

Regional climate offices and regional assessment reports needed

To the Editor — The commentary by Visbeck in the January 2008 issue of *Nature Geoscience* discusses the need to buttress the IPCC knowledge base by including regional activities. Even in the case of a successful climate policy with significant reductions of CO₂ emissions, knowledge about regional and local manifestations of anthropogenic climate changes are needed for appropriate adaptation measures. We propose that the problem has three additional noteworthy components:

- The stakeholders, including the media and the public at large, interpret the science in their cultural framework. Scientific knowledge undergoes many transformations before entering the public sphere. Vested interests, political as well as economical, play a role in this transformation. To fully comprehend this transformation social and cultural sciences are needed.
- Comprehensive analyses of the regional and local climate, as well as climate impacts, are not the only requirement. In addition, basic concepts — such as natural climate variability, detection of human-induced change and

attribution to causes, scenarios and uncertainty — need to be explained to the public.

- Only to a limited extent do scientists understand the concerns among stakeholders and the public at large. Some of these concerns are not rational, some are even outlandish, but because they prevail in the social arena they influence the political decision process. Science needs to be aware of the full spectrum of issues that the public is concerned about.

We report here two regional activities from northern Europe that aim to address the need for regional assessment as outlined in by Martin Visbeck as well as the points raised above.

- An IPCC-like assessment report for past, ongoing and possible future climate change and the impact of terrestrial and marine ecosystems in the Baltic Sea Basin has been assembled by about 80 scientists from 13 countries. This “BALTEX Assessment of Climate Change for the Baltic Sea Basin” (BACC)² was accepted in March 2007 by the Helsinki Commission for the Baltic Sea as the basis for political

deliberations³. (See ref. 4 for information on the BACC report.) A similar exercise has just been launched for the extended metropolitan region of Hamburg, and is expected to be concluded in 2010.

- To facilitate the two-way exchange of concepts, concerns, questions and knowledge between the scientific sphere and the regional public sphere the Norddeutsches Klimabüro⁵ was established in 2006. Other regional offices are presently set up for Southern Germany at the Research Center Karlsruhe and for Arctic Regions and Sea level at the Alfred Wegener Institute in Bremerhaven.

References

1. Visbeck, M. *Nature Geosci.* 1, 2–3 (2008)
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