Space mirrors and algae to cut global warming

BY LOUISE GRAY, THE DAILY TELEGRAPH NOVEMBER 29, 2010



Activists of The Supreme Master Ching Hai International Organization hold signs urging people to turn vegetarian as they believe it will save the planet, in Cancun November 29, 2010.

Photograph by: Gerardo Garcia, Reuters

CANCUN — UN scientists are to consider putting mirrors in space and sprinkling iron filings in the sea in an attempt to cut global warming, the climate change summit in Cancun has heard.

Speaking at the summit, Dr Rajendra Pachauri, the head of the Intergovernmental Panel on Climate Change (IPCC), said the Panel's next report on global warming would not only look at the threat of rising temperatures but also consider "geo-engineering" options that could reverse warming.

The announcement implied that scientists were losing faith in a global deal to stop temperature rise by limiting emissions.

There are already low expectations for the summit, being held at this beach resort on Mexico's east coast.

Representatives from more than 190 countries are meeting at the heavily guarded Moon Palace Hotel to try to find a way to limit emissions so that temperature rises stay below 3.6F (2C).

The IPCC is responsible for setting out the scientific basis on which the talks are based.

Addressing the opening conference, Dr Pachauri said if mankind continued to produce greenhouse gases at the current rate the world could experience catastrophic warming within 50 years.

He said the threat was so great that the fifth assessment report (AR5), due to be presented to the UN in 2014, would look at "geo-engineering options". "The AR5 has been expanded and will in future focus on subjects like clouds and aerosols, geo-engineering and sustainability issues," he said.

Later this year IPCC "expert groups" will meet in Peru to discuss geo-engineering.

Options include putting mirrors in space to reflect sunlight or covering Greenland in a massive "blanket" so it does not melt.

Sprinkling iron filings in the ocean "fertilises" algae, which absorbs CO2 and "seeding clouds" means that sunlight is blocked. Other options include artificial "trees" that suck carbon dioxide out of the atmosphere, painting roofs white to reflect sunlight, and man-made volcanoes that spray sulphate particles high in the atmosphere to scatter the sun's rays back into space.

Critics have argued that the process could make climate change worse through unintended consequences.

Earlier this year the IPCC was forced to undergo a review after it was disclosed that the last report to the UN, the AR4, included the mistaken claim that the Himalayan glaciers could melt by 2035. Critics called for the chairman to resign.

But Dr Pachauri insisted that the review made the panel stronger than ever.

"We are confident that the IPCC will emerge stronger as a result of this exercise and live up to the expectations of the global community," he said. The prospect of a treaty being agreed in Cancun is remote, as the world's two biggest emitters, China and the U.S., will not agree to legally binding targets.

Chris Huhne, Britain's Climate Change Secretary, has already admitted that a global agreement is unlikely this time, although he said it was possible to make progress in other areas.

Opening the talks, Felipe Calderon, Mexico's president, insisted a deal was still possible. "During the next two weeks, the whole world will be looking at you. It would be a tragedy not to overcome the hurdle of national interests."

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