Don't Wait for the Lifeboat: A Response to Geoengineering

Contributed by Alex Steffen 17 April 2009

Imagine finding yourself aboard a burning ocean liner. An increasing number of people are trying to put it out -- and they stand a good chance, if they can get access to the fire axes and hoses. Unfortunately, some rich old fat guys are sitting in deck chairs blocking the equipment, enjoying drinks and appetizers, and every time the other passengers try to get them to move, the rich old fat guys say they don't really believe in the fire, and even if it does exist, it probably can't be put out so we should just trust in the new lifeboat being built. And, sure enough, there on the deck is a guy is a brilliant, somewhat unworldly professor, busily sketching a design for a new lifeboat as the smoke billows in larger and larger clouds.

That's a pretty fair analogy for the situation in which we find ourselves, and for the role geoengineering is playing in the climate debate.

There is no reasonable basis to doubt that climate change is an extremely pressing problem. We can observe its impacts everywhere on the planet. In our ship analogy, the fire is quite real.

Luckily, this is a fire we know how to fight. We know now that we here in the developed world need to cut emissions dramatically and immediately: probably something on the order of 90 percent over the next 20-30 years. We know we can do this, mostly at a profit, and in ways that not only avert disaster but improve the quality of our lives. We know how to build bright green compact cities. We know how to redesign our buildings, transportation systems, infrastructure and factories to slash energy demand (again, usually at a profit). We have a good idea what climate-friendly farming and forestry would look like. We even have pretty clear paths ahead of us toward running our economy entirely on clean energy.

We can do all this, and not only cut the major sources of current emissions, but also provide a model of prosperity that the developing world can use to rise out of poverty without following in our climate-disruptive footprints, thus avoiding future emissions. All of this is within our power now. To return to the analogy, we know where the fire axes and hoses are.

The only reason we aren't already on track towards climate neutrality is that the burning of fossil fuels is extremely profitable, and the coal, oil and gas industries have used their power to completely distort the political debate. Their lackeys -- climate "skeptics," lobbyists, conservative talk radio hosts -- have used every possible strategy to slow progress away from fossil fuels by convincing Americans that climate change isn't a scientific certainty, that it won't be that bad, and that, anyways, cutting greenhouse gas emissions will destroy our economy. The fat guys in the deck chairs are full of bunkum, of course.

The professor on the deck is not. He is earnestly trying to figure out a lifeboat design, just as some scientists are eagerly trying imagine what megascale geoengineering projects might save our planet from runaway climate change. There's nothing wrong with that.

What's wrong is that we have no real reason to believe that he can, in fact, build a working lifeboat from scratch in time -or that we can, in fact, intervene in the planet's climate on a vast scale without disastrous consequences -- yet right now, those benefiting from inaction are already using the idea of possible lifeboats as an argument against fighting the fire, so to speak, with the idea being that since cutting emissions is "unrealistic" it's good we have a back-up strategy. This is not good science, and it's not good science policy. At very least, serious proponents of geoengineering need to acknowledge the severe limitations on our actual knowledge of geoengineering, and point out that emissions reductions are a far more certain and safe approach.

The professors should continue sketching lifeboats, by all means, but they should also tell the fat guys to get out of the way and stop misrepresenting their work.

This piece was written in response to a query from SEED Magazine titled, Will the Future Be Geo-Engineered?

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