Climate emergency?

Here are the facts

What is climate change?

Climate change refers to changes in the planet's average temperature, and the resulting shifts in weather patterns. We've known about this for a long time: in 1856, physicist Eunice Foote first discovered how adding more carbon dioxide into the atmosphere increases temperatures.

Christian and atmospheric scientist Professor Katharine Hayhoe explains:



'The heat-trapping gases we produce whenever we burn coal or gas or oil – as well as from deforestation, land use change and agriculture – are wrapping an extra blanket around our planet. This blanket is trapping heat inside the climate system that would otherwise escape to space. That's why we're warming.' 1

Photo: Kai T. Dragland/NTNU

Since the industrial revolution, we've pumped more and more carbon dioxide into the atmosphere, as well as other heat-trapping gases. As a result, we've seen temperatures climb rapidly, and floods, droughts and storms all become more severe.

Heating up

2020 was the joint-hottest year on record,² and it followed the hottest decade ever recorded from 2010 to 2019.³



This is a visual illustration of the change in annual average temperatures globally from 1850 to 2019, using data from the UK Met Office.⁴

Is it really an emergency?

In 2015, 195 countries came together to discuss how to tackle climate change, which resulted in the Paris Agreement. This was a ground-breaking commitment to stop the global average temperature from increasing by more than 2°C, and to do all they could to limit it to 1.5°C. But despite this, global emissions are still rising and temperatures have already climbed by about 1.2°C.5

To limit warming to 1.5°C, we need to reduce all our carbon emissions to zero as fast as possible – all the heat-trapping gases that come from transport, aviation, power, industry and food production – and we need to phase out the use of fossil fuels. In fact, carbon emissions need to reduce at an unprecedented pace, starting now, between 8 and 15 per cent every year.⁶ Analysis from the UN in early 2021 found that the latest commitments from governments would still only reduce emissions by less than one per cent by 2030.⁷ This is now a climate emergency.

Every fraction of a degree matters

Current predictions about the difference between 1.5°C and 2°C are devastating:

- · droughts last twice as long
- 116 million more people struggle to get water
- four times as many tropical cyclones
- 12 million more people flooded in coastal areas⁸

Climate change is a justice issue

The poorest 3.5 billion people are responsible for just ten per cent of emissions,⁹ but these same people are already facing the worst impacts of climate change. In 2016, world hunger increased for the first time in more than a decade. It's continued to increase every year since because of climate change and conflict, with climate change exacerbating the risk of conflict.¹⁰ Our reliance on fossil fuels is pushing our global neighbours deeper into poverty.



Why should climate change matter to Christians?

As temperatures rise, rains are becoming less reliable and droughts, floods and storms are becoming more frequent and extreme. We might notice some of these changes here at home, such as the flooding and heatwaves in recent times. But it's impacting people living in poverty globally first and worst.

As Christians, we know that 'the earth is the Lord's and everything in it, the world and all who live in it' (Psalm 24:1). We're called to act justly and to love our neighbours. God's creation is good, but the way we've damaged it is pushing people deeper into poverty. Responding to the climate emergency has to be a key part of living out our faith.

How can we stop climate change getting worse?

Everyone has a part to play in tackling this huge and urgent challenge. Governments and businesses need to make changes much faster and we need to keep up the pressure on them. We can build momentum for change by speaking up, inspiring others, living differently and, crucially, by praying.

Positive news

- The Anglican Church of Southern Africa, a church of 3–4 million people, has declared a climate emergency and is scaling up its use of renewable energy.
- The Church of England has committed to reaching net-zero emissions by 2030.
- 85% of British people are concerned about climate change; the majority are very concerned.¹²
- Almost half of Britons intend to reduce the amount they fly for holidays post-lockdown.¹³
- Churches, theological colleges and dioceses all over the UK are declaring a climate emergency in 2021 and making plans to respond.

Learn more:

An introduction:

'What is climate change?' The Met Office

Switch to 100% renewable electricity at home: bigcleanswitch.org/tearfund

In-depth reporting on the climate crisis: Carbon Brief

For Christian teenagers, the link between climate change and faith is clear.



9 out of 10

Christian teenagers surveyed are concerned about climate change



1 out of 10

think their church is doing enough

Source: Tearfund and Youthscape, 202111

Case study: Orbisa, a mum in Ethiopia

Orbisa lives with her family in Ethiopia, rearing goats and cattle. Over the last few years, rainfall in her region has reduced dramatically because of climate change. 'In the past we had rainfall every



six months, but now we don't know when the rainfall will come. The length of the dry season is increasing,' says Orbisa.

Without rain, her animals are dying, which means less income, less food and poor health for the family. Orbisa now has to travel many hours every day to fetch water, but still her children go thirsty. This is what the climate emergency looks like. If we don't take urgent action now, climate change will continue to push millions more people like Orbisa deeper into poverty.

Photo: Chris Hoskins/Tearfund

Pray

For resources to help you pray about climate change, including regular updates via text and creative prayer ideas, visit:

tearfund.org/prayforclimate

Speak up

We need to call on leaders to take urgent action. Join a protest, find a local group and add your voice to our latest campaign:

tearfund.org/reboot

Inspire others

Learn more with your church and friends by using our new film series and discussion guide, featuring Katharine Hayhoe:

tearfund.org/climatefilms

Take action

Could your church declare a climate emergency and make a plan of action to respond? Find everything you need at:

climateemergencytoolkit.com

References:

- ¹ Global Weirding with Katharine Hayhoe, 'This is all just a part of a natural cycle, right?'
- ² BBC (2021) <u>'2020 joint warmest year on record'</u>
- ³ The Telegraph (2020) 'Record breaking 2019 heat knocked world "'way off track" meeting climate change targets, warns UN'
- 4 #ShowYourStripes, Warming stripes for GLOBE from 1850-2019
- ⁵ BBC (2020) <u>'Climate change: 2020 set to be one of the three warmest years on record'</u>
- ⁶ Carbon Brief (2019) <u>'UNEP: 1.5C climate target "'slipping out of reach"</u>
- ⁷ UNFCCC (2021) NDC Synthesis Report
- ⁸ Carbon Brief, 'Scientists compare climate change impacts at 1.5C and 2C' beyond'
- 9 Oxfam (2015) Extreme climate inequality, 2015
- ¹⁰ Food and Agriculture Organisation (2018) <u>The state of food security and nutrition in the world, 2018</u>
- ¹¹ Tearfund and Youthscape (2021) <u>Burning Down The House</u>
- ¹² Ipsos MORI (2019) <u>'Concern about climate change reaches record levels with half now "very concerned""</u>
- ¹³ Cardiff University (2020) 'Britons hope to keep sustainable habits beyond Covid-19 lockdown'



