

## **OPINION: SOME FRESH AIR IN THE CLIMATE DEBATE**

De Volkskrant, 28 March 2007

<http://www.volkskrant.nl/>

By Hendrik Tennekes

Recently, the IPCC, the climate panel of the United Nations, issued a new report. It focuses on the relation between the emission of greenhouse gases and the rise in globally averaged temperatures in the next one hundred years. A few degrees centigrade are forecast; in all likelihood this must be ascribed to the burning of fossil fuels. The sea level rise expected by the IPCC is on the order of four millimeters per year.

Though it would be easy to write an extensive commentary about these predictions, I feel no need to take issue with the IPCC on this point. Taking into account that the worldwide supplies of oil and gas are shrinking, and that Mr. Putin has threatened more than once to shut off the supply of natural gas to Europe, I agree it is necessary to pay more attention to energy-saving technology. Energy policy requires a high priority, both nationally and internationally.

But this does not mean that the climate debate is over now. I just mention a few points that bug me. Assuming that the IPCC numbers are reliable, I find the doomsday picture Al Gore is painting – a six-meter sea level rise, fifteen times the IPCC number – entirely without merit. The IPCC would have substantially lessened the acrimony in the climate debate if it had said so explicitly. It would have credited IPCC also if it had taken issue against the pressure exerted on professionals who doubt the majority view. It is unbecoming that American television weather forecasters who express doubts about global warming are likely to lose their jobs. The planned removal of State Climatologists George Taylor (Oregon), David Legates (Delaware), and Patrick Michaels (Virginia) also does not contribute to an atmosphere of unfettered professional discourse.

I protest the tendency to simplify the climate debate to a matter of fossil fuels, greenhouse gases, and a relatively minor global temperature increase. I protest the rude way geologists and astronomers are shoved aside. Whatever the IPCC staff thinks, it is not at all inconceivable that decreasing solar activity will lead to some cooling ten years from now. And if we look at the climate with a geologist's eye, we see all kinds of changes that have no discernible origin. In the long run we will enter a new ice age, but in the mean time we may encounter all kinds of ups and downs. The climate is always changing; that happened also when there were yet no people on this planet.

I protest vigorously the idea that the climate reacts like a home heating system to a changed setting of the thermostat: just turn the dial, and the desired temperature will soon be reached. We cannot run the climate as we wish. That is fortunate, because a bad season for farmers may be a boon for the tourist industry, deteriorating conditions for French farmers may mean improving conditions for their Polish colleagues, what is good

for winter wheat may make things worse for corn, and so on. We are not dealing with a machine, but with Nature herself, and she is not easily mocked.

I want some fresh air in the climate debate, free of the acrimony surrounding the IPCC report. Fortunately there is plenty room for a breath of fresh air if we stop focusing on greenhouse gases to the exclusion of other matters. We obtain that freedom if we decide to think and act not only globally, but primarily locally. My colleague Roger Pielke Sr., professor emeritus of meteorology at Colorado State University and presently senior scientist at the University of Colorado in Boulder, has been investigating the effects of changing agricultural and forestry practices for many years. He doesn't stop at commiserating, as so many do, the climatic effects of tropical deforestation. He has demonstrated that increasing irrigation leads to enhanced summer precipitation, for example, in Colorado, Kansas, and Oklahoma. He also charted the effects of southward moving orange plantations on Florida's microclimate and found that the frost risks for the orange crops had moved southward as fast as the plantations themselves. Local climates can change this much by aggressive farming practices.

Another perspective opened by letting some fresh air in is to consider the concrete vulnerability of societies, in particular those in poor countries, to present climate. This is the vulnerability paradigm proposed by Pielke's son Roger Jr., who is a political scientist at the University of Colorado, and his colleague Daniel Sarewitz of Arizona State University. If the present climate problems of vulnerable regions are addressed forcefully, then 90% of the future problems there have become manageable. Don't bother to ponder whether or not climate change is responsible for Katrina's destructive impact, but state boldly that local, regional, and national authorities have ignored the warnings issued by the US Corps of Engineers for some twenty years. In my little lowlands country something similar has happened. Twenty years of warnings by the engineers in the Ministry of Public Works were thoughtlessly laid aside by the Dutch government. It finally woke up when the storm surge of February 1, 1953 claimed nearly two thousand lives. Then it was too late.

Let me summarize. In the climate, much more is at stake than the probable consequences of a slight temperature rise. The dwindling supplies of gas and oil and the direct effects of greenhouse gases get more than sufficient attention from the global community. But next to that there is a wide, only partially explored territory of local and regional vulnerabilities. Due to the incessant emphasis on the global aspects of the climate problem, this territory does not receive the attention it deserves. That is a shame.

Hendrik Tennekes

Copyright 2007, De Volkskrant