## Solar panels: harnessing renewable sources of energy

**Engineering** 



However, like any technology, certain steps and procedures must be thoroughly learned before one can set-up a solar panel. In fact, Solar Energy International(SEI), an online website, provides an online workshop for those who are interested in making their own solar panels. In fact, SEI suggests that one should study first "Solar Electric Fundamentals and Grid Design" before taking up other courses. A single solar panel used for homes is made up of modules that can contain about 40 cells. However, this is not sufficient that is why there is a need to produce up to 20 solar panels in order to provide electricity for a medium-sized house. There are also certain considerations such as making sure that the panels are placed in a direction that captures maximum sunlight. Usually, solar panels are placed in the south to be able to capture good sunlight.

Solar panels are made up of PV's all lined-up together. However, a single PV is made up of "crystalline substances called silicon" (re-enrgy. ca, 2007).

The Pembine Institute explains how solar cells are made:

Solar cells are typically made by slicing a large crystal of silicon into thin wafers and

putting two separate wafers with different electrical properties together, along with

wires to enable electrons to travel between layers. When sunlight strikes the solar cell,

electrons naturally travel from one layer to the other through the wire because of the different properties of the two silicon wafers. (Renewable Energy project Kit, re-enrgy. ca, 2007).

Below is an illustration of how PV cells work:

https://assignbuster.com/solar-panels-harnessing-renewable-sources-of-energy/