

What do we mean by climate change?

The easiest way to understand climate is by thinking about weather. Weather describes the conditions at one time, in one particular place. For example, the weather may be cloudy or sunny, cold or hot. Climate, on the other hand, is more than just one or two hot or cold days. It is the average weather over longer periods of time and across larger geographic areas. Climate is understood by observing the weather over 30 years or more and identifying the patterns. The climate is what is expected to happen in the atmosphere.

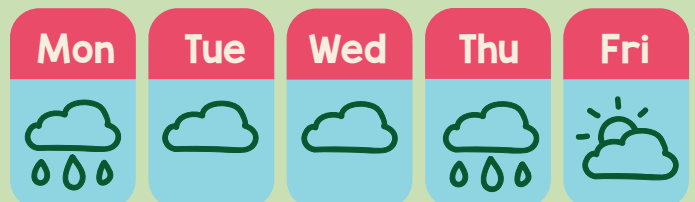
Our global climate changes naturally, but humans are now changing it with drastic consequences.

Natural resources are materials which are found in the environment like plants, light, air, water and fossil fuels (coal, oil and gas). These resources are used by humans to power our homes, transport, feed and clothe us.

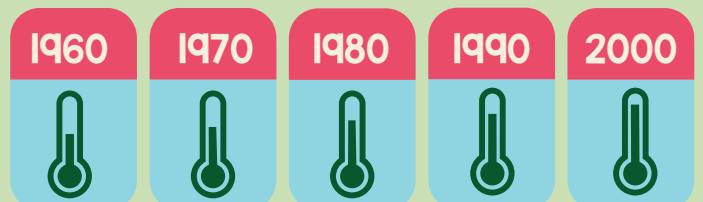
But many natural resources are being overused. This is depleting oceans and forests all over the world and causing climate change. That's why Greenpeace is working hard to make sure we act now to save our planet.

But what exactly is the climate and why is it changing?

Weather = the day-to-day conditions of the atmosphere



Climate = a pattern of weather over 30+ years



Why does climate change matter?

Extreme weather

Climate change makes the weather more extreme. Storms are fiercer and heat waves are more regular, leading to more frequent wildfires. In 2019 and 2020, forest fires swept across Australia. News reports suggested that an area nearly the size of England was burned and at least half a billion animals were killed, including thousands of koalas who struggled to move fast enough to escape. At least 33 people were killed and more than 1,500 homes were lost. Severe and long term drought and record-breaking heat waves were to blame.



Increased temperatures are causing other issues too. In parts of India and Pakistan, summer temperatures are reaching up to 51°C. This causes serious health problems for people. Floods are also happening more often. We've seen these in Britain in Yorkshire, Somerset and Cumbria where homes and lives were wrecked by water.

Rising sea levels

In the Arctic and Antarctic, sea ice is melting and animals, like polar bears, are becoming homeless. Melting ice also causes sea levels to rise, putting coastal cities in danger of disappearing under water. In 2018, almost six million people were threatened by rising flood waters across South Asia. But it's not

just South Asia. The Thames Barrier, which was built to protect London from tidal surges, is having to be used more frequently to protect the city from increased risks of flooding. Climate impacts are felt by everyone but it is those in poorer countries who are being impacted most.

Fragile habitats

Rapid climate change is affecting many habitats. For example, there has been a catastrophic loss of coral reefs over the last 30 years due to climate change and ocean acidification. Species cannot adapt to their rapidly changing environment. Therefore, one-third of all animal and plant species face extinction if climate change isn't halted.

What's the problem?



Burning fossil fuels

The energy we use for electricity and transport mainly comes from fossil fuels like coal, oil and gas. But when burned, these fuels release greenhouse gases like carbon dioxide. Because of this, the amount of carbon dioxide in our atmosphere has rocketed and is now at levels not seen in millions of years – since before even humans existed! The gas traps heat from the sun and makes our planet warmer. This means our planet is heating up fast. Shockingly, 100 companies are responsible for 71% of global greenhouse gas emissions.



Deforestation

Trees are important climate protectors because they store huge amounts of carbon dioxide. Think of them as boxes that store this dangerous gas. But when forests are cut down, this gas is released and it makes climate change worse. Read the 'Protect Our Forests' introduction sheet for more information on this subject.



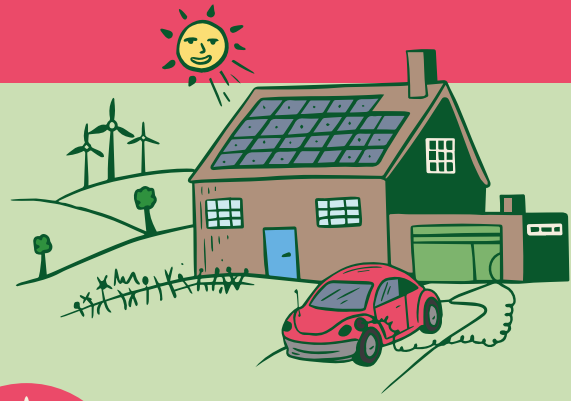
Ocean damage

Similarly to trees, oceans also store carbon dioxide. These are known as blue carbon reservoirs and they're so big, they store more than 50 times the amount of carbon than the atmosphere! So when these important reservoirs are damaged by fishing or other destructive activities, not only are they no longer able to take in new carbon, but all the old, stored-up carbon is released. Read the 'Protect Our Oceans' introduction sheet for more information on this subject.



What's the solution?

Greenpeace calls this a climate emergency because it's a problem we need to solve now. We need to cut our global greenhouse gas emissions by 45% by 2030 to move us in the right direction. This may seem like a lot but don't worry, we have the answers. It's about working together to make change happen.



Renewable energy

Renewable energy is made from natural resources too, like the wind and the sun, but it doesn't release carbon dioxide or change the climate. That's why Greenpeace is asking governments and companies like BP and Shell to switch to this energy source instead of using fossil fuels. By 2030 we want to see nearly 80% of the UK's power generated by renewables. We've even climbed oil rigs to stop oil drilling from happening because it's harmful to the planet.



Protect our forests and oceans

To stop climate change, we need to make sure forests and oceans are protected. That's why Greenpeace is asking companies and governments to stop destroying natural environments. To learn more, check out the 'Protect Our Forests' and 'Protect Our Oceans' introduction sheets.

By using different sources of energy and protecting our natural resources we can reduce many negative effects of climate change. But we need to act fast.



Working together

Millions of people around the world want to defend our climate. This includes the UK Student Climate Network, a group of young people who are striking from school on Fridays until climate action happens. By working together, we can tell governments and companies that we want a better future.

What can you do?

You can join school children all over the world who are demanding action on climate change by signing up [here](#). There are loads of other ways to help too, like reducing the amount of energy you use. Here are some tips on how.



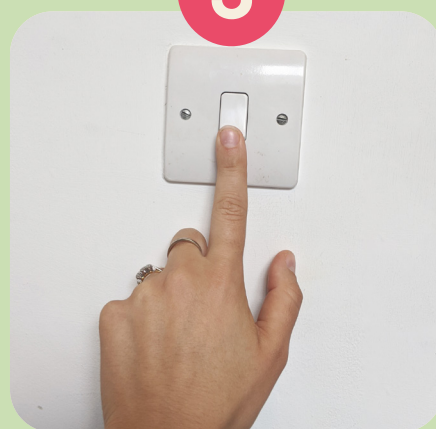
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Transport

Walk or cycle to as many places as possible. Trains and buses are also good. They save a lot of carbon dioxide compared to cars and planes.

Invite a Greenpeace Speaker

Ask an adult to invite a Greenpeace Speaker to talk to your class or club. They'll share their knowledge of the challenges our planet faces and ways you can help. Find out more: www.act.gp/speakers

Food

Eating less meat protects the climate. If you want to know how, check out our 'Protect Our Forests' introduction sheet.

Share your knowledge

Tell your friends and families about the climate emergency and what they can do to help by sharing [this link](#) with them.

At home

Can you use less energy at home? Here are some tips on how:

- Switch off lights, computers, TVs and video games when you leave a room.
- Keep windows closed when the heating is on.
- Have short showers instead of baths.
- Recycle as much as you can.
- Ask your parents or carers to use a renewable energy supplier.