

Year Five Knowledge Organiser: Natural Elements - Earth Wind and Water.

Human Geography: Carbon Footprint

National Curriculum Learning Intention:

To investigate human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water..



Key Numbers

The average person in the UK uses **150** litres of water per day.

Coal was form over **300 million** years ago.

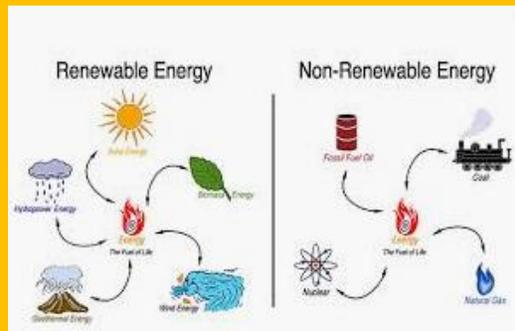
In **2014** renewables supplied **7%** of the country's energy.

Key Information

- Settlers need to have shelter, food and water. They may like to have transport links, healthcare and electricity.



There are four main types of power station operating in the UK.



- **Renewable energy** is made from resources that nature will replace, like wind, water and sunshine. **Renewable energy** is also called "clean energy" or "green power" because it doesn't pollute the air or the water.
- **Non-renewable energy** comes from sources that will eventually run out, such as oil and coal. Sources are relatively inexpensive to use, but when fossils are burned they release greenhouse gases that could cause the Earth to get too warm.
- **Ecuador** - the largest exporter of bananas accounting for 23.7% of total banana exports.
- **Mexico** - the largest exporter of tomatoes

- People in the UK can sell things they make when people in other countries want them. This might be because they can't make them themselves or because they are cheaper or better quality. Sending goods like this is called **export**.
- There are also things, such as bananas and oranges, that are hard to grow in the UK and we have to buy these things from abroad. This is called **import**.
- **What causes global warming?**
Global warming is a very complex subject. Some scientists disagree as to what caused the rise in temperatures that occurred during the end of the 20th century. Things that can have an impact on global warming include the natural temperature fluctuations of the planet, greenhouse gases such as **carbon dioxide**, volcanic eruptions, and increased solar activity.



Key Vocabulary

Settlement - places people live such as towns and villages.

Generation - the production of a form of energy or power from fuel or another power source such as water.

Gigawatt (GW) - a unit of power equal to one billion watts.

Coal - a combustible rock.

Nuclear - power produced when the nucleus of an atom is divided or joined to another.

CCGT - Combined Cycle Gas Turbines - a form of highly efficient energy generation technology that combines a gas-fired turbine with a steam turbine.

Pumped Storage - hydroelectricity - harnesses the power in running water

Renewable - sources of energy, such as wind, water and sun that can be replaced.

Non-renewable - sources of energy, such as coal that can get used up.

Solar power - the conversion of energy from sunlight to electricity.

Wind power - power obtained by harnessing the power of wind.

Biomass - organic matter used as a fuel.

Export - a country selling and sending goods to another country.

Import - a country buying and receiving goods from another country.

Efficiency - is the ability to avoid wasting materials, energy, money, and time in doing something or in producing something.

CO₂ - Carbon dioxide

Food miles - a mile over which a food item is transported.

Conservation - prevention of wasteful use of a resource/ the protection of plants, animals, natural areas and interesting and important structures.

Carbon footprint - the amount of carbon dioxide released into the atmosphere as a result of the activities of a person or item.





