

Solar Power Plants

There are two types of solar power plants. They are differentiated depending on how the energy from the sun is converted into electricity - either via photovoltaic or "solar cells," or via solar thermal power plants.

Photovoltaic Plants:

A photovoltaic cell, commonly called a solar cell or PV, is a technology used to convert solar energy directly into electricity. A photovoltaic cell is usually made from silicon alloys. Particles of solar energy, known as photons, strike the surface of a photovoltaic cell between two semiconductors. These semiconductors exhibit a property known as the photoelectric effect, which causes them to absorb the photons and release electrons. The electrons are captured in the form of an electric current - in other words, electricity.

Solar Thermal Power Stations:

Solar thermal power (also known as "concentrating solar power" or CSP) is currently cheaper, and can generate electricity into the night by storing heat. Whereas photovoltaic panels can be used anywhere, solar Thermal power only works in areas with plenty of direct sunshine.

Types:

There are three types of solar thermal power plants

1. Parabolic trough