

Classroom COP26

The COP meetings are the only official meetings about the climate crisis where the opinions of each country are all equally weighted. In other words, it doesn't matter how rich, poor, big, or small a country is:

Each nation at COP gets an equal say in decisions about the climate crisis.

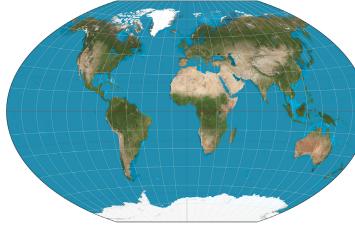
During COP21 in 2015, 185 nations signed up to the **Paris Agreement**, committing to making sure global temperatures go no higher than 2°C above pre-industrial levels (back in the 1800s). Since then, a further 12 have signed up, bringing that total to **197**.



COP26 was hosted in Glasgow, taking over Glasgow Science Centre (above) and the SEC for two weeks. Image Credit: Fredrika Carlsson via Unsplash

The Paris Agreement included a promise from countries around the world to talk about what they have done to combat climate change five years later - though it ended up being six years because Covid-19 delayed COP26 from 2020 to 2021. Because of this promise, at COP26 we got lots of updates to see how seriously different countries have been taking the issue. Who has been fighting really hard, and who needs to do more?

The discussions at COP are often quite long and difficult, as all the different nations have different ideas about what they should do to combat climate change. When you have almost 200 countries signed up, not everyone is going to think the same thing! For example, some countries - such as Brazil, Russia, and Saudi Arabia - rely on making money from burning fossil fuels. Moving to new fuel sources means changing industries, jobs, modes of transport, and more. This may be easier for some countries with smaller populations as fewer people need to adapt to big changes, but tough for big countries like them.



A world map on the Winkel tripel projection

It is especially important to convince big countries that produce a lot of greenhouse gases that they need to combat climate change, though. Countries like the USA, China, and India have huge populations and manufacture a lot of products, so it is important that they commit to cutting greenhouse gas emissions. However, there are also countries that produce huge amounts of emissions despite their populations being a lot smaller, such as Canada, Australia, and Qatar.





Challenge: Put on your own COP!

In 2020, when COP26 was postponed, young climate activists decided to run their own version. They described it as "a big, inclusive online Mock COP": it was attended by 350 youth delegates from 141 countries, and ran for two weeks. By the end, they had developed a **treaty with 18 policies** which they presented to Nigel Topping, the UK government's High-Level Climate Action Champion.

These policies called for actions such as climate education for all ages, stronger air quality regulation, and strong laws on the destruction of nature. You can read all the declarations on their <u>website</u>.

Inspired by them putting on their own COP, we are challenging you to do your own COP-style event! Don't worry, it won't last two weeks and involve hundreds of people – you'll just be working in small groups in your class.

Instructions

You will be working in 6 groups. Each group will be assigned a country. Your challenge is to identify what your country needs to focus on the most in the fight against climate change.

- 1. You'll receive a short fact file about the country, on topics like population, money, weather and access to healthcare. There will be a challenge at the bottom.
- 2. Read through your fact file to find out a little bit about your country and some of the ways it is affected by climate change.
- 3. Your group will have a task: convince the rest of the class that your class should get the most money to succeed in your challenge.
- 4. You will have to discuss in your groups all the things your country could spend money on and why it is important to do that. Try and come up with a list of priorities. For example:
 - What would your country use the money on buying things, paying people, improving and updating equipment?
 - Who will benefit from this money? Think about where people live and what they need: healthcare, jobs, safe homes...
- 5. Finally, as a class, discuss all the different opinions. Did any groups have similar priorities, or did you all want to spend money on totally different things?

While every country in the world has shared goals when it comes to combating climate change, some will find certain issues more important than others. Think about the points different groups raised after they talked about their fact files. Which goals do you think are especially important?



Fact file: USA

The energy produced in the USA comes from:

- 78% fossil fuel sources (natural gas, oil, coal)
- 12% renewable energy (such as solar and hydropower)
- 10% nuclear energy

The amount of energy produced from renewable sources is increasing a little bit every year.

Over 60% of the energy used by the USA is spent on **industry** and **transport**. (source)



Solar Star, the USA's largest solar farm, is spread over 13km2 in California.

Image credit: Solstice US

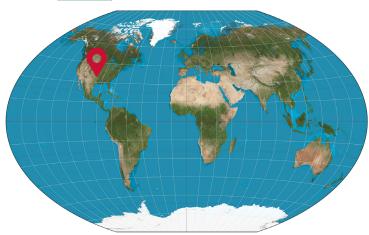
The population of the USA is **4.25%** of the world's population (<u>source</u>), but it produces approximately **15%** of the world's greenhouse gas emissions (<u>source</u>).

The global average for **carbon dioxide emissions per person each year** was **4.8 tonnes** in 2017. In the USA, the amount was **much higher**: **16.16 tonnes** (source).

The USA is the biggest economy in the world. In other words, almost a quarter of all the wealth in the world is found within the USA - which means people are making and spending money, and there are lots of products and services available (source).

Over \$5.2 trillion was spent on fossil fuels in the USA in 2017 - ten times more than the country spent on education (source).

The USA disrupted global emission reduction targets after withdrawing from the Paris Agreement in 2020, but they rejoined in 2021 (source).



Persuade the class that the USA should get the most money to invest in renewable energy – but also why some of this money could be used for fossil fuels too!





Fact file: India

Energy use has increased very quickly in India because its economy and industries have grown very quickly. **Energy consumption is twice as high as it was in 2000**. Currently, over 80% of India's energy needs are met by burning coal, oil, and solid biomass. (<u>source</u>)

However, **solar power is the fastest growing energy source** and it has been made gradually cheaper to use because of policies and investment by the Indian government. (<u>source</u>)

The population of India is 17.7% of the world's population, and it produces approximately 7% of the world's greenhouse gas emissions. (source)

The global average for **carbon dioxide emissions per person** each year was **4.8 tonnes** in 2017. In India, the amount was **lower**: **1.84 tonnes**. (source)



India has one of the highest levels of air pollution in the world - 5.5 times worse than the minimum level of air quality recommended by the World Health Organisation. It is created by processes like burning fossil fuels and waste, driving vehicles, and manufacturing in factories. (source)

An example of how thick the air pollution can get in New Delhi, India.
Image credit: CNN

Air pollution is bad for human health as it can cause and worsen many types of **illnesses**, such as respiratory and heart conditions. (source)



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Air pollution affects climate change - some particles contribute to the greenhouse effect and cause regions to get hotter, whereas other particles linger in the air, reflecting the sun's heat and light. (source)

Persuade the class why India should get the most money to reduce its levels of air pollution, and what the benefits would be for people and the environment.



Fact file: Ethiopia



Health Education and Training (HEAT) is a programme by the Open University to help train healthcare workers across sub-Saharan Africa. Image credit: OpenLearn

Countries across Africa are some of the most vulnerable to the effects of climate change according to the World Health Organisation. Environmental changes caused by climate change can increase the risk of diseases like malaria and dengue fever spreading. (source)

Studies have indicated that Ethiopia has been affected disproportionately badly by the effects of climate change, such as drought and disease transmission, because they have not had the resources to **research and respond** to these effects. (source)

Conditions like diarrhoea, malaria and meningitis can be worsened by changes in the environment. This will be intensified

by dramatic changes in the environment caused by climate change. (source)

About *14% of deaths* in Ethiopia across the next 50 years are predicted to be **attributable** to climate change. (source)

Although health conditions are predicted to increase and spread in Ethiopia, there is a lack of trained climate change experts in the country available to study the links between health and climate change. This means the population could be more badly affected than other countries who have more trained experts. (source)



Agriculture is a major source of emissions in Ethiopia: over 50% of the total emissions by the country. (source)

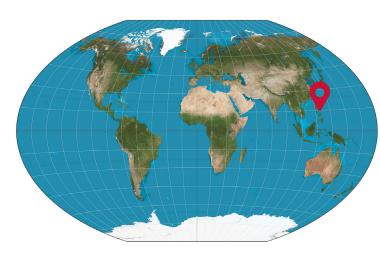
The global average for **carbon dioxide emissions per person** each year was **4.8 tonnes** in 2017. In Ethiopia, the amount was much **lower**: **0.15 tonnes**. (source)

Persuade the class why Ethiopia should get the most money to help strengthen its health services and protect people against the spread of disease.





Fact file: The Philippines



The top three strongest tropical storms in miles per hour (mph), measured when they first hit land, all hit the Philippines and all occurred within the past ten years:

- 1. 195 mph: Super Typhoon Goni, 2020
- 2. 190 mph: Super Typhoon Haiyan, 2013
- 3. 190 mph: Super Typhoon Meranti, 2016

In 2009, Typhoon Ketsana which doesn't even make the top 10 - caused \$33 million worth of damage to roads and bridges. (source) The Philippines experiences powerful tropical storms called typhoons. These occur every year, but climate change is causing them to become more intense, making them more and more dangerous for people living there. (source)

Hundreds of thousands of people have been forced out of their homes due to damage caused by typhoons. In September 2021, Typhoon Chanthu displaced thousands of people and cut power and water supplies in multiple areas. (source)



Damage caused in central Philippines by Super Typhoon Haiyan in 2013 Image credit: BBC News

Sea levels are rising in the Philippines faster than the global average. Most of the country's population live in big cities on the coastline which makes them vulnerable to stormy weather and flooding. (source)

By 2100, sea levels are predicted to have risen between 48 to 65cm. (source)

The global average for carbon dioxide emissions per person each year was 4.8 tonnes in 2017. In the Philippines, the amount was much lower: 1.28 tonnes. (source)

Persuade the class why the Philippines should get the most money to build defences against extreme weather events and rising sea levels.





Fact file: Brazil



Huge areas of the Amazon rainforest have been cut down to make way for cattle farms and other uses. Image credit: The New York Times

Between August 2020 and July 2021, almost 10,500km2 of rainforest was cut down in Brazil. This is about eight times the size of Fife - or 13 times bigger than New York City! (source)

Almost 20% of the Amazon rainforest has been destroyed over the past 50-60 years. Trees absorb carbon dioxide, stopping it from going into the atmosphere - so fewer trees means more severe climate change. (source)

Some reasons why the rainforest has been cut down: to make way for enormous **cattle farms**, for **wood** that is sold to countries across the world to make furniture, and to **access mines** underground to drill for resources like oil, aluminium and gold. (source)

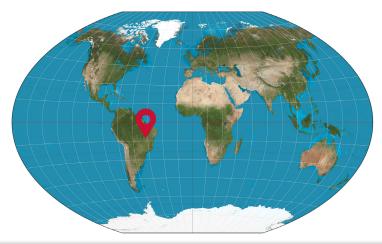
If global temperatures increase by a few degrees, huge amounts of the rainforest won't be able to survive, becoming barren and **unable to support life**. (source)

Many indigenous peoples whose communities have lived in the forest for centuries have **lost their homes** due to deforestation, and been **made ill by exposure to new germs** brought in by outsiders. (source)

Indigenous communities are very familiar with the land they live on and know how to **protect** and preserve it. Their land often has **healthy ecosystems** with high levels of biodiversity. (source)

The global average for **carbon dioxide emissions per person** each year was **4.8 tonnes** in 2017. In Brazil, the amount was **lower**: **2.33 tonnes**. (source)

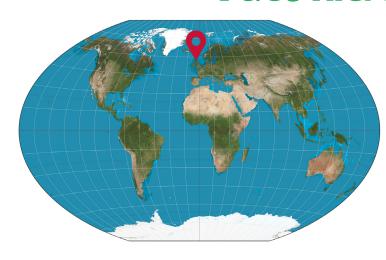
Persuade the class why Brazil should get the most money to reduce deforestation and increase other types of industry.







Fact file: Scotland



If a country is "**net zero**", it has balanced out the level of carbon dioxide it produces with ways to absorb it, removing it from the atmosphere.

Net zero is the internationally agreed upon goal that nations signed up to as part of the **Paris Agreement**. This is because it will prevent global temperatures from rising by more than 2°C. (source)

In 2019 Scotland passed the Climate Change (Emissions Reduction Targets) Act. This is a law committing to becoming **net zero by 2045.** Germany and Sweden are the only other countries that have **written into law** that they must achieve net zero by 2045. (source)

The global average for **carbon dioxide emissions per person** each year was **4.8 tonnes** in 2017. In the UK, the amount was **higher**: **5.82 tonnes**. (source)

Part of the journey to net zero requires a "just transition". This means ensuring people are not negatively affected by adaptations made to become net zero: for example, making sure people don't lose their jobs, or that environments and homes aren't damaged in any way. The Scottish Government has appointed a group called the Just Transition Commission to make sure this happens. (source)

Carbon dioxide is currently the **only greenhouse gas we can easily absorb** from the atmosphere, either by stimulating absorption by nature, or building technology to absorb it.

If governments - particularly in richer, developed countries - don't stick to their net zero targets, the effects of climate change will be **a lot worse**. Effects include flooding, extreme temperatures, air pollution and spread of disease. (source)

Many countries who have contributed **low amounts of emissions will be hit hardest** by the effects of climate change. This will continue, and get worse, if net zero targets aren't reached or beaten. (source)



Whitelee wind farm, near Glasgow, is the UK's largest on-shore wind farm Image credit: Bjmullan via Wikimedia Commons

Persuade the class why it is essential for their countries to create laws to reduce how much carbon dioxide they're producing, like Scotland has done.