cost the most
- Works automatically

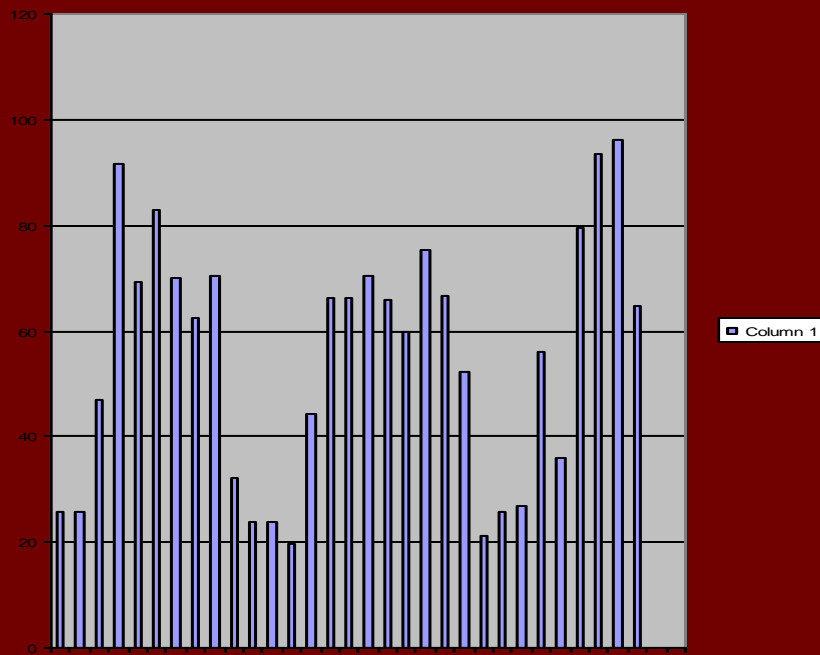


You may **want** to add a meter



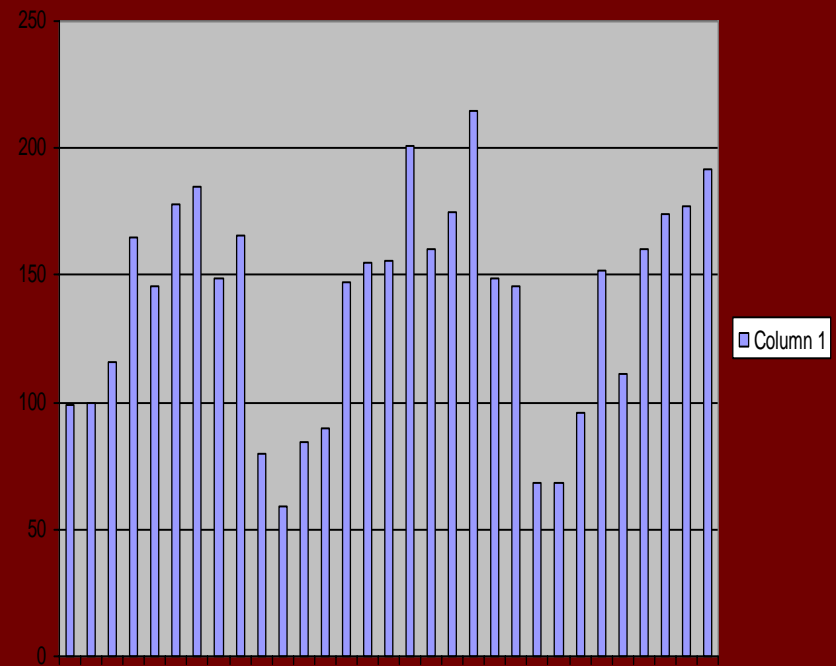
So you can chart your power!

Percent Solar Electricity



Percent Solar

KWH generated



KWH Generated

Solar power is waiting for you!

- "Every hour, enough sunlight energy reaches the Earth to meet the world's energy demand for an entire year."

U.S. Dept. of Energy



mnrenewables.org

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