

Overview of generation of electricity by solar energy

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ABSTRACT

The Solar Energy is produced by the Sunlight is a non-vanishing renewable source of energy which is free from ecofriendly. Every hour enough sunlight energy reaches the earth to meet the world's energy demand for a whole year. Today generation we needed Electricity every hour. This Solar Energy is generated by as per applications like industrial, commercial, and residential. It cans easily energy drawn from direct sunlight. So it is very efficiency & free environment pollution for surrounding. In this paper , we have reviewed electricity generation by Energy from Sunlight by using Solar panel.

Keywords: Renewable energy, Solar panel.

1-INTRODUCTION

Nowadays, due to the decreasing amount of renewable energy resources, the last ten years become more important for per watt cost of solar energy device. It is definitely set to become economical in the coming years and growing as better technology in terms of both cost and applications. Everyday earth receives sunlight above (1366W approx.) This is an unlimited source of energy which is available at no cost. The major benefit of solar energy over other conventional power generators is that the sunlight can be directly converted into solar energy with the use of smallest photovoltaic (PV) solar cells. There have been a large amount of research activities to combine the Sun's energy process by developing solar cells/panels/module with high converting form. the most advantages of solar energy is that it is free reachable to common people and available in large quantities of supply compared to that of the price of various fossil fuels and oils in the past ten years. Moreover, solar energy requires considerably lower manpower expenses over conventional energy production technology.

2-SOLAR ENERGY

Amount of energy in the form of heat and radiations called solar energy. Shown in Fig.1. It is radiant light and heat from sun that is natural source of energy using a range of ever changing and developing of technology such as solar thermal energy, solar architecture, solar heating, molten salt power plant and artificial photosynthesis. The large magnitude of solar power available makes highly appealing source of electricity. 30% (approx.) solar radiation is

back to space while the rest is absorbed by ocean, clouds and land masses.

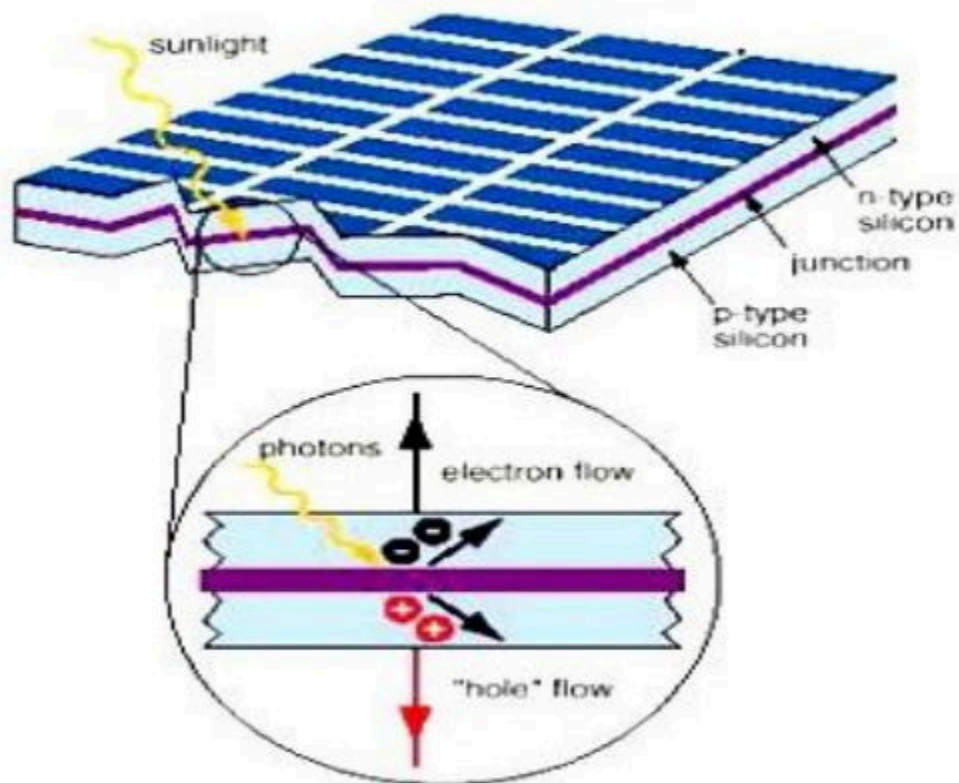


Figure 1 Internal of Reaction of Solar energy

Working of solar energy

PV cells Convert Sunlight to Direct Current (DC) electricity. Charge Controller work as control the power from solar panel which reverse back to solar panel get cause of panel damage. Battery System act as storage of electric power is used when sunlight not

available (i.e. night). From this system connected to inverter for convert Direct Current (DC) into Alternating Current (AC).

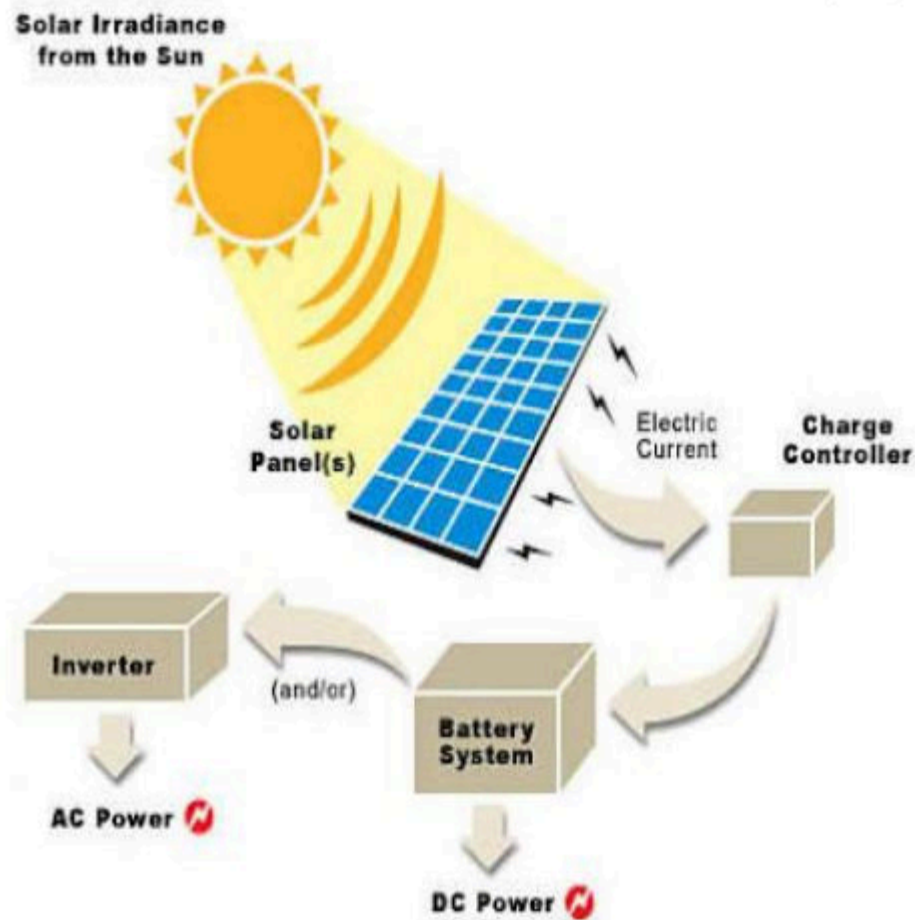


Figure 2 Working of solar energy

4-APPLICATIONS OF SOLAR ENERGY

It is used in many applications including electricity, evaporation, heating water, Heating and cooling of buildings, cooking of food, water pumping etc.

•-CONCLUSION

Most of the people are aware about non-renewable energy resources. Solar energy has become increase more popular due to their economic benefits. By on Battery Backup, Solar Energy can even provide Electricity $\forall x$, even on cloudy days and at night. This also used with inter-grid System with Continuously Power supply. It has more benefits compared to other forms of energy like fossils fuels and petroleum deposits. It is an alternative which is promise and consistent to meet the high energy demand.

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