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Questioning Bjorn Lomborg

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As promised, below you can read responses from Bjorn Lomborg to questions I posed related to “Cool It,” the new [documentary on his approach to global warming](#). Other sites are starting to [critique points](#) made in the film. While staking what he calls a sensible stance on the issue, he has [elicited strong reactions](#) for nearly a decade, including [a pie in the face from Mark Lynas](#), the British environmental campaigner and writer, in 2001.

There’s plenty more to ask, of course. **Lomborg has promised to answer at least five questions posed here by readers.** I’m going to send him a sampler, based mainly on which questions get the most reader recommendations, but with some discretion on my part to be sure there’s a mix. I’ll wait until Tuesday to compile the batch.

Here are the questions I sent him after watching the film, with his answers. The first deals with his portrayal of the [sea-level conclusions](#) of the Intergovernmental Panel on Climate Change (I.P.C.C.):

Q. Your characterization of I.P.C.C. sea level projections doesn’t note that the panel expressly excluded the ice-sheet dynamics [discussed in the film by the [glaciologist David Vaughan](#)] as a possible (although not necessarily probable) outcome.

A. Right. The I.P.C.C. has in its thousands of pages a large number of caveats, but the summary numbers (e.g. the 18-59cm) from I.P.C.C. is exactly what the thousands of scientists found most necessary for us to know and most well-based numbers for science to talk about. Some people want to say that because we’re not sure, [the] worst case would be that sea levels could rise much more, but the fundamental point of the film is exactly that worst-case scenarios are great for scares but very poor for making good policy. That is why we base ourselves on the mainstream estimates. (By the way, the I.P.C.C. didn’t exclude the ice-sheet dynamics but they did say that the models currently were not good enough to do anything but to linearly extrapolate, and therefore they simply assumed the flow from Greenland and Antarctica based on the period 1993-2003.)

Q. You pretty much punt on how to raise the research money (and probably could have hammered home [just how little the world is spending on basic energy R&D](#)). You’ve proposed a modest carbon tax, but how would even that happen?

A. The film makes the basic point that we [he's speaking of the European Union] are now committed to spending \$250 billion per year on current climate policies that will do virtually nothing in a century's time (reduce temperatures by 0.10F). We then show how we could spend that same money much smarter by fixing climate smartly, on adaptation and on fixing most of the other ills of the world. Obviously the E.U. is already willing to incur a loss that big.

Ways to raise the money include a low carbon tax or sales of cap-and-trade permits, or from government revenue. I think it would be politically much easier to raise less funding for research than for massively expensive, hugely ineffective carbon cuts. There will undoubtedly be a large number of different policies that could get us to this goal — the important thing is that the film shows us that this is a desirable direction to head in.

If that happens, the politics will follow. Using the phrase of environmentalist David Brower, politicians are like weather vanes and the film's job is to make the wind blow. (I totally agree that making the point of how little the world currently spends is a vital point. In the final version of the film we do make clear that the \$100 billion is 50 times what the world is spending now on R&D, and I hope that this is one of the points that the audience leaves with.)

[Lomborg also pointed to the following video, from the film's companion Web site, that gets at the money question:]

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Q. In a way, this echoes the point in Al Gore's film where he said, "We have everything we need but political will" (implying we had the necessary technologies and behavioral choices). For you, it's that we have the clear, cheap research and development path, but you don't note the challenge of how to build support for it.

A. Well, we are talking about two different solutions. Gore was fundamentally wrong to say we have everything but will to implement his solution. He suggests that we should cut carbon dramatically with our current technologies, which will be prohibitively expensive and politically absolutely impossible. This is not going to happen.

I say, we need to spend 0.2% of GDP on making the new technologies available. This is much less costly, much more likely to happen, and much more politically acceptable.

Q. Efficiency does matter... So you may be a bit too harsh, perhaps, in the treatment of the U.K. school kids working on that?

A. The point was not that we shouldn't do efficiency, but much more that we should recognize that the solution is not stopping people from toasting bread, but finding green technologies that will power the toaster without emitting CO₂.

Q. The geo-engineering discussion avoided what I see as the biggest question — the

diplomatic one of [who gets to set the thermostat \(Russia, Maldives...?\)](#). Developing and testing the technology is almost minor compared to that issue, to my mind.

A. You're right, that is a vital discussion, and one that I think could fill a movie in itself! I think that we do highlight many of the controversial aspects of geo-engineering. To my mind, the discussion about "who gets to set the thermostat" is one to have when the technology has been tested, its potential problems have been explored and better understood, and its use is seriously contemplated. But I think the discussion right now is about people realizing that geo-engineering is one of the many solutions that we have to take a look at, and that at very low cost it could provide us with a bridge of a couple of decades and an insurance policy against unlikely catastrophic climate change.

Q. You point to the middle of the bell curve and imply that provides comfort, when there's a decent economic argument that the worst case, while still uncertain, is the reason to act, not the middle case (particularly because there's little science concluding that the midrange of I.P.C.C. sensitivity projection is most likely). Would you agree that the plausible worst case (the risk that your house could burn down) provides the rationale for action more than the minor fire that only burns the kitchen?

A. No, I disagree on four counts. First, as [Schneider showed \[Stephen H. Schneider of Stanford University\]](#), the I.P.C.C. scenarios are tilted towards the low end of the temperature range — thus the low-medium temperature range is exactly a more likely outcome.

Second, the damage cost of a ton of CO₂ (at 3% discount rate) ranges from negative to \$22 at the 99 percentile [from Richard Tol's paper "[The Social Cost of Carbon: Trends, Outliers and Catastrophes](#)"], with a median of about \$4. Emphasizing the high end does indeed mean we should reduce emissions a little more (a carbon tax that is \$22/ton CO₂ rather than just \$4). But it does not justify that we should embrace the incredible outlier of Stern and say let's tax at \$86.

Third, this is not the way to fix the climate problem. Partly the worst-case scenarios are used to scare people, which leads to bad decisions — a strong recurrent theme of the film. Partly, even if we tax at \$22 this will only very moderately solve the problem. What we need is cheaper green energy and that is attacking this problem from an entirely different and smarter way. Thus the solution, both from a median point of view and a more concerned point of view should be the same — focus on R&D into green energy rather than focusing on a carbon tax.

Fourth, the insurance metaphor is misleading. The current, Kyoto-style solutions do not promise to avoid your house burning down. Even if implemented they would only — if you will allow me to continue in the metaphor — insure a tiny bit of the damage (the kitchen), and do so at a very large price (significantly more than the total damage). And of course, they don't actually get implemented. If we worry about insuring ourselves from extreme scenarios, the only realistic way to do so is through

geoengineering.

So, even a very concerned approach should come up with the same solutions as is advocated in the film — R&D and geoengineering — and the only real discussion is whether the spending should be even greater than a \$100bn/year on R&D. Once we get to that level of conversation in the climate discussion, it will be a great day.