

World has entered new CO2 'danger zone', UN says

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United Nations Convention on Climate Change executive secretary Christiana Figueres speaks during a press conference during the UN's 18th Climate Change Conference in Doha on November 30, 2012. The world has entered a "new danger zone" with a record level of Earth-warming carbon dioxide in the atmosphere, Figueres said Monday.

The world has entered a "new danger zone" with levels of Earth-warming carbon dioxide in the atmosphere never experienced by humankind, the UN's climate chief warned Monday.

When it breached the CO₂ threshold of 400 parts per million (ppm) last week, the world "crossed an historic threshold and entered a new danger zone," Christiana Figueres said in a statement urging policy action.

The level measured by US monitors has not existed on Earth in three to five million years—a time when temperatures were several degrees warmer and the sea level was 20 to 40 meters (22 to 44 yards) higher than today, experts say.

Before the Industrial Revolution, when man first started pumping carbon into the atmosphere by burning fossil fuels, CO₂ levels were about 280 ppm—rising steadily since records began in the 1950s.

The 400 ppm symbolic threshold had been expected to be breached for some time, but campaigners say it should nevertheless serve as a wake-up call in efforts to curb greenhouse gas emissions through fossil fuel use.

"The world must wake up and take note of what this means for human security, human welfare and economic development," said Figueres, who oversees global negotiations aimed at limiting warming-induced climate change.

"In the face of clear and present danger, we need a policy response which truly rises to the challenge."

Negotiators under the auspices of the United Nations are seeking by 2015 to develop a new, global climate treaty to take effect by 2020.

Nations are simultaneously attempting to find short-term solutions pre-2020 to closing the growing gap between agreed carbon emission targets and the actual curbs required to contain warming.

The UN is targeting a maximum temperature rise of two degrees Celsius (3.6 degrees Fahrenheit) on pre-industrial levels for what scientists believe would be manageable climate change.

The Intergovernmental Panel on Climate Change (IPCC), which informs policy makers, has said atmospheric CO₂ must be limited to 400 ppm for a temperature rise of 2-2.4 deg C (3.6 and 4.3 deg F).

Last Friday, however, the National Oceanic and Atmospheric Administration's monitoring centre in Mauna Loa, Hawaii, released data showing the daily average CO₂ over the Pacific Ocean was 400.03 ppm as of May 9.

A separate monitor at the Scripps Institution of Oceanography in San Diego, California, measured 400.08 ppm.

"We still have a chance to stave off the worst effects of climate change, but this will require a greatly stepped-up response," Figueres said Monday.

Global climate negotiations have been making poor progress and the yearly rise in emissions has led many scientists to conclude that warming of 3 or 4 C (5.4-7.2 F) is probable by century's end.

The next round of high-level talks are to take place in Warsaw, Poland in December, with a stock-taking session scheduled for Bonn, Germany in June.

Last year's meeting in Doha, Qatar, saw the 27-nation European Union, Australia, Switzerland and eight other industrialised nations sign up for binding emission cuts until 2020 under an extension of the Kyoto Protocol.

Together, the countries represent only 15 percent of global emissions.

The United States, China and India, the world's biggest emitters of CO₂, have no binding targets.

On Sunday, a study in the journal *Nature Climate Change* said more than half of common plant species and a third of animal species [are likely to see their living space halved](#) within seven decades on current CO₂ emission trends.

Output of man-made greenhouse gases is putting Earth on track for warming of 4 deg C (7.2 deg F) by 2100, it said.

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