

Solar Energy Production



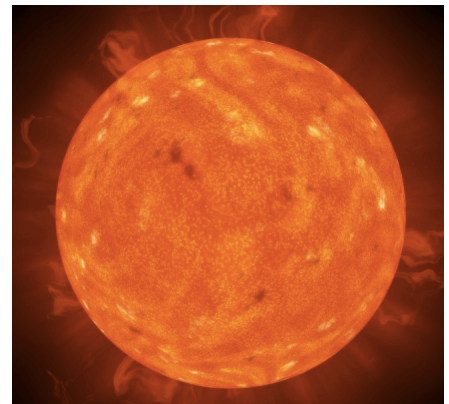
Renewable Energy Sources

Renewable energy or alternative energy is defined as energy which is collected through utilizing resources which are naturally replenished in a reasonable timeframe and then can be used again for the purpose of collecting energy (Quaschning, 2016).

The main usage of renewable energy is in electricity generation, which is used all over the world and by thousands of people to create electricity for their homes and cities. Some countries such as Sweden completely rely on renewable energy sources for their electricity demand (Clean Technica, 2016). Apart from electricity, renewable energy sources are also used in the fields of transportation, cooling, and heating.

The Sun and its power have always fascinated us. We have tried harnessing its power since the beginning of time, from using its heat to keep ourselves warm to using the light it produced to travel across the world. As the demand for electricity increased, scientists worked to discover a method through which the power of the Sun could be used to produce electricity.

In 1839, a nineteen years old French physicist named Alexandre Edmond Becquerel, observed a physical phenomenon which allowed the conversion of visible light energy to electricity using metal electrodes and electrolytes. However, the first commercial



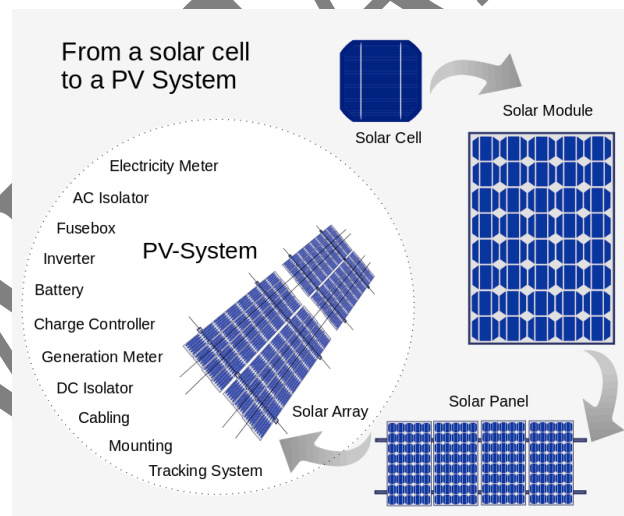
usage of solar energy did not begin until the late 1950s and currently solar energy only accounts for about 11% of the world's energy production (Sunlight, 2015).

How it works:

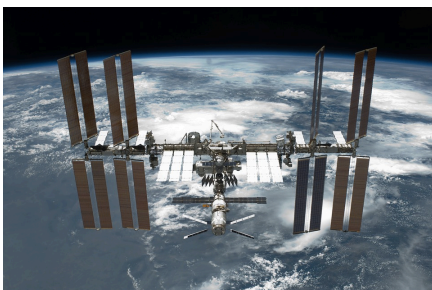
Reading Sample



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Flowing electricity (current) is produced by solar panels when light particles (photons) fall on the solar cells. These photons of light knock out electrons from the silicon atoms generating a flow of electrons (a flow of electrons = electricity) (Dhar, 2013).



Currently, solar panels are used all over the world in different ways such as providing electricity in remote off-the-grid areas

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The use of solar panels in our daily lives will subsequently increase, as it is one of the most reliable and never ending sources of energy available. Furthermore, solar panels are continually improving to become more efficient, financially practical and available. Recently, a transparent form of solar panel has been invented which could be mounted over windows and other areas (Olewitz, 2015). The Sun provides more than enough energy to power our entire planet; we just need to figure out how to use it.

Reading Comprehension Questions

1. What
2. What percentage of the world's energy demand is met using solar energy?
3. Electricity
4. Why would the International Space Station use solar panels to generate energy?

Extension Questions

5. Do you
6. Given current technology

For the next two questions, please go to the following site using the provided URL or the QR code.



<http://goo.gl/r0EzET>

7. Explain how
8. What main

Reading Sample



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TWF SAMPLE

References

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