
Climate Change: There is still time to avoid disaster ... but not much

For many years people have been hearing about climate change and the terrible impacts it would entail. In spite of warnings of the pending disaster, a group of scientists in the service of corporate interests has been trying to cast doubts on the scientific evidence. At the same time, another group of academics and technocrats has been inventing absurd mechanisms to “compensate” for carbon emissions in order to allow fossil fuel use to continue. Among these mechanisms are large-scale plantations of fast growing trees – located in the South, of course.

Against this background, it is encouraging to see scientists challenging power from within. Such is the case of Jim Hansen, the director of the NASA Goddard Institute for Space Studies in New York, who, despite a history of early outspokenness on climate change, is President George Bush's top climate modeller. On 17 February, Hansen published an article in the British newspaper *The Independent* noting that “a satellite study of the Greenland ice cap shows that it is melting far faster than scientists had feared --- twice as much ice is going into the sea as it was five years ago. The implications for rising sea levels -- and climate change -- could be dramatic.”

Hansen poses the question: “How fast can this go?” and his answer is: “Right now, I think our best measure is what happened in the past. We know that, for instance, 14,000 years ago sea levels rose by 20m in 400 years -- that is, five metres in a century. This was towards the end of the last ice age, so there was more ice around. But, on the other hand, temperatures were not warming as fast as today.”

Hansen explains that “The last time the world was three degrees warmer than today --which is what we expect later this century -- sea levels were 25m higher. So that is what we can look forward to if we don't act soon. None of the current climate and ice models predict this. But I prefer the evidence from the Earth's history and my own eyes. I think sea-level rise is going to be the big issue soon, more even than warming itself.”

Hansen's statement suggests that we are on the edge of a major climatic catastrophe – imagine a 25m rise in sea level! -- and that urgent and drastic measures need to be taken to avoid it. He obviously wanted to make the public aware about the danger. “Yet,” Hansen cautions, “a few weeks ago, when I -- a NASA climate scientist -- tried to talk to the media about these issues following a lecture I had given calling for prompt reductions in the emission of greenhouse gases, the NASA public affairs team -- staffed by political appointees from the Bush administration -- tried to stop me doing so. I was not happy with that, and I ignored the restrictions. The first line of NASA's mission is to understand and protect the planet.”

That should be the mission of all governments: to understand and protect the planet, as a means of ensuring the survival of humanity. At present, the main threat to the planet is global climate change and urgent action needs to be taken. Hansen asks the crucial question: “How long have we got?” His answer is: “We have to stabilise emissions of carbon dioxide within a decade, or temperatures will warm by more than one degree. That will be warmer than it has been for half a million years, and many things could become unstoppable. If we are to stop that, we cannot wait for new technologies

like capturing emissions from burning coal. We have to act with what we have. This decade, that means focusing on energy efficiency and renewable sources of energy that do not burn carbon. We don't have much time left."

None of the above, of course, is news. What is news is Hansen's breach in the wall of the corporate establishment and his example encouraging those within the scientific community to speak out and join the struggle to avert climate change. We really don't have much time left!

Note: Jim Hansen's article is available at:

<http://news.independent.co.uk/environment/article345926.ece>