

SOLAR POWER. THE TECHNOLOGY OF THE PRESENT FOR FUTURE SUSTAINABILITY.

The photon output of the sun reaches the earth after travelling millions of kilometers.

The amount of solar energy reaching the earth per minute is exceeding the global energy demand of one year.



This photon energy emitted by the sun can be converted into electrical power.

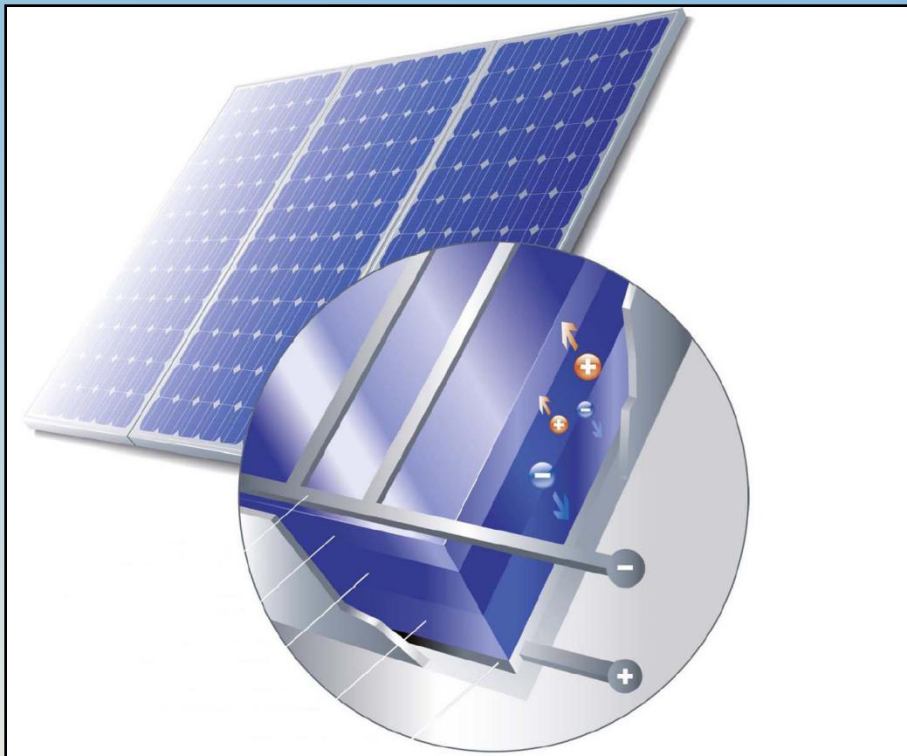
The technology of Photovoltaic (PV) once developed for satellites and space stations has long been transferred to the private sector and is now being used all over the world.

Photovoltaic (PV) is highly effective in producing usable electric power with zero emission and without waste of energy resources.

The Photovoltaic technology converts photons (light) into voltage (electricity).

The photons emitted by the sun are collected in silicon cells.

These cells are combined into layers within a solar panel.



The layers are divided by silicon covered with positive and negative electrodes. The photons are absorbed by the panels where they cause the electrons to flow through the layers in a circuit producing electrical power.

With multiple panels being arranged in arrays the photovoltaic energy can be accumulated to a current flow of up to 1000 V DC.

The electric current can then be fed by means of DC/AC inverters into a grid or be used to charge stationary battery systems.

Multiple PV panels are one of the strongest electric power stations.

Giga watts of electric power is being supplied on a permanent basis without the danger of black outs.

Especially in areas with high solar radiation the solar power is highly efficient.



The daily raise of the sun gives endless calculated stable energy supply.

Using this energy with its enormous amount of harvested photons by optimized angle or following the sun by solar trackers of the incoming light when absorbed by panels gives max free energy.

Solar PV power plants can serve for long time service and fuel free high efficient electric power supply especially in hot areas.

Photovoltaic energy is the state of the art in economic power production.

Already whole cities have based their power production solely or mainly on solar energy sources.

Solar energy is now an integral part of international architectural city planning.

Solar power plants can be easily adapted to the people's increasing demand of day and night electric power by adding more PV panels at short notice.



IPS ➤ **Your partner for solar power in your country.**