

Climate change

What is climate change?

By this we mean changes in our climate beyond those expected naturally, changes which are caused by human activities like burning fossil fuels and cutting down rainforests. These activities increase the amount of carbon dioxide and other greenhouse gases in our atmosphere, warming the Earth.

TRY THIS

Find a quiet place. Look at a photo of the Earth from space in silence for a minute. What thoughts come to mind? How do you feel towards our world?



People in Dogondoutchi, Niger, struggle to farm in this extreme environment, with little rain and poor soil.

“If we don’t confront climate change, we won’t end poverty.”

Jim Yong Kim, World Bank President

The world is warming up

At present rate of emissions, Earth’s average surface air temperature is set to climb by 2.6 to 4.8 °C by the end of this century. We can see the proof in sea level rises, reduction in Arctic sea ice, and warmer oceans. CAFOD is hearing direct from people in poor countries about how unpredictable weather is affecting them. It’s happening now.

Is it bad?

Yes. An increase of over 1.5 degrees from pre-industrial levels will mean more extreme weather events such as heatwaves, hurricanes, floods and droughts. Storm surges and sea level rise will seriously impact on our society and the natural world. Past climate changes led to extinction of many species, population migrations and big changes in the land surface.

When will it happen?

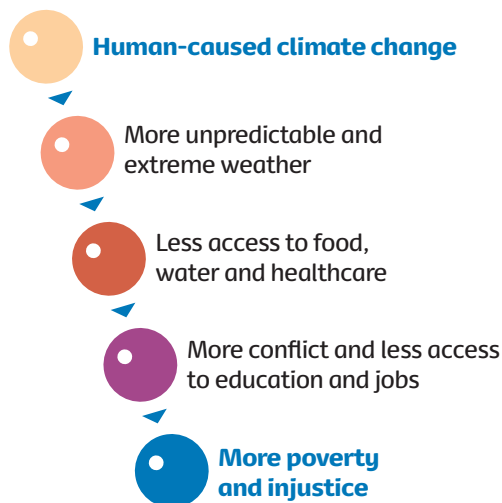
Climate change is already happening. And the pace of change is speeding up, as industrial and technological development gets faster and faster.

FACT

GLOBAL EMISSIONS OF CARBON DIOXIDE HAVE INCREASED BY ALMOST 90 PER CENT SINCE 1970.

The knock-on effect

Changes to our climate can have devastating knock-on effects, starting chains of events that force people deeper into poverty. That’s why it’s essential to act now, as a global family, to protect our home. Climate change is a justice issue.



Climate change and poverty

Climate change affects us all. But it hits the poorest hardest. In fact, many people see it as the number one threat to solving poverty.

Why is this? If you already live on the edge, severe weather can push you over into ruin. With no financial or social safety net, a flood that destroys your house can leave you completely destitute. At CAFOD, we know that increasingly unpredictable weather is making poor people even more vulnerable. It can undo decades of development.

Of the 30 countries most vulnerable to natural disasters and a changing climate, 26 are least developed countries. It’s deeply unfair, since these countries have done least to cause global warming.

TRY THIS

The “Problem Tree”: Draw a tree. Write “Environmental harm” on its trunk. On the roots write the causes, and on the branches the effects, of environmental harm. Then do a ‘Solution Tree’.

FACT

GLOBAL AVERAGE TEMPERATURE DURING THE LAST ICE AGE WAS ONLY ABOUT 4 TO 5°C COLDER THAN NOW. SMALL CHANGES MAKE A BIG DIFFERENCE.

The future for our planet

We can work together to protect our planet. For example, since a 1987 ban on harmful chemicals called CFCs, the hole in the ozone layer has shrunk by 4 million square miles. Reducing CO₂ emissions is a much harder challenge, but we must do it.

Net zero

In 2015, world leaders signed a **global climate deal** (the Paris Agreement), pledging joint action towards a low-carbon future. They committed to pursue efforts to keep temperature increases well below 2°C. It is now clear that we must limit the rise to 1.5°C to avoid disastrous change.

To do this, we need to reach global “net zero” emissions by 2050. This means ensuring the emissions we put into the atmosphere are no greater than those we remove (eg by planting trees and protecting forests which take in carbon dioxide as they grow).

Countries have promised to come together for five-yearly reviews to show how they are meeting their targets. Richer countries have pledged to help poorer nations cope financially with the impacts of climate change and the move to clean energy.

The switch to renewables

World leaders must commit to reaching net zero emissions as soon as possible. They must switch from polluting fossil fuels to green, clean sustainable energy, like the wind, sun and the tides. They are also the simplest and most reliable energy sources. Clean power can also operate in small local grids, which work well for isolated communities far from national power grids.

FACT

IN 2008 THE UK BECAME THE FIRST COUNTRY TO INTRODUCE A CLIMATE CHANGE ACT, PLEDGING TO REDUCE GREENHOUSE GAS EMISSIONS BY 80 PER CENT OF 1990 LEVELS BY 2050.



Living with climate change

People in the Pacific islands are at the sharp edge of climate change. They are being hit by rising sea levels, storm surges and coastal erosion. Salt water is seeping into the ground, destroying crops and drinking water.

Many coastal communities in places like Papua New Guinea, Samoa and the Torres Strait Islands are having to abandon the land they have had for generations. Schools and homes are standing ruined in the sea.

This is the human story of climate change. It is a warning for us all.

TRY THIS

Take sides. One group is a developing nation that wants electricity access for all its people, fast. The other group is a rich nation that already has energy for all, powered by fossil fuels, trying to explain to the poorer country why it must stick to renewable energy sources.

FACT

423 MILLION PEOPLE WHO ARE MOST VULNERABLE TO THE IMPACTS OF CLIMATE CHANGE ARE ALREADY LIVING IN EXTREME POVERTY.

Data sources: epa.gov Royal Society; Science journal; UNDP; UNFCCC.
Facts compiled November 2018.
Photo: Ben White / CAFOD. Illustration Dylan Gibson.
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Changing our lifestyles

In 2015 Pope Francis wrote a letter to everyone on the planet, urging us to take better care of our common home, the Earth. We need to do this as nations, as companies and as individuals, he says, by changing big power structures as well as our own lives.

The Earth is God’s gift to us, he says, but some of us are consuming and wasting as if the Earth’s resources will last forever. A completely new model of human progress is needed.

For ourselves, we all need to make bold and positive lifestyle changes to reduce our carbon footprint and care for our beautiful home. This could include:

- › Switching to renewable energy;
- › Eating less meat;
- › Reducing the amount of stuff we consume.

TRY THIS

Watch CAFOD’s *Laudato Si’* animation for young people online. Discuss what actions we can take as a school and as individuals, in the light of this quote: “What kind of world do we want to leave to those who come after us?” (LS, 6o)



CAFOD resources on climate change

Useful resources about climate change, care for creation and *Laudato Si’* on our schools pages include animations, reflections and prayers.

Search Secondary Schools resources under the theme ‘Climate change and environment’. See our campaigns factsheet on climate change for more on Net Zero.

Useful websites

ipcc.ch

Intergovernmental Panel on Climate Change

royalsociety.org

UK’s national academy of science

theclimatcoalition.org

130 UK organisations including CAFOD

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