Who Eats Geoengineering Risk? (Asilomar Dispatch 2)
— By Jim Rendon | Mon Mar. 29, 2010 5:00 AM PDT

During a panel discussion at last week's Asilomar International Conference on Climate Intervention Technologies, Mashahiro Sugiyama, a researcher for Japan's Central Research Institute of Electric Power Industry, stepped to the microphone to point out the obvious: Nearly everyone in the room was from the United States and the United Kingdom. There were no researchers from China, Russia, or Africa at the conference—and just one from India.

Afterward, Sugiyama stressed to me that while most climate-intervention research is being done in America and the UK, the Asilomar meeting was about more than science. The goal, he said, was to develop ground rules to help scientists navigate the legal, ethical, and political implications of proposed strategies to counter global warming—and to work with governments and global coalitions to regulate them appropriately.

According to David Keith, a researcher at the University of Calgary who has studied climate intervention for 20 years, long-term field tests are the only way to truly predict how spraying sulfur aerosols into the atmosphere—one proposed climate intervention—will affect global temperature, weather, and other factors. The tests themselves could lead to drought and dangerous weather patterns; entire communities could suffer, and people might well die. “You need input from other countries, and I do not see many here,” Sugiyama said.

Pablo Suarez, associate director of programs for the Red Cross/Red Crescent Climate Centre couldn't agree more. He was the only speaker on the opening day of the Asilomar conference to challenge its underlying premise—that geoengineering is an unpalatable fix for a worse problem: Even when trying to address global warming's consequences, Suarez said, we often do more harm than good.

He cited as a metaphor a case involving the Senegal River, which empties into the Atlantic Ocean, and floods regularly. Hoping to protect a large town, African engineers recently dug a channel to divert floodwater toward the Atlantic. But the project led to erosion of a land barrier protecting a smaller village from the ocean. In February, Suarez said, six people died as a result. He sees the mishap as a cautionary tale for geoengineering: that those with the fewest resources and the least say tend to suffer most from unintended consequences. “We let them eat the risk that we create,” he said.

In Suarez’s view, the Asilomar conference and others like it must find ways to represent the views of...
developing nations lest the meetings turn into high-minded discussions of science that miss the big picture. Global average temperature change is not the most important number, he told me. "The metric has to be the alleviation of human suffering."


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COMMENTS

Interesting article Jim. Let
Submitted by Anonymous (not verified) on Mon Mar. 29, 2010 8:46 AM PDT.

Interesting article Jim.

Let me ask you a question then:

"According to David Keith, a researcher at the University of Calgary who has studied climate intervention for 20 years, long-term field tests are the only way to truly predict how spraying sulfur aerosols into the atmosphere—one proposed climate intervention—will affect global temperature, weather, and other factors."

Is this your feeling regarding climate change modeling? Why is climate change modeling good enough for AGW proponents to demand huge changes in society and economics, and yet, geoengineering modeling is somehow invalid and requires empirical long term field tests?

I think that if they've modeled their geoengineering proposals to the same rigor as climate change models and published their proposals in peer reviewed articles, that we should stand back and let them have a whack at it.

Otherwise, we are no better than the deniers and the IDers and the anti-vaxxers.

Modeling
Submitted by Michael Mechanic on Mon Mar. 29, 2010 10:23 AM PDT.

Hi anonymous,

As Jim's editor, I can chime in here. Keith is an experimental guy; he doesn't think computer modeling is sufficient, at least not for the type of experiment he's talking about. Many scientists would disagree vehemently. Jim will have more on this debate in a later dispatch. He's not there to take sides so much as to listen and observe and get a first-hand feeling for where the scientists are at on all this.

Hi Michael, Thanks for the
Submitted by Anonymous (not verified) on Mon Mar. 29, 2010 6:02 PM PDT.

Hi Michael,
Thanks for the response. I was semi-serious in my question because I hear a lot of demands from the “pro-AGW” side that we take climate models very very seriously, and at the same time demand we consider geoengineering to be risky, unsafe stuff that will devastate the planet and has only been modeled but badly.

I have a pretty good background in science, two of three degrees and a slew of courses in biology and chemistry, and yet I’ve never come across the layman’s guide to how much of AGW theory is model based and how much empirically determined, and why we should believe the models.

The AGW skeptics of course claim the models cannot be trusted without experimental testing, and my background would consider that a pretty sympathetic argument. But if I say that in a forum I am called a denier.

Related: when I’ve asked climate scientists or their various internet forum proxies what it would take for them to falsify AGW, they tend to respond not with empirical observations, but with theoretical demands that I am not sure anyone disputes regarding absorption of light by different media.

I’d really like to find a good source that explains what I’ve laid out: how much of climate science is based on modeling, what isn’t based on modeling, and why we should believe the models.

Anyway, thanks for the response, I’ll look forward to Jim’s further dispatches.