GLOBAL WARNING

Report on climate change just tip of melting iceberg, scientists say Friday, February 02, 2007 Mike Lafferty THE COLUMBUS DISPATCH

If climate scientists have one hope for the global-warming report that will be released today in Paris, it is that policymakers and the public understand that Earth is teetering on calamity.

"I think we're running out of time," said Lonnie Thompson, an Ohio State University climate researcher who contributed to the Intergovernmental Panel on Climate Change report.

Written by hundreds of scientists and rewritten by hundreds of government officials, the report is supposed to be a tool for lawmakers and policymakers to make meaningful changes.

The report, like similar ones the panel released in 1995 and 2001, will say human actions have caused a lot of the warming. The phrasing that global warming is "very likely" man-made goes further though, and means the scientists believe it with more than 90 percent certainty.

Regardless of what the report says, scientists warn that unless we reduce carbon dioxide – a greenhouse gas and leading culprit in global warming – a number of scenarios could come true.

They include coastal areas destroyed by rising sea levels, southern Florida and Louisiana slipping under water, crippling drought over large portions of the United States and elsewhere, tropical regions made uninhabitable by heat and a resurgence of malaria and other tropical diseases.

"This is not how much it will cost to replace New York City or London. It's about what are we doing to the planet," said Harvard University scientist Dan Schrag.

While scientists continued to debate yesterday how exactly to word the report, Thompson and others said they are concerned that key areas, such as rising sea levels, have been watered down.

"It's not science, it's politics," said Thompson, who complained that the effect of melting tropical and polar glaciers has not been considered.

Information about sea levels was leaked earlier this week and said that the report lowers sea level predictions made in the 2001 report. For example, the leaked section forecast an increase of 5 to 23 inches by 2100 compared with the 2001 forecast of 20 to 55 inches.

"Adding the ice makes all the difference in the world," Thompson said.

Even a 6-inch rise in sea levels is huge, said Mike Rosenmeier, of the University of Pittsburgh, who studies ancient climates.

No one in the climate-research community disputes that levels of carbon dioxide are at their highest in 650,000 years. And that, scientists say, is going to cause major problems.

"If half of Greenland's ice melts, southern Florida will be underwater," Schrag said.

Thompson has predicted that the glacier at Mount Kilimanjaro in Africa will disappear by 2020 and that others will follow.

What do experts say must be done? Replace fossil fuels with solar, wind, biofuels and other energy sources to at least postpone the worst of it.

"What they're predicting for 2100, we're seeing it already," Rosenmeier said. "That should scare the hell out of everybody."

The world's geological record shows how climate has changed drastically and rapidly in the past. There is a real fear that greenhouse gases are forcing such a change now.

"The changes we're seeing today are beyond the natural envelope," said Greg Wiles, a geologist at the College of Wooster.

Wiles, who reviewed part of the report, said it's time to pay attention.

"How much are humans willing to gamble on a throw of the climate dice?" Wiles said. "Maybe we should err on side of caution instead of going recklessly forward."

Information from the Associated Press was included in this story.

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