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Putting the 'con' in consensus; Not only is there no 97 per cent consensus among climate scientists, many misunderstand core issues

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— *Appeared in the Financial Post*

In the lead-up to the Paris climate summit, massive activist pressure is on all governments, especially Canada's, to fall in line with the global warming agenda and accept emission targets that could seriously harm our economy. One of the most powerful rhetorical weapons being deployed is the claim that 97 per cent of the world's scientists agree what the problem is and what we have to do about it. In the face of such near-unanimity, it would be understandable if Prime Minister Stephen Harper and the Canadian government were simply to capitulate and throw Canada's economy under the climate change bandwagon. But it would be a tragedy because the 97 per cent claim is a fabrication.

Like so much else in the climate change debate, one needs to check the numbers. First of all, on what exactly are 97 per cent of experts supposed to agree? In 2013, U.S. President Barack Obama sent out a tweet claiming 97 per cent of climate experts believe global warming is "real, man-made and dangerous." As it turns out, the survey he was referring to didn't ask that question, so he was basically making it up. At a recent debate in New Orleans, I heard climate activist Bill McKibben claim there was a consensus that greenhouse gases are "a grave danger." But when challenged for the source of his claim, he promptly withdrew it.

The Intergovernmental Panel on Climate Change asserts the conclusion that most (more than 50 per cent) of the post-1950 global warming is due to human activity, chiefly greenhouse gas emissions and land use change. But it does not survey its own contributors, let alone anyone else, so we do not know how many experts agree with it. And the statement, even if true, does not imply that we face a crisis requiring massive restructuring of the worldwide economy. In fact, it is consistent with the view that the benefits of fossil fuel use greatly outweigh the climate-related costs.

One commonly cited survey asked if carbon dioxide is a greenhouse gas and human activities contribute to climate change. But these are trivial statements that even many IPCC skeptics agree with. And again, both statements are consistent with the view that climate change is harmless. So there are no policy implications of such surveys, regardless of the level of agreement.

The most highly cited paper supposedly found 97 per cent of published scientific studies support man-made global warming. But in addition to poor survey methodology, that tabulation is often misrepresented. Most papers (66 per cent) actually took no position. Of the remaining 34 per cent, 33 per cent supported at least a weak human contribution to global warming. So divide 33 by 34 and you get 97 per cent, but this is unremarkable since the 33 per cent includes many papers that critique key elements of the IPCC position.

Two recent surveys shed more light on what atmospheric scientists actually think. Bear in mind that on a topic as complex as climate change, a survey is hardly a reliable guide to scientific truth, but if you want to know how many people agree with your view, a survey is the only way to find out.

In 2012 the American Meteorological Society (AMS) surveyed its 7,000 members, receiving 1,862 responses. Of those, only 52% said they think global warming over the 20th century has happened and is mostly man-made (the IPCC position). The remaining 48% either think it happened but natural causes explain at least half of it, or it didn't happen, or they don't know. Furthermore, 53% agree that there is conflict among AMS members on the question.

So no sign of a 97% consensus. Not only do about half reject the IPCC conclusion, more than half acknowledge that their profession is split on the issue.

The Netherlands Environmental Agency recently published a survey of international climate experts. 6550 questionnaires were sent out, and 1868 responses were received, a similar sample and response rate to the AMS survey. In this case the questions referred only to the post-1950 period. 66% agreed with the IPCC that global warming has happened and humans are mostly responsible. The rest either don't know or think human influence was not dominant. So again, no 97% consensus behind the IPCC.

But the Dutch survey is even more interesting because of the questions it raises about the level of knowledge of the respondents. Although all were described as "climate experts," a large fraction only work in connected fields such as policy analysis, health and engineering, and may not follow the primary physical science literature.

Regarding the recent slowdown in warming, here is what the IPCC said: "The observed global mean surface temperature (GMST) has shown a much smaller increasing linear trend over the past 15 years than over the past 30 to 60 years." Yet 46 per cent of the Dutch survey respondents - nearly half - believe the warming trend has stayed the same or increased. And only 25 per cent agreed that global warming has been less than projected over the past 15 to 20 years, even though the IPCC reported that 111 out of 114 model projections overestimated warming since 1998.

Three quarters of respondents disagreed or strongly disagreed with the statement "Climate is chaotic and cannot be predicted." Here is what the IPCC said in its 2003 report: "In climate research and modelling, we should recognize that we are dealing with a coupled non-linear chaotic system, and therefore that the long-term prediction of future climate states is not possible."

Looking into further detail there are other interesting ways in which the so-called experts are unaware of unresolved discrepancies between models and observations regarding issues like warming in the tropical troposphere and overall climate sensitivity.

What can we take away from all this? First, lots of people get called "climate experts" and contribute to the appearance of consensus, without necessarily being knowledgeable about core issues. A consensus among the misinformed is not worth much.

Second, it is obvious that the "97%" mantra is untrue. The underlying issues are so complex it is ludicrous to expect unanimity. The near 50/50 split among AMS members on the role of greenhouse gases is a much more accurate picture of the situation. The phoney claim of 97% consensus is mere political rhetoric aimed at stifling debate and intimidating people into silence.

The Canadian government has the unenviable task of defending the interest of the energy producers and consumers of a cold, thinly-populated country, in the face of furious, deafening global warming alarmism. Some of the worst of it is now emanating from the highest places. Barack Obama's website (barackobama.com) says "97% of climate scientists agree that climate change is real and man-made ... Find the deniers near you - and call them out today." How nice. But what we really need to call out is the use of false propaganda and demagoguery to derail factual debate and careful consideration of all facets of the most complex scientific and policy issue of our time.

Author:



[\(/profile/ross-mckitrick\)](/profile/ross-mckitrick)

Ross McKittrick (</profile/ross-mckitrick>)

Professor of Economics, University of Guelph

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