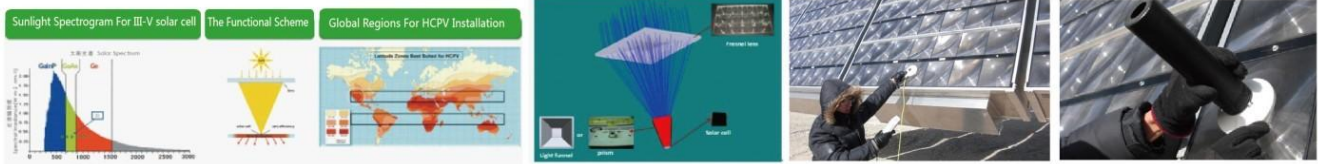
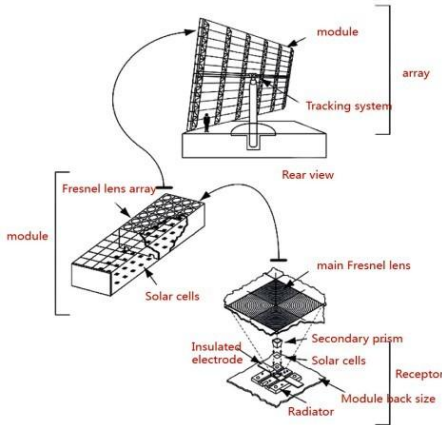




MACsun Solar Energy Technology Co.,Ltd

Add: Dalang Industrial Park, MinZhi, LongHua, Baoan, Shenzhen, China
 Tel: 0086 755 8981 6120 Fax: 0086 755 8175 3676
 Email: sales@SolarEnergy86.com SolarEnergy86@gmail.com
 MSN: jeffreyszaw2000@hotmail.com Skype: jeffrey-shaw
 Website: Http://www.SolarEnergy86.com



High Concentrated Photovoltaic (HCPV)

High Concentrated Photovoltaic (HCPV) is the 3rd generation high-concentration ratio solar power generation system (concentration ratio $\geq 500 \times$).

HCPV technology is to focus the sunlight at a certain scope by the way of concentration in a narrow area (focal spot) through a concentrating system. The converged sunlight goes through high efficiency III-V multi-junction GaAs solar cell that is as big as a focal spot and that will be directly converted into electricity by the PV effect of semiconductor material. HCPV technology has reduced the cost of power generation by improving the illumination intensity at unit area and system output power. Under the same circumstance, the higher concentration ratio, the smaller solar cell area. Take 1000X concentrating light as an example, only 1CM three-junction GaAs solar cell approaching 37% compared with 7 pieces of 5-inch silicon cell.

Taking a broad view for the international photovoltaic solar industry, HCPV is the most cost-effective and potential technology in solar energy at present and in the future. Compared with other photovoltaic technology, HCPV is characterized with wide spectral absorption, high efficiency, high power output and high reliability. 2010 has become a milestone for HCPV. Modern commercial project has attested HCPV's highest performance in strong sunlight exposure, dry and hot areas in the world.

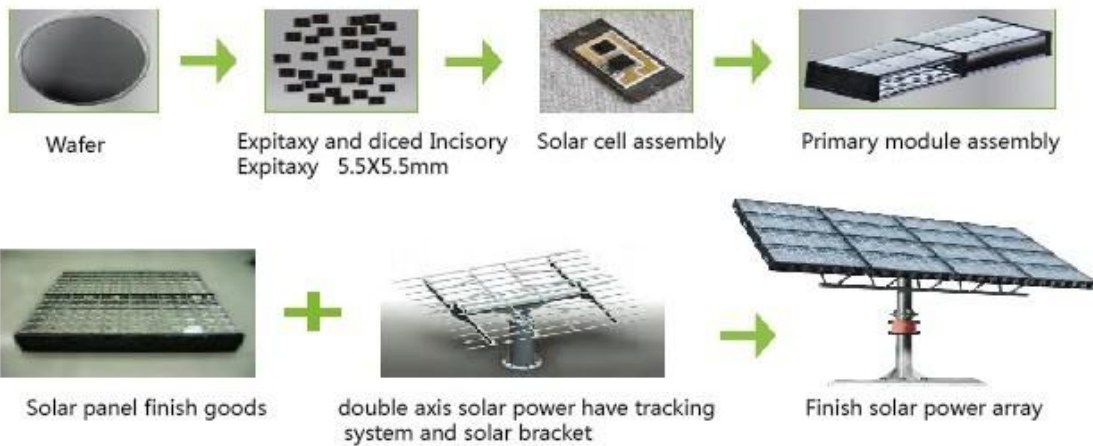
It is forecasted according to European and American research institutes that HCPV's market share will at least reach approximately 20% in the coming 10 years and its market scale will be predicted as about 20GW. By that time, HCPV industrial scale will reach nearly USD 300 billions per year.



MACsun Solar Energy Technology Co.,ltd

Add: Dalang Industrial Park, MinZhi, LongHua, Baoan, Shenzhen, China
 Tel: 0086 755 8981 6120 Fax: 0086 755 8175 3676
 Email: sales@SolarEnergy86.com SolarEnergy86@gmail.com
 MSN: jeffreyszaw2000@hotmail.com Skype: jeffrey-shaw
 Website: Http://www.SolarEnergy86.com

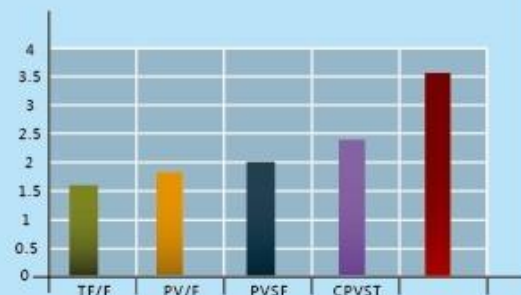
HCPV is a real clean energy technology comparing with the high pollution and high energy consumption Crystal silicon technology, there is no pollution and low energy consumption during it working.



High efficiency

Parameter	thin film crystalline	multi-crystalline	HCPV
Battery dimension	125X125mm	125X125mm	5.5X5.5mm
Concentrator ratio	1X	1X	500X
Battery power	2.0W	2.2W	6W
Power conversion efficiency	8-10%	14-17%	>39%

*Use two way tracking system





MACsun Solar Energy Technology Co.,ltd

Add: Dalang Industrial Park, MinZhi, LongHua, Baoan, Shenzhen, China
 Tel: 0086 755 8981 6120 Fax: 0086 755 8175 3676
 Email: sales@SolarEnergy86.com SolarEnergy86@gmail.com
 MSN: jeffreyszaw2000@hotmail.com Skype: jeffrey-shaw
 Website: Http://www.SolarEnergy86.com

Short return period of investment

Parameter	thin film crystalline	thin film crystalline	HCPV
Capacity	1MW	1MW	1MW
Installation occupancy area Per 1000KW	6Acres (24000m ²)	5Acres (20000m ²)	2Acres (8000m ²)
Investment amount	3.5 Mio US \$	4.0 Mio US \$	Please inquire us for the latest quotation.
Energy Output	1.4 Mio KWH	1.6 Mio KWH	3.0Mio KWH
Estimated recall years	>9 years	>7 years	<4 years

*The power price is USD 0.39/kwh offered by the local government in China.

mass energy conservation and emission reduction

Parameter	thin film crystalline	thin film crystalline	HCPV
Capacity	1MW	1MW	1MW
Capacity usage rate	30%	30%	30%
Recession rate	1.2%	1%	0.25%
Recession replacement method	Add or replace the panel	Add or replace the panel	change the battery chip only
Carbon Reduction fraction	1100 unit	1200 unit	2200 unit