Science Academies as Political Advocates
by Roger A. Pielke, Jr.

What role should national science academies play in policy and politics?
One answer to this question was provided last month when eleven national science academies sent a letter to "world leaders, including those meeting at the Gleneagles G8 Summit in July 2005" advocating a number of specific policy actions on climate change. The letter – from science academies in Brazil, Canada, China, France, Germany, India, Italy, Japan, Russia, the United Kingdom, and the United States – indicates that these national science academies perceive one of their roles to be overt political advocacy.

As the public has demanded a closer connection of science with society, the action of the science academies is part of a broader trend for scientists and scientific institutions to become more involved in the political fray on a wide range of issues involving science. While each individual scientist has a very personal decision to make about whether or not to engage in political advocacy, there are real risks for the scientific enterprise when science academies become political advocates.

There are at least three reasons why political advocacy by science academies should be greeted with caution:

One reason is simply practical – science academies have much to lose (including stature, legitimacy, public funding, etc.) if they take on the characteristics of an advocacy-oriented interest group. Regardless of the merits of the actions on climate change called for by the 11 academies, by endorsing a particular political agenda, the academies may compromise their future ability to serve as resources for policy makers on scientific issues. After all, one reason that policy makers look to science academies to provide reports on science rather than to, say, pharmaceutical companies or environmental groups, is because policy makers believe that science academies will not shape science to fit a pre-existing political agenda. By endorsing a political agenda, science academies begin to resemble these other groups.

The second reason has to do with the needs of policy making – sometimes all of the available options on a particular issue are bad ones. Climate change is a great example, as the options currently being debated and implemented, both on mitigation and adaptation, are not proving particularly effective. Yet, in their letter, the science academies are, in effect, calling for renewed support of the current approach to emissions-reduction under the Climate Convention that has proven woefully inadequate over more than a decade. Sometimes effective policy making requires more than just picking sides in a two-sided debate – specifically, the introduction of new and innovative possibilities for action. One of the most important, but overlooked, lessons of national and international responses on ozone depletion and acid rain is that new options can break a stalemate (e.g., think of substitutes for chlorofluorocarbons in the case of ozone depletion, or tradable permits in the case of acid rain). When science academies engage in political advocacy by taking a side in an existing debate, they miss their opportunity to suggest options previously unseen or underappreciated that might break a gridlock or prove more practically effective.

The third reason has to do with democratic accountability. For example, in the United States, the National Academy of Sciences is supported in large part with public funds. But when taking advocacy positions, who are they accountable to? Also, where does advocacy stop? Should science academies endorse specific candidates running for election or issue position papers on pending legislation? This is, of course, what special interest advocacy groups do, and do very well. Democracy is strengthened by political advocacy. But national science academies, especially those supported by public funds, are supposed to work in support of common interests, not particular special interests. If national academies continue down the path of issue advocacy, they should not be surprised if they are soon viewed by the public and their representatives as just another special interest group. The risk for science is not only the loss of particular political battles, but a potential diminution of the public support that has led to considerable, sustained...
investments in research over many decades.

Some might suggest that national academies should stick to science and not engage in issues of policy or politics. But as scholars of science, technology, and society have taught us, considering science as if it existed in a vacuum is only possible in highly idealized circumstances, usually those that are not politically controversial or scientifically complex. If we want science academies to be relevant to policy, science needs to consider social and political issues. So, if overt political advocacy is fraught with risk, and consideration of science alone is impossible, is there another option?

One way for science academies to closely engage with the needs of policy makers, but avoid recreating themselves as special interest groups, is to work to clarify and, if possible, expand the scope of choice available in decision making. For example, in the case of climate change, Oxford’s Steve Rayner has commented: It is plausible to argue that implementing Kyoto has distracted attention and effort from real opportunities to reduce greenhouse gas emissions and protect society against climate impacts. While it may not be politically practical or desirable to abandon the Kyoto path altogether, it certainly seems prudent to open up other approaches to achieving global reductions in greenhouse gas emissions.

The work of groups such as the National Environmental Assessment Agency of the Netherlands National Institute of Public Health and the Environment that are exploring innovative approaches to climate policy is typically overlooked in the general enthusiasm to join the existing two-sided climate debate. Climate policy desperately needs new options, and science academies are among the very few places with the authority and legitimacy necessary to introduce new options to the public debate.

Science academies face choices in how they interact with the broader societies of which they are a part. Such choices ought to be made with a clear understanding of the consequences for both science and society. There are undesirable consequences of science academies either seeking to focus only on science or taking on the role of political advocates. A better option may be for science academies to take on the role of honest brokers of policy options, for if they do not take on this role, who will?

Roger Pielke, Jr. serves as director of the Center for Science and Technology Policy Research. He has been on the faculty of the University of Colorado since 2001 and is a professor in the Environmental Studies Program and a fellow of the Cooperative Institute for Research in the Environmental Sciences (CIRES).

Sources
- Academies Joint Statement:
  http://nationalacademies.org/onpi/06072005.pdf
- Rayner, Steve:
  http://www.publications.parliament.uk/pa/cm200405/cmselect/cmenvaud/105/4121506.htm
- Netherlands National Institute of Public Health and the Environment
  http://www.rivm.nl/bibliotheek/rapporten/500036001.html