

Montreal Protocol

Ozone Layer Protection at the Turn of the Century: The Eleventh Meeting of the Parties

by Sebastian Oberthür*

The Eleventh Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer was held between 29 November and 3 December 1999 in Beijing. It took place in combination with the Fifth Meeting of the Conference of the Parties to the Vienna Convention for the Protection of the Ozone Layer. Representatives of 130 parties to the Protocol, several United Nations bodies and specialized agencies as well as a number of intergovernmental bodies and non-governmental organizations attended the sessions. The Meeting not only had before it a full agenda, but also constituted the biggest international environmental conference ever held in China. It was subdivided into a technical session that started on 29 November and a high-level session held on 2–3 December. Negotiating groups continued to meet during the high-level session to try to arrive at a compromise package.

The Meeting of the Parties was preceded by the 23rd Meeting of the Implementation Committee under the Non-Compliance Procedure of the Montreal Protocol, held on 27 November 1999 and by the 29th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, and meetings of its sub-committees, from 22–26 November 1999.¹

The Meeting of the Parties had to deal with a number of important issues, including the level of replenishment of the Multilateral Fund and several proposals for further Adjustments and Amendments to the Protocol put forward by the European Union (EU). These concerned in particular the introduction and strengthening of controls on hydrochlorofluorocarbons (HCFCs), methyl bromide and bromochloromethane and the continued production of chlorofluorocarbons (CFCs) in industrialized countries to meet the “basic domestic needs” of developing countries operating under Article 5 of the Montreal Protocol (so-called Article 5 countries). The meeting also addressed the continued non-compliance of several “countries with economies in transition” (CEITs), dealt with the potential for conflict with the Kyoto Protocol to the UN Framework Convention on Climate Change by accepting the greenhouse gases hydrofluorocarbons (HFCs) and

perfluorocarbons (PFCs) as CFC replacements and passed a Beijing Declaration, a draft of which had been submitted by the Chinese host government.

The replenishment of the Multilateral Fund with US\$ 440 million was eventually agreed for the period 2000–2002. This will be employed to keep developing countries on track with their phase-out schedule. The Beijing Amendment, containing a package of measures relating to HCFCs, methyl bromide and bromochloromethane, will start to be enforced on 1 January 2001. If fewer than 20 Parties have ratified the Amendment by that date, it will enter into force 90 days after the 20th instrument of ratification has been submitted. The Adjustments will, in accordance with Article 2.9 of the Protocol, become binding after six months without any ratification.

Replenishment of the Multilateral Fund for 2000–2002

The Multilateral Fund for the Implementation of the Montreal Protocol was founded in 1991 in order to assist Article 5 countries in complying with the applicable phase-out schedules and eventually achieve a complete phase-out of ozone-depleting substances (ODS) (see Table 1). Since then, it has operated on the basis of three-year budget periods. The Beijing Meeting thus faced the challenge of agreeing on the replenishment of the Multilateral Fund for its fourth triennium, 2000–2002. Negotiations took place at a critical juncture in international policy for the protection of the ozone layer: the “grace period” applying to developing countries with low per capita consumption of ODS under Article 5 of the Montreal Protocol ended. The freeze on the production and consumption of CFCs took effect in mid-1999 and further control measures will become applicable during the next decade until the phase-out of the major ODS in 2010–2015 (see Table 1).

The replenishment negotiations were informed by analyses of a special task force of the Technology and Economic Assessment Panel (TEAP) of the Montreal Protocol. The task force presented its assessment of the funding requirements for the period 2000–2002 in April 1999.² Although it came to the conclusion that only about US\$ 300 million would be needed to enable compliance with the phase-out schedule between 2000–2002, it recommended a replenishment in the range of US\$ 500 million.

* Ecologic, Centre for International and European Environmental Research, Berlin, Germany. The author would like to thank Project Proklima of the German Agency for Technical Co-operation (GTZ) for its support of his involvement in the Montreal Protocol process.

¹ See UNEP/OzL.Pro/ImpCom/23/3, Report of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol on the Work of Its Twenty-Third Meeting, 10 December 1999; UNEP/OzL.Pro/ExCom/29/65, Report of the Twenty-Ninth Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, 26 November 1999.

² Report of the Technology and Economic Assessment Panel, April 1999, Volume 1: Assessment of the Funding Requirement for the Replenishment of the Multilateral Fund for the Period 2000–2002, April 1999, UNEP.

This "advanced funding" was meant to provide for smooth progress towards meeting the next steps in the phase-out process, most importantly the 50 per cent cut in CFC production and consumption by 2005, and also allow for continuous project development in the mid-term to maintain momentum.

The TEAP report was first discussed at the meeting of the Open-Ended Working Group of the Parties that was held in Geneva from 15–18 June 1999. Discussions were conducted mainly within an *ad hoc* group on replenishment that consisted of 14 Parties, seven Article 5 countries and seven Non-Article 5 countries. Deliberations concerned the accuracy of assumptions made in the TEAP analysis, and resulted in a list of 10 questions being presented to the TEAP task force for its further consideration.³

The TEAP task force then presented a supplementary report addressing these questions at the end of August 1999. The questions concerned issues that were contentious in intergovernmental talks, such as the rationale for the advanced funding, the justification of funding non-investment activities (e.g. institutional strengthening for policy development), the cost-effectiveness levels of methyl bromide projects and of projects involving small and medium-sized enterprises and low-volume consuming countries as well as the cost implications of disfavouring HCFCs and favouring hydrocarbons in Fund projects. In addition, the TEAP task force introduced a few modifications to the calculations put forward in April. However, these did not have major implications for the funding requirements.⁴

The *ad hoc* group on replenishment subsequently met again in Washington, D.C., on 30 September and 1 October 1999 to discuss the supplementary report. Hard bargaining on the figures involved only started at the Beijing meeting, when the *ad hoc* group was slightly extended to allow for the wider participation of countries in preparing the final decision.

In the discussions, developing countries argued that the financial requirements for 2000–2002 may exceed the US\$ 500 million proposed by the TEAP task force, because the "low-hanging fruits" (i.e. the cheap reductions) had already been reaped. Future reductions would have to be achieved by addressing small and medium-sized enterprises and the informal sector which were characterized by far less favourable cost-effectiveness levels. A high level of uncertainty was inherent in other factors influencing the costs to be incurred by the Multilateral Fund in the next triennium, including the specific costs of phasing out methyl bromide.

Industrialized countries, on the other hand, emphasized that only around US\$ 300 million would be required if strict criteria were applied, believing that some assumptions made by the TEAP are too pessimistic, thus reduc-

ing the likely financial demand. Nevertheless, the willingness of industrialized countries to settle at an amount well above US\$ 300 million grew during 1999 in order to maintain momentum and provide for constant progress towards ODS phase-out.

However, the willingness of industrialized countries to pay varied quite substantially, for two main reasons. First, several European countries faced severe budgetary constraints resulting from general financial policies aimed at reducing budget deficits under the European stability pact for a common currency, the euro. Second, and more importantly, contributions to the Multilateral Fund are assessed on the basis of the UN scale of assessments. The latter had been revised in recent years leading to a substantial increase in the share of several EU member states and Japan. These countries would thus be faced with an increase to their contributions even if the overall size of the Multilateral Fund remained unchanged. For the triennium 1997–1999, the Multilateral Fund replenishment had been US\$ 466 million. Therefore, these countries (which included France, Italy, Japan and Germany) wanted the upcoming replenishment to stay below the level of US\$ 466 million. Others, including the US and a number of smaller industrialized countries, were more flexible. The big contributors were, however, united in requesting the introduction of the possibility of realizing projects under the Multilateral Fund by way of "innovative financing", especially concessional loans. This possibility had been envisaged in Article 10.3 of the Montreal Protocol. Nevertheless, the Fund operated solely on the basis of grants throughout the 1990s. Earlier attempts to introduce concessional lending had met with strong opposition by developing countries.

Major industrialized countries tried to overcome this stalemate by offering a trade-off: concessional lending for more money in the replenishment round. In protracted negotiations, the issue of concessional lending remained the only unresolved matter. A replenishment level of at least US\$ 440 million was agreed on, and industrialized countries offered to contribute another US\$ 20 million on the condition that concessional lending was accepted. After an unsuccessful search for a compromise, developing countries opted for less money without concessional lending.

Thus, Decision XI/7 adopted by the Meeting determines a replenishment level of US\$ 440 million for the triennium 2000–2002. The total budget for the triennium will, however, amount to US\$ 475.7 million, since US\$ 35.7 million of the previous budget period had not been spent and will be carried over to the next triennium.⁵ Such a carry-over does not necessarily result from a lack in demand for the resources. Rather, a number of countries paid their contributions late so that these could not be allocated.

In a related matter, it was decided that a fixed exchange rate mechanism may be used by Parties in contributing to

³ UNEP/OzL.Pro/WG.1/19/7, Report of the Nineteenth Meeting of the Open-Ended Working Group of the Parties to the Montreal Protocol, 18 June 1999, paras. 104–111.

⁴ Technology and Economic Assessment Panel, Supplementary Report to "Assessment of the Funding Requirements for the Replenishment of the Multilateral Fund for the Period 2000–2002", August 1999, UNEP.

⁵ Decision XI/7 in UN doc. UNEP/OzL.Pro.11/10, Report of the Eleventh Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, 17 December 1999.

the Fund during the triennium 2000–2002. Accordingly, industrialized countries may pay their contributions in their national currency (as opposed to US dollars) if their inflation rate fluctuation was below 10 per cent between 1997 and 1999. The operation of the mechanism and its implications on the operation of the Fund will be reviewed at the end of 2001.⁶

Adjustments and Amendments

The EU also put forward in 1999 a number of proposals for adjusting and amending the Protocol. These were related to strengthening control measures on the production and consumption of HCFCs and introducing HCFC trade controls, restricting the production of controlled substances for the basic domestic needs of developing countries, strengthening controls on methyl bromide and prohibiting the production and consumption of bromochloromethane, an ozone-depleting substance that had recently appeared in the marketplace. As such “new” ozone-depleting substances appear to be developed from time to time, the European Union also suggested that an “expedited procedure” for bringing such substances under the control of the Montreal Protocol should be considered.

These proposals met with little enthusiasm and even outright objection by other Parties during the preparation of the Beijing meeting and at the Meeting of the Parties. There can be little doubt that without the EU pushing forcefully for its proposals there would have been no Adjustment or Amendment to the Protocol adopted in Beijing. The EU did not only work towards the acceptance of each of the specific proposals, but it also strove to achieve a viable “package”. This was essential in particular for those parts of the proposals that needed to be agreed by adopting an Amendment to the Protocol. Such Amendments introducing new measures need to be ratified by Parties before taking effect.⁷ In contrast, Adjustments to existing measures adopted under Article 2.9 of the Protocol become binding on all Parties without national ratification.

HCFCs

In its proposals related to HCFCs, the EU followed up on a declaration supported by 34 Parties to the Protocol at the Ninth Meeting of the Parties in 1997 in Montreal that called for a decision on consumption and production controls of HCFCs at the Eleventh Meeting.⁸ The EU specifically proposed that the baseline for HCFC consumption controls in industrialized countries be reduced to take into account only 2.0 instead of 2.8 per cent of 1989 CFC production and that the intermediate reduction steps in 2004 and 2010 be strengthened (see Table 1 for applicable phase-out schedules). In addition, the EU called for controls to be introduced on the *production* of HCFCs for both industrialized and developing countries (including a full phase-out of production in the timeframe of the consump-

tion controls) as well as HCFC trade controls (*i.e.* a ban on trade in HCFCs with Non-Parties).⁹ Both these measures were new under the Montreal Protocol and thus needed to be adopted by means of an Amendment. However, the trade controls were thought to be essential for the overall Amendment package, as they would provide a strong incentive for countries to actually ratify the Amendment. Only if a country was considered a Party with respect to the Amendment, would they be able to participate in international HCFC trade without restrictions.

Other major players lent little support to the EU proposals. Neither the US, Japan, China, India or other developing countries were prepared to accept a phase-out of HCFC production. As in previous negotiating rounds, the proposed strengthening of the HCFC consumption phase-out schedule for industrialized countries met with fundamental opposition by the US. One of the reasons for this opposition apparently was an understanding reached between the US government and US industry during the first half of the 1990s that no further controls restricting the use of HCFCs would be introduced. This was meant to provide a stable basis for taking investment decisions regarding HCFCs that are used to substitute CFCs. HCFC trade controls met with little support since this would increase pressure on developing countries who have not yet ratified all the Amendments to do so, and might restrict export markets for some of the major producers, including the US. On top of this, the Scientific Assessment Panel and the TEAP provided little support for the EU’s case in their reports.¹⁰

The situation thus very much resembled that at the Ninth Meeting of the Parties in 1997, when a similar attempt by the EU failed: prospects for new and strengthened controls on HCFCs were slim.¹¹ As in 1997, the EU nevertheless pressed for progress in this area. In some respects, the situation was more favourable towards the EU. First, the EU and its member states were united in their request to include controls on HCFC production in the Protocol. This was also a result of internal agreement on phasing out HCFC production within the EU by 2026. Such a phase-out will be part of a new EU Regulation that is expected to enter into force in 2000.¹² Second, and as a result of the forthcoming EU rules, the chemical industry became more supportive of production controls in order to provide an industrial standard at the global level. Third, China was instrumental in the end in tipping the balance. The host government was eager to bring about some outcome of the conference that would demonstrate its success. To this end, China proposed a “Beijing Declaration”

⁶ Decision XI/6 in UNEP/OzL.Pro.11/10. Report of the Eleventh Meeting, *op. cit.*

⁷ See Article 2.10 of the Montreal Protocol and Article 9 of the Vienna Convention of 1985.

⁸ See Annex XI of UNEP/OzL.Pro.9/12, Report of the Ninth Meeting of the Parties to the Montreal Protocol, 25 September 1997.

⁹ See the proposals as legal text in UNEP/OzL.Pro.11/3, The Report of the Legal Drafting Group on Possible Adjustments and Amendment of the Montreal Protocol, 17 June 1999.

¹⁰ See Scientific Assessment of Ozone Depletion: 1998, World Meteorological Organization Global Ozone Research and Monitoring Project – Report No. 44, 1999; 1998 Report of the Technology and Economic Assessment Panel (Pursuant to Article 6 of the Montreal Protocol), UNEP 1999.

¹¹ See Sebastian Oberthür, Montreal Protocol: 10 Years After, in: *Environmental Policy and Law*, Vol. 27, No. 6, pp. 432–440; on the differing positions in 1999 see UNEP/OzL.Pro/WG.1/19/7, *op. cit.*

¹² Council of the European Union, Common Position (EC) No /99 Adopted by the Council on 23 February 1999 with a View to Adopting Council Regulation (EC) No /99 on Substances that Deplete the Ozone Layer, Brussels, February 1999.

Table 1: The current status of controls of ODS under the Montreal Protocol

Industrialized Countries		Article 5 (Developing) Countries	
Substances (baseline)	Schedule	Substances (baseline)	Schedule
Five major CFCs (1986)	7/1989: freeze 1994: -75% 1996: -100%	five major CFCs (1995-97)	7/1999: freeze 2005: -50% 2007: -85% 2010: -100%
Halons (1986)	1992: freeze 1994: -100%	Halons (1995-97)	2002: freeze 2005: -50% 2010: -100%
10 other fully halogenated CFCs (1989)	1993: -20% 1994: -75% 1996: -100%	10 other fully halogenated CFCs (1998-2000)	2003: -20% 2007: -85% 2010: -100%
Carbon Tetrachloride (1989)	1995: -85% 1996: -100%	Carbon Tetrachloride (1998-2000)	2005: -85% 2010: -100%
Methyl Chloroform (1989)	1993: freeze 1994: -50% 1996: -100%	Methyl Chloroform (1998-2000)	2003: freeze 2005: -30% 2010: -70% 2015: -100%
HCFC consumption (1989 plus 2.8% of 1989 CFC consumption)	1996: freeze 2004: -35% 2010: -65% 2015: -90% 2020: -99.5% 2030: -100%	HCFC consumption (2015)	2016: freeze 2040: -100%
HCFC production (see note below)	2004: freeze	HCFC production (average 2015 production and consumption)	2016: freeze
HBFCs	1996: -100%	HBFCs	1996: -100%
Methyl Bromide (1991)	1995: freeze 1999: -25% 2001: -50% 2003: -70% 2005: -100%	Methyl Bromide (1995-98)	2002: freeze 2005: -20% 2015: -100%

Note: The control periods run from 1 January to 31 December of the years indicated, except for the freeze of Annex I substances which starts at 1 July 1989 for industrialized countries and 1 July 1999 for Article 5 countries. The basis of HCFC production control in industrialized countries is the average 1989 consumption and production plus the average of 2.8 per cent of 1989 production and consumption of CFCs. Countries are only subject to controls to the extent that they have ratified the respective agreements (CFCs and Halons: Montreal Protocol of 1987; other fully halogenated CFCs, Carbon Tetrachloride, Methyl Chloroform: London Amendment of 1990; HCFC consumption, HBFCs, Methyl Bromide: Copenhagen Amendment of 1992; HCFC production: Beijing Amendment of 1999).

(see below on other matters). This gave the EU the opportunity to put pressure on the Chinese host by refusing to sign such a declaration unless a substantial outcome (i.e. a "Beijing Amendment") was agreed.

The EU was eventually able to achieve partial success. It was unable to obtain agreement on strengthening controls on HCFC consumption in industrialized countries and on a *phase-out* of HCFC production. It achieved, however, two of its major goals, the inclusion of trade controls on HCFCs and a freeze of HCFC production. Thus, each Party to the Beijing Amendment will have to ban the import and export of HCFCs to and from Non-Parties from 2004. As of the same date, industrialized countries will have to freeze HCFC production. The level of the freeze will be the average HCFC production and consumption in 1989 plus the average of 2.8 per cent of production and consumption of CFCs in the same year. Developing countries will have to freeze their HCFC production in 2016 at the level of the average of their production and consumption of HCFCs in 2015.¹³

The formula for the level of the freeze for HCFC production was the result of protracted negotiations in which Canada in particular took an active stance. It feared that it may not be able to produce a particular HCFC for export, which it had produced in the 1990s, if production in 1989 was taken as a baseline. Having included controls on HCFC *production* in the Protocol, Parties will be able to use the speedier and less demanding Adjustment procedure for any future strengthening of controls on HCFC production.

Basic Domestic Needs

Proposals for restricting continued HCFC production in industrialized countries for meeting the basic domestic needs of developing countries after the phase-out were far less controversial. According to Article 2 of the Protocol, such production can, after complete phase-out in industrialized countries, amount to up to 15 per cent of the baseline production. This provision has been used in particular with respect to CFCs where total production for the basic domestic needs of developing countries amounted to some 25,000 tonnes in 1997. However, the TEAP suggested that such production was not necessary to meet demand in developing countries. Continued production in industrialized countries would contribute to the oversupply of CFCs on the world market and to the availability of CFCs at very low prices, thus inhibiting the rapid phasing out of CFCs in developing countries.¹⁴

The EU was responsible for virtually all global CFC production for export to developing countries for basic domestic needs in 1997.¹⁵ Restricting this production was thus mainly at the cost of EU countries. Any reduction of production in industrialized countries should not lead to serious supply shortages in developing countries.

In the end, it was agreed to phase out the production of CFCs, halons, other fully halogenated CFCs and methyl bromide for basic domestic needs approximately along the lines of the phase-out schedule applying to developing countries. The baseline for controls applying to the phase-out in developing countries was also used as the baseline for the control of industrialized countries' production for basic domestic needs (CFCs and halons: average of 1995–1997; other fully halogenated CFCs: 1998–2000; methyl bromide: 1995–1998). In order to prevent any distortion of the baseline caused by the transfer of production entitlements under Article 2.5 of the Protocol, which allows such a transfer for the purpose of industrial rationalization, the amount of production transferred under this provision is not taken into account in calculating the baseline.¹⁶

Methyl Bromide

The EU put forward two main proposals regarding methyl bromide. First, it wanted to make separate reporting on quarantine and pre-shipment applications (QPS) of methyl bromide a mandatory requirement. Second, the EU and its member states wanted to freeze the consumption of methyl bromide for QPS. It proposed to do so from 2001 on the basis of the average consumption of methyl bromide for this purpose in the years 1996–1998. While the reporting requirement must be introduced by means of an Amendment, the freeze on consumption for QPS can generally be adopted as an Adjustment.

Both proposals were driven by the concern that the use of methyl bromide for QPS could be used as a loophole to escape the methyl bromide phase-out, since such QPS use is exempt from the control measures (Article 2H.6 of the Protocol). Highlighting the importance of the problem, the TEAP found that more than 20 per cent of overall consumption was for QPS.¹⁷

In the reporting formats, the Secretariat had already asked Parties to provide data on QPS (although such data reporting had been incomplete in the past). Not all countries agreed, however, that there should be separate reporting on the two components. While the EU held that each Party would have to collect the data on each component anyway and should thus be able to report on them separately without much additional effort, several countries wanted to avoid this extra effort, which they thought would be substantial. They prevailed in the end, and the reporting requirement became part of the Beijing Amendment without the request for separate reporting on quarantine and on pre-shipment applications.¹⁸

More contentious than the issue of reporting was the proposed freeze of methyl bromide consumption for QPS. Developing countries in particular voiced their concern that such a restriction may inhibit their ability to export certain goods that need to be treated prior to export, espe-

¹³ See UNEP/OzL.Pro.11/10, Report Eleventh Meeting, *op. cit.*, Annex V.

¹⁴ TEAP Report, April 1999, *op. cit.*, Annex 4.

¹⁵ See Sebastian Oberthür, Production and Consumption of Ozone Depleting Substances 1986–1997. The Data Reporting System under the Montreal Protocol, Eschborn (GTZ) 1999.

¹⁶ See UNEP/OzL.Pro.11/10, Report of the Eleventh Meeting, *op. cit.*, Annexes II, III and IV.

¹⁷ 1998 Report of the Technology and Economic Assessment Panel, *op. cit.*, p. 92.

¹⁸ See UNEP/OzL.Pro.11/10, Report Eleventh Meeting, *op. cit.*, Annex V.

cially to industrialized countries. They also felt that there was not enough evidence of sufficient substitutes being available for QPS applications of methyl bromide.¹⁹ As a result, the proposed freeze drew very little support from other countries and was not adopted. The Meeting adopted, however, a more precise definition of pre-shipment applications and requested the TEAP to further evaluate and review QPS use of methyl bromide in their report due in 2002/3.²⁰

New Ozone-depleting Substances

The proposal to prohibit the production and consumption of bromochloromethane met with little opposition, as this chemical has not yet been widely introduced into the marketplace. If not regulated, however, it was expected to have a significant market potential, especially as a solvent. It was thus agreed that, as part of the Beijing Amendment, the production and consumption of bromochloromethane (listed in Group III of Annex C of the Protocol) would be banned by 1 January 2002.

The prohibition only enters into force, however, upon ratification of the Beijing Amendment by at least 20 Parties and takes effect only for those Parties which have ratified the Beijing Amendment. Parties are faced with this situation with respect to any new ozone-depleting substance, i.e. in order to regulate its production and consumption, an Amendment is required that needs to be ratified. In cases where such a prohibition is not part of a viable package which provides enough incentives for Parties to ratify (as does the ban on the trade of HCFCs with Non-Parties that is part of the Beijing Amendment), this might considerably delay the effectiveness of any such prohibition.

The EU therefore suggested that Parties consider an expedited procedure for adding new substances to the control regime without the need for ratification. On that basis, the legal drafting group had developed the option of changing the existing Amendment procedure. The revised procedure would have required consensus for the adoption of Amendments (in contrast to the current two-thirds majority). In addition, each Party would have had the opportunity to opt out of the new procedure and request that its ratification remain to be required for any new agreement reached on the basis of the expedited procedure.²¹

However, several Parties considered the new expedited procedure to be legally problematic. Even some EU representatives were not sure whether the form the expedited procedure had taken in the elaboration of the legal drafting group met with their original intentions, in particular since consensus would now be required, which might make decision-making on Amendments more burdensome.

At Beijing, the expedited procedure was thus not at the centre of political negotiations. Although attempts were made to accommodate differing views on the matter, an acceptable solution could not be found. As a result, the

meeting decided "to continue to give full consideration to ways to expedite the procedure for adding new substances and their associated control measures to the Protocol and for removing them therefrom".²²

Other Matters

As in previous years, the Meeting of the Parties addressed the continuing non-compliance of a number of "countries with economies in transition" (CEITs). Since the early 1990s, the Global Environment Facility (GEF) has, in cooperation with the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol, provided assistance to CEIT countries to enable them to comply with the Protocol. By the time of the Beijing meeting, eight of the 15 CEIT countries that had so far received assistance from the GEF were still non-compliant. A GEF study provided an analysis of the situation and had, in cooperation with the countries concerned, developed phase-out plans for each non-compliant CEIT country including regular benchmarks for measuring progress. According to the study, a major step could be achieved in mid-2000 when the Russian production facilities are due to be closed down.²³

Upon the recommendation of the Implementation Committee, the Meeting of the Parties noted that phase-out plans had been established and urged the CEIT countries concerned to submit these phase-out plans and interim benchmarks to the Ozone Secretariat.²⁴ As last year's Meeting of the Parties had passed detailed decisions on a number of CEIT countries, the Implementation Committee only put forward proposals for two decisions addressing Bulgaria and Turkmenistan, and these were adopted by the Meeting. Bulgaria had been in non-compliance in 1997, but was compliant in 1998. For Turkmenistan, the Meeting noted with appreciation the phase-out plan developed in cooperation with the GEF and reproduced the interim benchmarks of that plan. Accordingly, full phase-out of the major ozone-depleting substances in Turkmenistan is to be achieved by 1 January 2003.²⁵

The Meeting also discussed the relationship of efforts to phase out ozone-depleting substances under the Montreal Protocol and restrictions on the emission of greenhouse gases under the Kyoto Protocol. Both efforts are linked because hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) are used as substitutes for CFCs but are regulated under the Kyoto Protocol due to their global warming potential. The Tenth Meeting of the Parties decided in 1998 to request the relevant Montreal Protocol bodies (i.e. the TEAP) to convene, in cooperation with the Intergovernmental Panel on Climate Change, a workshop on available and potential means of limiting HFC and PFC emissions. The workshop was subsequently held

²² Decision XI/20 in UNEP/OzL.Pro.11/10. Report of the Eleventh Meeting, *op. cit.*

²³ See Study of Impacts of GEF Activities on Phase-out of Ozone-Depleting Substances. GEF Evaluation Report, Global Environment Facility, November 1999 (GEF Council Dok. GEF/C.14/Inf.6).

²⁴ Decision XI/23 in UNEP/OzL.Pro.11/10. Report of the Eleventh Meeting, *op. cit.*

²⁵ Decisions XI/24 (Bulgaria) and XI/25 (Turkmenistan) in UNEP/OzL.Pro.11/10, Report of the Eleventh Meeting, *op. cit.*

¹⁹ See UNEP/OzL.Pro.11/10, Report of the Eleventh Meeting, *op. cit.*, para. 47.

²⁰ Decisions XI/12 and XI/13 in UNEP/OzL.Pro.11/10. Report of the Eleventh Meeting, *op. cit.*

²¹ UNEP/OzL.Pro.11/3, Report of the Legal Drafting Group, *op. cit.*, p. 11.

in Petten, the Netherlands, in May 1999 and produced a number of findings on how to limit and reduce HFC and PFC emissions.²⁶

No further decision on the matter was taken at the Beijing meeting. However, a task force of the TEAP presented a related report that concluded that HFCs were critical in a number of applications but that emissions would remain limited and could be reduced so that their contribution to climate change would remain small. It implied that there would be little need for additional policies and measures to restrict and phase out the use of HFCs and PFCs.²⁷ In the ensuing debate, as well as informally, the report drew heavy criticism mainly because its implied policy suggestions were thought to reflect closely the interests of relevant industry.²⁸

The Meeting eventually, after having reached a compromise on a substantial package of Adjustments and Amendment, also adopted the Beijing Declaration elaborated on the basis of a draft proposed by China. The Declaration does not call for any specific measures but notes the progress achieved so far in the phase-out process and appeals to Parties "to demonstrate a stronger political will and take more effective action to fulfil the obligations under the Convention and the Protocol". Industrialized countries are called upon to provide adequate funding, and the international community to show more concern for the issue of ozone layer protection.²⁹

The Meeting also determined the composition of the Implementation Committee and the Executive Committee of the Multilateral Fund. The Implementation Committee will consist of Argentina, Bangladesh, the Czech Republic, Ecuador, Egypt, Mali, Poland, Saudi Arabia, the UK and the US. The Executive Committee will be composed of Australia, the Bahamas, Brazil, China, the Dominican Republic, Germany, India, Japan, the Netherlands, Slovakia, Sweden, Tunisia, Uganda and the US.³⁰

Finally, the Meeting adopted decisions approving essential use nominations by some industrialized countries, further limiting the exemption applying to laboratory and analytical use, requesting industrialized countries to submit CFC management strategies, determining the terms of reference of the next reports of the assessment panels due in 2002, addressing the procedure for assessing potential new ozone-depleting substances, determining the budget, noting the status of discussions on customs codes for ozone-depleting substances with the World Customs Organization, requesting the Multilateral Fund to develop

guidelines for refrigerant management plans, and requesting the TEAP to assess the future availability of HCFCs in developing countries. The next Meeting of the Parties will take place in Burkina Faso in late 2000.

Conclusion

The Eleventh Meeting of the Parties to the Montreal Protocol was characterized by the declining attention that the issue of ozone layer depletion receives in international environmental politics. Limited media attention and the lack of interest shown by most Parties for the Adjustment and Amendment proposed by the EU were clear indications of this trend. This contrasted with the high importance the host China attached to this, the biggest international environmental gathering that has ever taken place in China. China not only demonstrated its hospitality by organizing a number of side events, but the Meeting was also addressed by the President of the People's Republic of China, Jiang Zemin.

China's concern for having a successful conference and passing a 'Beijing Declaration' proved instrumental in pushing through the Beijing Adjustments and Amendment. Had it not been for the EU, however, there would not have been such Adjustments and Amendment since only the EU had put forward proposals to that effect. The EU was also the driving force behind building a winning coalition that in the end enabled the adoption of the treaty amendments. In this respect, it is noteworthy that the EU was able to act in a united manner with clear priorities and thus exert successful environmental leadership.

It is fair to assume that, unless new ozone-depleting substances appear on the market in large quantities in the future, the Beijing Amendment may have been the last major change to the Montreal Protocol. Major activity will now concentrate on the management of the phase-out process in the developing countries. According to 1997 figures, about 20 per cent of the original global consumption of ozone-depleting substances remains to be phased out. Except for HCFCs and methyl bromide, the overwhelming part of the remaining consumption occurs in developing countries (see Table 2). Even more than in previous years, the Multilateral Fund will thus constitute the central point of the international regime for the protection of the ozone layer in the years to come.

Whether and when the Beijing Amendment enters into force, however, remains to be seen. The ratification by 20 Parties required for entry into force should not constitute an insurmountable hurdle. If major importers and exporters of HCFCs (e.g. the EU) ratify, there will be a strong incentive for others to join in order to be able to participate in HCFC trade. This might also have a beneficial effect on the ratification of the Copenhagen Amendment of 1992 that introduced methyl bromide controls. Since the Beijing Amendment may only be ratified by countries that are Parties to previous Amendments, this may constitute a further incentive to ratify the Copenhagen Amendment as well. A number of developing countries, including China, have yet to become Parties to the Copenhagen Amendment.

If China ratifies the Copenhagen Amendment, this will also have implications for the Multilateral Fund since

²⁶ See Sebastian Oberthür, Linkages Between the Montreal and Kyoto Protocols, International Conference on Synergies and Coordination between Multilateral Environmental Agreements, UN University, Tokyo, 14–16 July 1999; available at <<http://www.geic.or.jp/interlinkages/docs/online-docs.html>>.

²⁷ HFC and PFC Task Force of the Technology and Economic Assessment Panel, The Implications to the Montreal Protocol of the Inclusion of HFCs and PFCs in the Kyoto Protocol, October 1999, UNEP.

²⁸ See UNEP/OzL.Pro.11/10, Report of the Eleventh Meeting, *op. cit.*, para. 29; Earth Negotiations Bulletin, Vol. 19, No. 6, Summary of the Eleventh Meeting of the Parties to the Montreal Protocol and the Fifth Conference of the Parties to the Vienna Convention: 29 November – 3 December 1999, 6 December 1999, p. 3.

²⁹ Decision XI/1 and Annex I in UNEP/OzL.Pro.11/10. Report of the Eleventh Meeting, *op. cit.*

³⁰ Decisions XI/8 and XI/9 in UNEP/OzL.Pro.11/10. Report of the Eleventh Meeting, *op. cit.*

Table 2: Global Consumption of Ozone-Depleting Substances in 1997

Substance	Consumption in 1997 (Thousand ODP Tons)	% of Total Consumption in 1997
CFCs (industrialized countries)	23 (CEITs: 13)	7.6
CFCs (developing countries)	145	48.3
Halons	50	16.7
Methyl Chloroform	2	0.7
HCFCs	35	11.7
Methyl Bromide	45	15.0
TOTAL	300	100

Source: Sebastian Oberthür, Production and Consumption of Ozone-Depleting Substances 1986–1997. The Data Reporting System under the Montreal Protocol, Eschborn 1999 (German Agency for Technical Cooperation, GTZ).

China will then require substantial financial assistance to comply with the control measures for methyl bromide. The replenishment of the Multilateral Fund agreed in Beijing should provide the necessary resources, but a number of uncertainties exist, which make it difficult to assess whether the Fund will be able to meet all demands and enable all developing countries to comply with the applicable phase-out schedules. In particular, the Fund is now entering a stage where most of the relatively cost-efficient large-scale potentials for limiting and reducing

the use of ozone-depleting substances have been exploited. In years to come, the Fund needs to develop approaches to address the small and medium-sized enterprises and the informal sector. The costs involved in implementing such approaches remain to be seen. The result of the experience to be gained in implementing such new approaches will be decisive in determining the financial requirements of the Fund for subsequent commitment periods, when the phase-out of ozone-depleting substances in developing countries needs to be completed and sustained. □