

Task1-

1. Biomass is an organic matter used as a fuel, especially in a power station for the generation of electricity.
2. Wind power is the power obtained by harnessing the energy of the wind.
3. Tidal power is the power obtained by harnessing the tides and turning it into useful energy.
4. Wave power is the power obtained by harnessing the energy produced by waves at sea.
5. Hydro-electric is the power obtained by harnessing the power of water motion.
6. Geothermal is internal heat produced from the earth that can be adapted and used to make different types of power.
7. solar is the power obtained by harnessing the energy obtained for the sun's rays
8. Nuclear power is electricity generated by nuclear power plants that gain their heat from fission in a nuclear reactor.
9. A renewable resource is a resource that can be used repeatedly and does not run out because it is naturally replaced.

Task2-

Biomass	Organic matter used as fuel
Geothermal	Internal heat produced from the earth
Hydro-electric	Power obtained by harnessing water motion
Nuclear power	Electricity generated by heat form nuclear fission
Renewable resources	A resources that be used repeatedly and dose not run out
Solar	Power obtained by harnessing the sun's rays
Tidal power	Power obtained by harnessing tides
Wave power	Power obtained by harnessing waves
Wind power	Power obtained by harnessing the wind

Task3-

Biomass

- a) Biomass contains stored energy from the sun. plants absorb the sun's energy in photosynthesis. When biomass is burned, the chemical energy in the biomass is released as heat. Biomass can be burned or converted in a liquid as Biofuels.
- b) Biomass has positive and negative effects on the environment. A negative effect is burning biomass produces carbon dioxide a greenhouse gas. However, the carbon dioxide produced is around the same amount produced during photosynthesis making it carbon neutral.

Wind power

- a) Wind power is harnessed by using wind turbines, which is basically a big fan. Wind turns the propeller around a rotor, which spins a generator, which creates electricity.
- b) wind power has an adverse environmental impact. The wind turbines are very eco-friendly as they are powered by a natural resource, but they can pose a threat to any flying wildlife like birds or bats.

Tidal power

- a) Tidal energy is produced through the use of tidal generators. Tidal generators are large underwater turbines that are strategically placed areas which have the most tidal movements, they are designed to harness the kinetic motion in order to produce the electricity.
- b) Tidal power does not result in the emission of any gasses responsible for global warming or acid rain. The use of tidal power could also reduce the need for nuclear power, with its associated radiation risks.

Wave power

- a) Wave power is produced by the up and down motion of floating devices placed on the surface of the ocean. As the waves travel across the ocean, high-tech devices (Overtopping Wave Power Device) capture the natural movements of ocean currents and the flow of swells to generate power.
- b) Wave power is perceived to be a non-polluting and renewable source of energy. wave energy devices produce none of the atmospheric greenhouse gas type pollutants and emissions such as carbon dioxide and nitrogen oxides commonly associated with burning fossil fuels to generate electricity.

Hydro-electric

- a) Hydro-electric power plants capture the energy of falling water to generate electricity. A turbine converts the kinetic energy of falling water into mechanical energy. Then a generator converts the mechanical energy from the turbine into electrical energy.
- b) Hydro-electric power does not pollute the water or the air. However, hydro-electric facilities can have large environmental impacts by changing and effecting land use, homes, and natural habitats in the dam area. This is because most hydroelectric power plants have a dam and a reservoir.

Geothermal

- a) Geothermal power plant drills 1 or 2 miles deep into the Earth to pump steam or hot water to the surface. When the water reaches the surface, the pressure is dropped, which causes the water to turn into steam. The steam spins a turbine, which is connected to a generator that produces electricity.
- b) Geothermal power does not burn fuel to generate electricity, therefore the levels of air pollutants it emits are low. Geothermal power plants emit 97% less acid rain-causing sulphur compounds and about 99% less carbon dioxide than fossil fuel power plants of similar size.

Solar

- a) Solar power works by converting light from the sun into electricity. This is done by installing solar panels on your roof which generate direct current electricity. This is then fed into a solar inverter which converts the direct current electricity from your solar panels into alternating current electricity.
- b) An environmental impact of solar comes from the construction of solar energy power plants can pose hazards to air quality. Such threats include the release of soil-carried pathogens and results in an increase in air particulate matter which has the effect of contaminating water reservoirs.

Task4-

Task5-

Non- renewable energy resources, like coal, nuclear, oil, and natural gas, are available in limited supplies and all have a negative effects on the environment speeding up the things like global warming this is as they usually produces gasses like carbon dioxide and methane into the atmosphere, these gasses are also known as greenhouse gasses.. This is usually due to the long time it takes for them to be replenished. Renewable resources are replenished naturally and over relatively short periods of time some of these include Wind, tidal, solar and more. However, non-renewable resources are much more efficient compared to renewable ones.