

What CO2 Target is Safe?

Global warming is the result of the unnatural rise in the concentration of greenhouse gases in the Earth's atmosphere. Carbon dioxide the greenhouse gas most responsible for the global warming trends that are happening and projected into the future.

The question we need a clear answer to is this: what concentration of CO2 and other greenhouse gases is safe for us and for future generations? For an answer to the question based on paleoclimate science, there is a single report, the Hansen report. In April 2008, ten scientists published Target CO2: Where should humanity aim? The lead writer is James Hansen, head of the NASA Goddard Institute for Space Studies in New York. The report states that a safe level of atmospheric CO2 has a ceiling of about 350 parts per million (ppm) and that the functioning of the planet will be at risk of remaining at elevated, rising levels for too long. Here is an excerpt:

If humanity wishes to preserve a planet similar to that on which civilization developed and to which life on Earth is adapted, paleoclimate evidence and ongoing climate change suggest that CO2 will need to be reduced from its current 385 ppm to at most 350 ppm, but likely less than that.

The Nobel-winning International Panel on Climate Change implies a need to stabilize the concentration of greenhouse gases at levels below present levels. Here is an excerpt from the AR4 2007 Synthesis Report:

In order to stabilize the concentration of GHGs in the atmosphere, emissions would need to peak and then decline thereafter. The lower the stabilization level, the more quickly this peak and decline would need to occur. [p. 66]

Media:

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