

What is Climate Change?

Climate is what the **weather** is like in a certain place over a **long** period of time - things like the **temperature**, wind and rainfall. And it doesn't always stay the same. In the past, Wales has had ice ages and warm **tropical** climates, but the changes have happened **naturally** and slowly. But now the climate is **rapidly** changing. Earth is warming more quickly **than it was** before. And surprise, surprise - we're to blame.

We use lots of fossil **fuels** like coal, **oil** and gas to heat our homes, **generate** electricity, and power cars and planes. They're very **useful** but there's a problem. **Burning** fossil fuels produces carbon dioxide, or **CO2**, which traps heat in the atmosphere and makes the Earth **warmer**. This is known as the greenhouse effect. And we're starting to see the effect of **global warming** all over the world. Summers in Australia are getting hotter and drier, making the problem of **wildfires** worse. In Wales, **serious** flooding is becoming more common. It's no wonder that nations around the world are doing more to **tackle** climate change.

One **answer** is to get **energy** from the wind, the tides and the sun. These are renewable, meaning they won't run out and they don't **produce** carbon dioxide.

What can you do to fight climate change? How can we use less energy?
Remember, the smallest **actions** can make a big **difference**.

The effects of global warming

Global warming can affect the planet in different ways. It is causing the ice near the North Pole and the South Pole to start melting which will cause sea levels to rise. The warmer temperatures are making the weather more extreme which causes more flooding, drought and storms like hurricanes.



Australia has faced serious wildfires that can last for months. Very high temperatures and dry conditions allow the fires to spread quickly. Many homes and large areas of forest have been destroyed by these fires.

Towns and villages in south Wales have been affected by heavy rainfall and flooding, causing severe damage to homes and businesses.

Renewable energy

There are ways to produce energy without burning fossil fuels. We are producing more and more energy from sources that are renewable - meaning that they won't run out. More importantly, they don't produce carbon dioxide.

Some of the most effective renewable energy sources are:

- **wind energy** - using the power of the wind to generate electricity
- **solar energy** - using the heat and light from the sun as a source of power
- **tidal energy** - using the movement of water caused by the tide to generate electricity

What can we do?

If we are responsible for causing climate change which is harming our planet, we can also be responsible for reducing the effects of global warming. There are lots of things that we can do.

- Use electric vehicles which don't create harmful gases, instead of petrol and diesel vehicles.
- Raise people's awareness by explaining the things that all of us can do to save energy whenever we can.
- Generate more renewable energy.

Activity: Choose 2-3 words and explain their meaning using English

Word	Meaning

Bonus Activity: Make sentences using the words.
