

Scientists warn of rising CO₂ concentrations, despite stabilizing global temperatures

By: Michael Bastasch – April 29, 2013

Scientists at the U.S. government's Earth Systems Research laboratory in Hawaii reported Monday that the concentration of carbon dioxide could pass 400 parts per million for the first time in the next few days.

These warnings, however, come amid reports that global temperatures have been leveling for the past fifteen years.

"I wish it weren't true but it looks like the world is going to blow through the 400ppm level without losing a beat. At this pace we'll hit 450ppm within a few decades," said Ralph Keeling, a geologist with the Scripps Institution of Oceanography. Scripps operates the Mauna Loa station which is located over 11,000 feet high and far away from major pollution sources.

The carbon dioxide concentration reached 399.72 parts per million, the Guardian reported Monday, and will likely pass the "symbolically important" 400 ppm in the next few days.

"The 400ppm threshold is a sobering milestone, and should serve as a wake up call for all of us to support clean energy technology and reduce emissions of greenhouse gases, before it's too late for our children and grandchildren," said Tim Lueker, an oceanographer and carbon cycle researcher with Scripps CO₂ Group.

But global air temperatures at the earth's surface have been flat for the last ten years amid rapidly rising greenhouse gas emissions, according to recent reports.

"The world added roughly 100 billion tonnes of carbon to the atmosphere between 2000 and 2010," The Economist reported last month. "That is about a quarter of all the CO₂ put there by humanity since 1750. And yet, as James Hansen, the head of NASA's Goddard Institute for Space Studies, observes, 'the five-year mean global temperature has been flat for a decade.'"

Recent research out of Norway undercut global warming projections made by the United Nations' climate change authority. In 2007, the UN estimated that global temperatures could rise 3 degrees Celsius by 2050, if worldwide carbon dioxide levels doubled. Researchers from Norway used post-2000 temperatures and found that global temperatures may rise only 1.9 degrees Celsius.

“The Earth’s mean temperature rose sharply during the 1990s,” said Terje Berntsen, a professor at the University of Oslo who worked on the study. “This may have caused us to overestimate climate sensitivity.”

Climate scientists have also been lowering their warming projections since the UN’s 2007 estimate.

“Forecasts for the 21st century that were made in the late 1990s had better be revised downward because it’s very clear that we are going to go pretty close to a quarter of a century, at least, without a warming trend,” said Pat Michaels, director of the Center for the Study of Science at the Cato Institute.

Michaels produced a partial list of the studies in a Washington Times op-ed:

“Richard Lindzen gives a range of 0.6 to 1.0 C (*Asia-Pacific Journal of Atmospheric Sciences*, 2011); Andreas Schmittner, 1.4 to 2.8 C (*Science*, 2011); James Annan, using two techniques, 1.2 to 3.6 C and 1.3 to 4.2 C (*Climatic Change*, 2011); J.H. van Hateren, 1.5 to 2.5 C (*Climate Dynamics*, 2012); Michael Ring, 1.5 to 2.0 C (*Atmospheric and Climate Sciences*, 2012); and Julia Hargreaves, including cooling from dust, 0.2 to 4.0 C and 0.8 to 3.6 C (*Geophysical Research Letters*, 2012).”