

Jack Venrick

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Sent: Tuesday, October 28, 2008 3:56 PM
Subject: Scientists warn of 2 more gaseslinked to climate

Jack:

Just today there was this article in the Seattle Times that there are now two more greenhouse gases to worry about and the planet is warming, no doubt about it, according to these government-paid scientists. It is a never-ending barrage of article after article that that man is the cause of global warming and must be controlled, regulated, restricted and admonished for his decadent life style. No where are there articles that you just forwarded forwarded to me.

I'm sick of it and it has to be a conspiracy of some sort or another. And I don't believe in conspiracies.

Ron

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Scientists warn of 2 more gases linked to climate

Carbon dioxide isn't the only greenhouse gas that worries climate scientists. Airborne levels of two other potent gases — one from ancient plants, the other from flat-panel-screen technology — are on the rise, too.

By Seth Borenstein

WASHINGTON — Carbon dioxide isn't the only greenhouse gas that worries climate scientists. Airborne levels of two other potent gases — one from ancient plants, the other from flat-panel-screen technology — are on the rise, too.

And that concerns scientists worried about accelerated global warming.

The gases are methane and nitrogen trifluoride. Both pale in comparison to the warming effects of carbon dioxide, produced by the burning of coal, oil and other fossil fuels. In the the past few years, however, these other two gases have been on the rise, according to two new studies. The increase is not accounted for in predictions for future global warming and and comes as a nasty surprise to climate watchers.

Methane is by far the bigger worry. It is considered the No. 2 greenhouse gas based on the the amount of warming it causes and the amount in the atmosphere. The total effect of methane on global warming is about one-third that of human-made carbon dioxide.

Methane comes from landfills, natural gas, coal mining, animal waste and decaying plants. plants. But it's the decaying plants that worry scientists most. That's because thousands of of years ago billions of tons of methane were created by decaying Arctic plants. It lies frozen in permafrost wetlands and trapped in the ocean floor. As the Arctic warms, the concern is this methane will be freed and accelerate warming.

The data are far from conclusive, but scientists said they are concerned that what they are seeing could be the start of the release of the Arctic methane.

After almost eight years of stability, atmospheric methane levels — measured every 40 minutes by monitors near remote coastal cliffs — suddenly started rising in 2006. The amount of methane in the air has jumped by nearly 28 million tons from June 2006 to October 2007. There are more than 5.6 billion tons of methane in the air.

"If it's sustained, it's bad news," said Massachusetts Institute of Technology atmospheric scientist Ron Prinn, lead author of the methane study, which will be published in the journal *Geophysical Research Letters* next Friday. "This is a heads up. We're seeing smoke. smoke. It remains to be seen whether this is the fire we're really worried about."

By contrast, nitrogen trifluoride has been considered such a small problem that it generally generally has been ignored. The gas is used as a cleaning agent during the manufacture of liquid-crystal-display television and computer monitors and for thin-film solar panels.

Earlier efforts to determine how much nitrogen trifluoride is in the air substantially underestimated the amounts, said Ray Weiss, a geochemistry professor with Scripps Institution of Oceanography and lead author on a nitrogen-trifluoride paper. It is set to be published in *Geophysical Letters* in November.

Nitrogen trifluoride levels in the air — measured in parts per trillion — have quadrupled in in the past decade and increased more than 30-fold since 1978, according to Weiss, who is also a co-author of the methane paper.

It contributes only 0.04 percent of the total warming effect that human-made carbon dioxide does from the burning of fossil fuels.

But nitrogen trifluoride is one of the more potent gases, thousands of times stronger at trapping heat than carbon dioxide. Methane is more than 20 times more potent than carbon dioxide on a per-molecule basis. Carbon dioxide remains the most important gas because of its huge levels and rapid growth.

Stanford University environmental scientist Stephen Schneider cautioned that the recent increase in methane is new and that "it is pretty hard to be very confident of any trend or big story yet on methane."

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