

USES OF SOLAR ENERGY

Solar energy is the radiation from the sun that is capable of producing heat, causing chemical reactions, or generating electricity.

- Solar energy can be converted to electricity using photovoltaic cells/solar cells. This converted energy is used to provide electricity for watches, calculators & cameras.
- Unfortunately, though solar energy is free, the high cost of its collection, conversion & storage has limited its exploitation.

↳ Uses Of Solar Energy

- A partial list of solar applications includes space heating & cooling through solar-architecture, potable water via distillation and disinfection, daylighting, solar hot water, solar cooking, & high temperature process heat for industrial purposes.
 - To harvest the solar energy, the most common way is to use solar panels.
- ### 1. Agriculture & horticulture
- Agriculture & horticulture seek to optimize the capture of s. energy in order to optimize

the productivity of plants-

- Applications from solar energy in agriculture aside from growing crops include pumping water, drying crops, brooding chicken and drying chicken manure.
- Greenhouses convert solar light to heat, enabling year-round production and the growth of speciality crops & other plants not naturally suited to the local climate.

2. Solar Lighting

Daylighting systems collect & distribute sunlight to provide interior illumination. Solar thermal technologies can be used for water heating, space heating, space cooling & process heat generation.

3. Water Treatment

Solar distillation can be used to make saline. Solar energy may be used in a water stabilisation pond to heat waste water without chemicals or electricity.

4. Cooking

Solar cookers use sunlight for cooking, drying and pasteurization. They can be grouped into three broad categories - box cookers, panel cookers and the reflector cookers.

5. Electrical generation

Solar power is the conversion of sunlight into electricity, either directly using photovoltaic (PV) or indirectly using concentrated solar power.

6. Solar vehicles

Some vehicles use solar panels for auxiliary power, such as for air conditioning, to keep the interior cool, thus reducing fuel consumption.

7. Medical Uses of Solar Energy

- Ultraviolet light is used to destroy bacteria & viruses.
- It stimulates the immune system & has shown good results in killing blood borne pathogens.
- Some microorganisms destroyed by Ultraviolet light are bacillus anthracis, salmonella or food poisoning, shigella dysenteriae or dysentery.
- UV light can be combined with other therapies.
- Some kinds of skin conditions can improve with the exposure of ultraviolet light.
e.g. Psoriasis

Solar Energy Health Effects on Humans.

- Electromagnetic radiation from solar panels
- The body produces Vitamin D from sunlight & excessive ~~seclusion~~ seclusion from the sun can lead to deficiency unless adequate amounts are obtained through diet.
- Excessive sunlight exposure has been linked to all types of skin cancer caused by ultraviolet part of radiation from sunlight or sunlamps.