



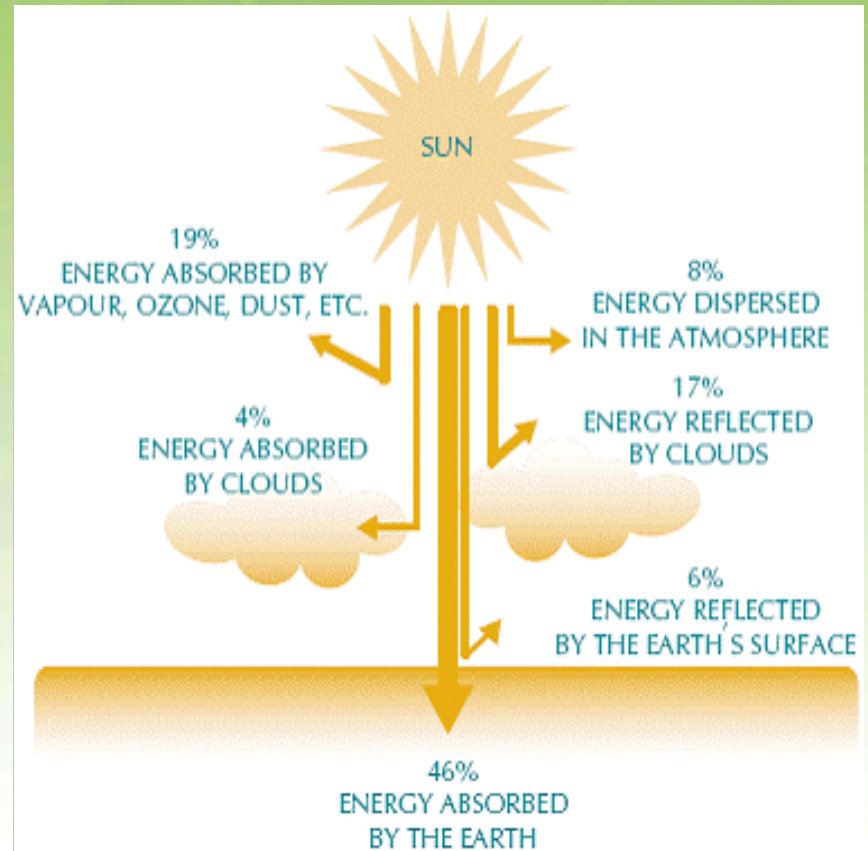
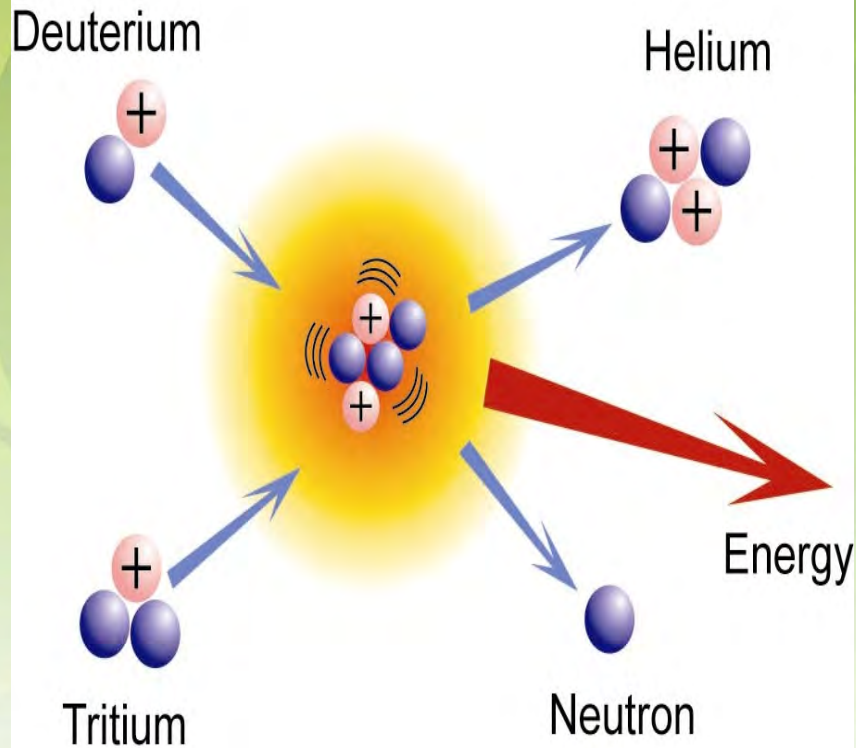
Solar Energy



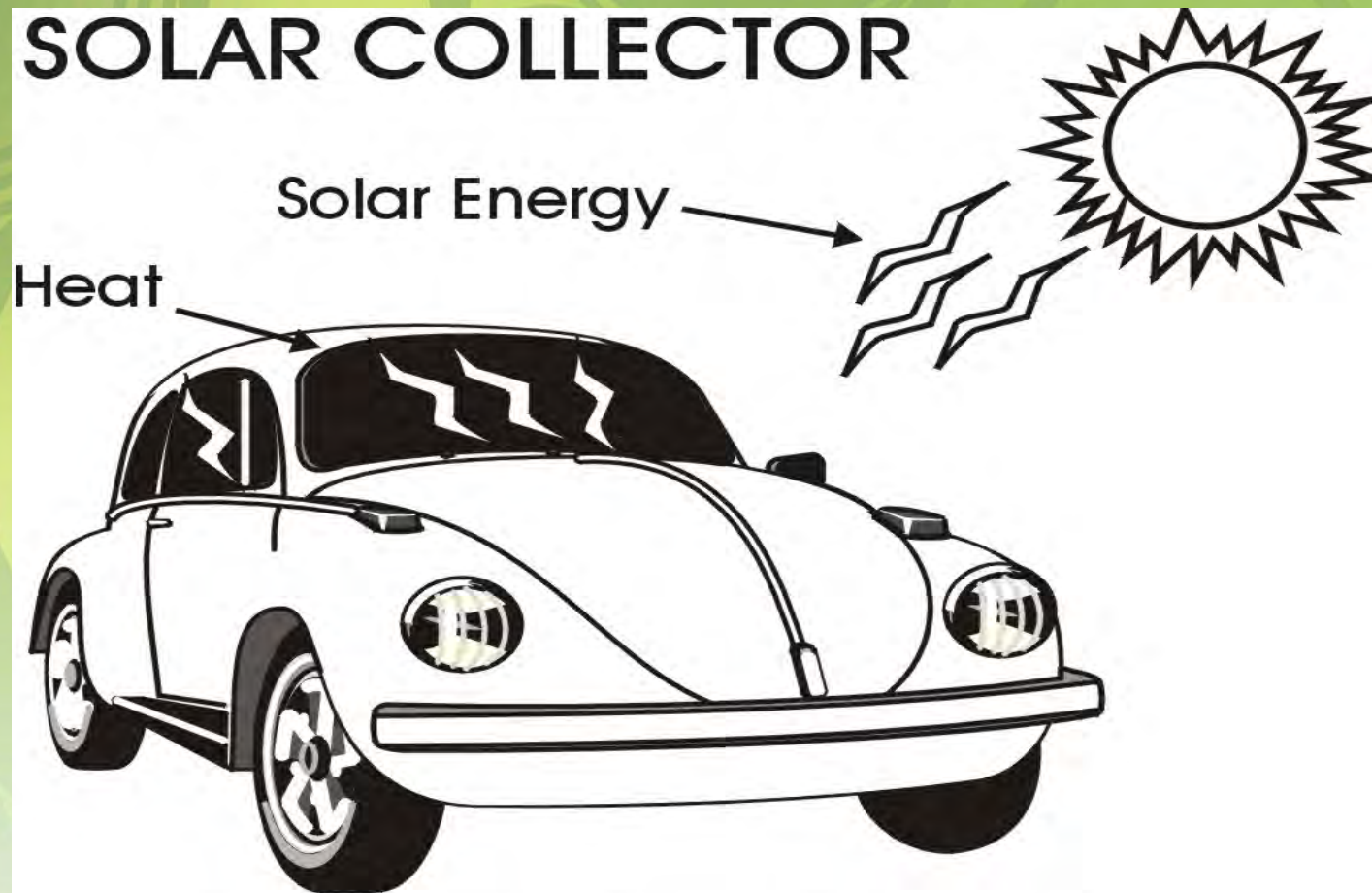
Seize the Solar Energy...

Radiant Energy

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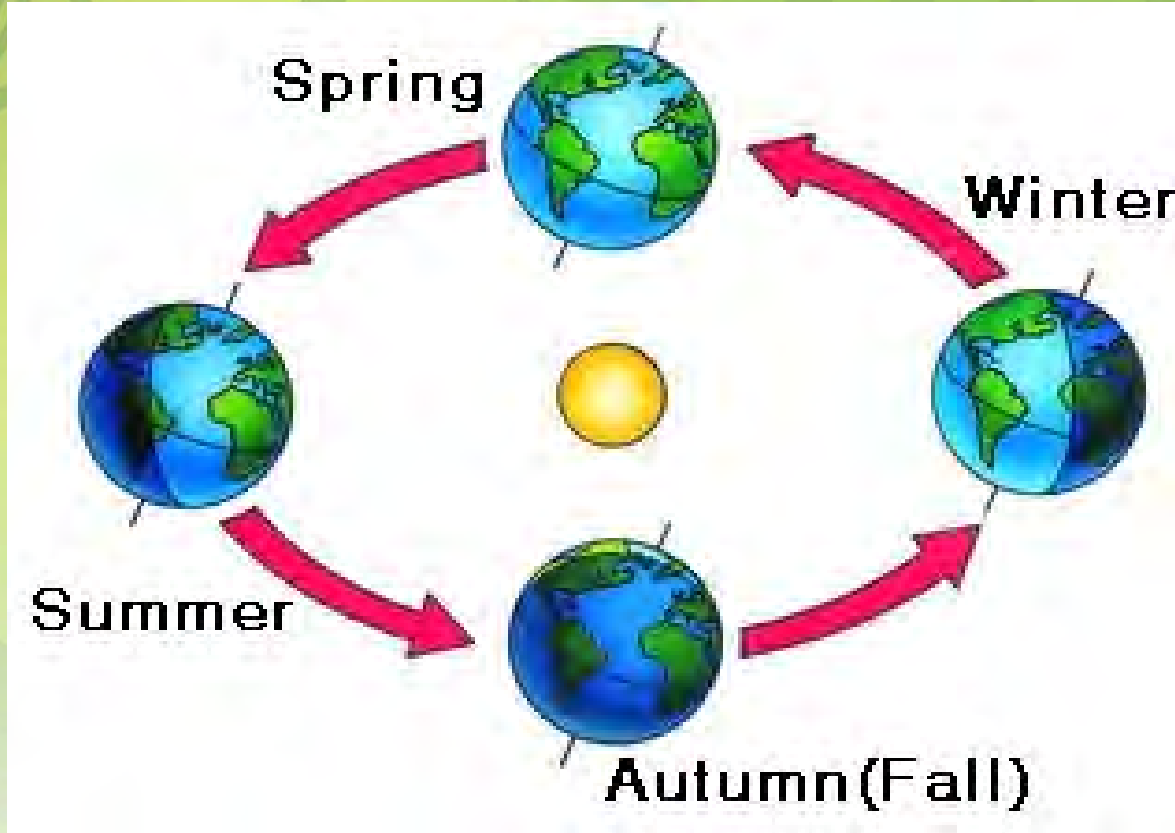


SOLAR COLLECTOR



On a sunny day, a closed car is a solar collector.
Solar energy passes through the glass,
hits the inside of the car and changes into heat.
The heat gets trapped inside.

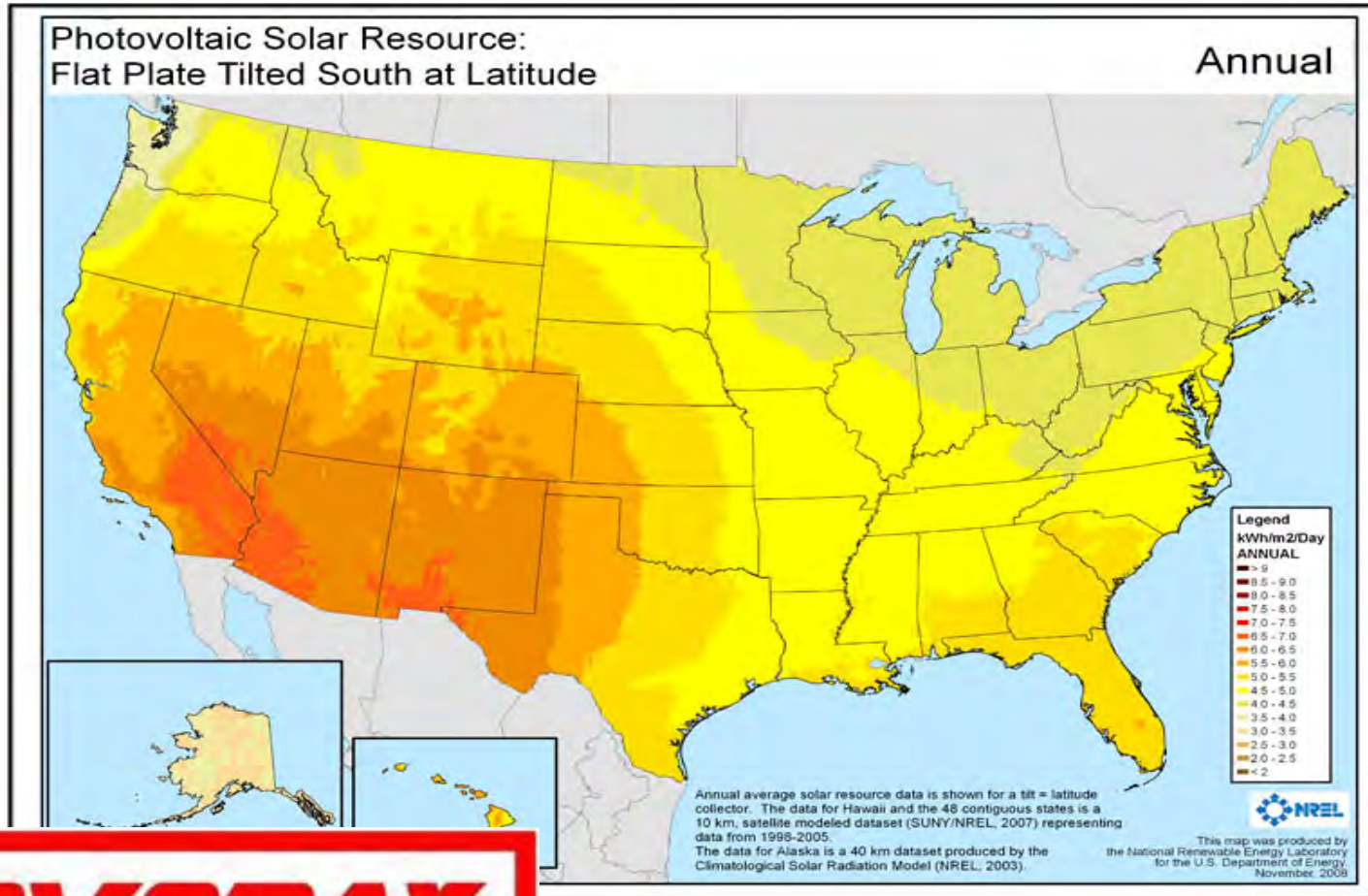
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Solar Radiation



Average Daily Solar Insolation Per Month



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- Drying Agricultural Products
- Heating Water
- Space Heating
- Generating Electrical Energy

Major Uses of Solar Energy

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Solar Technologies

- Daylighting
- Passive Solar Heating
- Active Solar Heating
- Concentrating Solar Thermal
- Photovoltaics (PV)



Passive Solar

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Daylighting

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Active Solar Heating

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Concentrating Solar Power

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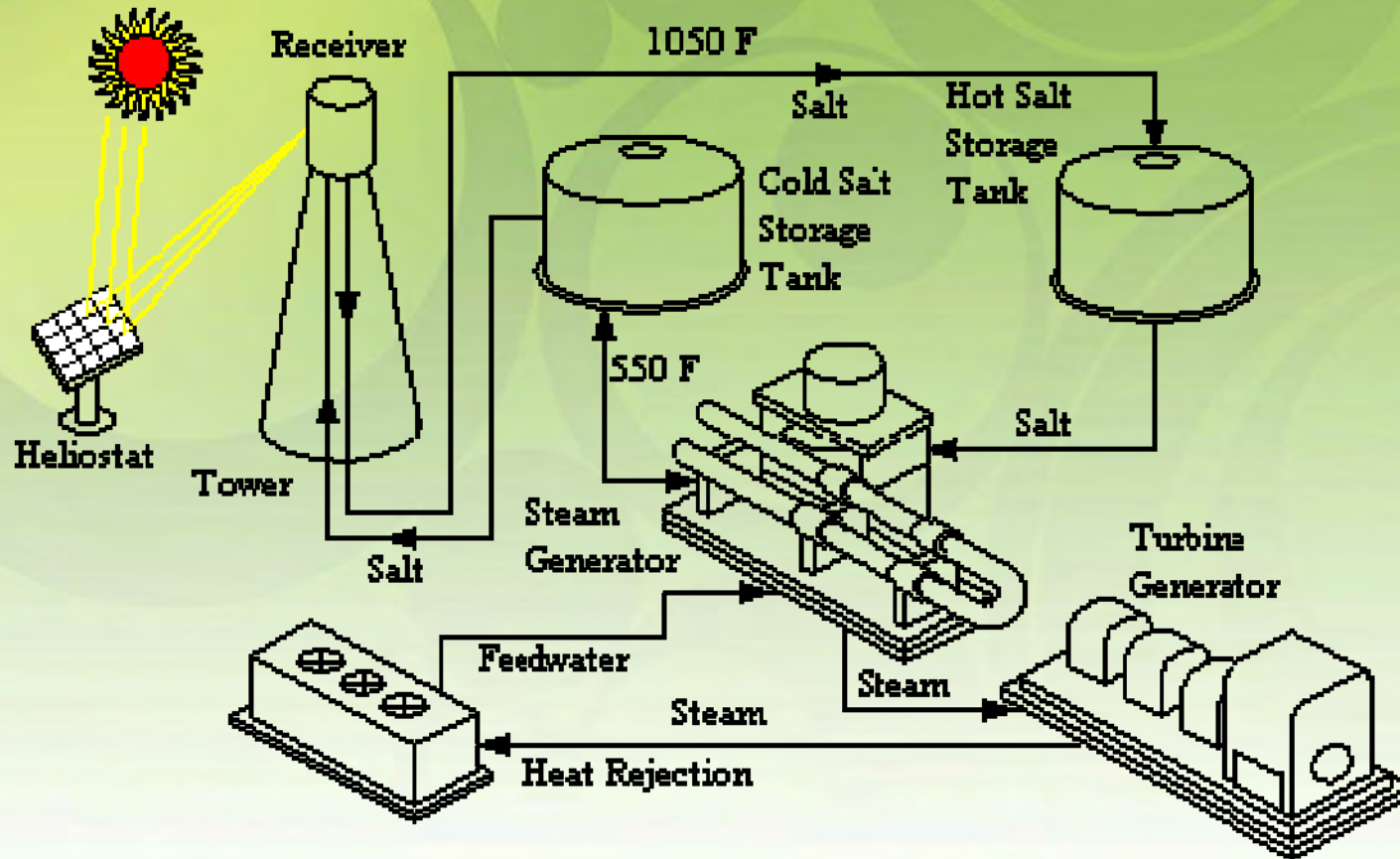
Power Tower

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How a Power Tower Works

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Photovoltaics

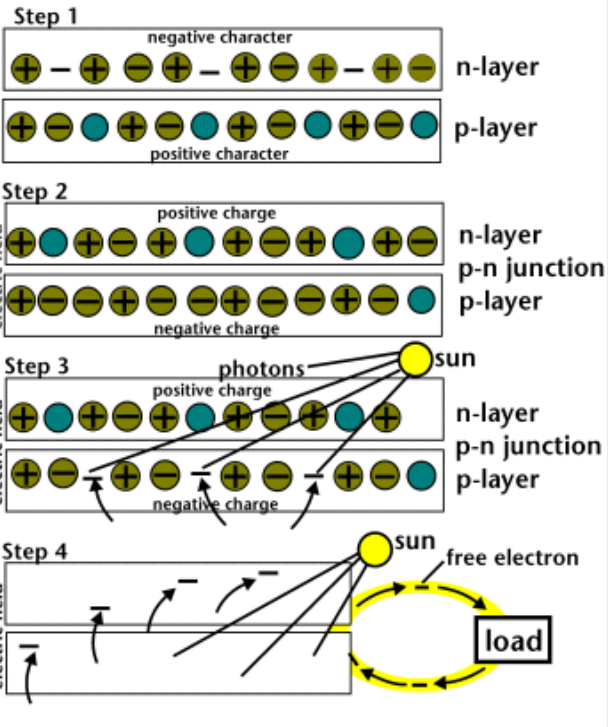


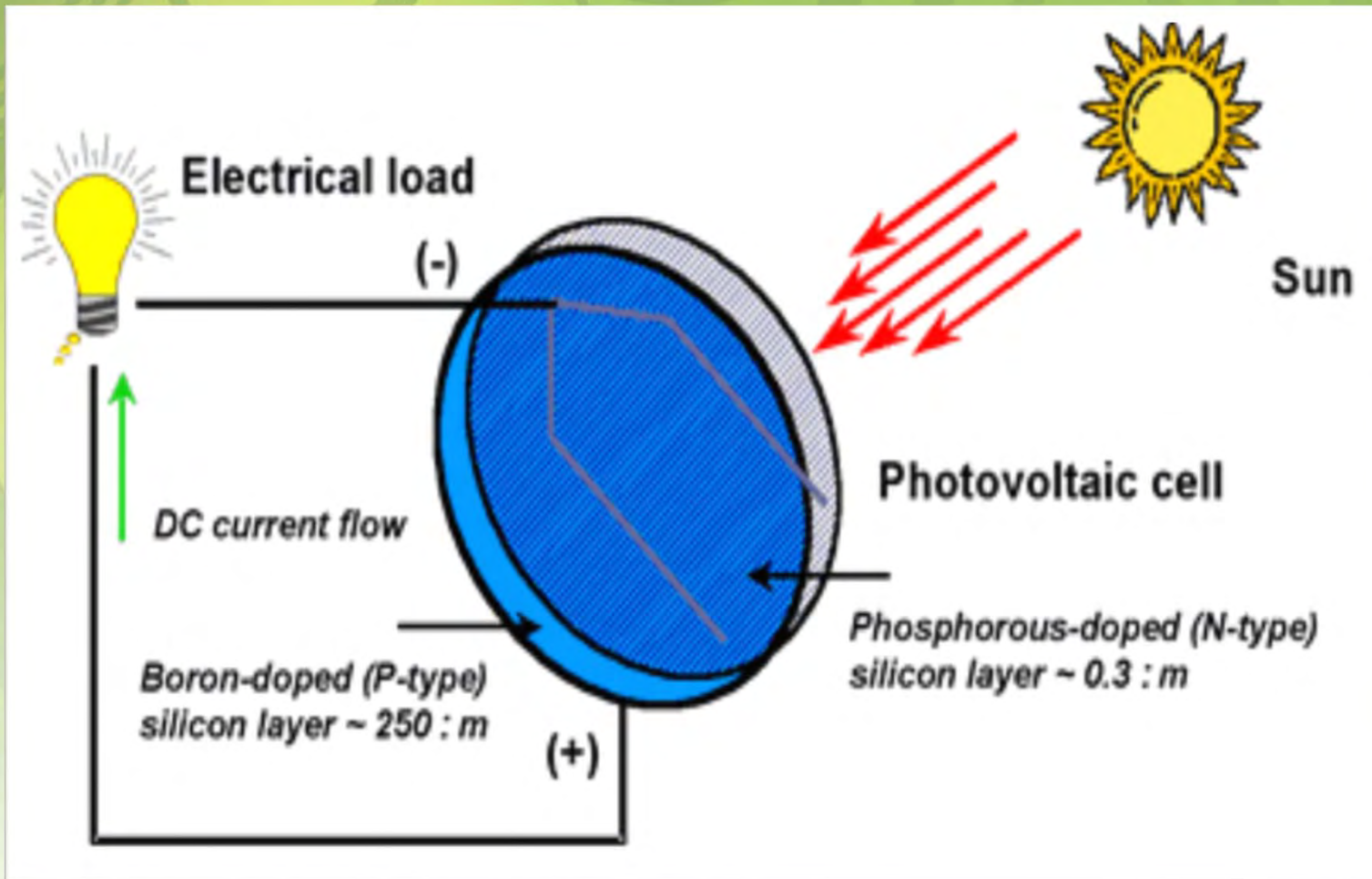
PV Cell



PHOTOVOLTAIC CELL

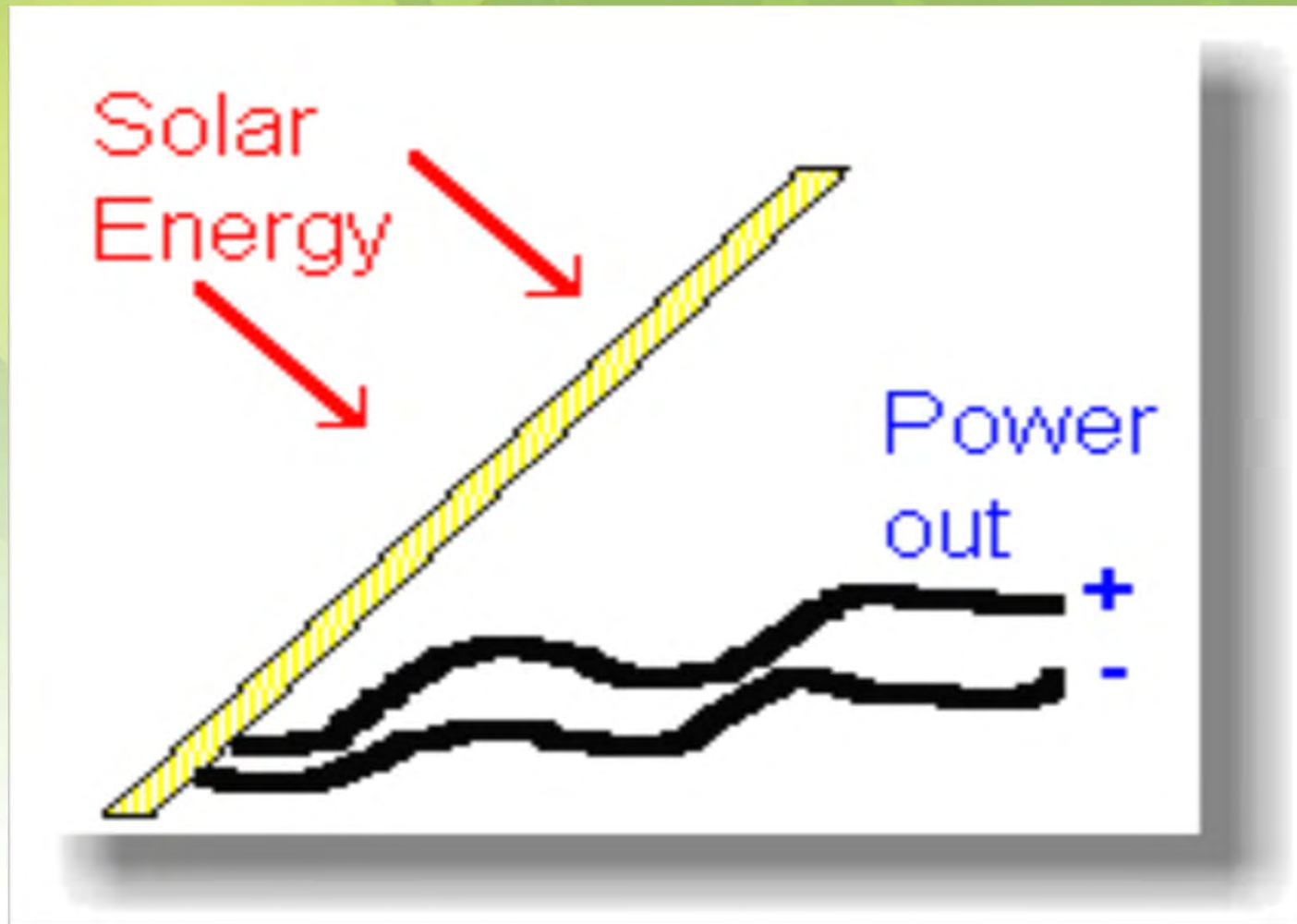
- A location that can accept an electron
- Free electron
- ⊕ Proton
- ⊖ Tightly-held electron





Conversion Efficiency

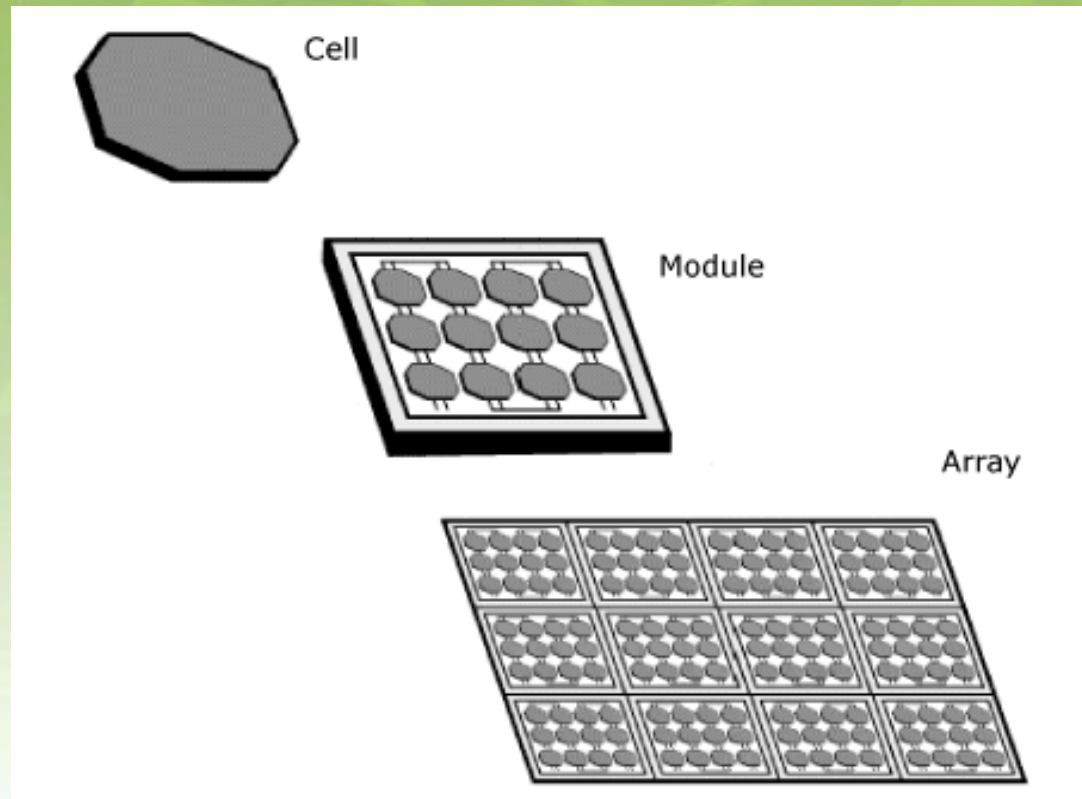
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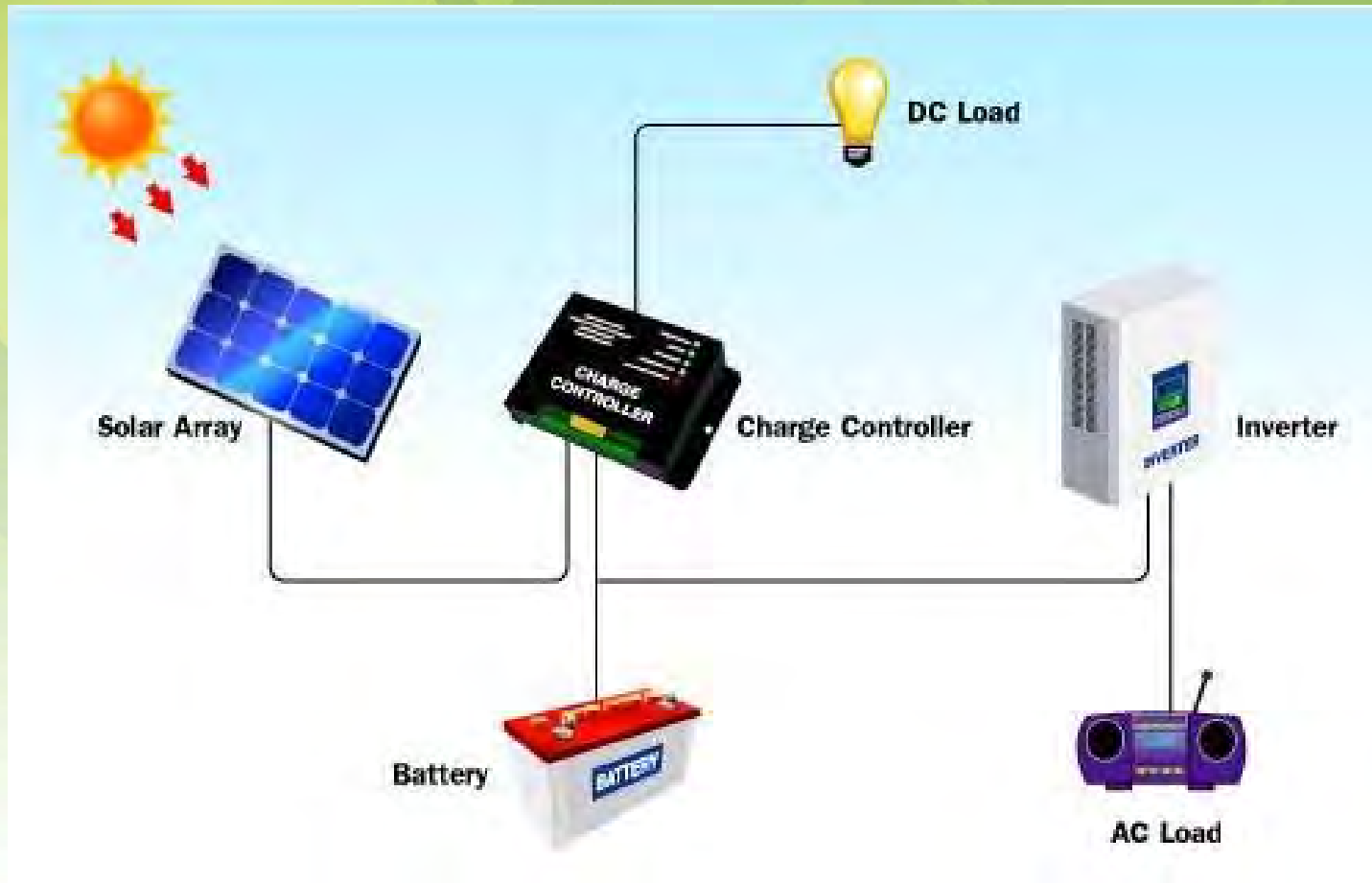
PV Array Components

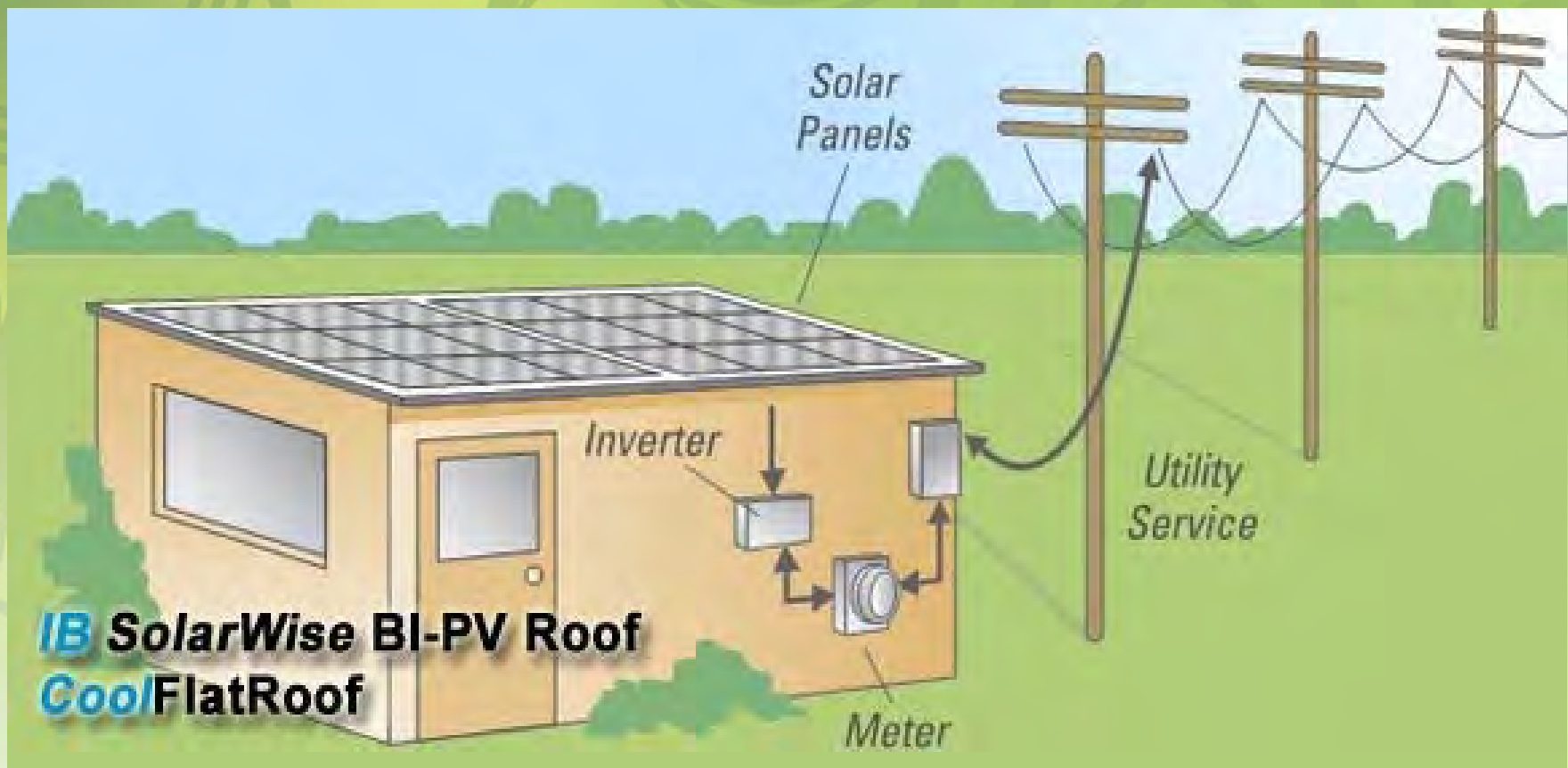


- PV Cells
- Modules
- Arrays



PV System Components





Net Metering

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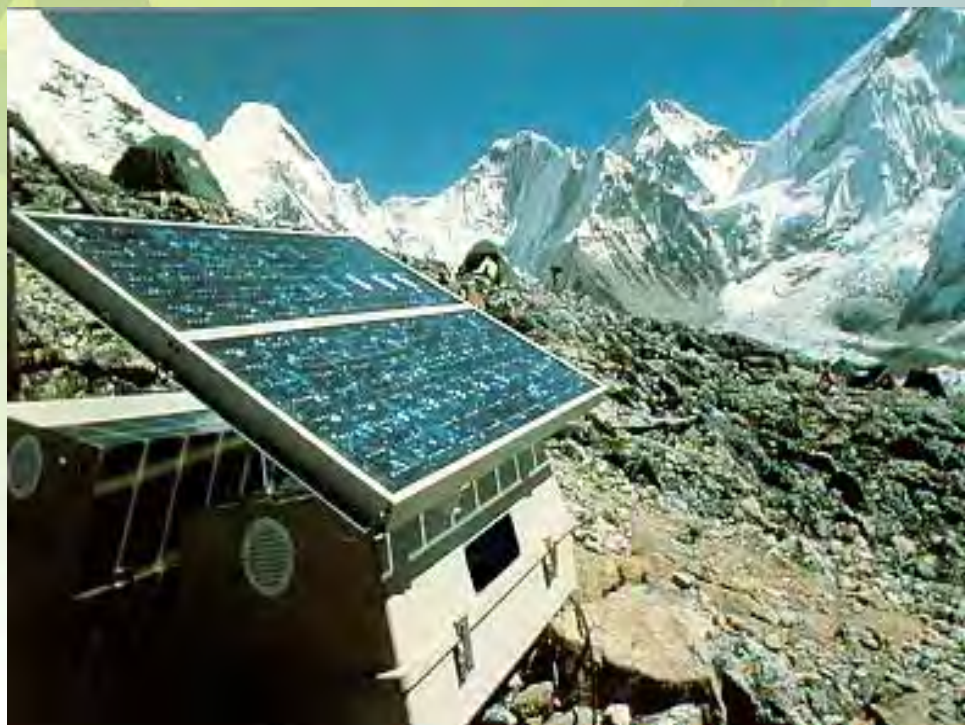
PV Array Fields

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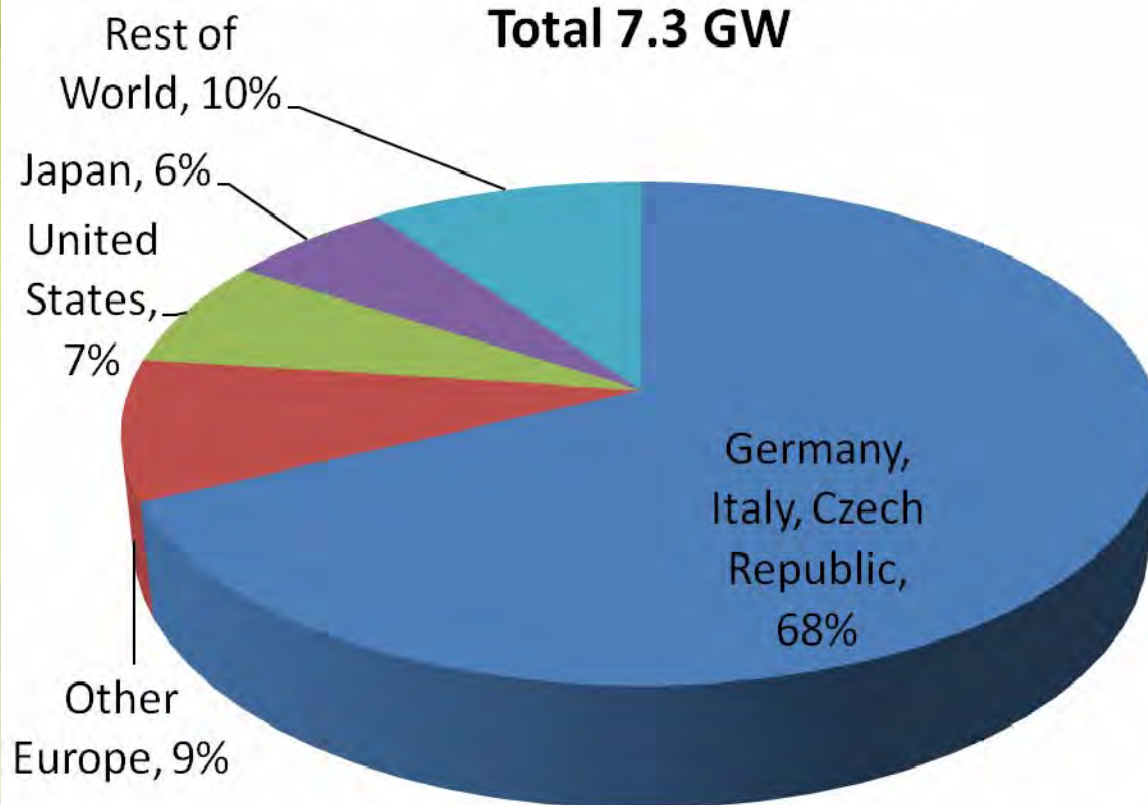
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Photovoltaic Market in 2009

Total 7.3 GW



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The logo for NOVORAY, featuring the word "NOVORAY" in a bold, italicized, red sans-serif font. The text is centered within a white rectangular box that has a thick red border. The background of the slide is a light green color with a pattern of overlapping, semi-transparent circles of various shades of green.

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- Clean
- Sustainable
- Free
- Provide Electricity to Remote Places

Advantages of Solar Energy

Disadvantages of Solar Energy

- Inefficient and costly equipment
- Part Time
- Reliability Depends On Location
- Environmental Impact of PV Cell Production

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For more information



NovoRay

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