



Climate Change Now

With Professional Engineer
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This series of articles is about the current state of climate change knowledge across our planet. The series will explore the most up to date science in areas including the scientific consensus, the conservative bias of climate science, abrupt climate change mechanisms, ancient climate and the global impacts of long-term sea level rise.

Climate change awareness is significantly increasing across the globe. The risks are becoming better known, the impacts better defined and the costs, better put, the long-term savings, are starting to be accepted as reality. But there are huge uncertainties that remain. Recent climate events have shown us that some of the claims of climate change skeptics are true – the scientists really don't understand what is going on with our climate. The scientific projections are increasingly understood to be conservative. Climate change is now proceeding more rapidly, and to greater extents than the computer models and the scientific consensus have made known.

Prime Minister Tony Blair launched the Climate Group in April 2004 with a speech that included the following quote:

“The issue of climate change is now very, very critical indeed. ... we're talking about climate change which is, I think, probably long term, the single most important issue that we face as a global community.”

The Climate Group is an independent, nonprofit organisation dedicated to advancing business and government leadership on climate change. This organization is represented by international giants such as British Petroleum, Dow, Goldman Sachs, HDR Engineering, Johnson and Johnson, JP Morgan Chase, Munich Re, Swiss Re and retail giant Tesco.

Arctic sea ice is melting three times faster and is at lower levels than can be explained in recorded history using the most powerful computer models (1). Eleven out of the last 12 years have been the eleven warmest years ever recorded.(2) Our current average planetary temperature is as warm or almost as warm as it has been in 10,000 years, and within 1 degree C of being as warm as it has been in the last 1.35 million years.(3)

The Intergovernmental Panel on Climate Change says that it is *very likely* that this warming is caused by man. This body of over 1,200 scientists representing over 100 countries, defines very likely as a greater than 95% probability. The scientist say that our planet's warming has now “emerged from the noise”. That there is a very clear signal that mankind is indeed causing this warming, and therefore mankind can manipulate this warming.

There is a significant and growing body of researchers that are saying that our super computer climate models are conservative.(1, 3, 4, 5). Global temperature increases are at the upper limits of the model projections, sea level increases are 65% greater than projected, and CO2 emissions have increased 65% over model projections since 2000 (4, 5).

Sources for this information come from NASA, NOAA, Stanford and Columbia Universities, the National Snow and Ice Data Institute and the National Center for Atmospheric Research. These scientists are among the leading climate scientists in the world.

References

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5. Canadell, et. al., Contributions to accelerating atmospheric CO2 growth from economic activity, carbon intensity, and efficiency of natural sinks, National Academy of Sciences, October, 2007

