

In the public's mind

The policy and communications director of the Grantham Research Institute on Climate Change and the Environment, Bob Ward, talks to *Nature Climate Change* about the need for climate scientists to actively engage with the public.

■ Why is the temperature slowdown a communication challenge?

The story of the slowdown in the public discourse is dominated by a concerted campaign that tries to undermine the case for action on climate change. Unfortunately, the scientists have been a bit naive about the issue and very slow at responding to this campaign. Sceptics have used the slowdown to say that global warming has stopped. The scientists have fallen into that trap by using completely inadequate language. Hiatus, for example, is a terrible word — it refers to a temporary stop. Even though the scientists have tried to emphasize the temporary nature of the phenomenon, the sceptics' interpretation that the warming effect has stopped has created confusion and has persuaded many that there is no reason for concern until, if and when, warming starts again.

■ What should have happened?

Climate scientists should have become involved with the communication of this slowdown sooner and more actively and should have taken a different angle. Instead of discussing the possible causes of the slowdown, something of which they can't be certain at present, they should have re-emphasized what is still largely agreed by the scientific community — that the heating effect is still happening and whatever is temporarily counteracting the long-term warming trend is not reversing it.

■ Scientists weren't expecting the slowdown, is that why they were so unprepared?

The problem is that scientists have been generally very poor at explaining what the models do. In particular, they should have explained more clearly why climate models are better at dealing with the greenhouse gas forcing over the long term than predicting the short-term variability that affects the long-term trend. The fact that they weren't able to predict the timing of the slowdown, and do not know for sure what is causing it, does not mean that they don't know anything about it. Scientists tend to focus on the interesting questions, which are the areas of uncertainty. But when they communicate in public they should start with what they



are quite sure about. If you focus on the uncertainties, people infer that you are uncertain about all of it.

■ Is it that people expect scientists to know everything?

The public certainly expect the experts to be honest about the things they don't know. However, they also expect clear communication of what is known. The way scientists handled communication of the slowdown shows that the climate science community has really not done enough to understand the need to engage with the media and the public. They should have been clearer about the slowdown and explained why it has not changed the long-term risks of big rises in temperature.

■ Is the debate around the slowdown a sign of a wider issue?

There is certainly a wider communication issue here. One can blame the sceptics for muddying the water but in the end, if the researchers were generally better at communicating, they wouldn't have as much of a problem. The sceptics have the most difficult part, because they're trying to spin a line that is basically untrue. In the case of the slowdown, a delayed and inadequate response from climate scientists has allowed the sceptics to make it a test of the credibility of climate science, and to falsely portray it as the most important issue. They have distorted

the media's views and it will take a great deal of time to undo that distortion.

I would like to see the scientists admit that communication needs to be improved. In the run up to the publication of IPCC AR5 WGI, there was a big press conference where scientists talked about the slowdown. But, perhaps not surprisingly, the BBC science editor — David Shukman — made it clear that it was the first time he heard climate scientists talking about the slowdown. Even if that's not true, the fact that he has such a perception shows that the climate science community just hasn't got the communication right.

■ What about politicians in all this?

Government departments have chief scientific advisors who brief them about the science. There is little excuse if politicians get the science wrong. Of course there are exceptions, with some politicians using the slowdown to try to justify ideologically driven statements about climate change. It is disturbing to see that the confusion around the slowdown is being used as a way of preventing public pressure on politicians to do more. We know that current levels of actions to reduce emissions are not sufficient to avoid the risks of dangerous climate change. That is what everybody should be really concerned about. And that's why I think this is not only a problem of communication but a crisis for public policy.

■ What should scientists do?

They should speak more and understand more about the basics of public debate. Senior climate scientists have to accept that if you are a leader in this field, part of your job is to engage with the public debate. Climate science is more than just the research; it's about the interface with the public and with policy makers. Scientists need to talk to newspaper editors who very often don't have a science background and therefore don't understand even the basics of climate change. The public have been let down by the media and it's up to the scientists to get the editors to understand more than they currently do.

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