

## Geography

## Question

Does it matter if we fail to limit global warming to 1.5°C above pre-industrial levels?

Word limit: 750 words

## **Prompt**

The Paris Agreement was adopted in 2015 by 196 parties to tackle climate change. The goal of the Paris Agreement is to try to keep the increase in mean global temperatures to well below 2°C – and ideally to limit the increase to 1.5 °C.

In 2015 the global average carbon dioxide concentration was 399.4 parts per million; however, seven years after the Paris Agreement, this was projected to have risen to an average of 417.2 million parts per million in 2022. Temperatures are now more than 1°C higher than preindustrial levels. In 2022, UN Secretary-General Antonio Guterres said that "the 1.5-degree goal is on life support. It is intensive care."

But does it matter? Does it matter if we fail to limit global warming to 1.5°C? Drawing on both human and physical geography, this task invites you to consider the impacts of climate change beyond 1.5 °C. You might approach this question from a physical basis – what does the 1.5°C target mean for coral reefs, rainforests and the Arctic? Or you might think about how human societies adapt to a warming planet. The best responses will consider the impacts across a range of human and physical systems.

You will need to reference your sources. This will include an in-text citation and a reference list at the end. Your reference list does not count towards the word limit. Here is a handy quick guide to Harvard Referencing: <a href="https://library.aru.ac.uk/referencing/files/QuickHarvardGuide2019.pdf">https://library.aru.ac.uk/referencing/files/QuickHarvardGuide2019.pdf</a>

## Reading list

https://www.ipcc.ch/sr15/ - the summary for policymakers might be a good place to start.

https://theconversation.com/after-cop27-all-signs-point-to-world-blowing-past-the-1-5-degrees-global-warming-limit-heres-what-we-can-still-do-about-it-195080

Climate: World getting 'measurably closer' to 1.5-degree threshold | UN News

A Degree of Concern: Why Global Temperatures Matter – Climate Change: Vital Signs of the Planet (nasa.gov)

Climate Crisis: What's the Difference Between a Rise of 1.5, 2, and 3 Degrees Celsius? (globalcitizen.org)

Analysis: When might the world exceed 1.5C and 2C of global warming? - Carbon Brief

1.5 or 2 degrees Celsius of additional global warming: Does it make a difference? » Yale Climate Connections

Why 2C of global warming is so much worse than 1.5C | World Economic Forum (weforum.org)

Please feel free to go beyond these sources! Think critically about the sources you use.