

**What are the different types of energy available?**

**Non-renewable** energy is only available in limited amounts and take a long time to replenish. Includes coal, gas and oil. Most cars, trains and planes use non-renewable energy. They are made by burning fossil fuels to create energy.

**Renewable** energy comes from natural sources and includes solar, hydro and wind energy. Wind energy is made when the wind moves the blades on a wind turbine. This movement creates wind energy which is converted into electrical energy.

**What are the threats that our planet currently face?**

Scientists are providing increasingly compelling evidence of environmental change and stress.

Around the world glaciers and ice sheets are retreating, the overall health and diversity of wildlife is declining, human numbers are increasing and natural resources are over-exploited.

These are worrying trends and many people believe we need to take firm action to address these problems.

*Protecting the Environment*

**Some advantages and disadvantages of fossil fuels:**

- Advantages
- They generate large amounts of energy quite cheaply
  - As technology improves, more reserves can be accessed.
  - Locating where fossil fuels are is quite easy.
- Disadvantages
- They release carbon dioxide when they are burnt, creating pollution.
  - Carbon dioxide contributes to the greenhouse effect and global warming.

**Some advantages and disadvantages of renewable energy:**

- Advantages
- They are eco-friendly.
  - They are renewable.
  - They're low-maintenance energy source
- Disadvantages
- Hydro generators need enough rain to fill dams for their supply of flowing water.
  - Wind turbines need wind to turn their blades.
  - Solar panels need clear skies and sunshine to get the heat needed to generate electricity.

**Vocabulary**

Biodiversity	the number and types of plants and animals that exist in a particular area or in the world generally,
Conservation	the protection of plants and animals, and natural areas from the damaging effects of human activity:
Extinction	a situation in which something no longer exists:
Endangered	a species which is at risk of becoming extinct being it is being affected by different things.
Habitat	the natural environment in which an animal or plant usually lives:
Mineral	a valuable or useful chemical substance that is formed naturally in the ground
Recycle	to sort and collect rubbish in order to treat it and produce useful materials that can be used again:
Renewable	Renewable forms of energy can be produced as quickly as they are used:
Sustainability	the quality of causing little or no damage to the environment and therefore able to continue for a long time:
Waste	unwanted matter or material of any type, especially what is left after useful substances or parts have been removed: