

Mineral and Power Resources

Q1. Describe some non- conventional sources of energy.

Ans. Solar energy - Solar energy trapped from the sun can be used in solar cells to produce electricity. Many of these cells are joined into solar panels to generate power for heating and lighting purpose. Solar energy is also used in solar heaters, solar cookers, solar dryers besides being used for community lighting and traffic signals. The technology of utilising solar energy benefits a lot of tropical countries that are blessed with abundant sun shine.

Wind Energy - Wind is an inexhaustible source of energy. The high speed winds rotate the wind mill which is connected to a generator to produce electricity. Windfarms are found in Netherlands, Germany, Denmark, UK, USA and Spain are noted for their wind energy production.

Nuclear Power - Nuclear power is obtained from energy stored in the nuclei of atoms of naturally occurring radioactive elements like uranium and thorium. These fuels undergo nuclear fission in nuclear reactors and emit power. The greatest producers of nuclear power are USA and Europe.

Geothermal Energy - Heat energy obtained from the earth is called geothermal energy. The temperature in the interior of the earth rises steadily as we go deeper. Some times this heat energy may surface itself in the form of hot springs. This heat energy can be used to generate power. USA has the world's largest geothermal power plants followed by New Zealand, Iceland, Philippines and Central America.

Tidal Energy - Energy generated from tides is called tidal energy. Tidal energy can be harnessed by building dams at narrow openings of the sea. During high tide the energy of the tides is used to turn the turbine installed in the dam to produce electricity. Russia, France and the Gulf of Kachchh in India have huge tidal mill farms.

Biogas - Organic waste such as dead plant and animal material, animal dung and kitchen waste can be converted into a gaseous fuel called biogas. Biogas is an excellent fuel for cooking and lighting and produces huge amount of organic manure each year.