

The IPCC May Have Outlived its Usefulness - An Interview with Judith Curry

As the global warming debate increases in its intensity we find both sides deeply entrenched, hurling accusations and lies at one another in an attempt to gain the upper hand. This divide within the scientific community has left the public wondering who can be trusted to provide them with accurate information and answers.

The IPCC, the onetime unquestioned champion of climate change, has had its credibility questioned over the years, firstly with the climategate scandal, then with a number of high profile resignations, and now with the new "Gleickgate" scandal (1) (2) - One has to wonder where climate science goes from here?

Oilprice.com just had the pleasure of interviewing the well known climatologist Judith A. Curry in order to get her thoughts on climate change, the IPCC, geo-engineering, and much more. *The original interview can be found at Oilprice.com*

Judith is the current chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology and hosts sensible discussions on climate change at her popular blog [Climate, etc.](#) Considered somewhat of a black sheep within the scientific community Judith was a one time supporter of the IPCC until she started to find herself disagreeing with certain policies and methods of the organization. She feared the combination of groupthink and political advocacy, combined with an ingrained "noble cause syndrome" stifled scientific debate, slowed down scientific progress, and corrupted the assessment process.

OilPrice.com: What are your personal beliefs on climate change? The causes and how serious a threat climate change is to the continued existence of society as we know it.

Judith Curry: The climate is always changing. Climate is currently changing because of a combination of natural and human induced effects. The natural effects include variations of the sun, volcanic eruptions, and oscillations of the ocean. The human induced effects include the greenhouse gases such as carbon dioxide, pollution aerosols, and land use changes. The key scientific issue is determining how much of the climate change is associated with humans. This is not a simple thing to determine. The most recent IPCC assessment report states: "Most [50%] of the warming in the latter half of the 20th century is very likely [>90%] due to the observed increase in greenhouse gas concentrations." There is certainly some contribution from the greenhouse gases, but whether it is currently a dominant factor or will be a dominant factor in the next century, is a topic under active debate, and I don't think the high confidence level [>90%] is warranted given the uncertainties.

As I stated in my testimony last year: "Based upon the background knowledge that we have, the threat does not seem to be an existential one on the time scale of the 21st century, even in its most alarming incarnation."

OilPrice.com: You have said in the past that you were troubled by the lack of cooperation between organizations studying climate change, and that you want to see more transparency with the data collected. How do you suggest we encourage/force transparency and collaboration?

Judith Curry: We are seeing some positive steps in this regard. Government agencies that fund climate

research are working to develop better databases. Perhaps of greatest interest is the effort being undertaken by the Berkeley Earth Surface Temperature project, which is a (mostly) privately funded effort to compile and document a new data base on surface temperatures, in a completely open and transparent way.

OilPrice.com: Do you feel climatologists should be putting more effort into determining the effect of the sun on our climate? As the IPCC primarily focuses on CO₂ as the cause of climate change – Is the importance of CO₂ overestimated and the importance of the sun is underestimated?

Judith Curry: I absolutely think that more effort is needed in determining the effect of the sun on our climate. The sun is receiving increased attention (and funding), and there is a lively debate underway on interpreting the recent satellite data record, reconstructing past solar variability, and predicting the solar variability over the 21st century. Nearly all of the solar scientists are predicting some solar cooling in the next century, but the magnitude of the possible or likely cooling is hotly debated and highly uncertain.

OilPrice.com: You are well known in climate and energy circles for breaking from the ranks of the IPCC and questioning the current information out there. What do you see as the reasons for the increase in skepticism towards global warming over the last few years.

Judith Curry: Because of the IPCC and its consensus seeking process, the rewards for scientists have been mostly in embellishing the consensus, and this includes government funding. Because of recent criticisms of the IPCC and a growing understanding that the climate system is not easily understood, an increasing number of scientists are becoming emboldened to challenge some of the basic conclusions of the IPCC, and I think this is a healthy thing for the science.

OilPrice.com: What are your views on the idea that CO₂ may not be a significant contributor to climate change? How do you think such a revelation, if true, will affect the world economy, and possibly shatter public confidence in scientific institutions that have said we must reduce CO₂ emissions in order to save the planet?

Judith Curry: Personally, I think we put the CO₂ stabilization policy 'cart' way before the scientific horse. The UN treaty on dangerous climate change in 1992 was formulated and signed before we even had 'discernible' evidence of warming induced by CO₂, as reported in 1995 by the IPCC second assessment report. As a result of this, we have only been considering one policy option (CO₂ stabilization), which in my opinion is not a robust policy option given the uncertainties in how much climate is changing in response to CO₂.

OilPrice.com: There has been quite a bit of talk recently on geo-engineering with entrepreneurs such as Bill Gates and Richard Branson pushing for a "plan B" which utilizes geo-engineering to manipulate the environment in order to cool the atmosphere. Geo-engineering could be much cheaper than reducing emissions, and also much quicker to produce results and scientists are lobbying governments and international organizations for funds to experiment with various approaches, such as fertilizing the oceans or spraying reflective particles and chemicals into the upper atmosphere in order to reflect sunlight and heat back into space. What are your thoughts on geo-engineering? Is it a realistic solution to solving climate change or is it a possible red herring?

Judith Curry: With regards to geo-engineering, there are two major concerns. The first is whether the technologies will actually work, in terms of having the anticipated impact on the climate. The second is the possibility of unintended consequences of the geoengineering.

OilPrice.com: You have been noted to criticize the IPCC quite openly in the past on several topics. Even going so far as to say: *"It is my sad conclusion that opening your mind on this subject (climate change controversy) sends you down the slippery slope of challenging many aspects of the IPCC consensus."* Do you believe that the organization as a whole needs to be assessed in order to better serve progress on climate change? What suggestions do you have on how the organization should function?

Judith Curry: The IPCC might have outlived its usefulness. Lets see what the next assessment report comes up with. But we are getting diminishing returns from these assessments, and they take up an enormous amount of scientists' time.

OilPrice.com: Would renewable energy technologies have received the massive amounts of funding we have seen over the last few years without global warming concerns?

Judith Curry: I think there are other issues that are driving the interest and funding in renewables, including clean air and energy security issues and economics, but I agree that global warming concerns have probably provided a big boost.

OilPrice.com: What do you believe are the best solutions to overcoming/reversing climate change; is a common consensus needed in order to effectively combat climate change?

Judith Curry: The UN approach of seeking a global consensus on the science to support an international treaty on CO2 stabilization simply hasn't worked, for a variety of reasons. There are a range of possible policy options, and we need to have a real discussion that looks at the costs, benefits and unintended consequences of each. Successful solutions are more likely to be regional in nature than global.

OilPrice.com: I saw an interesting comment on another site regarding climate science that i thought i'd get your opinion on as it raises some very interesting arguments: *Climate science has claimed for 30 years that it affects the safety of hundreds of millions of people, or perhaps the whole planet. If it gets it wrong, equally, millions may suffer from high energy costs, hunger due to biofuels, and lost opportunity from misdirected funds, notwithstanding the projected benefits from as yet impractical renewable energy. Yet, we have allowed it to dictate global policy and form a trillion dollar green industrial complex - all without applying a single quality system, without a single performance standard for climate models, without a single test laboratory result and without a single national independent auditor or regulator. It all lives only in the well known inbred, fad-driven world of peer review.*

Judith Curry: I agree that there is lack of accountability in the whole climate enterprise, and it does not meet the standards that you would find in engineering or regulatory science. I have argued that this needs to change, by implementing data quality and model verification and validation standards.

OilPrice.com: Do you believe that the language used in papers and at conferences is a problem? The public just wants straight answers to questions: Is the climate warming, By how much, and what will the effects be? Scientists need to step out from behind the curtain and engage the public with straight answers and in their own words. Is this achievable, or is climate science too complex to be explained in laymen's terms? Or is it because even climate scientists can't agree on the exact answers?

Judith Curry: I think the biggest failure in communicating climate science to the public has been the reliance on argument from consensus. We haven't done a good job of explaining all this, particularly in the context of the scientific disagreement

OilPrice.com: What resources would you recommend to people who wish to get a balanced and objective view on climate science and climate change.

Judith Curry: There is no simple way to get a balanced and objective view, since there are so many different perspectives. I think my blog Climate Etc. at judithcurry.com is a good forum for getting a sense of these different perspectives.

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