Glossary

ATMOSPHERE a layer of gases surrounding the planet, allowing life on earth by trapping the sun's heat to warm the surface.

BIOMASS a renewable source of energy, it is matter that was recently alive and growing, such as wood, plants and food, which you can burn to make heat, electricity and transport fuel.

CARBON DIOXIDE a gas which humans breathe out and plants breathe in. It is also produced by burning fossil fuels for energy, contributing to the greenhouse effect.

CARBON FOOTPRINT the total amount of greenhouse gas created by an individual, group or organisation. It is usually measured in tons of carbon dioxide produced per year.

CARBON SINK all plants absorb carbon dioxide and store it as carbon. Large forests and oceans are very large carbon sinks (stores).

CLIMATE the total of all weather occurring in a place over a long period of time (at least 30 years). This includes average weather conditions, seasons and extreme events like hurricanes.

CLIMATE CHANGE the changes in the average weather of a place over a long period of time.

ELECTRICITY a form of energy used to power machines, communications, lighting, and heating devices. Electricity is usually made in power stations burning fossil fuels.

ENERGY the power to make things move. As humans we get our energy from food. We use energy for light, transport, cooking, warmth and more.

FOSSIL FUELS coal, oil and gas which are buried deep in the ground and were made millions of years ago. They store carbon which is released as carbon dioxide when burned to make energy.

GEOTHERMAL POWER a renewable energy source, it uses the hot magma in the centre of the earth to heat water.

GREENHOUSE EFFECT the natural tendency of the atmosphere to keep the planet warm, using greenhouse gases to trap the sun's heat. Our planet would be much colder without it.

GREENHOUSE GASES gases in the atmosphere that trap heat around the earth like a blanket. The main gases are carbon dioxide, methane and nitrous oxide. They occur naturally but scientists are concerned that human activity is adding more of them to the atmosphere.

HYDROELECTRIC POWER a renewable source of energy, it is a way of making electricity from running water. A dam is built across a river to control the running water and capture its energy.

KEROSENE a liquid made from oil which can be burned as fuel. It is dangerous, very expensive, bad for the environment and for people's health.

LED Light Emitting Diode, a small bulb which is bright, energy-efficient and long-lasting.

PHOTOVOLTAIC PV for short: photo means light and voltaic means electricity. PV solar panels are made from silicon which comes from sand. They use the sun's light to make electricity.

RENEWABLE ENERGY energy generated from natural sources which are immediately replaced as we use them so they won't run out. They include the sun, wind, water, geothermal and biomass.

SOLAR POWER a renewable source of energy, there are two types of solar power: solar thermal energy (heat) and solar light.

TIDAL POWER a renewable source of energy, using the tidal water moving up and down the shore.

WAVE POWER a renewable source of energy, using the movement of the waves to make electricity.

WIND POWER a renewable source of energy, using a turbine to harness the wind to make electricity.

WEATHER whatever is happening outside, including precipitation, wind, sunshine, clouds and temperature. It can change a lot in a very short time.