

Atmospheric CO2 levels to hit milestone

By James Gerken, Huffington Post

Scientists monitoring global atmospheric carbon dioxide concentrations report that, for the first time in human history, CO2 levels could soon rise above 400 parts per million for a sustained period of time in much of the Northern Hemisphere.

Hourly readings have surpassed 400 ppm in the past week, but daily averages remain just below 400, reported The Guardian. Daily readings are expected to surpass 400 ppm in early May. They will reach their annual peak by mid-month.

The measurements come from the NOAA-operated Mauna Loa Observatory in Hawaii, which has maintained a continuous record of atmospheric CO2 concentrations since 1958. Records of earlier levels come from air bubbles inside Antarctic ice core samples.

"I wish it weren't true, but it looks like the world is going to blow through the 400-ppm level without losing a beat," said Scripps Institution geochemist Ralph Keeling in a press statement. Keeling's late father began taking the measurements which have come to form the "Keeling Curve."

"At this pace we'll hit 450 ppm within a few decades," he added.

The symbolic CO2 milestone comes amid an apparent slowdown from Obama on the climate and energy front, despite bold words at the outset of the president's second term.

Yet the Senate Finance Committee may soon take up discussion of a carbon tax, while Obama's former climate czar, Carol

Browner, has suggested the White House will act on power plant emissions.

“I think what you’ll see this term is more greenhouse gas requirements, particularly on new and existing coal-fired power plants,” she recently told The Chicago Maroon. Coal currently accounts for 80 percent of U.S. CO₂ emissions from electricity generation.

Last summer, CO₂ concentrations surpassed 400 ppm in the Arctic, but that concentration has not been recorded for prolonged periods across the globe.

Emissions from industrialized nations have dipped recently, but increasing atmospheric greenhouse gas concentrations – due to human activities like the burning of fossil fuels – mean continued planetary warming and more record years for temperature and extreme weather.

Environmental organization 350.org’s name was inspired by the growing threat of climate change from rising CO₂ levels. Scientists have argued that atmospheric CO₂ levels must be reduced to 350 ppm to prevent disruptive climate change.

Increasing concentrations of long-lived greenhouse gases like carbon dioxide mean “largely irreversible” climate change for 1,000 years after emissions are curtailed, research has shown.

Scripps recently launched a Keeling Curve Twitter account to provide daily updates on CO₂ measurements from Mauna Loa.