

How does grid-tied solar power work?

Solar energy systems turn sunlight into electricity. Silicon wafers capture photons from sunlight and turn them into DC power. The system's inverter then transforms the DC power into AC power. The solar energy system is connected to your existing electrical system as well as to the electrical grid. When the sun shines you can generate more power than you consumer (your meter spins backwards) pushing the excess onto the electrical grid. At night or on cloudy days you will draw on utility company power, in effect using the electrical grid as a giant storage battery.

What are the components of a solar photovoltaic system?

Solar Panel: A solar panel is a device which is used to convert energy contained within the suns rays into electricity. Solar Panels are secured to a roof or other structure.

Inverter: An inverter takes the DC output from the solar panels and transforms it into usable AC power. The inverter is generally installed on the outside of your home or business in a shaded area.

Electric Panel: Electricity will be sent from the inverter to your electric panel (breaker box). Your meter will literally spin backwards when your solar PV system produces more electricity than you need and will spin forward at night or on cloudy days.

Electrical Grid: The electrical grid refers to the electricity going to/from your electric utility provider. When you go solar, you will send back to the grid the electricity that you produce in excess of your consumption, and use grid electricity at night or on cloudy days.

