

# World 'heading for 3.5 C warming': study

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Output of heat-trapping carbon gases is rising so fast that governments have only four years left to avert a massive extra bill for meeting the two degrees Celsius (3.6 degrees Fahrenheit) target, they said.

"The current pledges are heading towards a global emissions pathway that will take warming to 3.5 C goal (6.3 F)," according to an estimate issued by a consortium of German researchers.

The world is on a "high-warming, high-cost, high-risk pathway," they said.

The report, compiled by Climate Analytics and Ecofys, which are German firms that specialise in carbon data, was issued on the sidelines of the 194-nation UN talks in Durban. The 12-day conference runs until Friday.

The 2 C (3.6 F) goal, initiated at the stormy

Copenhagen Summit of 2009, was enshrined at last year's conference of the UN [Framework Convention on Climate Change](#) (UNFCCC) along with a less feasible target of 1.5 C (2.7 F).

Accompanying these objectives is a roster of pledges by nation-states about what they intend to do to rein in their emissions.

The promises mark the first time that all countries have been coaxed into declaring specific carbon-curbing actions.



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But the measures are not subject to any international compliance regime and do not incur any penalties if they are not met.

The report said current pledges would lead to global emissions in 2020 of 55 billion tonnes of [carbon dioxide](#) (CO<sub>2</sub>) or its equivalent in 2020. This is 11 billion tonnes above the 44 billion tonnes consistent with meeting the 2 C (3.6 F) objective smoothly.

As a result, costs in [energy efficiency](#) and switching to cleaner power will rise very sharply after 2020 in order to recover lost headway. [Global emissions](#)

would have to fall by 3.8 percent annually from 2020 to 2050, using 2000 as the benchmark year per year.

But this effort would be roughly halved, to two percent, if action to brake emissions growth is initiated within the next three years to bring the tally back on line to 44 billion tonnes by 2020.

The figures carried in the report concur with similar estimates, published last month by the International Energy Agency (IEA) and the UN Environment Programme (UNEP).

Scientists caution that 2 C (3.6 F) is no guarantee of a safe haven against climate change and consider 3.5 C (6.3 F) to be an extremely dangerous scenario.

It would badly worsen droughts, flood and storms and affect sea levels, spelling famine and homelessness for tens of millions.

Already, 0.8 C (1.44 F) of the 2 C (3.6 F) has occurred since the start of the Industrial Revolution, when coal -- followed by oil and gas -- powered the rise to prosperity.

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