UAH professor is at center of national debate on global warming

There are many voices on the global warming issue, from movie stars to public officials. Among them is a scientist from Alabama, State Climatologist and University of Alabama-Huntsville professor Dr. John R. Christy. While his name is not as recognizable as, say, Al Gore's, his research and writings have earned him a reputation as an important source of credible information in the national discussion on climate change policy.

Indeed, Dr. Christy served as a lead author on the United Nations Intergovernmental Panel on Climate Change (the IPCC). In 1991, he earned NASA's Medal for Exceptional Scientific Achievement, and in 1996 received a Special Award by the American Meteorological Society.

Dr. Christy's research, however, puts him at odds with many of the better recognized spokespersons on the issue. For the past two decades, Dr. Christy and his colleagues have collected and studied temperature data from satellites and weather balloons — and their findings suggest that an impending climate catastrophe is not supported by scientific evidence.

This position has generated much interest in Dr. Christy's work. He has written articles for the New York Times, Wall Street Journal and the BCC. He has been interviewed on CNN and NPR. He has been featured in documentary films. And he was invited to write an essay for a new book by Mike Wallace entitled *The Way We Will Be 50 Years From Today (60 of the World's Greatest Minds Share Their Visions of the Next Half-Century)*.

Global Warming

Alabama's State Climatologist discusses the issue and how it could affect what you pay for energy

By Stephen V. Smith

An Internet search on 'global warming' or 'climate change' will yield a long list of articles about the issue — and a majority of these news reports and opinions will treat the subject as if it is absolute fact, as widely accepted and undeniable as the law of gravity itself.

But the idea that human activity is changing the earth's climate and putting us on a collision course with disaster is not wholly accepted by the entire scientific community. One of the leading voices on this side of the debate is Dr. John R. Christy, Director of the Earth System Science Center and associate vice president for research at UAH. In addition to his work at the University, Dr. Christy also serves as the Alabama State Climatologist.

A Warmer Planet

The issue of global warming centers around the fact that humans are burning more fossil fuels and thereby putting more greenhouse gases — primarily carbon dioxide — into the atmosphere. "All things being equal, you would expect that more carbon dioxide in the atmosphere would create some rise in temperature," says Dr. Christy. "The real question is, what does everything else do in the climate system."

Other parts of the climate, Dr. Christy maintains, have a much greater greenhouse effect than carbon dioxide, including clouds and water vapor. "We must remember that, without carbon dioxide, there would be no life on the planet," he says. "In fact, the plant world you see around you actually developed at a time when carbon dioxide was five times the amount it is today."

Dr. Christy's work in the field can be traced back to 1988, when a NASA scientist testified before the U.S. Senate that the enhanced greenhouse effect was warming the planet and was related to issues such as that summer's severe drought.

"We were very suspicious of the data set being used," Dr. Christy says. The information reflected only surface temperatures, gathered from an assortment of thermometers across land and on ships at sea. He and colleague Dr. Roy Spencer (then a NASA scientist who now works for UAH) felt that too many factors affect surface temperatures for these measurements to produce a reliable picture of the planet's climate.

By 1992, Dr. Christy and Dr. Spencer had produced a data set that used satellite information to determine the temperature of the atmosphere, where the greenhouse effect actually takes place. "Our results were startling, because they did not show dramatic global warming like people were thinking we would find," Dr. Christy recalls. "By the way, it's still true. We don't find this dramatic global warming. It is warming some, but not dramatically."

And as a result, Dr. Christy believes that ongoing efforts to drastically change our nation's energy policy could result in higher energy costs for all Americans, undue burdens on our economy and added hardship for our poorest citizens.

A Brutal Life

No one can argue that the development of affordable energy sources brought great progress to the United States. Likewise, some of the poorest regions on earth are also those that lack access to affordable energy.

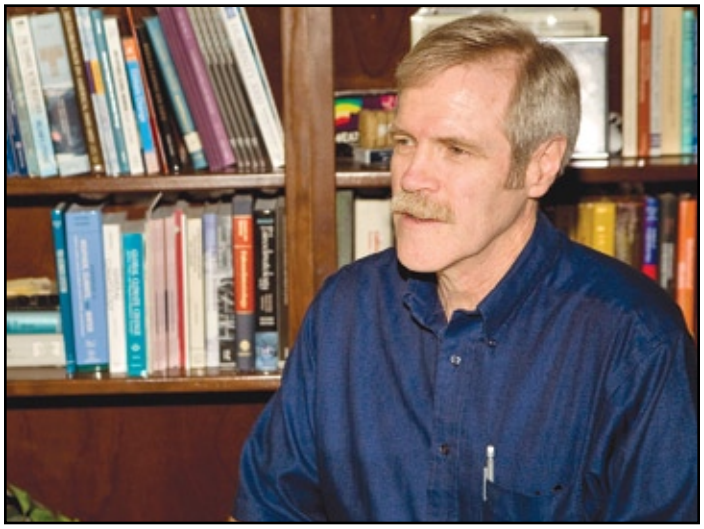
"Energy provides such wonderful benefits," Dr. Christy says. "Electrification of our country has really set us on the path of progress in so many ways." From agricultural research to medical research, Dr. Christy says affordable electricity is "the foundation of our innovation, and our ability to create better lives for people."

The scientist gained insight into this fact while serving as a missionary in Africa. "One of the things I learned there very clearly is that without energy, life is brutal and short," he says. Dr. Christy met African women who spent much of their day walking long distances to cut trees at the edge of the forest, then carry 50 pounds of firewood on their backs to burn inside their homes for heat and cooking. Not only is this back-breaking work, but the burning of fresh wood indoors reportedly kills some 1.6 million African women and children each year.

Affordable Energy

In interviews and public appearances, Dr. Christy likes to quote 19th-century physicist Lord Kelvin, who said, "all science is numbers." When dealing with statements such as "we have more incidents of severe weather today," and "the polar bears are disappearing," Dr. Christy cautions people to see what the numbers really tell us.

Dr. Christy has used this scientific data many times in testimony before congressional panels looking for answers to the climate change issue. But global warming has become so laden with political notions that great momentum exists among the nation's leaders to create laws aimed at lowering society's emissions of greenhouse gases.



Dr. John Christy in an interview earlier this year on campus of the University of Alabama-Huntsville.

"Families should understand two things," warns Dr. Christy. "All these proposals that are being offered will make energy more expensive." This includes paying more at the gas pump and paying higher electricity bills, he says.

"Also, these same proposals that will make their energy costs go up will not do anything to change whatever the climate is going to do," he continues. "As one of my colleagues says, this is one of those situations that's all pain and no gain. I think the American people prefer to get at least something for their money, and this is a situation where they would get nothing."

A Pro-Energy Policy

Based on what he sees in the science available today, Dr. Christy has his own ideas about what America's energy policy should look like. And it begins with affordable energy. "There is absolutely no question that available and affordable energy leads to longer and better lives," he says.

He would also move toward cleaner energy, where real pollutants were not part of the issue. "And I would always support a very vigorous research program to find the new sources of energy and new ways to create energy that will keep us efficient, and therefore allow us to grant to everyone this wonderful resource, this gift, of affordable energy," he says.

"Because energy does make life better."

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Learn more at wiregrass.coop

For a deeper understanding of the global warming issue and how it may affect energy costs in the United States, log on to the Wiregrass Electric Cooperative Web site. There you will find video excerpts from the interview with Dr. John R. Christy of the University of Alabama in Huntsville.