

Is human activity  
responsible for  
a rise in the  
Earth's global  
temperature?

**eic**

# The facts

*‘The average global temperature on Earth has increased by about 0.8°C since 1880. Two-thirds of the warming has occurred since 1975, at a rate of roughly 0.15–0.20°C per decade.’*

<https://earthobservatory.nasa.gov/world-of-change/DecadalTemp>

# But is human activity the cause?

Since the Industrial Revolution in the 1800s, the global temperature has increased at a much faster rate.<sup>1</sup>

97% of climate scientists agree that climate warming trends over the past century are extremely likely to be due to human activities.<sup>2</sup>

Over the past one million years, the Earth has experienced a series of ice ages ('glacial periods') and warmer periods ('interglacial'). Glacial and interglacial periods cycle roughly every 100,000 years, caused by changes in the Earth's orbit around the sun.<sup>1</sup>

Changing energy from the sun has affected the temperature of Earth in the past.<sup>1</sup>

# Prepare to debate

‘The rise in the average global temperature on Earth is the result of human activity.’

1. Research the arguments both *for* and *against* the statement above. Be prepared to present an argument for either side. Make sure you include evidence to support any points you make.
2. Arrange yourselves into groups of three.
3. Allocate each member of your group to one of these roles:
  - Person 1: The **starter and summariser**
  - Person 2: The **builder**
  - Person 3: The **challenger**

# Debate

In your group of three, debate the following statement: **'The rise in the average global temperature on Earth is the result of human activity'**.

Each person must stick to their specific role:

## The **Starter / Summariser**

This person instigates the discussions between the builder and the challenger and then summarises their key points.

I'd like to begin by saying ...

In summary ...

## The **Builder**

This group member must build on the previous points made.

Building on that idea ...

## The **Challenger**

The challenger must present an alternative idea or should challenge the builder by asking the builder for evidence.

What evidence do you have to support that comment?

I hear what you are saying but ...