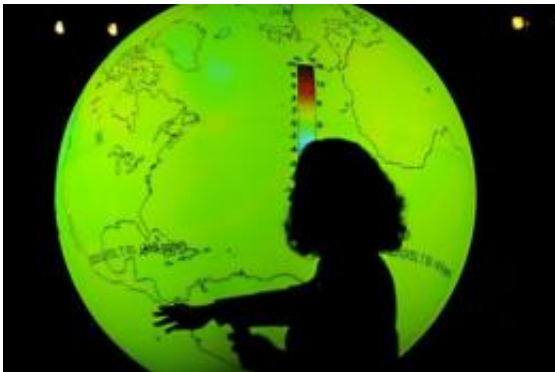


Climate: Copenhagen pledges set Earth for +3 C warming - study

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A scientist stands in front of a globe during the United Nations Climate Change Conference in Copenhagen in 2009. Carbon-curbing pledges under the Copenhagen Accord are likely to doom Earth to warming of three degrees Celsius (5.4 degrees Fahrenheit) or more, compared to the deal's target of 2 C (3.6 F), scientists said on Wednesday.

Carbon-curbing pledges under the Copenhagen Accord are likely to doom Earth to warming of three degrees Celsius (5.4 degrees Fahrenheit) or more, compared to the deal's target of 2 C (3.6 F), scientists said on Wednesday.

In an analysis published by the [journal Nature](#), researchers at the Potsdam Institute for Climate Impact Research (PIK) near Berlin said the promises fell very short of the headline-making mark.

"It's amazing how unambitious these pledges are," they said.

Born in the final hours of the chaotic UN [climate summit](#) last December, the Accord sets a goal of limiting warming to 2 C (3.6 F).

But it does not set a date for achieving this, nor stepping-stone targets for getting there, and the roster of pledges it sets up, gathering rich and poor countries alike, is voluntary.

If the promises are carried out, global yearly emissions of [greenhouse gases](#) will increase by 10 to 20 percent above current levels, reaching the equivalent of 47.9-53.6 billion tonnes of carbon dioxide (CO₂) by 2020, says the study.

"This would result in a greater than 50 percent chance that warming will exceed 3 C (5.4 F) by 2100," PIK said in a press release.

"To be on track for meeting the 'below 2 C' climate target, global emissions of no more than 40 to 44 gigatonnes (billion tonnes) of CO₂ equivalent have to be achieved by 2020."

Added PIK researcher Malte Meinshausen: "Forty-eight gigatonnes of CO₂ emissions is not on track to meet the 2 C goal -- it is like racing towards a cliff and hoping to stop just before it."

The Copenhagen Accord remains politically contested.

It was devised by leaders of a couple of dozen countries to stave off a fiasco in Copenhagen, billed as the culmination of a two-year process towards a post-2012 [climate treaty](#).

Green groups lashed the deal as toothless and left-led countries in the Caribbean and Latin American charged it violated the principles of

international democracy.

Talks have resumed under the 194-nation UN [Framework Convention](#) on Climate Change (UNFCCC) but there is negligible consensus on how to move forward or incorporate the Copenhagen Accord.

In their analysis, the PIK researchers said a big loophole was surplus allowances under the Kyoto Protocol, whose current provisions expire at the end of 2012.

These surplus allowances can be used by industrialised countries who undershoot their Kyoto targets for emissions reductions.

The United States, the world's No. 2 carbon emitter, is not party to Kyoto, nor is China, the world's No. 1, because it is a developing country and does not have binding emissions targets.

The authors say that the Kyoto targets were weak, which means many countries will be banking their surpluses for use later -- a tally that they estimate at a huge 11 gigatonnes.

Warming of 3 C (5.4 F) or more would have a huge effect on Earth's climate system, possibly leading to more frequent drought, flood, storms and rising seas affecting millions of people, scientists have said.

Since pre-industrial times, Earth's mean surface temperature has risen by about 0.8 C (1.4 F), yet this has been enough to cause the loss of Arctic ice and glaciers, soften permafrost and affect seasons in northerly latitude.

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