Global Warming Becomes Hot Issue for Bromley

A disagreement within the Administration over plans for an international meeting on global change was aired in the press and on Capitol Hill last week

PRESIDENTIAL SCIENCE ADVISER D. Allan Bromley last week found himself in the hot seat when he was called before a Senate subcommittee to explain his views on global warming. The Senators were angered by press reports that Bromley had opposed sending a U.S. delegation to an international ministerial meeting on global change, to be held in The Hague next week.

Bromley was recently appointed by President Bush to chair a Domestic Policy Council working group on global change, a position that gives him a prominent role in formulating U.S. policy. According to Administration sources, at the working group's first meeting on 20 October, Bromley and White House chief of staff John Sununu opposed a recommendation by Environmental Protection Agency administrator William Reilly and the State Department that the United States attend The Hague conference, which will be held on 6 and 7 November.

At the meeting, which will draw together environment ministers from some 60 countries, the Netherlands is expected to propose that carbon dioxide emissions be stabilized at present levels by the year 2000 and that the feasibility of a 20% cut worldwide by 2005 be studied.

The Netherlands is hoping that the meeting will produce a consensus statement on global warming. But Bromley, Sununu, and others are reportedly worried that the United States, which produces one-fifth of the world's carbon dioxide emissions, could suffer economic damage if stabilization levels or reductions are agreed to.

Administration officials are also divided over whether the United States should honor a pledge made by Bush last year to host an international conference in 1990 on global change. At the 20 October meeting, Bromley, Sununu, and others opposed the proposal while Reilly and the State Department pushed for it. On 30 October, 40 U.S. senators, all Democrats, signed a letter to Bush, urging him to keep his commitment to convene the conference.

At the congressional hearing last week, Bromley dodged, for the most part, repeated questioning by Senators Albert Gore (D– TN) and John Kerry (D–MA) about his views on global warming and whether he approved of U.S. participation at The Hague meeting. Bromley would only say, "My belief is that we should not move forward on major programs until we have a reasonable understanding of the scientific and economic consequences of those programs."

Asked by Gore whether the scientific evidence is inadequate to justify curbs on



greenhouse emissions, Bromley responded that recent adjustments to climatic models by British climate modeler John Mitchell have made him uneasy about the reliability of predictions that the earth is warming up significantly.

Mitchell's model of the climate system previously predicted that the earth's temperature would rise 5°C when greenhouse gases double sometime in the next century. But he recently halved this figure after he added a new factor to his model—the effects of ice crystals. Bromley said, "That such simple and obvious changes in [Mitchell's] model can make major changes in predictions underscores my own feeling and many of my colleagues in the scientific community that, we have a substantial distance to go yet." Gore asked, "Do you believe that the doubling of carbon dioxide in the atmosphere, which will occur in the next 40 years or so, is likely to result in global warming?" Bromley replied, "It's certainly possible, and probable to some degree, but that's as far as I can say on the basis of the evidence." Given the changes in the Mitchell model, he said, "my answer is that I simply don't know."

Steven Schneider of the National Center for Atmospheric Research and many other atmospheric scientists have said that while current models are relatively crude and flawed in some ways, their predictive reliability has been validated to a substantial degree. Moreover, they point out that the fundamental theories of how greenhouse gases trap heat have been substantiated by billions of observations of the atmosphere.

Thomas Lovejoy, an ecologist and assistant secretary for external affairs of the Smithsonian Institution, said in an interview that the Administration "could be taking a

> San Andreas fault approach" in formulating national policy on global warming. "It's resisting change until it's catastrophic." Lovejoy, whom Bromley has

nominated as a member of the White House science council, last week wrote a letter to Bromley himself, urging that the President and the Cabinet be given a full briefing by scientists on global warming. "There are a lot of actions associated with cutting greenhouse gases that will make us more competitive," Lovejoy says.

At the congressional hearing, Bromley also repeatedly stressed the importance of allowing a United Nations group, the Intergovernmental Panel on Climate Change, or IPCC, to finish a report on evaluating greenhouse effects. The report could lead to an international framework convention acknowledging the problem of global warming and then to a protocol with specific goals to cut emissions of greenhouse gases. This process is similar to the one that led to an international agreement on a phaseout of chlorofluorocarbon gases.

But a few other countries, including the Netherlands, together with environmentalists and some members of Congress, contend that the IPCC process is moving too slowly. Although the IPCC report is due out at the end of next year, they say that the IPCC may take several years to arrive at specific goals for emission reductions.

As for The Hague meeting, Reilly has won a partial victory: the United States will be sending a delegation, which Reilly will head. But an Administration source says that Reilly "is going with a bare portfolio." Bromley will be part of the delegation.

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