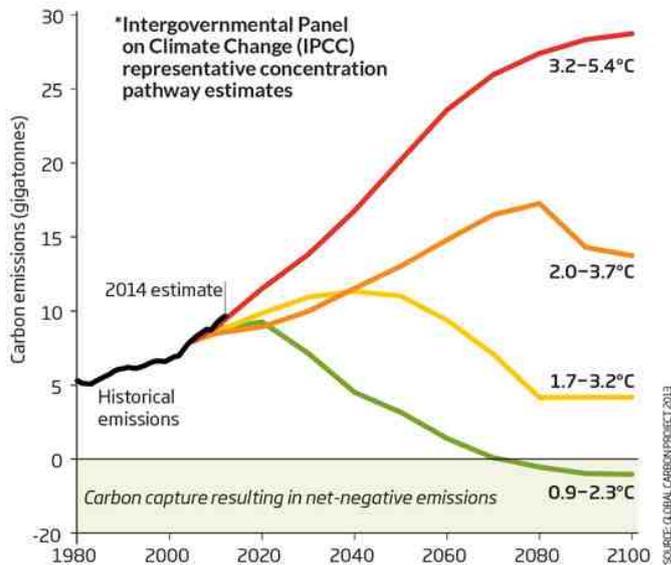


## World on track for worst-case warming scenario

12:45 22 September 2014 by [Catherine Brahic](#), New York City  
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### Emissions go from bad to worse

The new report from the Global Carbon Project shows global emissions are following the course of the worst of four scenarios\*. This suggests warming of at least 3°C by 2100, relative to 1850-1900



Presidents, prime ministers and ministers flying into New York City on Tuesday for a one-day United Nations summit on climate change have their work cut out for them. And this is why. As the graph above shows, despite everything they have done so far, we are on a clear course to extreme global warming.

Since the ignominious [2009 United Nations Climate Change Conference](#) in Copenhagen, Denmark, over a hundred nations have pledged action on emissions. The world has seen a major shift away from coal in favour of gas, which emits fewer greenhouse gases. Solar panels have become much, much cheaper and are being deployed in regions around the world, as are other renewable sources of energy. But the latest number-crunching – published on Sunday in *Nature Climate Change* – shows that none of this is enough.

"Our study shows no progress in curbing global carbon emissions," says [Corinne Le Quéré](#) at the University of East Anglia in the UK. Global carbon emissions from fossil fuel burning and cement production grew 2.3 per cent in 2013. They are expected to increase a further 2.5 per cent this year. "And they are projected to be around that for the next five years," says Le Quéré. "There is no progress in spite of all the talk."

#### Perfectly bad

The bleak image is brought home when emissions over the last few decades are plotted against projections for the future. Models predict how much the world will warm depending on how much we emit in future. Scientists typically look at four different possible futures, ranging from an uber-green society to a worst-case scenario, in which no action is taken to combat global warming. Le Quéré and her colleagues show how today's emissions are near-perfectly in line with the worst-case scenario. This means that, according to scientists' best estimates, the world will be as much as 5.4 °C warmer in 2100 than it was before the industrial revolution.

Le Quéré says it is still possible to stay below the internationally agreed target of 2 °C, but that this will require drastic emissions cuts across the world, and very soon. Bringing certain technologies online – such as [carbon capture and storage](#) – would be instrumental in achieving this, she says.

And that is the scale of the action needed from the New York meeting tomorrow, when world leaders will gather for one day at the UN headquarters. The UN secretary general, Ban Ki Moon, is hosting the event and has been pleading with governments for months now to come

to the summit prepared to show the world that they are taking the situation seriously and are prepared to grow their ambitions on tackling the problem.

The UN Climate Summit 2014 follows the launch of New York City's climate week today, and demonstrations around the world on Sunday.

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