'CLIMATEGATE' PROVIDES LESSONS FOR POLICY MAKERS

BY ROBERT J. BEBBER

In November of 2009, e-mails of the Climatic Research Unit (CRU) at the University of East Anglia (UEA) were hacked and became available to the public.[1] The e-mail exchanges[2] between scientists at the CRU and other institutions, such as the Pennsylvania State University, suggested that they were searching for ways to manipulate climate data in order to perpetuate the hypothesis that (a) the Earth is going through a period of "global warming," and (b) that it is largely "human induced"—also called Anthropogenic Global Warming (AGW).

Since the story broke, additional revelations from the Nobel Prize winning United Nation's International Panel on Climate Change (IPCC) report that the Himalayan icepacks were melting have proven false.[3] The report also overstated how much of the Netherlands is below sea level.[4]

Nonetheless, the head of the IPCC Dr. Rajendra Pachauri continues to insist that, despite these revelations, the veracity of the IPCC report and associated research at institutions such as the CRU are not in question. However, the lead scientist at the CRUhas admitted that no global warming has actually occurred since 1995[5] and that the Earth may not be warming at all.[6]

What to believe? While this author is not a climatologist, geologist, or meteorologist and therefore cannot speak authoritatively on the science

(or lack thereof), there is a great deal that might be said for policy makers who implement policies based on beliefs and assumptions derived from "scientific analysis."

Unfortunately for taxpayers, serious policy decisions were made over the past several years based on the conclusions drawn by the CRU, IPCC, and other institutions. New laws and regulations to reduce so-called "man-made" causes of global warming were implemented or are in the process of being considered. These include variants of "cap and trade" legislation currently pending in the U.S. Congress. Such legislation recently got a fresh push from President Obama in the wake of the Gulf oil spill, yet more evidence of his Administration's determination not to let any disaster "go to waste."

The use of science or scientific data is not new to policy making or public administration. In 2008, this author wrote in the *Journal* about Governor Charlie Crist's "Serve to Preserve Initiative" in Florida. The Governor issued Executive Orders to adopt automobile tailpipe emission standards from California, emission standards for utility companies and emission reduction targets for state agencies and departments.[7] In 2009, more than $168 million in federal "stimulus" funding was allocated to state, local, and tribal governments for "energy efficiency and conservation."[8] In can be argued that much of the impetus for the adoption of these policies and expenditures of tens of millions of taxpayer dollars lay with the constant drumbeat of scientific studies and publications suggesting that without political action, Florida (and the globe) would suffer irreparable environmental damage.

Policy makers should not be faulted for seeking data-driven solutions to political and social problems. After all, nearly every decision made by a political body comes with a cost to the individual in the form of taxes, regulation, or behavior compliance. The desire by policy makers for data-supported solutions has had a positive effect on scientific research as well. Much work in the field of social science research has been done on behalf of policy makers who genuinely desire to address key social issues such as crime, health care, and education.

The fact remains, however, that most policy makers are not trained scientists. They do not have experience in how data are acquired or understand the true meaning of statistical significance. Very few, for example, could adequately explain the different threats to the internal and external validity of research. The same can also be said for most of the professional bureaucrats, civil servants, and political appointees who serve the policy makers. So perhaps the "Climategate" scandal can provide elected officials a "teachable moment," to use the words of our President. Here are some points to consider:

Bias is fine, but be skeptical. We all approach the world around us through our own biases, preconceived notions, and generalizations.

It would be impossible not to. The world is too complex, and biases are our crude and imperfect way of trying to simplify our understanding. That being said, elected officials and policy makers have a *duty to be skeptical*—even when such studies seem to *support* our world view (especially so). This is also true for research conducted on behalf of political bodies, such as the Legislature or local governments.

Challenge assumptions. Scientists, when designing a research study, have to make assumptions. Such assumptions might relate to human behavior, or the existence of physical properties. Good research will state upfront the assumptions the study is using and should clearly explain how and why such assumptions were reached. These assumptions should be considered one of the legs upon which the study conclusion is built. Good questions for policy makers to ask researchers include: *How did you come to these assumptions? What alternative assumptions did you or your research team discard and why?*

Examine the data. Elected officials (and staff) will often jump straight to the conclusion of a research study and give only a cursory glance to the data the study used. Data, the evidence used by the researcher to come to the conclusions or recommendations, are just as important as the assumptions used in the study. We know this intuitively from the old saying, "Garbage in, garbage out." But bad data often have the appearance of being good data, and it can take a keen eye to discover it. For example, much of the evidence of global warming was based on temperature readings of weather stations around the world. While this seems innocent enough, independent studies of the data collected at these weather stations suggest the temperature readings could have been compromised by other factors such as urban growth, being moved to other sites, or—in the case of one weather station in Rome, Italy—being located at a site next to an airport where it catches the hot jet exhaust from taxiing jets.[9] Obviously, this would distort the temperature readings, and hence the data from which the conclusions were drawn. Policy makers should ask hard questions of researchers, such as: *How were these data collected? When were these data collected and under what circumstances? What other data collection methods were considered, and why were they not used? What problems did you have collecting the data?* And most importantly: *Will you be making your data set available to the public?*

"Good research will state upfront the assumptions the study is using…"

Understand the limitations. Every good research study goes into great detail about the limitations, both in how the study was conducted and the conclusions that may be drawn. A study that has no acknowledged

limitations should be carefully scrutinized. A limitation is not an admission of error nor does it invalidate the study. It merely states that based on research design, methodology, or conclusions, other possible explanations for a phenomena may exist. Sometimes, science has not progressed far enough technologically to properly explore or understand its subject. Often, funding limits the size and scope of a study as well. All of these factors may combine to limit the conclusions and recommendations and must be taken into consideration before public policies are made.

Science is not truth or certainty. We want to believe that science is the "search for truth," and while it may be true that science *searches for truth*, it cannot *be true* without a degree of uncertainty. Indeed, any researcher who claims to have no uncertainty about the conclusions he has reached is not a good scientist. It goes to the core credibility of the research. Today, the scientists and the research associated with global warming have lost the credibility and authority with which they have argued their point. By arguing forcefully and loudly for more than 20 years that the data are "certain" and that the world's scientific community is "unified" in its belief that global warming is a man-made phenomena and will lead to a global environmental apocalypse, they have destroyed their position as an honest, dispassionate broker of knowledge. They have done a disservice to themselves and to science at large.

Elected officials and policy makers have a duty to their constituents to base their decisions on sound data and analysis. This does not mean that the data and analysis will not be contradicted and other points of view should not be considered. But policy makers should proceed with caution and prudence, and approach critical public issues incrementally and with great care. The "Climategate" scandal could cost the Florida taxpayers millions of dollars in spending and regulation based on bad recommendations from faulty science. If politicians and bureaucrats adopt these few lessons and approach policy recommendations with a skeptical eye, Florida citizens would be well-served.

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Endnotes

1 BBC News, February 13, 2010, 2010, "Q&A: Professor Phil Jones," http://news.bbc.co.uk/2/hi/science/nature/8511670.stm/.

2 A searchable database of all the emails is readily available at several websites on the Internet, including http://junkscience.com/climategate.html.

3 Ben Cubby, "Storm Brews Over Glacier Blunder," *The Age*, January 25, 2010, 2010, www.theage.com.au/environment/climate-change/storm-brews-over-glacier-blunde4-20100124.mslv.html.

4 Louise Ireland, "U.N. Climate Panel Admits Dutch Sea Level Flaw," Reuters, February 13, 2010, www.reuters.com/article/idUSTRE61C1V420100213/.

5 Jonathan Petre, "Climategate U-turn As Scientist At Centre Of Row Admits: There Has Been No

Global Warming Since 1995," *The Daily Mail*: Mail Online, February 14, 2010, www.dailymail.co.uk/new/article-1250872/Climategate-U-turn-Astonishment-scientist-centre-global-warming-email-roaw-admists-data-organised.html.

6 Jonathan Leake, "World May Not Be Warming," T*he London Times*: Times Online, February 14, 2010, www.timesonline.co.uk/tol/news/environmet/article7026317.ece/.

7 Robert J. Bebber, "The Cult of Global Warming," *Journal of the James Madison Institute* (Winter/Spring 2008)

8 Governor's Press Office, "State, Local And Tribal Governments To Receive $168.8 Million In Stimulus Funds For Energy Efficiency And Conservation," Serve To Preserve: Myfloridaclimate.com, March 31, 2009, www.myfloridaclimate.com/newsroom/state_local_and_tribal_governments_to_receive_168_8_million_in_stimulus_funds_for_energy_efficiency_and_conservation/

9 Jonathan Leake, "World May Not Be Warming," *The London Times*: Times Online, February 14, 2010, www.timesonline.co.uk/tol/news/environment/article7026317.ece/.

TEXTBOOKS *(Continued from page 28)*

by an incident involving a question asked by my wife, Mallie, who accompanied me on one promotional visit to Dallas. "Wayne," she asked a tall Houghton Mifflin representative from Texas during a reception, "do Texans regard themselves as Southerners or Westerners?"

"Mallie," he said quickly with a broad smile, "we regard ourselves as Texans." ☙

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for funding, publishing bogus "research" in which the findings are dictated by the funding source. In contrast, JMI retains complete editorial control over all of its published research, much of it funded by our members' contributions. On those exceptional projects for which a single donor's generous grant provides some of the funding to support the research and its dissemination, JMI steadfastly maintains an arms-length relationship. Grants proffered with strings attached are routinely rejected.

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Worthy Words

"When the people find they can vote themselves money, that will herald the end of the republic."

– BENJAMIN FRANKLIN