

## Report Has 'Smoking Gun' on Climate

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The Associated Press

WASHINGTON — Human-caused global warming is here, visible in the air, water and melting ice, and is destined to get much worse in the future, an authoritative global scientific report will warn next week.



### Threat of Climate Change

"The smoking gun is definitely lying on the table as we speak," said top U.S. climate scientist Jerry Mahlman, who reviewed all 1,600 pages of the first segment of a giant four-part report. "The evidence ... is compelling."

Andrew Weaver, a Canadian climate scientist and study co-author, went even further: "This isn't a smoking gun; climate is a battalion of intergalactic smoking missiles."

The first phase of the Intergovernmental Panel on Climate Change is being released in Paris next week. This segment, written by more than 600 scientists and reviewed by another 600 experts and edited by bureaucrats from 154 countries, includes "a significantly expanded discussion of observation on the climate," said co-chair Susan Solomon,

a senior scientist for the U.S. National Oceanic and Atmospheric Administration. She and other scientists held a telephone briefing on the report Monday.

That report will feature an "explosion of new data" on observations of current global warming, Solomon said.

Solomon and others wouldn't go into specifics about what the report says. They said that the 12-page summary for policymakers will be edited in secret word-by-word by government officials for several days next week and released to the public on Feb. 2. The rest of that first report from scientists will come out months later.

The full report will be issued in four phases over the year, as was the case with the last IPCC report, issued in 2001.

Global warming is "happening now, it's very obvious," said Mahlman, a former director of NOAA's Geophysical Fluid Dynamics Lab who lives in Boulder, Colo. "When you look at the temperature of the Earth, it's pretty much a no-brainer."

Look for an "iconic statement" — a simple but strong and unequivocal summary — on how global warming is now occurring, said one of the authors, Kevin Trenberth, director of climate analysis at the National Center for Atmospheric Research, also in Boulder.

The February report will have "much stronger evidence now of human actions on the change in climate that's taken place," Rajendra K. Pachauri told the AP in November. Pachauri, an Indian climatologist, is the head of the international climate change panel.

An early version of the ever-changing draft report said "observations of coherent warming in the global atmosphere, in the ocean, and in snow and ice now provide stronger joint evidence of warming."

And the early draft adds: "An increasing body of evidence suggests a discernible human influence on other aspects of climate including sea ice, heat waves and other extremes, circulation, storm tracks and precipitation."

The world's global average temperature has risen about 1.2 degrees Fahrenheit from 1901 to 2005. The two warmest years on record for the world were 2005 and 1998. Last year was the hottest year on record for the United States.

The report will draw on already published peer-review science. Some recent scientific studies show that temperatures are the hottest in thousands of years, especially during the last 30 years; ice sheets in Greenland in the past couple years have shown a dramatic melting; and sea levels are rising and doing so at a faster rate in the past decade.

Also, the second part of the international climate panel's report — to be released in April — will for the first time feature a blockbuster chapter on how global warming is already changing health, species, engineering and food production, said NASA scientist Cynthia Rosenzweig, author of that chapter.

As confident as scientists are about the global warming effects that they've already documented, they are as gloomy about the future and even hotter weather and higher sea level rises. Predictions for the future of global warming in the report are based on 19 computer models, about twice as many as in the past, Solomon said.

In 2001, the panel said the world's average temperature would increase somewhere between 2.5 and 10.4 degrees



An iceberg melts in Kulusuk, Greenland, near the Arctic Circle. AP

Fahrenheit and the sea level would rise between 4 and 35 inches by the year 2100. The 2007 report will likely have a smaller range of numbers for both predictions, Pachauri and other scientists said.

The future is bleak, scientists said.

"We have barely started down this path," said chapter co-author Richard Alley of Penn State University.

AP Special Correspondent Charles J. Hanley contributed to this report.

On the Net: Intergovernmental Panel on Climate Change: <http://www.ipcc.ch/>