



**RMetS**

Royal Meteorological Society

Promoting meteorology as a  
science, profession and interest

# Meeting a global temperature goal of 1.5 C

**Introduction:**

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# Limiting the impact of climate change

## The Aim of the UN Framework Convention on Climate Change (1992)

The ultimate objective of this Convention ..... is to achieve ....  
**stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.**

Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

# Development of the aim of the UNFCCC

1994 IPCC workshop on long term goals

1996 EU proposed a 2C temperature rise limit and a 550ppm concentration guideline

2005 UK G8 Presidency “Avoiding dangerous climate change”

2008 AOSIS “1.5 to stay alive”

2010 Cancun (COP16) recognised 2 C goal and possible strengthening to 1.5 C and set up a review of goals.

2013-15 Review of the Long Term Goals

2015 Paris (COP21) finalised the goals

2016 IPCC agreed to assess the impact of 1.5 C

# Cancun Agreement 2010

Further recognizes that deep cuts in global greenhouse gas emissions are required according to science, and as documented in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, **with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2 °C above preindustrial levels**, and that Parties should take urgent action to meet this long-term goal, consistent with science and on the basis of equity; also **recognizes the need to consider**, in the context of the **first review**, as referred to in paragraph 138 below, **strengthening the long-term global goal on the basis of the best available scientific knowledge, including in relation to a global average temperature rise of 1.5 °C**

# Review of the Long Term Global Goal

- 2C Limit – not a guard rail – but a defence
- ...halting the global average temperature rise at any level will require net zero global CO<sub>2</sub> emissions at some point in the future.
- While science on the 1.5 °C warming limit is less robust, efforts should be made to push the defence line as low as possible

# What goals were agreed in Paris?

- Global temperatures should stay **below 2 degrees** (above pre-industrial) – and we should pursue efforts to limit the temperature rise to 1.5 degrees.
- Sets a collective **long term goal** to achieve a **balance between** anthropogenic **emissions** by sources and **removals** by sinks of greenhouse gases in the second half of this century, which **all countries** will work together to achieve.

# Paris Text

## **Article 2, Para 1 a)**

Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;

## **Article 4, Para 1**

In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.