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**LETTERS** 

## **Check With Climate Scientists for Views on Climate**

February 1, 2012

Do you consult your dentist about your heart condition? In science, as in any area, reputations are based on knowledge and expertise in a field and on published, peer-reviewed work. If you need surgery, you want a highly experienced expert in the field who has done a large number of the proposed operations.

You published "No Need to Panic About Global Warming" (op-ed, Jan. 27) on climate change by the climate-science equivalent of dentists practicing cardiology. While accomplished in their own fields, most of these authors have no expertise in climate science. The few authors who have such expertise are known to have extreme views that are out of step with nearly every other climate expert. This happens in nearly every field of science. For example, there is a retrovirus expert who does not accept that HIV causes AIDS. And it is instructive to recall that a few scientists continued to state that smoking did not cause cancer, long after that was settled science.

Climate experts know that the long-term warming trend has not abated in the past decade. In fact, it was the warmest decade on record. Observations show unequivocally that our planet is getting hotter. And computer models have recently shown that during periods when there is a smaller increase of surface temperatures, warming is occurring elsewhere in the climate system, typically in the deep ocean. Such periods are a relatively common climate phenomenon, are consistent with our physical understanding of how the climate system works, and certainly do not invalidate our understanding of human-induced warming or the models used to simulate that warming.

Thus, climate experts also know what one of us, Kevin Trenberth, actually meant by the out-of-context, misrepresented quote used in the op-ed. Mr. Trenberth was lamenting the inadequacy of observing systems to fully monitor warming trends in the deep ocean and other aspects of the short-term variations that always occur, together with the long-term human-induced warming trend.

The National Academy of Sciences of the U.S. (set up by President Abraham Lincoln to advise on scientific issues), as well as major national academies of science around the world and every other authoritative body of scientists active in climate research have stated that the science is clear: The world is heating up and humans are primarily responsible. Impacts are already apparent and will increase. Reducing future impacts will require significant reductions in emissions of heat-trapping gases.

Research shows that more than 97% of scientists actively publishing in the field agree that climate change is real and human caused. It would be an act of recklessness for any political leader to disregard the weight of evidence and ignore the enormous risks that climate change clearly poses. In addition, there is very clear evidence that investing in the transition to a low-carbon economy will not only allow the world to avoid the worst risks of climate change, but could also drive decades of economic growth. Just what the doctor ordered.

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