

04/01/2010 05:00 PM**Climate Catastrophe****Part 2: Politically Charged Science**

No other branch of science is as politically charged. A religious war is raging between alarmists and skeptics, and it threatens to consume levelheaded climatologists. But it is a critical conflict, because it revolves around something as massive as the total restructuring of industrial society, a venture that will cost trillions of euros. Powerful economic interests and unshakeable fundamental beliefs come into play.

The credibility crisis in climatology comes at an extremely unfavorable time. Since the failed December 2009 climate summit in Copenhagen, environment policy has been in a state of shock. US President Barack Obama, for example, has put his initiative for new climate legislation on hold. And last week French President Nicolas Sarkozy reversed his plans to introduce a climate tax, saying: "We will not impose any constraints on our industry yet."

On the other hand, Mohamed Nasheed, the president of the Maldives, an island nation threatened with extinction as a result of rising sea levels, accuses the Americans of engaging in intrigue to make climatology seem ridiculous. During a recent speech in Berlin, Nasheed characterized efforts to discredit climate research as "a diabolical plan."

Unwilling to Pay

Meanwhile, there are growing concerns in Berlin that German citizens could become less willing to pay for costly efforts to protect the climate. A poll conducted on behalf of SPIEGEL already signals a dramatic shift in public opinion and suggests that Germans are losing their fear of climate change. The strong majority of 58 percent who said they feared global warming about three years ago has declined to a minority of 42 percent.

German Environment Minister Norbert Röttgen, a member of the center-right Christian Democratic Union (CDU), is urging the IPCC to deal with its own errors more proactively. "The IPCC should openly admit its mistakes and correct them," he told SPIEGEL. "It is imperative that trust in the work of the IPCC be restored as quickly as possible."

There are also growing concerns at Germany's Ministry of Education and Research, which is spending €250 million (\$338 million) to support climate science this year. Research Minister Annette Schavan has already summoned German IPCC scientists to attend a "meeting to clarify the situation and improve quality assurance." Officials at the ministry are horrified over how unprofessionally the IPCC is organized. "The IPCC's results must be above suspicion, because their impact can cost trillions and have serious political consequences," says Wilfried Kraus, a senior ministry official.

Scientists Who Want to be Politicians

Reinhard Hüttl, head of the German Research Center for Geosciences in Potsdam near Berlin and the president of the German Academy of Science and Engineering, believes that basic values are now

under threat. "Scientists should never be as wedded to their theories that they are no longer capable of refuting them in the light of new findings," he says. Scientific research, Hüttl adds, is all about results, not beliefs. Unfortunately, he says, there are more and more scientists who want to be politicians.

"If the revelations about the affair in England turn out to be true, it will be a catastrophe for climatology as a whole," says Hüttl. "We can only monitor ourselves, and if we fail in that endeavor, who can be expected to believe us anymore?"

The British climate research center the Met Office has decided that the only way to regain lost trust is to make all climate data available online immediately, in a system that is accessible to anyone, offers maximum transparency and includes critical assessments on how reliable each piece of information is. The Met Office estimates that this major international project will take at least three years.

Despite the controversy, most climatologists agree that in the end the general view of climate change will not have changed significantly. Almost all share the basic conviction that we are headed for warmer times.

Open Questions

Scientists fear that without an open, honest process, they will no longer find a sympathetic ear. This process could mean that much of what has long been considered established knowledge will come under review once again, specifically, five elementary questions on the future of the climate:

- By how many degrees has the Earth's temperature already increased, and how much further will temperatures rise?
- How high will sea levels rise in a greenhouse climate?
- Can we expect to see storms of unprecedented strength in the future?
- Which parts of the world will experience more droughts, and where will there be more flooding?
- Will the situation on the planet truly spin out of control if the average global temperature increases by more than two degrees Celsius?

Anyone who speaks with leading climatologists today will discover how many questions remain open. The media, politicians and even scientists often talk about changes to the weather with a certainty that does not in fact exist.