

**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.’

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.

**IS IT REALLY AN EMERGENCY?**

In 2015, 195 countries came together to discuss increased ambition on tackling 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 do all they could to limit it to 1.5°C. But despite this, temperatures have already climbed by about 1.1°C and, even with temporary reductions during the coronavirus lockdown, global carbon emissions continue to rise. This is a climate emergency.

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.

**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 areas

**HEATING UP**

The five years from 2015 to 2019 were the five hottest years on record and 2010–2019 was the hottest decade since records began.

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

**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, like the flooding and heatwaves in recent times. But it’s impacting the world’s poorest 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.
CLIMATE CHANGE IS A JUSTICE ISSUE

The poorest 3.5 billion people are responsible for just ten per cent of emissions, 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, and it’s continued to increase every year since because of climate change and conflict, with climate change exacerbating the risk of conflict. Our reliance on fossil fuels is pushing our global neighbours deeper into poverty.

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. Orbisa says, ’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.’

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.

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.

PRAY

For resources to help you pray about climate change, including regular WhatsApp updates and creative prayer ideas, visit:
www.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:
www.tearfund.org/reboot

INSPIRE OTHERS

Together we’re stronger. Find resources to inspire your church and get more people involved with climate action on our website:
www.tearfund.org/action

LIVE DIFFERENTLY

Making lifestyle changes – how you travel, eat or power your home – is key to loving our global neighbours. Switch to 100% renewable energy:
www.bigcleanswitch.org/tearfund

LEARN MORE:

An introduction: “What is climate change?” The Met Office
Theology: Ruth Valerio’s 2020 book, Saying yes to life
Short videos: Global Weirding with Katharine Hayhoe
In-depth reporting: Carbon Brief

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.

• Almost half of Britons intend to reduce the amount they fly for holidays post-coronavirus.

• In June 2020, more than 14,000 people signed up to have a virtual cup of tea with their MP and ask them to tackle climate change.
REFERENCES:

1 Global Weirding with Katharine Hayhoe, ‘This is all just a part of a natural cycle, right?’

2 The Telegraph (2020) ‘Record breaking 2019 heat knocked world “way off track” meeting climate change targets, warns UN’

3 #ShowYourStripes, Warming stripes for GLOBE from 1850-2019

4 World Meteorological Organization (2020) ‘WMO confirms 2019 as second hottest year on record’


6 Carbon Brief, ‘Scientists compare climate change impacts at 1.5C and 2C’

7 Oxfam (2015) Extreme carbon inequality

8 Food and Agriculture Organisation (2018) The state of food security and nutrition in the world, 2018

9 Ipsos MORI (2019) ‘Concern about climate change reaches record levels with half now “very concerned”’

10 Cardiff University (2020) ‘Britons hope to keep sustainable habits beyond Covid-19 lockdown’