Time for Action

The world embarks on the tortuous road toward a climate treaty

By RICHARD MONASTERSKY

At an historic conference last month, delegates from 101 nations launched an unprecedented set of negotiations aimed at uniting the world in a battle against global warming. But observers might wonder whether the meeting generated anything other than hot air.

The United Nations wants to have a climate treaty ready for signing in June 1992 — a short span for negotiating such a difficult and novel agreement. Toward that end, many delegates at the February meeting in Chantilly, Va., had hoped to bring home a preliminary draft of the document — with contentious issues left undecided — for consideration during the four-month wait before the next negotiating meeting. Yet after 10 days of discussions, they accomplished only the most basic organizational tasks in the treaty process. The delegates agreed to negotiate, and they hammered out instructions for those talks, but the real job of fashioning a treaty has yet to begin.

Environmentalists and many participants grew frustrated by the slow pace of the discussions. "I've seen glaciers move faster," says Alden Meyer of the Union of Concerned Scientists in Washington, D.C., one of many groups calling for the world to respond quickly to the global warming threat.

Nonetheless, some encouraging signs emerged. In a substantial shift from years past, several key developing countries expressed growing interest in fighting global warming. Moreover, the United States showed subtle hints of softening its hard-line stance against taking specific climate-protecting action — a position that had drawn criticism from many other countries (SN: 11/17/90, p.310). These and other developments at the meeting offered hope that the participating nations can forge a meaningful agreement in time for the United Nations' June 1992 conference on environment and economic development, to be held in Rio de Janeiro, Brazil.

France's Jean Ripert, selected by the delegates to chair the negotiating process, proclaimed after the Chantilly meeting: "We do not intend to produce just another general statement. Everybody recognizes that whatever the uncertainties are, it's time to start some action."

At its core, the treaty will address international controls on the emissions of gases that threaten to warm the planet. This extremely complex issue raises fundamental questions about how nations should treat energy sources and dwindling forests. Controls on emissions will strike at the economic heart of the industrialized world, which derives its power principally from the combustion of fossil fuels.

The negotiations will also force the global community to address the sticky topic of development in nonindustrialized countries. Many governments are just starting to supply their people with electricity and modern forms of transportation. Such nations contribute only one-quarter of the world's greenhouse gas emissions, and they do not want to handicap their economic growth by accepting energy limitations unless the industrialized nations promise both financial and technological assistance — a point sure to confound the treaty-drafting process.

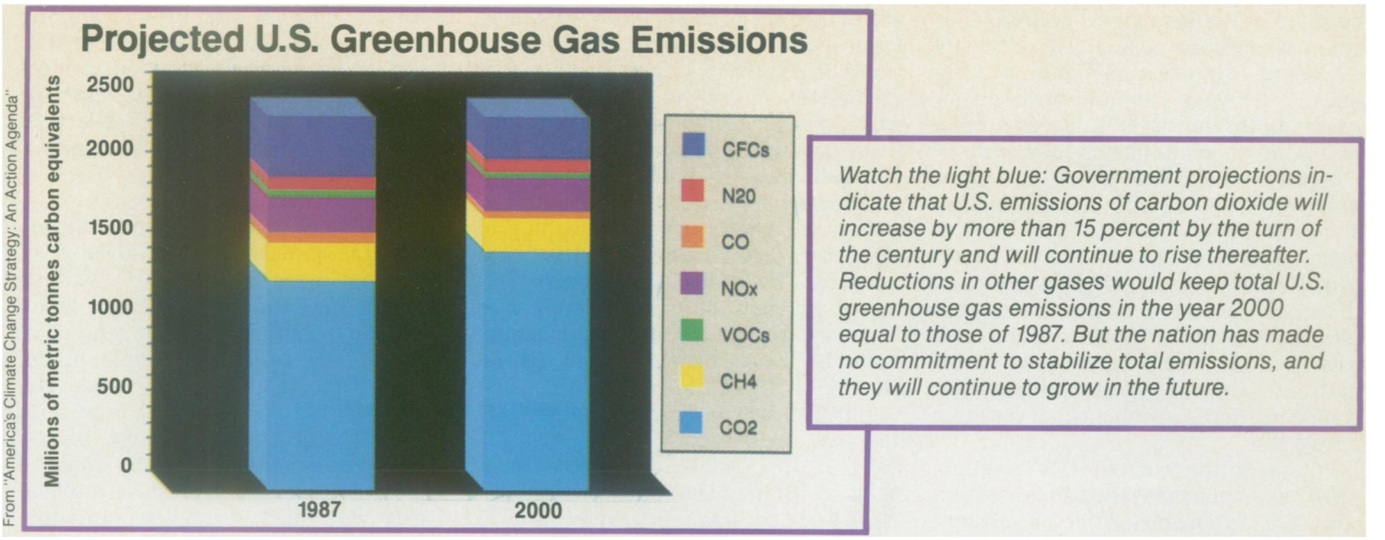
In concrete terms, delegates at the Chantilly meeting pledged to negotiate in the coming months on commitments for reducing emissions of carbon dioxide and other greenhouse gases. They also vowed to discuss technology transfer and financial assistance for developing countries. Most nations had hoped to pass smoothly through these procedural matters and then move on to writing a draft of the treaty, but conflicting national interests caused the talks to stall during the organizational discussions.

"Naturally we are disappointed, because we, like most people, had hoped to have a first draft to work on between sessions, and we're not that far along," says Robert F. Van Lierop, who represents the Pacific island of Vanuatu. He adds, however, that the process moved slowly because delegates began addressing difficult negotiating issues even in the organizational stage of discussions.

"We are encouraged because the pro-

U.S. Agency for International Development

Fueling the future: Developing countries will increase their energy consumption substantially as they attempt to improve living standards and expand their economies in coming years. Such nations today contribute only one-quarter of the carbon dioxide emitted each year from the burning of fossil fuels, but projections suggest that their share could rise to nearly half the world's emissions in the next 35 years.



Watch the light blue: Government projections indicate that U.S. emissions of carbon dioxide will increase by more than 15 percent by the turn of the century and will continue to rise thereafter. Reductions in other gases would keep total U.S. greenhouse gas emissions in the year 2000 equal to those of 1987. But the nation has made no commitment to stabilize total emissions, and they will continue to grow in the future.

cedural logjams we encountered are important and significant enough that once they are resolved, they can make the rest of the negotiations easier," he told SCIENCE NEWS.

Van Lierop heads an influential alliance of 28 small island nations in the Pacific, Caribbean and Mediterranean. Of all countries, nations such as these face the most obvious threat from global warming. Some sit only a meter or two above the waves and will suffer an Atlantis-like fate if a warming trend causes sea levels to rise as scientists have predicted. The Intergovernmental Panel on Climate Change forecasted last year that the oceans will rise about 20 centimeters by the year 2030 and another 45 centimeters by the year 2100 (SN: 6/23/91, p.391).

"Global warming and a sea-level rise will mean that certain small island countries and low-lying coastal areas will cease to exist, just completely disappear," Van Lierop says. "Many people get worried when a certain species of bird or whale may be threatened, but we're talking about human civilizations and cultures ceasing to exist."

Van Lierop's alliance came into being last November at the Second World Climate Conference in Geneva, Switzerland, and began flexing its political muscles in earnest at the Chantilly meeting. Pressure from the island nations drew a specific assurance from negotiators to address the problems of these and other highly threatened areas. The alliance also injected a sense of urgency into the sometimes lackluster talks.

"What impressed me the most about the meeting is that the island countries have become a very strong force for action," says John C. Topping Jr., president of the Climate Institute in Washington, D.C. "When they talk about the urgency of the issue, that's different from a bunch of Western environmentalists doing the same thing."

In concert with the island nations, several other developing countries have started expressing support for a treaty. In the past, most calls for action against climate warming came from environmental groups and wealthy industrialized nations, with the notable exception of the United States. But at Chantilly, says Topping, "some of the major developing countries, such as Brazil, Mexico, Pakistan and some others, were taking a remarkably forward-looking approach in the whole importance of the issue."

In a presentation at the meeting, Pakistan's Zullfigar Ali Quershi asserted that his country has the economic and moral right to seek development and that industrialized countries bear the greatest responsibility for the present threat of global warming. He added that Pakistan would nonetheless attempt to limit its contribution to climate change problems as the country developed economically.

During the three remaining negotiating meetings scheduled to occur before the 1992 conference, discussions will focus largely on whether the climate treaty should include specific commitments to cut carbon dioxide emissions. The European nations, many of which have already pledged to reduce their own emissions, would like the final agreement to include such commitments, at least by the wealthy industrialized countries. But the United States has long resisted such demands. The Bush administration maintains that the initial treaty, or "convention," should include only general provisions, leaving more specific targets and timetables for subsequent "protocol" treaties.

At the Chantilly talks, U.S. delegates asked participants to consider all greenhouse gases together instead of singling out carbon dioxide. In a colorful brochure titled "America's Climate Change Strategy," which U.S. delegates distributed at the meeting, the administration argues that this comprehensive approach could provide nations with flexibility, permitting them to reduce any greenhouse gas instead of requiring specific cuts in carbon dioxide. Through such a strategy, the United States claims it can keep its greenhouse gas emissions in the year 2000 at a level equal to that of 1987.

That sounds like an impressive promise. But opponents quickly labeled it as deceptive, saying it hides the fact that U.S. carbon dioxide emissions would actually increase by 15 percent during the next decade. During that same period, all the wealthy Western nations have pledged to stabilize or reduce their emissions of carbon dioxide – the prime offender in climate warming scenarios.

The United States can make good on its promise largely by keeping its 1990 pledge to phase out chemicals called chlorofluorocarbons, which warm the atmosphere as well as destroy the protective ozone layer. Fifty-eight other nations have made that same pledge, as part of an international agreement called the Montreal Protocol (SN: 7/7/90, p.6).

In the end, the negotiating committee took the critics' charges into account and decided that the draft treaty will include "appropriate commitments, beyond those required by existing agreements, for limiting and reducing net emissions of carbon dioxide and other greenhouse gases." Since U.S. delegates agreed to this wording, some observers interpret the specific mention of carbon dioxide as a sign of the nation's willingness to bend, however slightly.

"I think the United States did move a little closer to the position that most of us have," Van Lierop says.

Others disagree, noting that the Bush administration hasn't agreed to anything. Words like "appropriate commitment" leave open the possibility of avoiding specific limits on carbon dioxide emissions, says David Doniger of the Natural Resources Defense Council, an environmental group in Washington, D.C.

Robert Reinstein, the chief U.S. negotiator at Chantilly, says the committee

chose neutral language acceptable to countries seeking general commitments as well as to those pushing for specific ones. "The word 'appropriate' encompasses both," he says. "It leaves it open what kind of commitments they are."

While the Bush administration may or may not have altered its negotiating stance, it has changed its tone, Doniger believes. At meetings last year, U.S. representatives repeatedly stressed the scientific and economic uncertainties that plague the issue of climate change. Now, says Doniger, "it seems the United States is at least being shrewd enough to say that it appears there's a problem that warrants a response."

Whatever the current U.S. position, environmentalists say the administration will have to go much farther if a substantial agreement is to emerge from the June 1992 meeting. Given that President Bush faces a reelection bid just five months after the Brazil conference, the political will of the American people may strongly influence how his administration proceeds on this issue. Topping suggests that the Western European nations, most of which provided high-profile support for Bush during the Persian Gulf war, may also help sway U.S. policy.

"I do not believe that the Bush administration yet knows what it is willing to sign," says Rafe Pomerance of the World Resources Institute in Washington, D.C. "So in my view, there clearly should be negotiations over carbon dioxide limitations, because I believe there's a good chance that the Bush administration would sign such an agreement next year."

With the negotiating process still in its infancy, it's too early to place any bets on the outcome. Optimists can find reason for encouragement, but equally distressing signs have emerged. For one, the delegates have yet to decide who will head the two working groups that will actually prepare the draft treaty. Participants had hoped to elect chairs at the Chantilly meeting, and their failure to do so may reflect a lack of consensus on how to distribute power among the various regional blocs of countries, Pomerance says.

In addition, delegates point with dismay to the sparse representation of developing nations at the meeting. For various reasons, including lack of funds, many developing countries did not send delegates to the conference, while others assigned members of their United Nations staff rather than flying in experts familiar with climate change issues. Some participants questioned whether negotiators can truly produce a global treaty with such incomplete participation.

And then there's the issue of time. Given the divergent national positions that surfaced at Chantilly, can the delegates reach any substantial agreement in a span of 16 months?

Ripert offers a distinctly pragmatic answer: "If there is a *will* to provide a solution, we have the capacity to do it. The drafting part of it will be very easy. Drafting is a problem only when you are still trying not to be precise in what you want to do."

"We might not succeed, but it is not a question of months," he insists. "It is a question of will." □

Weaning the U.S. from CO_2 addiction

The United States has the technology to achieve substantial reductions in carbon dioxide emissions, a new study concludes, but the price of such action remains a multibillion-dollar question mark.

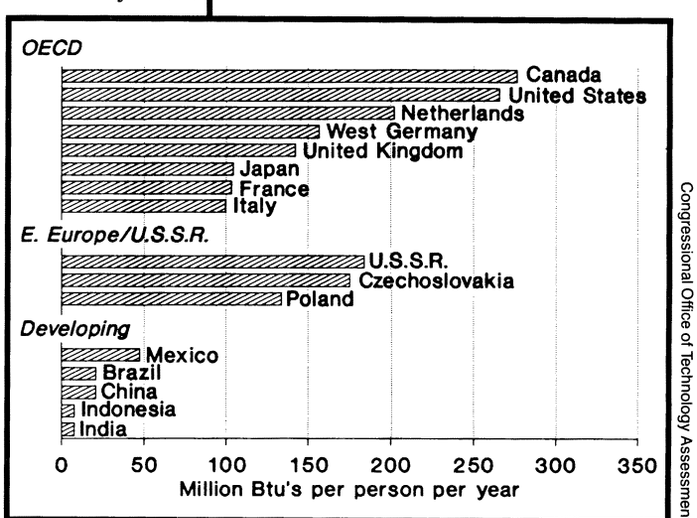
Using a computer model to simulate the effectiveness of various policies, the congressional Office of Technology Assessment (OTA) calculates that the United States can cut carbon dioxide emissions 35 percent by the year 2015 using existing technology. At worst, such a program could cost the country $150 billion annually, a sum equivalent to about 1.8 percent of the gross national product projected for 2015. For comparison, that's slightly more than what the United States spends on all current measures to control pollution.

Such a reduction policy might prove far less expensive if, for example, fuel price rose substantially in the future. It's even possible the policy could save the nation an average of $20 billion a year, the new study suggests. The OTA released its report last month as representatives from around the world gathered in Chantilly, Va., to discuss cooperative measures for curbing global warming.

Americans need not trade their closet-sized refrigerators for shoebox coolers to achieve such ambitious reductions. In creating its energy scenarios, the OTA selected measures that would not involve sacrifices of convenience or comfort. It also focused on currently available technologies instead of counting on future breakthroughs. For instance, the OTA analysis doesn't assume that solar-powered automobiles will fill the freeways by the early 21st century. But it does assume that government policy changes will boost auto efficiency so that new cars will average from 39 to 42 miles per gallon by the year 2000.

If the 35 percent cut in emissions sounds too costly, consider a more moderate policy assessed by OTA. These measures, which would allow carbon dioxide emissions to increase by about 15 percent over the next 25 years, should actually produce a net savings for the U.S. economy. In the absence of any new controls, U.S. emissions of carbon dioxide in the year 2015 will reach levels 50 percent higher than today's, the OTA warns.

As the United States continues to avoid any commitment to reduce those emissions, some industrialized nations have already committed themselves to strong unilateral reductions. At the head of the pack, West Germany has pledged to cut its carbon dioxide emissions by 25 percent within 15 years. Australia, Austria, Denmark and New Zealand have agreed to 20 percent reductions within 10 or 15 years, and several other nations have committed to hold their emissions at a constant level. — *R. Monastersky*



Energy gluttons: Canada and the United States lead the world in terms of energy consumed by the average citizen each year.