Climate Change – No, It’s Not a 97 Percent Consensus
by Ian Tuttle  October 8, 2015

Key Finding Extract:

“Since 33 percent appeared to endorse anthropogenic climate change, he divided 33 by 34 and — voilà — 97 percent! When David Legates, a University of Delaware professor who formerly headed the university’s Center for Climatic Research, recreated Cook’s study, he found that “only 41 papers — 0.3 percent of all 11,944 abstracts or 1.0 percent of the 4,014 expressing an opinion, and not 97.1 percent,”

Unable to address Texas senator Ted Cruz’s questions about “the Pause” — the apparent global-warming standstill, now almost 19 years long — at Tuesday’s meeting of the Senate Judiciary Subcommittee on Oversight, Sierra Club president Aaron Mair, after an uncomfortable pause of his own, appealed to authority: “Ninety-seven percent of scientists concur and agree that there is global warming and anthropogenic impact,” he stated multiple times. The relevant exchange begins at 1:39 (though the whole segment is worth watching): The myth of an almost-unanimous climate-change consensus is pervasive. Last May, the White House tweeted: “Ninety-seven percent of scientists agree: #climate change is real, man-made and dangerous.” A few days later, Secretary of State John Kerry announced, “Ninety-seven percent of the world’s scientists tell us this is urgent.” “Ninety-seven percent of the world’s scientists” say no such thing. There are multiple relevant questions: (1) Has the earth generally warmed since 1800? (An overwhelming majority of scientists assent to this.) (2) Has that warming been caused primarily by human activity? And, if (1) and (2), is anthropogenic global warming a problem so significant that we ought to take action? ADVERTISING In 2004, University of California-San Diego professor Naomi Oreskes reported that, of 928 scientific abstracts from papers published by refereed scientific journals between 1993 and 2003, “75% . . . either explicitly or implicitly accept[ed] the consensus view; 25% dealt with methods or paleoclimate, taking no position on current anthropogenic climate change. Remarkably, none of the papers disagreed with the consensus position.” Also remarkably, the papers chosen excluded several written by prominent scientists skeptical of that consensus. Furthermore, the claims made in abstracts — short summaries of academic papers — often differ from those made in the papers themselves. And Oreskes’s analysis did not take up whether scientists who subscribe to anthropogenic global warming think the phenomenon merits changes in public policy. RELATED: On Climate, Science and Politics Are Diverging The “97 percent” statistic first appeared prominently in a 2009 study by University of Illinois master’s student Kendall Zimmerman and her adviser, Peter Doran. Based on a two-question online survey, Zimmerman and Doran concluded that “the debate on the authenticity of global warming and the role played by human activity is largely nonexistent among those who understand the nuances and scientific bases of long-term climate processes” — even though only 5 percent of respondents, or about 160 scientists, were climate scientists. In fact, the “97 percent” statistic was drawn from an even smaller subset: the 79 respondents who were both self-reported climate scientists and had “published more than 50% of their recent peer-reviewed papers on the subject of climate change.” These 77 scientists agreed that global temperatures had generally risen since 1800, and that human activity is a “significant contributing factor.” A year
later, William R. Love Anderegg, a student at Stanford University, used Google Scholar to determine that “97–98% of the climate researchers most actively publishing in the field surveyed here support the tenets of ACC [anthropogenic climate change] outlined by the Intergovernmental Panel on Climate Change.” The sample size did not much improve on Zimmerman and Doran’s: Anderegg surveyed about 200 scientists. Share article on Facebookshare Tweet article tweet Surely the most suspicious “97 percent” study was conducted in 2013 by Australian scientist John Cook — author of the 2011 book Climate Change Denial: Heads in the Sand and creator of the blog Skeptical Science (subtitle: “Getting skeptical about global warming skepticism.”). In an analysis of 12,000 abstracts, he found “a 97% consensus among papers taking a position on the cause of global warming in the peer-reviewed literature that humans are responsible.” “Among papers taking a position” is a significant qualifier: Only 34 percent of the papers Cook examined expressed any opinion about anthropogenic climate change at all. Since 33 percent appeared to endorse anthropogenic climate change, he divided 33 by 34 and — voilà — 97 percent! When David Legates, a University of Delaware professor who formerly headed the university’s Center for Climatic Research, recreated Cook’s study, he found that “only 41 papers — 0.3 percent of all 11,944 abstracts or 1.0 percent of the 4,014 expressing an opinion, and not 97.1 percent,” endorsed what Cook claimed. Several scientists whose papers were included in Cook’s initial sample also protested that they had been misinterpreted. “Significant questions about anthropogenic influences on climate remain,” Legates concluded. RELATED: Scientists Don’t Actually Know What’s Causing ‘Extreme Weather’ Studies showing a wider range of opinion often go unremarked. A 2008 survey by two German scientists, Dennis Bray and Hans von Storch, found that a significant number of scientists were skeptical of the ability of existing global climate models to accurately predict global temperatures, precipitation, sea-level changes, or extreme weather events even over a decade; they were far more skeptical as the time horizon increased. Most did express concerns about global warming and a desire for “immediate action to mitigate climate change” — but not 97 percent. More Global Warming Montage: Victory! Cheerleading Media Celebrate Paris Climate Deal The Paris Climate Conference: A Jobs Program for the Greens Obama’s Special Brand of Climate Doomsaying A 2012 poll of American Meteorological Society members also reported a diversity of opinion. Of the 1,862 members who responded (a quarter of the organization), 59 percent stated that human activity was the primary cause of global warming, and 11 percent attributed the phenomenon to human activity and natural causes in about equal measure, while just under a quarter (23 percent) said enough is not yet known to make any determination. Seventy-six percent said that warming over the next century would be “very” or “somewhat” harmful, but of those, only 22 percent thought that “all” or a “large” amount of the harm could be prevented “through mitigation and adaptation measures.” And according to a study of 1,868 scientists working in climate-related fields, conducted just this year by the PBL Netherlands Environment Assessment Agency, three in ten respondents said that less than half of global warming since 1951 could be attributed to human activity, or that they did not know. Given the politics of modern academia and the scientific community, it’s not unlikely that most scientists involved in climate-related studies believe in anthropogenic global warming, and likely believe, too, that it presents a problem. However, there is no consensus approaching 97 percent. A vigorous, vocal minority exists. The science is far from settled. — Ian Tuttle is a William F. Buckley Jr. Fellow in Political Journalism at the National Review Institute.