Europe Recognizes the Ozone Threat

Born-again environmentalism sweeps the Atlantic, leading to proposals to ban all uses of chlorofluorocarbons; the developing nations remain skeptical

AFTER YEARS OF DRAGGING their heels reluctantly behind the United States in protecting the global ozone layer, members of the European Economic Community have suddenly placed themselves in the lead, proposing to ban all uses of chlorofluorocarbons (CFCs) by the end of the century.

CFCs, inert chemicals used for refrigeration and industrial purposes, are broken down into active compounds when exposed to sunlight at high altitudes. It is clear now that CFC by-products are destroying ozone in the stratosphere, thinning out the natural shield that protects life on earth from intense ultraviolet radiation.

The proposed CFC ban, announced by the European Community's environmental commissioner Carlo Ripa di Meana, came last week on the eve of a 124-nation meeting in London called by British Prime Minister Margaret Thatcher. Europe's rapid shift of policy took many by surprise, triggering a cascade of new promises on both sides of the Atlantic, each seeming to outdo the last.

The new U.S. environment chief, William Reilly, immediately disclosed that he had asked President George Bush to seek a ban of all CFC production by the year 2000. Shortly afterward, Bush gave his assent. (In a sense, the United States is already ahead of Europe, having banned CFCs in aerosols.)

Members of Congress are vying to lead the campaign as well and will be proposing even tougher CFC phase-out goals. For example, Senator Albert Gore (D–TN) has called for an end to all production and importation of CFCs within 5 years, and Senator John Chafee (R–RI) has proposed a deadline of 1997. The question suddenly is not whether, but by what means a total ban can be put into effect before the end of the century.

Noticeably absent from this chorus of self-reform are the voices of the developing nations. They were noncommittal during the meeting, although Thatcher's main purpose in calling the London conference was to put across the U.S.–European view that the CFC problem can be attacked only with a global program of control. It must involve those poised to expand CFC production, such as Brazil, China, and India.

Third World leaders are concerned that a CFC ban may be applied to the advantage of big industrial firms in Europe and America. Kenya's Daniel Moi, keynote speaker at the conference, said that the advanced nations "must be prepared to bear the burden of conserving the global ozone layer equitably with the less industrialized nations," hinting at the need for special exemptions or a plan to share replacement technology.

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The European Community's announcement reflects a growing sensitivity of European governments to environmental issues and a desire to be seen adopting a strong common approach. Last week's proposal goes far beyond the Montreal Protocol of 1987, which merely specifies that there should be a 50% reduction in CFC production by the end of the century. So far, more than 40 nations have endorsed it. China and India are among those that have not, and Chinese officials say they cannot sign unless an annex is added giving special allowances to the Third World.

Two years ago, it took considerable pressure to persuade European nations to accept even this limited goal. At that time, it was Britain that led Europe in arguing that the limited phase-out by 2000 provided insufficient time for European chemical companies, which currently produce about one-third of the world's CFCs, to develop substitutes. U.S. companies produce another one-third of the global volume.

But recent evidence shows that atmospheric ozone is being depleted even faster than initially predicted (*Science*, 24 February, p. 1007). This prompted the environment ministers of the 12 EEC states to conclude at a meeting in Brussels last week that the time for action had arrived.

Prior to the meeting, it had been expected that they would agree to a goal of an 85% reduction. But with two of Europe's most environmentally conscious nations, the Netherlands and West Germany, pushing for a figure of 95%, the ministers decided—somewhat to their own surprise—to go the whole way and agree to a complete ban.

The EEC agreement does not include a specific timetable for the intermediate steps needed to reach this goal. It specifies only that the 85% reduction should be achieved "as soon as possible" and omits various CFCs omitted by the Montreal Protocol.

Nevertheless, it is being seen as a major political coup for the European Commission—the Brussels-based administrative agency of the EEC—which is still smarting under recent comments made by the U.S. representative at the Montreal negotiations, Richard Benedick, that a failure of EEC states to agree on a joint target could delay implementation of the protocol.

Thatcher, who in recent months has become one of Europe's most fervent supporters of action on environmental problems, said in a radio interview last week that in Britain, "We shall have a rule that all new refrigerators must have the new solvents and not the old ones."

However, after protests from industry representatives who pointed out that the time scale for the development of acceptable alternatives was still uncertain, officials from Downing Street later clarified Thatcher's statement by saying that she had no immediate plans for legislation, and was merely suggesting that such laws might have to be introduced if refrigerator manufacturers do not adopt the new chemicals fast enough once they become available.

In the United States, environmental protection chief William Reilly revealed in hearings last week that the biggest U.S. producer of CFCs, E. I. duPont de Nemours and Company, may be ready for a total phase-out by the end of the century. DuPont reportedly has a candidate replacement for CFCs in hand, one whose production cost will not be dramatically larger.

For political leaders, the knottiest problem remains that of winning support for a CFC ban among the developing nations.

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