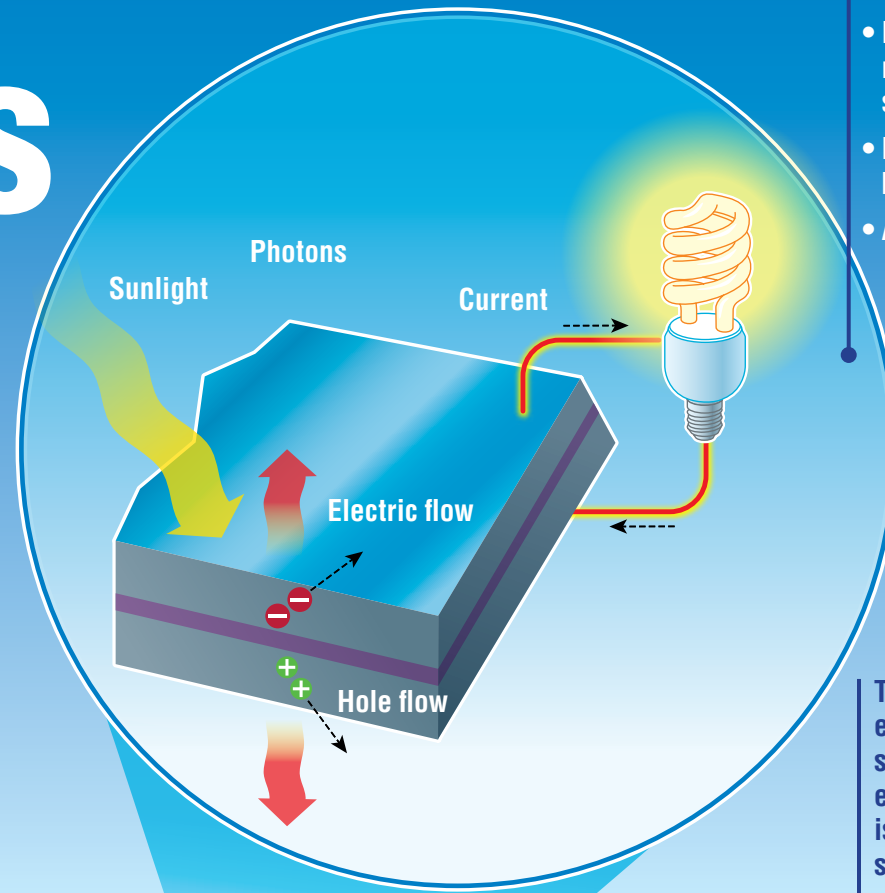


# Solar Basics

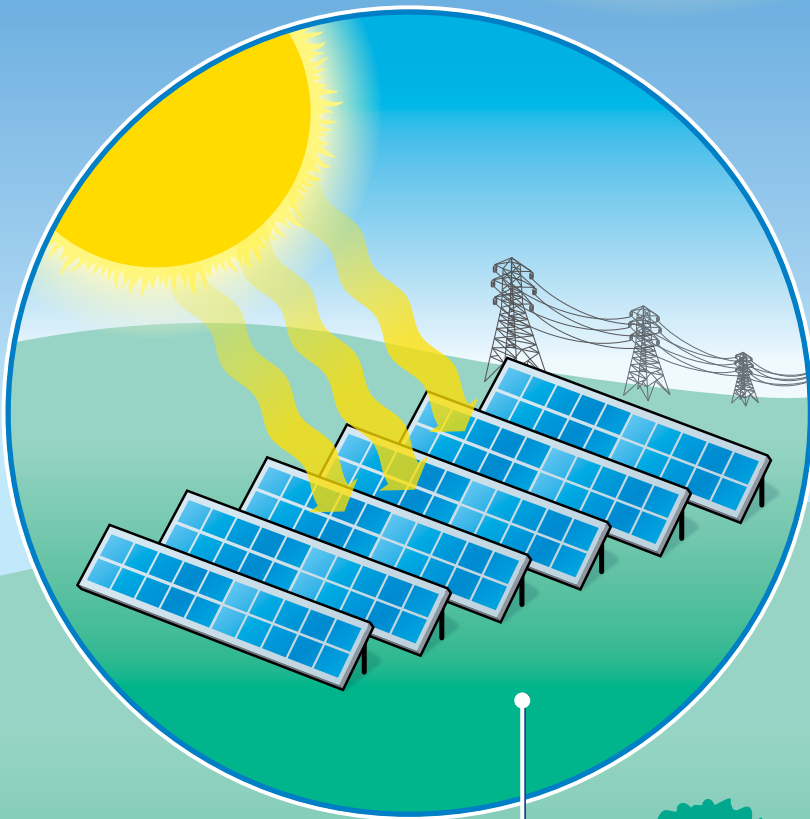
## A closer look at Photovoltaic (PV) solar panels

- Photons from the sun's rays are captured by the solar panels.
- Electrons in crystals are knocked free.
- An electric current is produced.



The electric grid supplies your home with electricity from many different energy sources to ensure reliable and consistent electric service at night and when sunshine is not sufficient to produce the amount of solar energy to meet your electricity needs.

A solar array on your roof uses energy from the sun to produce an electric system.



Solar farms, sometimes encompassing many acres, are large collections of interconnected solar panels that work together to capture sunlight and turn it into large amounts of electricity. The power generated is distributed to you and other solar customers by your Electric Membership Corporation (EMC) through the power grid, along with other sources of energy. Receiving power in this manner may be ideal for those who rent or have a shaded roof or a roof that isn't ideally positioned to capture the sun's rays. Individuals may also like this EMC sponsored method of solar participation because it is low-cost and maintenance-free.



A meter measures electricity use in your home.

The inverter converts the direct current produced by the solar array to an alternating current used by your home's appliances and electrical devices.

An electric service panel routes the electricity from the inverter to your home circuits.

