

Energy Resources and Their Uses

There are lots of energy resources available on earth. There are 2 types of energy resources

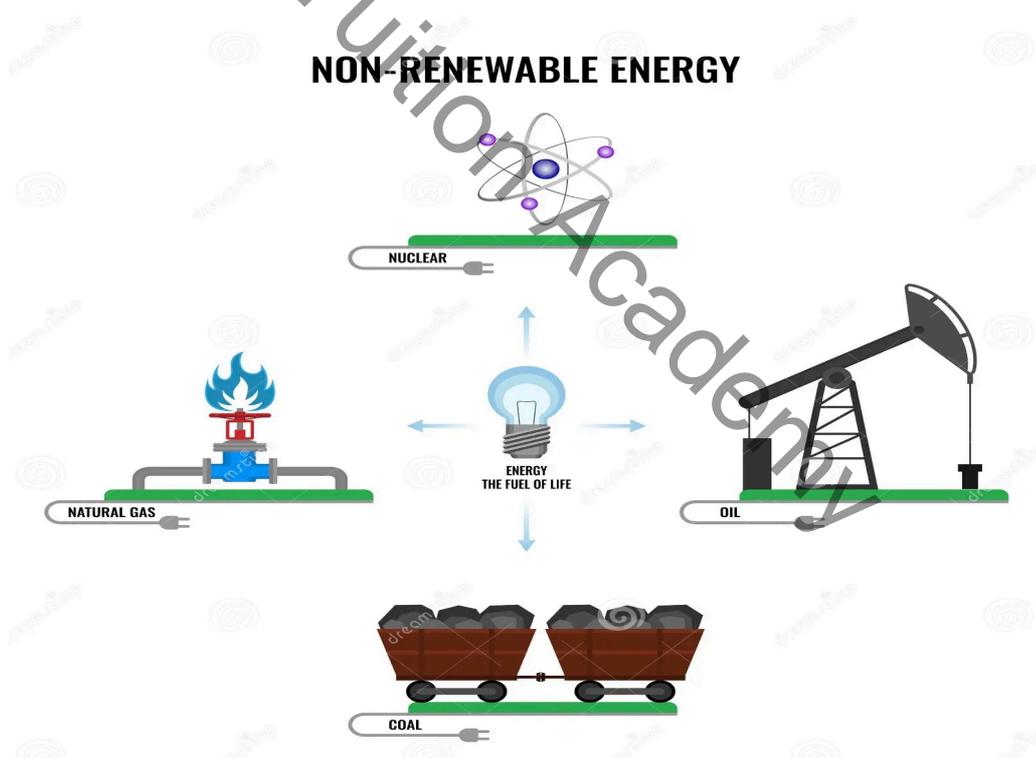
- 1- Non renewable energy resources
- 2- Renewable energy Resources

1- Non Renewable energy resources

► **Definition:**

Nonrenewable energy comes from sources that will eventually run out, such as oil, fossil and coal.

- non renewable energy resources are dangerous to the environment
- Non renewable resources are reliable



► **Non renewable energy Resource used as Transport:**

a) Transport is the most obvious place where fuel is used. The non renewable energy resources which is used in transport are **diesel and petrol**.

b) **Coal** is used in some old fashioned steam train to boil water to produce steam.



► **Non renewable energy Resource used for heating:**

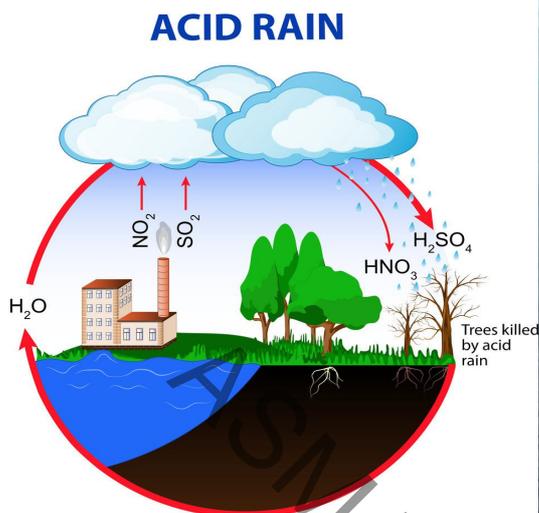
- a) **Natural gas** is most commonly used fuel for heating homes in the U.K.
- b) **Coal** is used to burnt in fireplaces
- c) **Electric heaters** used electricity generated from non renewable resources.



Non- Renewable Resource but create environmental problems:

- **Burning coal , oil and gases** produce **carbon dioxide (CO₂)** and **sulphur dioxide (SO₂)**. CO₂ added in the **green house effect** and contribute **global warming**, and SO₂ causes **acid rain** which harm the ecosystem.
- Acid rain can be reduced by taking the sulphur out before fuel is burned.
- **Oil spillages** effecting mammals and birds lives.

- ▶ Nuclear waste is very dangerous. Nuclear power having risk of major **Catastrophe** like in Japan.



2- Renewable energy resources:

- ▶ Definition:

Renewable energy will never run out, energy can be renewed as it is used.

- ▶ Most of them do damage to the environment but as compared to non renewable energy resources these are less dangerous.
- ▶ These are unreliable.
- ▶ These resources didn't provided much energy.
- ▶ these are some Renewable energy resources.

I. Sun

II. Wind

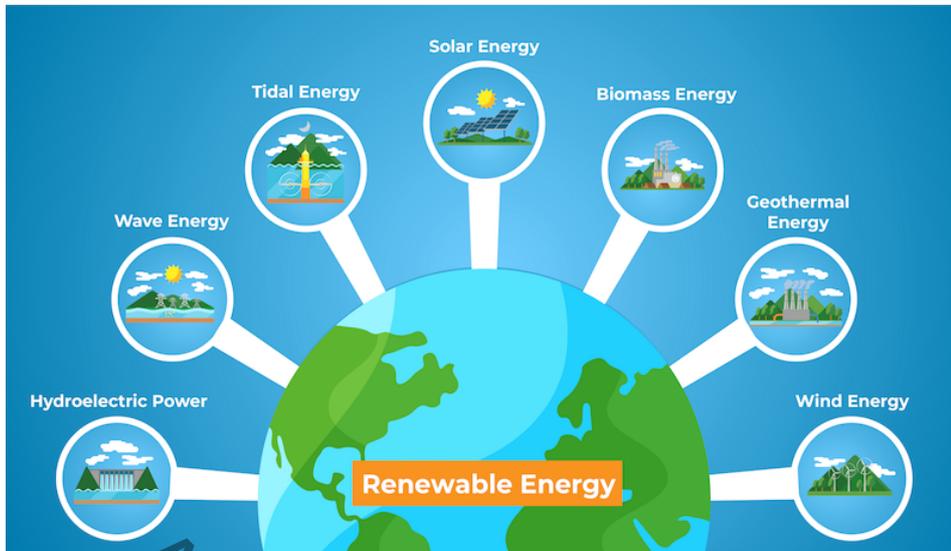
III. Water waves

IV. Hydro- electricity

V. Biofuel

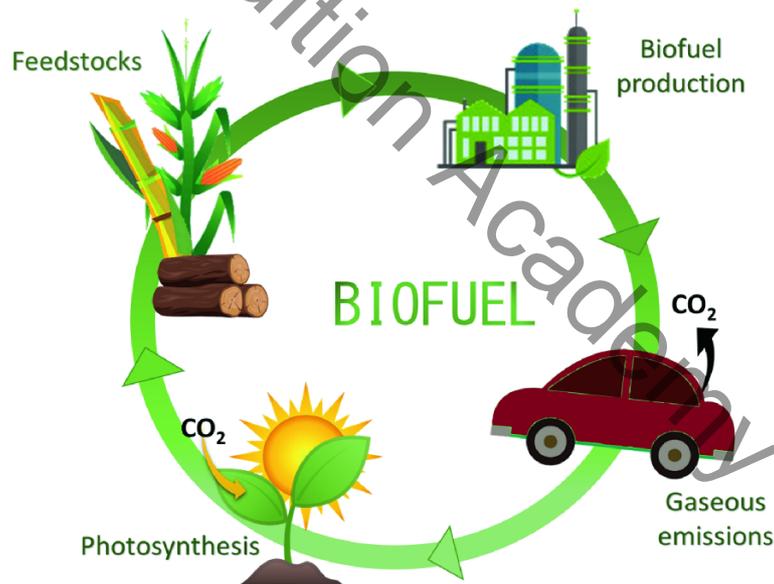
VI. Tides

VII. Geothermal



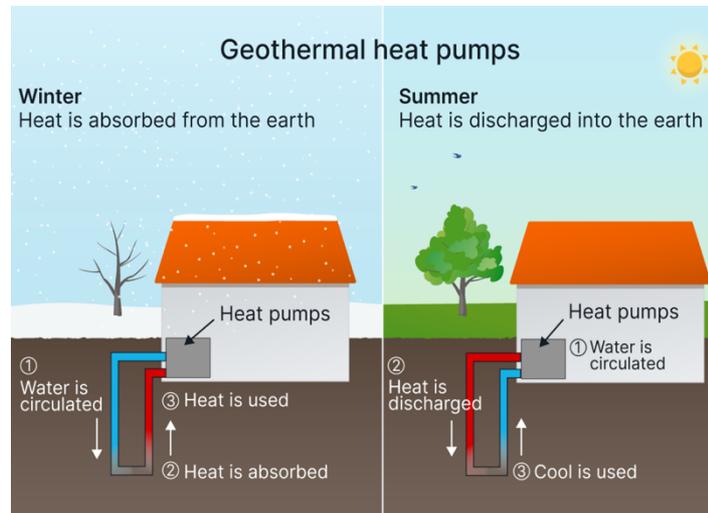
► **Renewable energy Resource used as Transport:**

Biofuel: vehicles that run on pure biofuel. Only biofuel bit can be renewable.



► **Renewable energy Resource used for Heating:**

a) **Geothermal heat pump** : uses geothermal energy to heat up the buildings.



b) **Solar water heaters:** using sun to heat water and then this heat pumped into radiators in the buildings.



c) **Burning biofuels and electricity:** generated from renewable energy source can also be used for heating purpose.