

# Climate Change & Sustainability: How is climate change affecting our planet and what can we do about it?

## Key Vocabulary

<b>atmosphere</b>	The layer of gases surrounding the Earth.
<b>biodiversity</b>	The amazing variety of all living things on earth.
<b>climate</b>	The pattern of weather in a certain place over a long time (at least 30 years).
<b>emissions</b>	Gases released into the atmosphere: often from burning fossil fuels.
<b>environment</b>	The natural world around us.
<b>fossil fuels</b>	A natural fuel like oil, coal and gas formed from the remains of plants and animals millions of years ago.
<b>global warming</b>	The rapid (fast) increase in the Earth's average temperature.
<b>greenhouse gas</b>	Gases in the Earth's atmosphere like carbon dioxide and methane, that act like a blanket - trapping heat from the sun and keeping the planet warm enough.
<b>natural resources</b>	Useful resources found in nature, not man-made.
<b>non-renewable</b>	A natural resource that will eventually run out as it cannot be replaced as quickly as it is used e.g. coal.
<b>pollution</b>	Harmful substances like waste, which are released into the environment and hurt or damage air, water, land, people or animals.
<b>renewable</b>	Natural resources that can be replaced when used e.g. wind, sunlight.
<b>sustainable</b>	Continued for a long time (using resources wisely)

What can we do about climate change?



## Conserving (Saving) Resources

It is very important to conserve (save) food, water and energy supplies because it is good for the planet and for future generations. We can do this by:

- using resources as wisely/efficiently as possible
- conserving resources by using as little/few as possible



Increased pollution is causing global warming. As our planet heats up, extreme weather, floods and droughts are more likely to happen. These in turn affect farming, food production and access to clean drinking water. These events can have a knock-on effect around the whole world.

## Sustainability

Sustainability means meeting our needs today without harming the planet for future generations. It is about protecting the environment, using resources wisely (so they do not run out) and saving energy. By reducing waste, reusing items, and recycling, we can live more sustainably and help keep the Earth healthy.

## Ways of Saving Resources

- Turn the tap off when brushing teeth.
- Turn the heating down and wear a jumper at home.
- Holiday in the UK rather than flying abroad.
- Switch things off when not in use e.g. car, TV, lights.
- Air dry clothes rather than tumble dry.
- Walk to school rather than using the car.
- Drink tap water not bottled water.
- Have a shower instead of a bath.
- Recycle household waste.



## Top Takeaways

After finishing this topic you should be able to:

- Explain the greenhouse effect and climate change.
- Identify natural and human causes of climate change.
- Understand the impact of climate change on people and animals.
- Discuss different ways people are taking climate action.
- Understand what sustainability is and why it is important.
- Explain what a carbon footprint is.
- Discuss ways to reduce the use of fossil fuels and why this is important
- Know which foods have the highest carbon footprint.
- Explain biodiversity and why nature matters for a sustainable world.
- Research ways to make cities and our school more sustainable.

## Energy Sources

