



G D GOENKA PUBLIC SCHOOL

Subject: Ev.Sc./ 5TH

Aspect: Supporting Content

Thursday 9th October 2021)

Lesson no 08. Natural Resource

Learning Objective: Students will learn about various types of alternative sources of energy.

Skills: Development of environmental sensitivity.

Important alternative sources of energy

Solar Power

Solar power is an alternative source of energy which is capable of producing heat and generating electricity.

Among all of the natural sources of energy, sunlight is the most abundant. The amount of solar energy the

earth receives on a sunny day is capable of generating around 200,000 times the total daily amount of energy required to power our planet. The abundance of solar energy is only limited by the methods of collection, storage and conversion into heat and electrical energy.



Wind power

The wind is a clean, free, and readily available renewable energy source. Each day, around the world, wind turbines are capturing the wind's power and converting it to electricity.



Wind power generation plays an increasingly important role

in the way we power our world – in a clean, sustainable manner.

Hydroelectricity

Hydro energy is the form of energy which could be harnessed through movement of water to power machinery or create electricity.



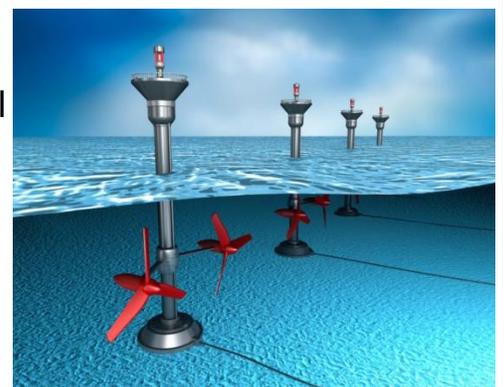
Compressed Natural Gas

Natural gas in the form of compressed natural gas (CNG) is used for power generation. It is also used as a fuel for automobiles and vehicles. It can be directly used for burning and hence finds extensive use at homes in cooking cylinders and industries for generating energy.

Although compressed natural gas is a fossil fuel, it is the cleanest burning fuel at the moment. CNG can be employed to power passenger cars and city busses. CNG passenger vehicles emit 5-10% less CO₂ compared to other frequently used fuels.

Ocean Energy

Tidal energy is a renewable energy powered by the natural rise and fall of ocean tides and currents. Some of these technologies include turbines and paddles. Tidal energy is produced by the surge of ocean waters during the rise and fall of tides.



Geothermal Energy

Geothermal energy is heat derived within the sub-surface of the earth. Water and/or steam carry the geothermal energy to the Earth's surface. People use geothermal heat for bathing, to heat buildings, and to generate electricity.



Homework:

Q 1. Mention any two alternative sources of energy.

Q 2. How can we use solar energy? Explain briefly.