

Solar Panels



Solar panels convert the energy from the sun into electricity for us to use in our homes.

- They can be put anywhere that gets sunlight.
- They don't generate electricity at night.
- It is now possible to store energy from solar panels in batteries.
- Sometimes you need to get permission to put them in certain places
- No greenhouse gases are made when they create electricity

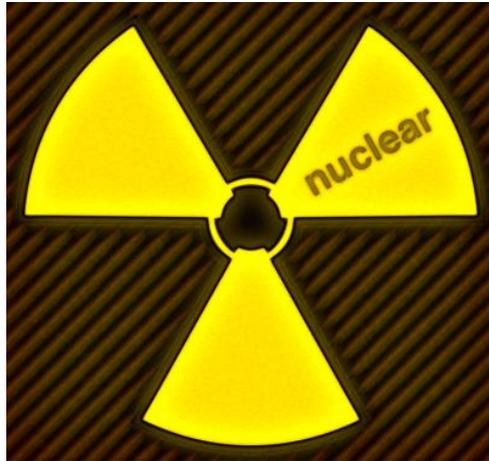
Wind turbines



Wind turbines turn wind energy into electricity.

- Wind turbines can be put on land or in the ocean.
- No greenhouse gases are made when they create electricity.
- Some people don't like how wind turbines look, so we have to be careful where we put them.
- In the UK, only 8% of our electricity is made by the wind.
- Wind turbine blades are sometimes wider than a whole football pitch!

Nuclear power



Nuclear energy is made by releasing energy from tiny atoms.
This energy can be made into electricity to use in
our homes.

- 14% of the world's electricity comes from nuclear power.
- Nuclear energy creates a lot of radioactive waste. This has to be stored safely because it is very dangerous.
- Britain already has 100,000 tonnes of radioactive waste that needs to be stored for thousands of years.
- Nuclear energy doesn't release any harmful greenhouse gases when it is made.

Hydropower



Hydropower is electricity that is made using the energy in moving water.

- Usually, hydropower is made using a dam, or a waterfall such as Niagara falls.
- It is the cheapest way of making electricity in the world.
- The dam at China's Yangtze River is 1.4 Miles wide – this is more than 8 times wider than the Eiffel Tower is tall!
- No greenhouse gases are made by creating hydropower electricity.
- Dams can destroy local plants and wildlife by changing the way that rivers flow

Geothermal Energy



Geothermal energy is heat and electricity made from rocks below the ground.

- Many people in the UK heat their homes now by using energy stored below the ground in their back gardens.
- In Iceland, they can use lots of underground heat as they have 25 active volcanoes!
- No greenhouse gases are made by using geothermal energy.
- Geothermal can only be made on a large scale in some places.

Coal / Oil / Natural Gas power station



Fossil fuel power stations make electricity by burning coal, oil or natural gases.

- Almost all of our cars, trains, and planes run by burning fossil fuels.
- Burning fossil fuels creates gases which damage our atmosphere.
- Coal, oil and natural gas are all made from the remains of plants and animals that lived millions of years ago.
- These fuels are usually found deep underground and need to be mined or drilled so that we can use them.

Biomass energy



Biomass energy is when we burn trees and other plants to make electricity.

- Burning wood creates greenhouse gases, but only releases the same gases that the tree takes from the atmosphere when it grows.
- When we grow trees and plants for biomass energy we have to make sure that we don't burn more than we grow or we will run out of them!
- Biomass energy uses a lot of space to grow the plants and trees we need.