

# CLIMATE CHANGE FACT SHEET

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## What is Climate Change?

**Climate change refers to long-term shifts in temperatures and weather patterns.**

Such shifts can be natural, due to changes in the sun's activity or large volcanic eruptions. But since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas.

**Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures.**

The main greenhouse gases that are causing climate change include carbon dioxide and methane. These come from several sources including the petrol we use for driving a car and the coal or gas we burn to produce the electricity we use for heating our buildings. Clearing land and cutting down forests can also release carbon dioxide. Agriculture, oil and gas operations are major sources of methane emissions.

**Climate scientists have showed that humans are responsible for virtually all global heating over the last 200 years.**

Human activities like the ones mentioned above are causing greenhouse gases that are warming the world faster than at any time in at least the last two thousand years.

The average temperature of the Earth's surface is now about 1.42°C warmer than it was in the late 1800s—prior to the industrial revolution—and warmer than at any time in the last 100,000 years. The last decade (2015–2024) was the warmest on record, and each of the last four decades has been warmer than any previous decade since 1850.

**Many people think that climate change mainly means warmer temperatures. But temperature rise is only the beginning of the story.**

Because the Earth is a system where everything is connected, changes in one area can influence changes in all others.

The consequences of climate change include, among others, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity.

(<https://www.un.org/en/climatechange/what-is-climate-change>)



## What the evidence tells us:

### Climate change is happening now and is human-caused.

Human activities, mainly burning fossil fuels, have unequivocally caused global warming, with global temperatures already around **1.1°C above pre-industrial levels**.

(IPCC Sixth Assessment Report – Synthesis Report, 2023)

### The impacts are already widespread.

Climate change is driving more frequent and intense **heatwaves, heavy rainfall, droughts and flooding**, affecting health, livelihoods, food systems and ecosystems across the world.

(IPCC AR6 Synthesis Report, 2023)

### Every additional increase in warming increases harm.

Even small rises in temperature significantly increase risks — particularly for vulnerable communities — including heat-related illness, displacement and loss of income. (United Nations – Climate Change Science: Key Findings)

### The UK is already experiencing climate impacts.

The UK's independent climate watchdog confirms that climate change is increasing the likelihood and severity of extreme weather such as heatwaves and heavy rainfall. (UK Climate Change Committee)



## Why urgent action matters:

### This decade is critical.

- To limit the worst impacts of climate change, deep, **rapid and sustained cuts in greenhouse gas emissions are needed before 2030**. Delayed action locks in higher long-term damage and costs. (IPCC AR6 Synthesis Report, 2023)

### Carbon reduction matters because it stops further warming.

- Global warming only stabilises when carbon dioxide emissions reach net zero. Continued emissions, even at lower levels, mean continued warming. (IPCC AR6 Synthesis Report, 2023)

### Inaction increases inequality.

- Climate impacts fall hardest on people with the fewest resources, widening health and social inequalities. (United Nations – Climate Change Science)

## The Good News: Change Is Already Happening

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### The UK has already reduced emissions significantly.

- UK greenhouse gas emissions are substantially lower than in 1990, and the first three legally binding carbon budgets have been met. (UK Climate Change Committee)

### Clean technologies are cheaper and more accessible.

- The cost of renewable energy, batteries and other low-carbon technologies has fallen dramatically, making climate action more affordable and scalable. (UK Climate Change Committee; IPCC AR6)

### Climate action brings immediate co-benefits.

- Reducing emissions improves air quality, public health, energy security and household bills, while supporting jobs and local economies. (UK Climate Change Committee; United Nations)

### Nature-based solutions work.

- Restoring peatlands, woodlands and green spaces helps cut emissions, reduce flood risk, improve mental wellbeing and strengthen biodiversity. (IPCC AR6; UK Climate Change Committee)



## What This Means for VCSE Organisations

VCSE organisations are not expected to “solve” climate change — but they do have a vital role.



Many VCSE organisations are already contributing through community action, prevention, behaviour change and place-based work.

Climate action can:

Support community resilience and wellbeing

Demonstrate leadership and credibility

Reduce organisational risk and running costs

Add value to social impact and social value reporting

Strengthen funding bids and commissioning outcomes

United Nations - Climate Action - What is Climate Change  
<https://www.un.org/en/climatechange/what-is-climate-change>

Intergovernmental Panel on Climate Change (IPCC) - AR6 Synthesis Report: Summary for Policymakers (2023) <https://www.ipcc.ch/report/ar6/syr/>

United Nations - Climate Change - Climate Science: Key Findings <https://www.un.org/en/climatechange/science/key-findings>

UK Climate Change Committee (CCC) - Independent advice on UK climate action <https://www.thccc.org.uk/>

Bolton Climate Change Strategy <https://www.bolton.gov.uk/climatechangestrategy>