

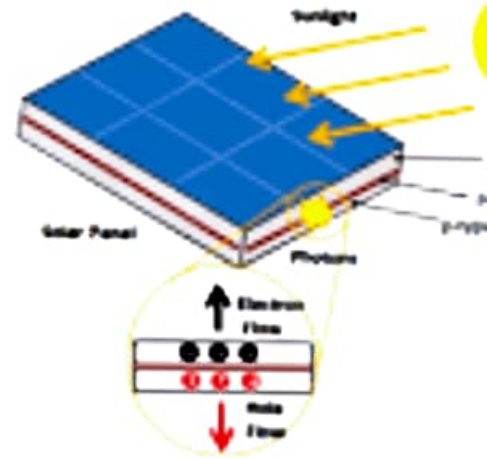
What is a photovoltaic cell and how does it work?



Why is it called photovoltaic cell?



A photovoltaic (PV) cell is an energy harvesting technology, that converts solar energy into useful electricity through a process called the photovoltaic effect.

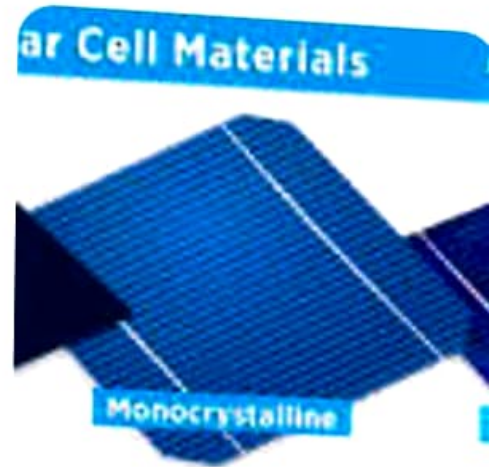


... is photovoltaic also known as?



When light shines on a photovoltaic (PV) cell – also called a **solar cell** – that light may be reflected, absorbed, or pass right through the cell.

The PV cell is composed of semiconductor material; the “semi” means that it can conduct electricity better than an insulator but not as well as a good conductor like a metal.



What is photovoltaic cell made of? ^

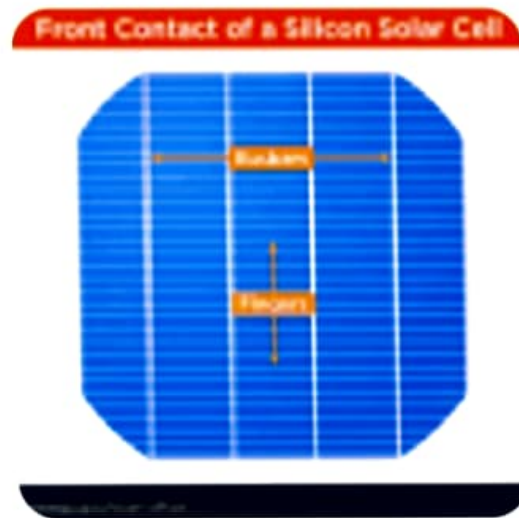
Photovoltaic cells are connected electrically, and neatly organised into a large frame that is known as a solar panel. The actual solar cells are made of silicon semiconductors that absorb sunlight and then convert it into

electricity 3 Oct 2023

How is photovoltaic made?



The manufacturing typically starts with float glass coated with a transparent conductive layer, onto which the photovoltaic absorber material is deposited in a process called close-spaced sublimation. Laser scribing is used to pattern cell strips and to form an interconnect pathway between adjacent cells.



What is the structure of a photovoltaic cell?



A solar cell consists of a layer of p-type silicon placed next to a layer of n-type silicon

(Fig. 1). In the n-type layer, there is an excess of

electrons, and in the p-type layer, there is an excess of positively charged holes (which are vacancies due to the lack of valence electrons).

