

# Emissions Trading Goes Global

*Spurred on by critics, the Administration is set to propose a world market in emissions of greenhouse gases*

THE BUSH ADMINISTRATION, which has been criticized for being slow to react to the problem of global warming, may be ready to get off the dime. At a meeting of an international panel on the subject that convenes on 5 February in Washington, D.C., the Administration will propose an international system of emission credits that would allow each country to release a specified amount of the gases that cause the greenhouse effect; the credits could be bought and sold among nations. Some critics are calling this "free market" solution unworkable and politically motivated but others see the proposal as a useful first step.

The U.S. proposal was included—in

broad outline rather than specific detail—in a State Department document submitted last month to the Intergovernmental Panel on Climate Change (IPCC). The panel was set up by the United Nations in 1988 to assess the effects of climate change and evaluate response strategies to global warming. The State Department document, written in response to IPCC talks in October about economic incentives for controlling global warming, says the panel "should seriously evaluate" various options to control greenhouse gases, including international emissions trading.

The proposal is one of the first the Administration has made on global warming, a

fact that has led to considerable pressure from environmental groups and members of Congress for stronger leadership. Criticism came to a head in December when White House officials balked at sending William K. Reilly, head of the Environmental Protection Agency, to an international meeting in the Netherlands on global warming; later that stance was reversed and Reilly did attend.

The Netherlands meeting, like other international talks, focused mainly on developing a protocol for controlling carbon dioxide as a first step toward reducing the levels of all greenhouse gases. In the Netherlands many European nations initially called for the industrial countries to reduce their level of carbon dioxide emissions 20% by 2005, but the United States, did not endorse this position. Participants ended up merely calling for the stabilization of emissions "as soon as possible."

The emissions trading proposal is compatible with either stabilizing or reducing emissions. Under that framework all greenhouse gases—including carbon dioxide, methane, nitrous oxide, and other trace gases—would be addressed collectively. Nations releasing such gases would be assigned an allocation for emissions up to a set amount. A country that wishes to exceed its limit might buy credits held by another nation that is not emitting as much as it is assigned or can reduce its own emissions for less than it would gain by selling the rights.

The buying and selling of emissions rights is attractive to the Administration, which staunchly advocates free market principles. Free market theory holds that emissions trading is a cheaper and more efficient way to reduce pollution than regulation. The concept has some highly placed champions, including Boyden Gray of the Council to the President and Richard Stewart of the Justice Department. Indeed, a similar scheme has already been successfully implemented to reduce sulfur dioxide emissions in southern California and lead in gasoline in the United States and has been proposed by the Administration as a way to control sulfur dioxide emissions nationally.

But emissions trading has never been applied to an international setting, and experts on environmental issues—even those sympathetic to the concept—note that it raises a host of issues that are not easily resolved. One is how emission allowances would be determined. One possibility is to use GNP as a base—a criterion under which the developed countries would fare far better than the developing ones. Using population as a base, on the other hand, would favor countries such as India and China. Dan Lashof of the Natural Resources De-

## BITNET Headed for New Frontiers

Researchers in eastern Europe should soon be able to collaborate with their colleagues in the West using a computer network. The U.S. Department of Commerce last week informed CREN—the Corporation for Research and Educational Networking—that it had no specific objections to making the BITNET computer network available to research institutions in eastern European countries.

BITNET has become an increasingly popular way for scientists to communicate with one another. BITNET founder Ira Fuchs says the political changes in Eastern Europe convinced him that the time was right to seek permission for those countries to join the network.

"We have been trying to push Commerce to give us an answer," says Fuchs, who is now president and CEO of CREN. "I figured if ever there was a time to make this happen, this was it."

Fuchs says BITNET or its counterpart, the European Academic and Research Network (EARN), has received applications from the Soviet Union, Czechoslovakia, Hungary, Poland, and Bulgaria to establish network sites. He hopes that it will also be possible to extend services to China. Yugoslavia already has a BITNET site.

The Commerce Department has been concerned that electronic mail could make it easier for someone to send prohibited exports to countries not part of a Western alliance known as Cocom.

"From an export control perspective we'd probably prefer they didn't do this," says Dan Cook of the Commerce Department's export administration. But if someone wanted to use BITNET for espionage, he says, "it's nothing they couldn't do by putting something in an envelope and putting postage on it. It's not how you communicate but what you communicate that we control."

Fuchs says CREN will probably help promulgate export control rules so there won't be any accidental slipups. CREN officials were worried that they would be required to scrutinize network messages in search of violators. "Obviously as an organization we don't want to be held liable if somebody goofed," says Fuchs.

CREN's lawyer is studying a seven-page legal opinion from Commerce Department lawyers advising them on how they can proceed. If there are no problems, CREN should start evaluating applications from Eastern countries within weeks.

"This has been something we've been working on for a long time," says Fuchs. "I made it my New Year's resolution that it had to happen in 1990." ■ JOSEPH PALCA