

## BOOKS &amp; ARTS

# Four ways to take the policy plunge

How should researchers best interact with policy-makers for maximum benefit to society?

## The Honest Broker: Making Sense of Science in Policy and Politics

by Roger Pielke Jr

Cambridge University Press: 2007. 198 pp.

\$29.99, £15.99

### Andrew A. Rosenberg

Few scientists are trained to be policy advisers. Many academics look askance at politics, as though there might be something unseemly about bringing their research to bear on problems of the day. This is probably not so much from disinterest as from a lack of experience in real-world policy debates and of an academic incentive to participate in them. Happily, the book by Roger Pielke Jr on the engagement of scientists in policy offers a pithy, insightful basis for discussing the contributions scientists can make to advising policy-makers.

Pielke sets out four basic modes for how scientists advise on policy and two models for scientific advice. The first mode is for the 'pure scientist', who is not involved at all. This is the colleague who shakes their head ruefully because the policy-makers were foolish enough not to read his or her recent papers. The second is for the 'science arbiter', who readily responds to questions but without voicing an opinion on the policy choices. Again, this person sets themselves apart from the problems of the policy-maker and is loath to take ownership of the results.

The third role is the 'issue advocate', who takes a clear position and argues for specific policy action, using scientific knowledge and training to make that argument. Finally, the 'honest broker' — Pielke's obvious preference — engages in the policy process to bring scientific information to bear by considering the options and helping policy-makers to choose. Here, there is real ownership of the process, and products of policy as options are explored from a scientific perspective.

These caricatures of the roles that science advisers play provide useful scope for thought about how to interact with policy-makers. I have had experience with all four roles at various points in my career as both scientist and policy-maker, and agree with Pielke that scientists often make the most impact by serving as honest brokers. But his view of issue advocates is excessively disparaging. Although a scientist who takes a strong position on policy may not comport with the view of some that science is somehow 'pure' and above the messy fray of



At the 2007 Intergovernmental Panel on Climate Change conference, scientists help shape policies.

policy debates, such advocacy has had a hugely positive effect on policy.

Issue advocates are to be welcomed and the scientific evidence weighed as it always should be, irrespective of who brings it to the table. It is too easy to label a scientist as an issue advocate to downplay their opinion without a rigorous reason. In my experience, most scientists who take the role of issue advocate do so out of conviction resulting from their work, in much the same way as researchers will argue strongly for their interpretation of research results. It is therefore inappropriate to assume that issue advocates rely on science that is less rigorous.

The strongest case that Pielke makes is this: "That some scientists engage in political activities is neither new nor problematic; they are after all citizens. A problem exists when ... scientists implicitly or explicitly equate scientific arguments with political arguments, and in the process reinforce a simplistic and misleading view of how science supports policy." The challenge is to separate carefully which of your inferences stem solely from the science, and which from your views as a citizen.

The two models for science advice Pielke describes are the linear and the stakeholder models. The first is a simple progression from science to policy, with no real feedback; the second is an integrated system. I tired of Pielke railing against the linear model, and more so of

the implication that this model somehow leads to scientists unwittingly becoming issue advocates instead of honest brokers. Stakeholder involvement is essential, but can accentuate the tendency to polarize positions and for scientists to advocate one policy over another.

Pielke's choice of the basis for the Iraq war as an example of advisory processes, and how they fail, is a missed opportunity. An alternative scientific case study would have been more relevant to the role that most scientists may play in policy-making. For example, the natural-resource issues that I have dealt with in fisheries and the marine environment have extensive advisory processes and stakeholder input. Scientists were engaged in these issues in all of Pielke's four roles. The process is difficult and time-consuming, but it is likely to be much more relevant to the work of most scientists than the gathering of military intelligence.

This is a clear, thought-provoking book that helps move us away from thinking of science as 'pure' and distinct from policy. It would make an excellent basis for a graduate seminar. It isn't a textbook, but a think-piece, and we all need to consider carefully our responsibility to engage as scientists in policy-making. ■

Andrew A. Rosenberg is professor of natural resources at the Institute for the Study of Earth, Oceans and Space, University of New Hampshire, Durham, New Hampshire 03824, USA.