



**Solar Electric or Photovoltaics:**

Solar Electric technology often referred to as PV which is short for photovoltaic, works by converting sunlight into electricity. Made from refined silica, solar cells are formed into products such as solar panels and solar roofing shingles. When exposed to sunlight, these cells generate electrical current. The electricity created is used in your home or business, thereby reducing your consumption from your utility company. Currently, there are many rebates and incentives that help offset the cost of a PV installation. These rebates and incentives can pay for anywhere between 40% and 60% of the system cost. PV systems are virtually maintenance-free and they have a long life expectancy, ensuring an excellent investment.

Electricity from the sun can be generated from photovoltaics on south, east, or west facing structures. A south facing solar array will produce the best results however arrays with a gentle slope on east/west structures can also be very effective. The most important item that needs to be addressed is the impact that shade can have on the array. Chimneys, trees and surrounding buildings can reduce the productivity of an array. Since the angle of the sun changes every day, it is imperative to have an expert access a prospective site to determine its viability for year round energy production.