

Is there enough renewable energy?

Key Vocabulary	
Fossil Fuel	Much of the world's energy is produced by burning fossil fuels such as oil, coal and gas. These are natural resources formed from the remains of plants and animals that died millions of years ago. Fossil fuels are burnt to make electricity to power aeroplanes to gas cookers.
Non renewable energy	Includes coal, oil and gas. Most cars, trains and aeroplanes use non renewable energy. The energy is produced by burning fossil fuels. It is non renewable as once it is used up there is no more.
Renewable energy	Energy inc solar, hydro and wind energy sources that can be used to create electricity. It is a natural source and will not run out.

Fossil Fuels

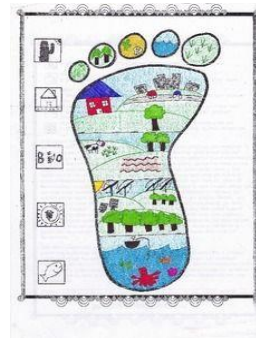
PROBLEM: Burning fossil fuels to generate electricity creates carbon dioxide gas which is damaging to the environment and is making the Earth warmer (The Greenhouse Effect).

The ice caps are melting and sea levels are rising. Not only this but it is further contributing to climate change as the Earth is experiencing changes to weather patterns and more and more extreme weather. This can take the form of flooding and longer dry periods.

This has affected us on a local level. More heavy rain over a period of a few weeks (extreme weather) has caused the River Skirth to flood. Many rivers flooded in the winter 2020 across the Midlands.

How can we reduce our carbon footprint?

1. Turn off lights / the tv etc When not in use.
2. Leave the car at home. Walk or cycle to school.
3. Turn down the heating.
4. Grow your own veg.
5. Do not waste paper.
6. Eat less meat.



Can you think of other ways we can all reduce our carbon footprint?

Renewable Energy

Hydro Power – moving water helps to create electricity by turning turbines as the tide moves in and out or water used in a dam can be used instead.

Solar energy – solar panels collect energy from the sun to create electricity. Many houses have solar panels but there are now solar panel farms such as the one outside Branston on the way to Lincoln.

A solar farm



Off Shore wind turbines



Wind energy – the wind turns turbines to create electricity. Some are on land, some are off shore such as the ones off the coast in the sea near Skegness.

Harmful gases are not produced so they do not cause pollution and climate change.

Biomass – uses natural materials like waste products which are burned and release heat. There is a biomass renewable energy power plant at Sleaford. Find out how it works and why it is sustainable?

Lincolnshire relies on tourism to generate money. How do lots of tourists coming to places like Lincoln and Skegness affect the environment?

What can we do to ensure tourists still come to Lincolnshire but also help the environment?

