

on the pact, it became evident that this was inadequate. The hole in the ozone layer was still growing and an additional hole had been identified over the Arctic.

This led the new green Margaret Thatcher to convene two meetings in London to strengthen the protocol. The first was held in February of last year, and agreed on the need to speed up the timetable. This meeting was followed by a conference in Helsinki which identified a the critical need for some form of burden sharing, if the large developing countries, such as India and China, were to sign the document. Both of these countries have plans to spread the use of refrigerators, at least so that each village has a capacity for the safe storage of medical supplies. Why, they ask, should they cut back on these plans because of ozone depletion caused almost entirely by the developed countries? Why should they pay five or six times the price for less efficient CFC substitutes?

This led to a proposal at the second London meeting in June of this year for the creation of a fund to ease the transition away from CFCs in the developing world. The fund was initially resisted by the White House, which feared the precedent that might be created for a much larger fund to deal with global warming. After considerable arm twisting by the other industrialized powers, the US agreed to go along with a level of US \$240 million for the first three years. If China and India signed the protocol, as it appears certain they will, the fund would rise to approximately \$320 million.

FOR THE FIRST THREE YEARS, THE FUND WILL BE used mainly for assessing the needs of developing countries. After that period, it will help finance the acquisition of the technology to use (and perhaps to produce) the CFC substitutes, the halochlorofluorocarbons (HCFCs), whose use is thought to be less hazardous to the ozone layer, although they remain fierce greenhouse gases. Some have criticized this arrangement on the grounds that the technical experts involved in the discussions tend overwhelmingly to be experts on chemicals and not on refrigeration, and therefore have neglected the potential for other refrigerants such as propane or butane which do not contribute to global warming. Nevertheless, the London meeting represents an enormous step forward in responding to the special needs of developing countries.

The success of the ozone negotiations opens the door to progress on the far more difficult question of global warming. The Toronto Conference recommended a cut in CO<sub>2</sub> emissions of twenty percent by the year 2005, leading to



Michael McTrilline

an eventual stabilization of CO<sub>2</sub> in the atmosphere. The latter would require a cut of at least fifty percent in current levels of fossil fuel combustion. Even if draconian measures were taken by the developed industrialized countries to reduce their greenhouse gas emissions, the planned massive expansion of coal-fired electricity production by India and China would wipe out these gains – two hundred coal-burning generating stations are planned by China alone.

This gives developing countries a good deal of leverage in the formulation of the so-called global bargain, or more accurately, as Jim MacNeill of the Institute for Research on Public Policy points out, a series of small bargains leading up to a larger one. And as the preparations for the 1992 United Nations Conference on Environment and Development to be held in Brazil have shown, the Third World intends to use that leverage to bring attention to its priority issues of trade, debt and the need for economic growth in exchange for action on climate change.

THE AGENDA FOR ARRIVING AT SUCH A SERIES OF deals is now clear. The first steps must be taken by the developed world and will be a series of unilateral decisions to reduce greenhouse gas (GHG) emissions. Some countries have already made such commitments. The Federal Republic of Germany recently said it would reduce West German emissions of CO<sub>2</sub> by twenty-five percent of 1987 levels by the year 2005. The UK has promised a freeze by that date and the Japanese, a freeze by the turn of the century. Although Canadian policy has been muddied on this point, Mr. de Cotret, the acting Environment minister, also has promised a freeze by the end of the century.

All of these countries have concluded that not only are these policies technically feasible, but in most cases, they will result in enhanced international competitiveness and major savings in expenditures on energy. The exception is the US where, in his post-Houston press conference, a petulant President Bush equated controlling emissions with causing massive job

losses. None of the other leaders agreed with him.

The second part of the bargain is creating arrangements to allow developing countries to pursue more sustainable forms of development of the kind that would provide jobs and incomes for the poor without massively increasing their GHG emissions. These would include easier terms of technology transfer for non-polluting technologies; debt relief, perhaps in the form of debt-for-nature swaps that would provide substantial sums of money for reforestation programs to soak up some of the atmospheric carbon; and finally, it

must include the establishment of the very kind of fund which the Bush administration feared when it agreed to the CFC fund in London.

This new fund would need to be quite large by traditional international standards – US \$20 to 40 billion annually, according to Dutch estimates – but small when compared with world arms expenditure. It appears that a start had been made on a US \$2.5 billion fund at Houston, but German Chancellor Kohl, its main advocate, was unable to persuade his host to go along.

THERE ARE PLENTY OF FORA TO ACCOMMODATE this process. November will see the convening of the World Climate Conference in Geneva. A “framework convention” on climate change could be discussed at that time. The argument here is between those who, like the Germans, favour a convention with specific commitments for the limitation of greenhouse gases and arrangements for technology transfers, and those who are arguing for an “empty shell” containing a general commitment to deal with the issue, and to work out the details later. The latter group seems to be led by the US, but some other countries may also hold this view, content to let the Americans take the blame.

The denouement of this issue may well come at the 1992 Brazil Conference when the optimists hope to have a convention opened for signature. Whether the convention has substance may well be a function of whether or not the Houston summit has signalled the long awaited change in economic power relationships. Chancellor Kohl, and to a lesser extent, the other European leaders, seem determined to make real progress on the issue of climate change in the near future. It would be interesting to see what would happen if six members of the summit, perhaps led by Canada as the closest to the United States, decided to establish the initial \$2.5 billion fund on their own. After all, it is not a lot of money when the future of the planet may be at stake. □