

SUMMARY OF THE NINETEENTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER: 17-21 SEPTEMBER 2007

The nineteenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP-19) took place in Montreal, Canada, from 17-21 September 2007. There were over 900 participants, representing governments, UN agencies, intergovernmental and non-governmental organizations, academia, civil society and industry.

Following a one-day seminar commemorating the 20th anniversary of the Montreal Protocol, MOP-19 opened with a high-level segment on Monday, which included an awards ceremony and statements from heads of delegations. A preparatory segment of plenary was convened from Tuesday to Thursday, to address the MOP's substantive agenda items and related draft decisions. The high-level segment also continued on Tuesday and Thursday, and concluded on Friday with the adoption of decisions.

When the meeting concluded late Friday evening, MOP-19 had adopted 29 decisions, including on: an accelerated phase-out of hydrochlorofluorocarbons (HCFCs); essential-use nominations and other issues arising out of the 2006 reports of the Technology and Economic Assessment Panel (TEAP); critical-use nominations for methyl bromide; budgets; and monitoring transboundary movements and illegal trade in ozone-depleting substances (ODS). A Montreal Declaration was also adopted, which acknowledges the historic global cooperation achieved during the last 20 years under the Montreal Protocol, and reaffirms parties' commitment to phase out consumption and production of ODS through a range of actions. A spirit of good humor pervaded the final session of the meeting with delegates lauding the cooperation and flexibility of all parties to achieve significant reductions in methyl bromide critical use exemptions and a "historic" agreement on an accelerated HCFC phase-out.

A BRIEF HISTORY OF THE OZONE REGIME

Concerns that the Earth's stratospheric ozone layer could be at risk from chlorofluorocarbons (CFCs) and other anthropogenic substances were first raised in the early 1970s. At that time, scientists warned that the release of these substances into the atmosphere could deplete the ozone layer, hindering its ability to prevent harmful ultraviolet (UV) rays from reaching the Earth. This would adversely affect ocean ecosystems, agricultural productivity and animal populations, and harm humans through higher rates of skin cancers, cataracts and weakened immune systems. In response to this growing concern, the United Nations Environment Programme (UNEP) convened a conference in March 1977 that adopted a World Plan of Action on the Ozone Layer and established a Coordinating Committee to guide future international action on ozone protection.

VIENNA CONVENTION: In May 1981, the UNEP Governing Council launched negotiations on an international agreement to protect the ozone layer and, in March 1985, the Vienna Convention for the Protection of the Ozone Layer was adopted. The Convention called for cooperation on monitoring, research and data exchange, but did not impose obligations to reduce the use of ODS. The Convention now has 190 parties.

IN THIS ISSUE

A Brief History of the Ozone Regime	1
MOP-19 Report	3
High-Level Segment.	3
Preparatory Segment	5
MOP-19 Outcomes and Decisions	5
Closing Plenary	11
A Brief Analysis of MOP-19	12
Upcoming Meetings	13
Glossary	14

This issue of the *Earth Negotiations Bulletin* © <enb@iisd.org> is written and edited by Melanie Ashton, Andrew Brooke, Suzanne Carter, Radoslav Dimitrov, Ph.D. and William McPherson, Ph.D. The Digital Editor is Leila Mead. The Editor is Pamela S. Chasek, Ph.D. <pam@iisd.org> and the Director of IISD Reporting Services is Langston James "Kimo" Goree VI <kimo@iisd.org>. The Sustaining Donors of the *Bulletin* are the United Kingdom (through the Department for International Development – DFID), the Government of the United States of America (through the Department of State Bureau of Oceans and International Environmental and Scientific Affairs), the Government of Canada (through CIDA), the Danish Ministry of Foreign Affairs, the Government of Germany (through the German Federal Ministry of Environment - BMU, and the German Federal Ministry of Development Cooperation - BMZ), the Netherlands Ministry of Foreign Affairs, the European Commission (DG-ENV) and the Italian Ministry for the Environment, Land and Sea. General Support for the *Bulletin* during 2007 is provided by the Swiss Federal Office for the Environment (FOEN), the Norwegian Ministry of Foreign Affairs and the Ministry of Environment, the Government of Australia, the Austrian Federal Ministry for the Environment, the Ministry of Environment of Sweden, the New Zealand Ministry of Foreign Affairs and Trade, SWAN International, the Japanese Ministry of Environment (through the Institute for Global Environmental Strategies - IGES) and the Japanese Ministry of Economy, Trade and Industry (through the Global Industrial and Social Progress Research Institute - GISPRI). Funding for translation of the *Earth Negotiations Bulletin* into French has been provided by the International Organization of the Francophonie (IOF) and the French Ministry of Foreign Affairs. Funding for the translation of the *Earth Negotiations Bulletin* into Spanish has been provided by the Ministry of Environment of Spain. The opinions expressed in the *Earth Negotiations Bulletin* are those of the authors and do not necessarily reflect the views of IISD or other donors. Excerpts from the *Earth Negotiations Bulletin* may be used in non-commercial publications with appropriate academic citation. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at <kimo@iisd.org>, +1-646-536-7556 or 300 East 56th St. Apt 11A, New York, NY 10022, USA.

MONTREAL PROTOCOL: In September 1987, efforts to negotiate binding obligations to reduce the use of ODS led to the adoption of the Montreal Protocol on Substances that Deplete the Ozone Layer. The Protocol introduced control measures for some CFCs and halons for developed countries (non-Article 5 parties). Developing countries (Article 5 parties) were granted a grace period allowing them to increase their use of these ODS before taking on commitments. The Protocol currently has 191 parties.

Since 1987, several amendments and adjustments to the Protocol have been adopted, adding new obligations and additional ODS, and adjusting existing control schedules. Amendments require ratification by a defined number of parties before their entry into force, while adjustments enter into force automatically.

LONDON AMENDMENT AND ADJUSTMENTS: Delegates to the second Meeting of the Parties (MOP-2), which took place in London, UK, in 1990, tightened control schedules and agreed to add ten more CFCs to the list of ODS, as well as carbon tetrachloride (CTC) and methyl chloroform. To date, 186 parties have ratified the London Amendment. MOP-2 also established the Multilateral Fund for the Implementation of the Montreal Protocol (Multilateral Fund). The Multilateral Fund meets the incremental costs incurred by Article 5 parties in implementing the Protocol's control measures and finances clearinghouse functions, including technical assistance, information, training, and the costs of the Multilateral Fund Secretariat. The Fund is replenished every three years, and has received pledges of over US\$2 billion since its inception.

COPENHAGEN AMENDMENT AND ADJUSTMENTS: At MOP-4, held in Copenhagen, Denmark, in 1992, delegates tightened existing control schedules and added controls on methyl bromide, hydrobromochlorofluorocarbons (HBFCs) and hydrochlorofluorocarbons (HCFCs). MOP-4 also agreed to enact non-compliance procedures and to establish an Implementation Committee (ImpCom). The ImpCom examines cases of possible non-compliance by parties, and makes recommendations to the MOP aimed at securing full compliance. To date, 178 parties have ratified the Copenhagen Amendment.

MONTREAL AMENDMENT AND ADJUSTMENTS: At MOP-9, held in Montreal, Canada, in 1997, delegates agreed to a new licensing system for the import and export of ODS, in addition to tightening existing control schedules. They also agreed to ban trade in methyl bromide with non-parties to the Copenhagen Amendment. To date, 157 parties have ratified the Montreal Amendment.

BEIJING AMENDMENT AND ADJUSTMENTS: At MOP-11, held in Beijing, China, in 1999, delegates agreed to controls on bromochloromethane and additional controls on HCFCs, and to reporting on methyl bromide for quarantine and pre-shipment applications. MOP-11 also agreed to replenish the Multilateral Fund with US\$440 million for 2000-2002. At present, 132 parties have ratified the Beijing Amendment.

MOPs 12-14: MOP-12, held in Ouagadougou, Burkina Faso, in 2000, adopted the Ouagadougou Declaration, which encouraged parties to take steps to prevent illegal production,

consumption and trade in ODS, and to harmonize customs codes. The following year in Colombo, Sri Lanka, delegates to MOP-13 adopted the Colombo Declaration, which encouraged parties to apply due care in using substances that may have ozone depletion potential (ODP), and to determine and use available, accessible and affordable alternatives and technologies that minimize environmental harm while protecting the ozone layer. At MOP-14, held in Rome, Italy, in 2002, the MOP's decisions covered such matters as compliance, interaction with the World Trade Organization, and replenishment of the Multilateral Fund with US\$474 million for 2003-2005.

MOP-15: Like its predecessors, MOP-15, held in Nairobi, Kenya, in November 2003, resulted in decisions on a range of issues, including the implications of the entry into force of the Beijing Amendment. However, disagreements surfaced over exemptions allowing the use of methyl bromide beyond 2004 for "critical" uses where no technically or economically feasible alternatives are available. As delegates could not reach agreement, they took the unprecedented step of calling for an "extraordinary" MOP.

FIRST EXTRAORDINARY MOP: The first Extraordinary Meeting of the Parties to the Montreal Protocol (ExMOP-1) took place from 24-26 March 2004, in Montreal, Canada. Parties agreed to critical-use exemptions (CUEs) for methyl bromide for 2005 only. The introduction of a "double-cap" concept distinguishing between old and new production of methyl bromide was central to this compromise. Parties agreed to a cap for new production of 30% of parties' 1991 baseline levels, meaning that where the capped production amount was insufficient for critical uses allocated in 2005, parties were required to use existing stockpiles. Parties also achieved compromises on conditions for approving and reporting on CUEs, and the working procedures of the Methyl Bromide Technical Options Committee (MBTOC).

MOP-16: MOP-16 took place in Prague, Czech Republic, from 22-26 November 2004. The parties adopted decisions on the Multilateral Fund, ratification, compliance, trade in ODS and other matters, but work on methyl bromide exemptions for 2006 was not completed. For the second time, parties decided to hold an extraordinary MOP.

SECOND EXTRAORDINARY MOP: ExMOP-2 was held on 1 July 2005, in Montreal, Canada. Parties agreed to supplementary levels of CUEs for 2006 left unresolved at MOP-16. Under this decision, parties also agreed that: CUEs allocated domestically that exceed levels permitted by the MOP must be drawn from stocks rather than from new production; methyl bromide stocks must be reported; and parties must "endeavor" to allocate CUEs to the particular categories specified in the decision.

COP-7/MOP-17: MOP-17 was held jointly with the seventh Conference of the Parties (COP-7) to the Vienna Convention in Dakar, Senegal, from 12-16 December 2005. Parties approved essential-use exemptions for 2006 and 2007, supplemental CUEs for 2006 and CUEs for 2007. They authorized production and consumption of methyl bromide in non-Article 5 parties

for laboratory and analytical critical uses, and requested the Technology and Economic Assessment Panel (TEAP) to report on such uses. Other decisions concerned, *inter alia*: submission of information on methyl bromide in space fumigation; replenishment of the Multilateral Fund with US\$470.4 million for 2006-2008; and the terms of reference for a feasibility study on developing a monitoring system for the transboundary movement of controlled ODS. Parties deferred consideration of: the US's proposal on multi-year CUEs; Canada's proposal on disclosure of interest guidelines for bodies such as the TEAP and its Technical Options Committees (TOCs); and the European Community's (EC) proposal for an adjustment to the methyl bromide phase-out schedule for Article 5 parties.

CURRENT ODS CONTROL SCHEDULES: Under the amendments to the Montreal Protocol, non-Article 5 parties were required to phase out production and consumption of: halons by 1994; CFCs, CTC, HBFCs and of methyl chloroform by 1996; bromochloromethane by 2002; and methyl bromide by 2005. Consumption of HCFCs is to be phased out by non-Article 5 countries by 2030 and by Article 5 parties by 2040 (with interim targets prior to those dates), with production to have been stabilized by 2004. Article 5 parties were required to phase out production and consumption of bromochloromethane by 2002. These parties must still phase out: production and consumption of CFCs, halons and CTC by 2010, and methyl chloroform and methyl bromide by 2015. Production of HCFCs in Article 5 countries must be stabilized by 2016. As for non-Article 5 parties, there are exemptions to these phase-outs to allow for certain uses lacking feasible alternatives or in particular circumstances.

MOP-19 REPORT

HIGH-LEVEL SEGMENT

MOP-18 Vice-President Omar Tejada (Dominican Republic) opened MOP-19 on Monday, 17 September. John Baird, Minister of Environment, Canada, welcomed participants, describing the Montreal Protocol as the most effective international convention of our time. He stated that the use of hydrochlorofluorocarbons (HCFCs) was always intended to be a temporary solution and called for an accelerated phase-out of HCFCs. UNEP Executive Director Achim Steiner welcomed delegates and said that while that the multilateral system can be complex and frustrating, extraordinary policy regimes such as the Montreal Protocol show that the international system can effectively address environmental issues.

Steiner, Minister Baird, and Marco Gonzalez, Executive Secretary, Ozone Secretariat, presented numerous awards to individuals, international agencies, and government agencies as implementing agencies, in recognition of outstanding contributions to the implementation of the Montreal Protocol.

Parties elected the following Bureau members for MOP-19: Khalid Al-Ali (Qatar) as President; Miroslav Spasojevic (Serbia), Nicholas Kiddle (New Zealand) and Mayra Mejía (Honduras) as Vice-Presidents; and Jesca Eriyo (Uganda) as Rapporteur.

MOP-19 Bureau President Al-Ali then introduced the proposed agenda (UNEP/OzL.Pro.19/1). He suggested, and delegates agreed, to refer Agenda Item 11 (consideration of a Montreal Declaration) to the preparatory segment. The US proposed an additional agenda item on endorsing the selection of new SAP Co-Chairs, which delegates agreed to add to the agenda of the preparatory segment. Delegates then adopted the agenda and agreed to the organization of work.

PRESENTATION OF 2006 SYNTHESIS REPORT BY ASSESSMENT PANELS: MOP-19 President Al-Ali invited reports from the assessment panels.

Scientific Assessment Panel: A.R. Ravishankara, Scientific Steering Committee of the Science Assessment Panel (SAP), presented the latest results on ozone depleting substances (ODS) emissions and ozone recovery, which he said indicated that the Montreal Protocol is "working as intended." He showed that global ozone levels have leveled off and are not declining, but that uncertainty remained as to when the ozone layer would recover. He stated that methyl chloroform, methyl bromide, HCFC-22 and very short lived halogens are the main contributors to current ozone depletion.

Environmental Effects Assessment Panel: Janet Bornman, Co-Chair of the Environmental Effects Assessment Panel (EEAP), reported on the interaction between climate change factors and ozone depletion. She highlighted the adverse effects of increased ultraviolet (UV) radiation on human health, terrestrial and aquatic ecosystems, air quality and materials. Bornman emphasized that all types of skin cancers are expected to double from 2000 to 2015.

Technology and Economic Assessment Panel: Stephen Andersen, Co-Chair of the Technology and Economic Assessment Panel (TEAP), stated that TEAP recommended an accelerated phase-out of HCFCs and called for alternatives to ODS in foam production. He further reported that: the civil aviation sector still widely uses halons; phase-out of CFCs for metered-dose inhalers (MDIs) is achievable by 2009; and alternatives for methyl bromide exist. Andersen outlined TEAP's view that refrigeration in Article 5 countries will likely depend on CFCs and HCFCs for some time, and called for accelerated use of alternatives.

STATEMENTS BY HEADS OF DELEGATIONS: Heads of delegations delivered statements during the high-level segment on Monday, Tuesday and Friday. Many countries thanked Canada for hosting MOP-19 and outlined national activities to eliminate ODS. Fiji called for closer cooperation within the Southeast Pacific network with the support of the Multilateral Fund. Argentina noted that the G8 Summit, Ibero-American Ministerial Conference and Mercosur have all made declarations on reducing ODSs, and called for accelerated phase-out efforts. The Solomon Islands, Bhutan, Benin and Croatia referred to networks in their regions that support implementation of the Protocol.

The US stated that an accelerated HCFC phase-out would bring greater benefits for climate change amelioration than current measures under the UN Framework Convention on Climate Change (UNFCCC) Kyoto Protocol, and called for

reaching a decision on a phase-out at this conference. Zimbabwe and Sweden also called for an accelerated HCFC phase-out. Guinea stressed the need to fully phase out both HCFCs and CFCs. China stressed that continued successful implementation depends on support from key industries, and listed current obstacles to an accelerated HCFC phase-out and including the lack of alternative technologies, and negative economic impacts.

Colombia said that reducing HCFCs requires adequate financing for Article 5 parties from the Multilateral Fund. Djibouti supported an accelerated phase-out but called for a realistic timetable due to the difficulties faced by developing countries in gaining access to reasonably-priced alternatives. Portugal, for the European Union (EU), offered to take a leading role helping developing countries accelerate the phase-out of HCFCs and suggested a focus on preventing illegal trade, controlling new substances, managing ODS banks, and ozone-layer monitoring.

Brazil highlighted its joint submission with Argentina for an accelerated HCFC phase-out and stressed the phase-out's dependence on sufficient funding. Japan asserted that any consideration of an accelerated HCFC phase-out must take available resources into account.

Gabon, Tanzania and Senegal raised concern over the future of the Protocol after 2010 and, with South Africa and Samoa, drew attention to the need for assistance to address growing illegal trade in ODS, and the negative economic impacts of ODS reductions. Uganda identified future challenges for the Montreal Protocol, including improving strategies for border control. The European Community emphasized the need for MOP-19 to achieve solid results that go beyond current commitments under the Montreal Protocol.

India stressed the need for technology transfer to be provided under fair and favorable conditions. Mauritius and the Federated States of Micronesia highlighted the vulnerability of small island developing states to climate change. The Maldives urged action to protect the human right to a safe environment. France noted the interrelationships between ODS, global warming, biodiversity and human health. Mexico advocated the elimination of methyl bromide use by all parties and, with the Dominican Republic, highlighted alternatives to methyl bromide. Cuba stressed that political will was necessary to reduce methyl bromide consumption.

Norway highlighted key factors in the success of the Montreal Protocol, including sending credible signals to industry, and ensuring financial and technical support. Algeria called for greater interaction between the Montreal Protocol and other multilateral environment agreements (MEAs). Venezuela called for dealing with illicit trade, especially of methyl bromide. Kyrgyzstan said illegal trade in ODS is a significant problem for economies in transition. The Republic of Korea urged implementation of licensing systems to combat illegal trade. Malaysia expressed support for the development of a tracking system for ODS to prevent illegal trade. Thailand urged the use of prior informed consent on imports of halons and carbon tetrachloride.

Cambodia, Mongolia, Liberia and Nigeria supported an accelerated HCFC phase-out. Mauritania, Kenya, Thailand, Chile, Turkey and Togo commended the role of donors and the Multilateral Fund in promoting phase-out of ODS, especially HCFCs, and with Indonesia, called for further assistance to accelerate HCFC phase-out. Kenya and Togo added that assistance and mandated targets should take into account national circumstances and not adversely affect Article 5 countries' economies. The Russian Federation called for assessing the economic and technical impacts of a phase-out. Switzerland called for a realistic HCFC phase-out with a financial solution that addresses developing country constraints. Suriname noted the lack of low-cost and easily available HCFC alternatives. Ecuador stressed the need for sustained funding to accelerate HCFC phase-out. On the Multilateral Fund, Switzerland suggested that funding should be maintained at least at existing levels, given the need for strengthened controls over HCFCs and destruction of existing stocks of HCFCs and halons.

Ghana called for regional facilities for destroying ODS to be established. Serbia, Democratic Republic of the Congo, Sri Lanka, Italy, Myanmar and Rwanda outlined national activities to eliminate ODS. The Lao People's Democratic Republic reported that the Protocol's "Ozzy Ozone" character had been translated into Lao for use in education campaigns. Lebanon urged parties to work on prevention rather than environmental damage control. The Holy See congratulated parties on 20 years of success under the Montreal Protocol. New Zealand noted that the Montreal Protocol has linked sound science to international law and policymaking. The Philippines expressed concern with use of transitional substances. Pakistan supported increased multilateral funding to transform industries to ozone friendly technologies and alternatives.

NGO STATEMENTS: Delegates heard from statements from NGOs on Friday. Greenpeace called on parties to: immediately accelerate the HCFC phase-out; ensure that HCFCs are not replaced by hydrofluorocarbons (HFCs) with high global warming potential; accelerate methyl bromide phase-out; mandate recapturing and safe destruction of CFCs and HCFCs in old equipment; and work in cooperation with the Kyoto Protocol to establish an HFC emission cap.

The International Institute of Refrigeration underscored that environmentally-friendly refrigerants have been developed. He stressed that any decision on refrigerants should differentiate between industrialized and non-industrialized countries and that cooperation and funding are vital to technology transfer.

PRESENTATION BY THE MULTILATERAL FUND: In the high-level segment on Monday, Philippe Chemouny (Canada), Chair of the Executive Committee of the Multilateral Fund, presented the Committee's report (UNEP/OzL.Pro.19/4), noting that the Multilateral Fund lacks guidelines for assessing the cost of phasing out HCFCs and will consider the incremental costs of an accelerated phase-out at its next meeting.

Presentations by the Implementing Agencies: The implementing agencies of the Multilateral Fund then presented reports of their activities in support of the Montreal Protocol. The

United Nations Development Programme listed its contributions to projects in 100 countries. UNEP outlined activities including capacity building and technical support, regional networking, special compliance assistance, education of teachers and close cooperation with industry experts. The United Nations Industrial Development Organization has supported over 1000 projects in 81 countries including: promoting use of hydrocarbons to replace CFCs; and helping to establish national ozone units and phase out ODS in developing countries. The World Bank reported its involvement in 600 Montreal Protocol projects in 25 countries, and said accelerated phase-out of HCFCs might be viable for some countries, but there was a need to better understand supply and demand issues. The Global Environment Facility (GEF) explained its strategic mandate to support the HCFC phase-out.

PREPARATORY SEGMENT

The preparatory segment was co-chaired by Marcia Levaggi (Argentina) and Mikkel Sorensen (Denmark). Marco Gonzalez, Executive Secretary of the Ozone Secretariat, opened MOP-19's preparatory segment on Tuesday with a discussion of ODS targets for 2010, calling for an accelerated phase-out of HCFCs and sufficient funding for its accomplishment by Article 5 parties. Delegates then adopted the preparatory segment agenda (UNEP/OzL.Pro.19/1) with additional items proposed by the US on endorsing the selection of new SAP Co-Chairs, and by Australia on halon assessment. The Executive Committee's request to change its terms of reference (ToR) to modify the number of times it meets, and a draft decision on the status of Romania, were referred to the high-level segment. The agenda item on future challenges to be faced by the Montreal Protocol, including refining the institutional arrangements of the Montreal Protocol and establishment of a multi-year agenda for the MOP, was referred to the contact group on ToR for a study on the Multilateral Fund replenishment.

Throughout MOP-19, delegates discussed agenda items and corresponding draft decisions in plenary, contact groups and informal consultations. Draft decisions were approved by the preparatory segment, and forwarded to the high-level segment for adoption on Friday evening. The description of the negotiations, the summary of the decisions and other outcomes can be found in the corresponding sections below, in the order in which they were introduced during the meeting.

MOP-19 OUTCOMES AND DECISIONS

FINANCIAL MATTERS: FINANCIAL REPORTS AND BUDGETS: In the preparatory segment on Tuesday, Co-Chair Levaggi established a contact group, chaired by Jiří Hlaváček (Czech Republic), to prepare draft decisions related to the Montreal Protocol budget and the trust funds of the Vienna Convention and the Montreal Protocol. The contact group met on Tuesday, Wednesday and Friday and agreed on: zero nominal budget growth; keeping the level of contributions constant for 2007, 2008 and 2009; and increasing the operating cash reserve to 11.3% in 2008 and 15% in 2009. In the preparatory segment on Friday, budget contact group acting Chair Alessandro Guigliano-Peru (Italy) introduced the budget, noting: the total of US\$4,618,880 for 2008; a draw down of the surplus of

US\$341,947 in 2008; and operating reserves of 11.3% in 2008 and 15% in 2009. He said that most of the explanatory notes list the costs, including: personnel, administrative support, travel, equipment, rent, consultants, meeting costs, equipment costs, and miscellaneous costs. The proposed budget was forwarded to the high-level segment and was adopted.

Final Outcome: In the decision (UNEP/Oz.L.Pro.19/3, Decision XIX/D), the MOP:

- approves a budget of US\$4,618,880 for 2008, with a draw down of the surplus of US\$341,947;
- notes the proposed budget of US\$4,887,129, an increase of US\$268,249 from 2008;
- approves a reserve of 11.3% in 2008, and projects a reserve of 15% in 2009; and
- maintains the contributions of the parties at the same level as 2007.

HCFC ISSUES: TEAP Report on Addressing HCFCs: On Tuesday in the preparatory session, the TEAP presented reports addressing HCFC issues. TEAP Task Force Co-Chair Radhey Agarwal (India) presented the TEAP report related to ozone depletion, highlighting trends in production and consumption of HCFCs, and the impact of the Kyoto Protocol's Clean Development Mechanism on HCFC-22 production. TEAP Task Force Co-Chair Paul Ashford (UK) emphasized the need for early development of low global warming potential (GWP) alternatives to ensure climate benefits from an accelerated HCFC phase-out.

TEAP Task Force Co-Chair Lambert Kuijpers (the Netherlands) noted that TEAP did not address the cost effectiveness of available alternatives. He said estimated savings from a phase-out will depend on the availability of alternative technologies.

In the ensuing discussion, Kuwait suggested that an accelerated phase-out is unrealistic, given current urban growth rates in Asia, increasing HCFC consumption, and the lack of alternative technologies. The US asserted that technologies for destroying HCFC-23 are inexpensive, but cautioned against assuming maximum climate benefits. The EC said that technical and economic alternatives exist for most HCFC uses. Supported by India and Indonesia, he said the UNFCCC is the appropriate forum for addressing the impact on global warming of phasing out HCFCs.

Tanzania called for more information on available alternatives and areas of application. Japan said measures such as controlling HCFC leakage would accrue as many benefits as an accelerated HCFC phase-out.

Adjustments to HCFC Phase-out Schedule: This issue was first brought up in the high-level segment on Monday. MOP-19 President Al-Ali established a contact group, co-chaired by Maas Goote (the Netherlands) and Mikheil Tushishvili (Georgia). An open contact group met on Monday afternoon, and a closed contact group consisting of a reduced number of parties met from Tuesday to Friday. A draft decision (UNEP/OzL.Pro.19/CRP.18)

and legal annex (UNEP/OzL.Pro.19/CRP.19) were presented to the preparatory segment on Friday and were adopted by the high-level segment.

In plenary, proposals for an accelerated phase-out from the Federated States of Micronesia, Mauritania, Mauritius, US, and joint submissions from Argentina and Brazil, and Iceland, Norway and Switzerland, were considered.

On Tuesday, in the open contact group, parties expressed their views on: the baseline for measuring HCFC use prior to phase-out; sector-specific approaches to phase-out; the availability of alternatives, funding, and technical assistance; the accuracy of pre-2007 data on HCFCs; eligibility of post-1995 facilities to be funded for phase-out; the needs of low-consumption countries; and the application of common but differentiated responsibilities. Many countries strongly supported an accelerated phase-out. Japan supported maintaining but not increasing Multilateral Fund replenishment levels. Brazil and Argentina stressed the need to establish a legal link between funding and the adjustment. The US suggested using 2008-2009 as the baseline date, whereas many developing country parties preferred using 2009-2010 or later.

In the closed contact group, parties continued to grapple with financing issues throughout the week, in consultation with representatives of the Multilateral Fund, TEAP and the German Development Bank (GTZ). Negotiations on the baseline freeze date and specific reduction targets for Article 2 and Article 5 parties were protracted. Most developed countries supported an early freeze date, whereas some developing countries supported smaller reduction targets. Parties reached a compromise in the early evening on Friday, balancing a later freeze date of 2009-2010 with larger reduction targets for Article 5 parties.

In the closing session of the preparatory segment, Co-Chair Goote presented and recommended the draft decision to the high-level segment. A number of parties underlined the importance of the decision, describing it as a historic landmark. China noted the difficult economic implications of accelerating the phase-out, while nonetheless stressing the importance of the decision and underlining his country's commitment to meeting the targets. China also raised the need to ensure that alternatives are ozone- and climate-friendly, safe, and economically viable.

Final Decision: In the decision on adjustments to accelerate the HCFC phase-out schedule (UNEP/OzL.Pro.19/CRP.18 and CRP.19), the MOP agrees, *inter alia*:

- to choose as a baseline the average of the 2009 and 2010 levels of HCFC consumption and production for Article 5 parties;
- to freeze consumption and production in 2013 at the baseline level;
- for Article 2 parties to complete the phase-out of consumption and production by 2020, with reduction steps of 75% by 2010, 90% by 2015 and allowing 0.5% for servicing the period 2020-2030;
- for Article 5 parties to complete accelerated phase-out of consumption and production by 2030, with reduction steps of 10% by 2015, 35% by 2020, 67.5% by 2025 and allowing for

servicing an annual average of 2.5% from 2030-2040;

- that funding available through the Multilateral Fund in upcoming replenishments will be stable and sufficient to meet all incremental costs to enable Article 5 countries to comply with accelerated phase-out;
- to direct the Executive Committee to assist parties in preparing phase-out management plans and in conducting surveys to improve reliability of baseline data on HCFCs;
- to encourage parties to promote alternatives that minimize environmental impacts, particularly climate impacts, as well as health, safety and economic considerations;
- to request parties to report regularly on the implementation of Montreal Protocol Article 2F paragraph 7;
- to agree that the Executive Committee, when developing and applying funding criteria for projects and programmes, will give priority to projects focusing on: phasing out HCFCs with high GWP first; adopting substitutes and alternatives that minimize other environmental impacts, including climate and taking account of GWP, energy use and other relevant factors;
- to agree to address the possibility of critical use exemptions (CUEs) no later than 2015 for Article 2 parties, and 2020 for Article 5 parties;
- to agree to review in 2015 and 2025 the needs for servicing for Article 2 and Article 5 parties, respectively;
- to agree to allow for up to 10% of baseline levels to satisfy basic domestic needs until 2020, and to consider by 2015 further reductions of production for basic domestic needs for the period after 2020; and
- in accelerating HCFC phase-out, to agree that parties will take every practicable step consistent with Multilateral Fund programmes, to ensure that the best available and environmentally safe substitutes and related technologies are transferred from Article 2 to Article 5 parties under fair and most favorable conditions.

Additional HCFC Proposal: On Tuesday in the preparatory segment, Kuwait introduced a proposal for studying HCFC uses and alternatives in Article 5 countries. Co-Chair Sorensen established a contact group, chaired by Saud Aziz Al-Rashied (Kuwait), which met on Wednesday. In the contact group, most participants voiced broad support for the proposal. One participant suggested examining the scope of the technical challenges before a study is designed. A revised draft decision was presented to the preparatory segment on Friday afternoon, and was adopted in the high-level segment on Friday evening.

Final Decision: In the decision on additional work on HCFCs (UNEP/OzL.Pro.19/CRP.12/Rev.2), the MOP:

- requests TEAP to study the prospects for promotion and acceptance of HCFC alternatives in the refrigeration and air-conditioning sectors in Article 5 parties, in particular specific climatic conditions and unique operating conditions such as certain mines; and
- requests TEAP to summarize the study's outcomes in its 2008 progress report.

Eligibility of South Africa for financial assistance from the Multilateral Fund: The issue arose on Friday in the preparatory segment. South Africa explained that it originally operated as an Article 2 party, but was reclassified as operating under Article 5 at MOP-9 in 1997. She added that South Africa ratified the Copenhagen Amendment in 2001, and so has access to the Multilateral Fund for assistance with HCFC phase-out, and that the proposed decision seeks to confirm this. Following a minor textual amendment by the US, the proposal was forwarded to the high-level segment and adopted on Friday evening.

Final Decision: In the decision on South Africa's eligibility of for financial assistance from the Multilateral Fund (UNEP/OzL.Pro.19/L.2, Decision XIX/E), the MOP decides that South Africa, as a developing country operating under Article 5, is eligible for financial and technical assistance from the Multilateral Fund for fulfilling its commitment to phase out production and consumption of HCFCs.

METHYL BROMIDE: Critical-Use Exemptions for Methyl Bromide for 2008 and 2009: The issue was raised in the preparatory segment on Tuesday. A contact group met in closed sessions on Wednesday, Thursday and Friday, and a draft decision was then forwarded to the preparatory segment on Friday and adopted by the high-level segment.

In plenary, the Methyl Bromide Technical Options Committee (MBTOC) reported "excellent progress" in phasing out methyl bromide, citing a significant decline in nominations for critical-use exemptions (CUEs) for 2008/2009. Delegates raised concerns about slow adoption of alternatives and disputed large CUE nominations, noting that up to 40% of stocks were not being used for critical uses. The EC tabled a draft decision for consideration. The US proposed an alternative decision and said they had adopted alternatives in most sectors and noted that stocks will run out in 2009. The Natural Resources Defense Council warned that progress on HCFCs would be undone by allowing large CUEs for methyl bromide. Co-Chair Levaggi established a contact group, to be chaired by Pierre Pinault (Canada).

In the preparatory segment plenary on Friday, Co-Chair Sorensen reported that the draft decision (UNEP/OzL.Pro.19/CRP.21) was a combination of US and EU proposals. The US said that the decision resembles those of previous years. The EU noted that the decision follows the recommendations of MBTOC, drawing attention to the 300-tonne reduction of ODS.

Final Decision: In the decision (UNEP/OzL.Pro.19/L.2 Decision XIX/F), the MOP:

- approves production and consumption for 2008 necessary to satisfy critical uses;
- requests parties with a CUE in excess of production to make up differences from stocks;
- requests parties to require licensees to use emission minimization; and
- requests the TEAP to continue publishing annually a progress report on stocks of methyl bromide, and to provide to the Open Ended Working Group a written explanation of methodology

The tables annexed to the decision include: agreed critical use categories, and amounts permitted for Australia, Canada, Israel, Poland, Spain and the US for 2008 and 2009. For the US, the 2009 tonnage is 3962 tonnes, with the caveat "minus available stocks."

Preventing Harmful Trade in Methyl Bromide Stocks: In the preparatory segment plenary on Tuesday, Kenya introduced a proposed decision on this issue (UNEP/OzL.Pro.19/3, Decision XIX/B), which it said aimed to help Article 5 parties combat unwanted imports. Many delegations questioned how the draft decision might prevent unwanted trade, and said that licensing was the most effective way of combating illegal trade. Co-Chair Sorensen referred the proposal to the contact group on illegal trade (see page 9).

CONSIDERATION OF ISSUES ARISING OUT OF THE 2007 TEAP REPORTS: Essential use nominations: In the preparatory segment on Tuesday, delegates discussed requests for essential-use nominations for controlled substances, including requests for an exemption from the Russian Federation for the aerospace industry (UNEP/OzL.Pro.19/3, Draft Decision XIX/H), and from the EU, the Russian Federation and the US for metered-dose inhalers (MDIs) (UNEP/OzL.Pro.19/3, Draft Decision XIX/J). Mexico supported the requests, while Argentina opposed, noting the existence of alternatives. The Russian Federation and the US noted that the requests were approved by OEWG-27 and endorsed by the TEAP. On Thursday, the Russian Federation reported that its proposal for CFC-113 exemptions for aerospace uses had been agreed with the EU, US and Mexico. The proposals were supposed to be merged and then were forwarded to the high-level segment and adopted on Friday evening.

Final Decision: In the decision (UNEP/OzL.Pro.19/L.2, Decision XIX/J), the MOP, *inter alia*:

- notes TEAP's listing of alternatives to CFCs for MDIs;
- urges parties to commit to reformulating products, provide information on the timetable of reformulation, and provide evidence of transition away from CFCs;
- requests countries to meet their phase-out commitments by the end of 2009; and
- approves quantities of CFCs for MDIs of 200 tonnes for the EU, 212 tonnes for the Russian Federation, and 282 tonnes for the US.

The text relating to the Russian Federation's CFC-113 exemptions for aerospace uses was unintentionally omitted from the text of the decision (UNEP/OzL.Pro.19/L.2, Decision XIX/J), and the Ozone Secretariat agreed to correct this oversight.

Process Agent Related Proposals: This issue was considered in the preparatory segment on Tuesday. Co-Chair Levaggi explained that the proposal related to an update of Table A of decision X/14 as amended in decision XVII/7, and Table A-bis of decision XVII/8, listing uses of controlled substances as process agents. The issue was referred to the high-level segment on Friday, where the decision was adopted.

Final Decision: The decision (UNEP/OzL.Pro.19/L.2, Decision XIX/K) adopts replacement Tables A and A-bis for the relevant process agent decisions.

TEAP Report on Carbon Tetrachloride emissions and opportunities for reductions: In the preparatory segment on Tuesday, Co-Chair Sorensen noted that the TEAP study on carbon tetrachloride was not complete and parties requested TEAP to include these results in next year's report.

N-Propyl Bromide Proposal: In the preparatory segment on Tuesday, the EU tabled a proposal on n-propyl bromide (UNEP/OzL.Pro.19/3/CRP.9), which delegates agreed to consider under the agenda item on new very short-lived ODS (see discussion below).

TEAP Report on Campaign Production of CFCs for MDIs: In the preparatory segment on Tuesday, delegates agreed to defer discussion on the TEAP report on campaign production of CFCs for MDIs until MOP-20.

Financial requirements of the MBTOC: In the preparatory segment on Thursday, Switzerland introduced a proposal (UNEP/OzL.Pro.19/CRP.15) requesting financial assistance for the MBTOC for supporting the administrative cost of two meetings and travel by experts. He said that financial support for the MBTOC is not unprecedented. The US voiced opposition to the proposal. In the high-level segment on Friday, the draft decision was withdrawn.

NEW VERY SHORT-LIVED ODS: In the preparatory segment on Tuesday, the EU tabled proposals on new very short-lived ODS and n-propyl bromide (UNEP/OzL.Pro.19/3/CRP.8 and CRP.9). The US asserted that these substances do not pose a significant threat as ODS and discussion on the proposal was deferred. On Friday, in plenary, the EU announced that the proposal would not go forward.

HALONS: In the preparatory segment on Tuesday and Wednesday, Australia introduced a proposed decision on projected regional imbalances of halons (UNEP/OzL.Pro.19/CRP.1). The EU, Canada and the US supported the proposal, which was forwarded to the high-level segment and adopted on Friday.

Final Decision: In the decision on follow-up to the 2006 assessment by the Halons TOC (UNEP/OzL.Pro.19/L.2, Decision XIX/M) the MOP *inter alia*:

- requests TEAP to undertake further study on projected regional imbalances in the availability of certain halons and to investigate a mechanism to better predict and mitigate such imbalances in the future;
- requests TEAP to consult with the Multilateral Fund on the outcomes of its study on the operation of halon banks around the world; and
- requests parties that have a requirements for certain halons to provide to the Ozone Secretariat information on the projected needs for those halons, and any difficulties experienced to date, or foreseen, in accessing adequate halons to support critical or essential use.

CARBON TETRACHLORIDE COMPLIANCE STATUS

OF ARTICLE 5 PARTIES: The issue of carbon tetrachloride was addressed in plenary on Wednesday and Friday. Co-Chair Levaggi noted that four parties not in compliance had reported use reductions to zero. Chile, on behalf of the Group of Latin American and Caribbean Countries, noted the difficulties faced by Article 5 countries in finding viable alternatives to analytical methods that comply with international standards, and tabled a proposal requesting that the exemption of carbon tetrachloride for laboratory and analytical uses be extended to Article 5 countries (UNEP/OzL.Pro.19/CRP.11). On Friday, Chile introduced a revised draft decision (UNEP/OzL.Pro.19/CRP.11/Rev.1), which was forwarded to the high-level segment and adopted on Friday.

Final Decision: In the decision on carbon tetrachloride for laboratory and analytical uses in Article 5 parties (UNEP/OzL.Pro.19/L.2, Decision XIX/N), the MOP, *inter alia*:

- recognizes the difficulties faced by Article 5 countries in their search for viable alternatives to analytical methods that comply with international standards;
- considers that carbon tetrachloride plays an important role in analytical and laboratory processes and that there are currently no alternatives to its use for some of those processes;
- decides that the ImpCom and the MOP should defer until 2010 the consideration of the compliance status in relation to the control measures for carbon tetrachloride of Article 5 parties; and
- urges Article 5 parties to minimize consumption of carbon tetrachloride in laboratory and analytical uses by applying the global exemption criteria and procedures for laboratory and analytical uses of carbon tetrachloride currently established for non-Article 5 parties.

LABORATORY AND ANALYTICAL USES OF ODS: On Wednesday, preparatory segment Co-Chair Sorensen introduced two draft decisions to extend exemptions of laboratory and analytical uses until 2009 and 2015 respectively (UNEP/OzL.Pro.19/3, Decisions XIX/L and XIX/M). The US, with the EU and Canada, supported the extensions but proposed language on incentives for the scientific community to develop procedures that do not use ODS. A small drafting group prepared a revised decision and on Thursday the US reported agreement on a proposal that merged the two draft decision texts (UNEP/OzL.Pro.19/CRP.17), which was forwarded to the high-level segment and adopted on Friday.

Final Decision: In the decision on laboratory and analytical uses of ODS (UNEP/OzL.Pro.19/L.2, Decision XIX/O), the MOP, *inter alia*:

- extends until December 2011 the global laboratory and analytical-use exemption for the controlled substances in all annexes and groups of the Montreal Protocol except Annex C, group 1 (HCFCs);
- requests TEAP and its Chemicals Technical Options Committee to provide to MOP-21 a list of laboratory and analytical uses of ODS, indicating those for which alternatives exist; and

- decides to eliminate the testing of organic matter in coal from the global exemption for laboratory and analytical use of controlled substances.

COMPLIANCE AND DATA REPORTING: On Wednesday in the preparatory segment, Robyn Washbourne (New Zealand), President of the ImpCom, presented draft decisions on: non-compliance of various parties; data reporting; establishment of licensing systems; and reporting of CFC production (UNEP/OzL.Pro.19/CRP.4). Noting ImpCom's increasing workload, she requested parties to approve funding for extending the next ImpCom meeting from two to three days. The request was referred to the budget contact group.

In response to the ImpCom presentation, the US stressed that prior decisions "urging" parties to report do not entail obligations. Argentina suggested including information on countries with multiple exemptions. The EC said reporting promotes implementation and Australia welcomed administrative changes designed to improve transparency. The decisions were forwarded to the high-level segment and adopted on Friday.

Final Decisions: In the eight decisions related to compliance and data reporting (UNEP/OzL.Pro.19/L.2, Decisions XIX/R through XIX/Y), the MOP:

- notes the return to compliance of Greece and the potential non-compliance of Saudi Arabia, confirms the compliance of Iran, and notes the non-compliance of Paraguay and outlines a plan of action to address this non-compliance;
- agrees to Turkmenistan's request for a change of baseline data for methyl bromide use;
- urges parties to report outstanding 2006 data and requests the ImpCom to review the status of parties' data reporting;
- requests various parties to comply with the import and export licensing systems for ODS required under the Montreal Protocol;
- notes the return of Iran to compliance with the Montreal Protocol's carbon tetrachloride control requirements; and
- requests the ImpCom to review the implementation by the parties of Decision XVII/12 (reporting of production of CFCs).

ASSESSMENT PANELS' 2010 QUADRENNIAL

REPORTS: During Wednesday's preparatory segment, delegates considered the proposed ToR for the 2010 quadrennial reports of the SAP, the EEAP and the TEAP (UNEP/OzL.Pro.19/CRP.2/Rev.1). A small contact group comprising the US, the EC, Australia and Canada reviewed and amended the draft decision, which was introduced on Friday in the preparatory segment (UNEP/OzL.Pro.19/CRP.2/Rev.2). Delegates accepted: the EEAP's proposed amendment on considering the impact of stratospheric ozone depletion on the troposphere; a proposal by Micronesia to include an explicit reference to climate change; and Switzerland's amendment to insert "reduction" in addition to "elimination" of ODS through the use of alternatives. Delegates asked the report of the session to reflect that "production and use of various ODS" also referred to feedstocks. The decision was then adopted by the high-level segment on Friday.

Final Decision: In the decision on the ToR for SAP, EEAP and TEAP (UNEP/OzL.Pro.19/L.2, Decision XIX/Q), the MOP, *inter alia*:

- notes the work of the SAP, EEAP and TEAP in preparing their 2006 assessments, including the 2007 synthesis report;
- requests the panels to update their 2006 reports in 2010 and submit them by the end of that year for consideration by the OEWG and MOP-23 in 2011;
- requests the SAP to consider issues including assessment of: the state of the ozone layer, the Antarctic ozone hole and Arctic ozone depletion; concentrations of ODS; interaction between climate change and changes on the ozone layer; interaction of stratospheric and tropospheric ozone; observed changes in polar ozone and UV radiation; and the impact of very-short lived substances; and identifying and reporting any other threats to the ozone layer;
- requests EEAP to continue to consider: environmental impacts of ODS, interaction of ozone depletion and climate change for all areas assessed, effects on human health, and impact of UV-B radiation on ecosystems, biogeochemical cycles and materials; and
- requests TEAP to consider: the impact of the phase-out of ODS on sustainable development; technical progress in all sectors; technically and economically feasible choices for reduction and elimination of ODS through the use of alternatives; technical progress on recovery, reuse and destruction of ODS; accounting for production and use in various applications of ODS; and updating use patterns in coordination with the SAP.

MEMBERSHIP OF PROTOCOL BODIES FOR 2008:

On Friday in the high-level segment, the Ozone Secretariat introduced the agenda item on new members for the Montreal Protocol's Implementation Committee (UNEP/OzL.Pro.19/L.2, Decision XIX/A) and membership of the Executive Committee of the Multilateral Fund (UNEP/OzL.Pro.19/3, Decision DD), and new Co-Chairs for the OEWG (UNEP/OzL.Pro.19/L.2, Decision XIX/C). The high-level segment confirmed that new members of the Implementation Committee are Mauritius, Mexico, the Russian Federation, and New Zealand, with nominations still pending for an Asian Region member, President and Vice-President. New members of the Executive Committee are Gabon, Sudan, China, India, Lebanon, Dominican Republic, Uruguay, Belgium, Australia, Romania, Germany, Japan, USA and Sweden, with Gabon as Chair and Sweden as Vice-Chair. Parties also confirmed the election of Mikkel Sorensen (Denmark) and Judy Beaumont (South Africa) as Co-Chairs of OEWG-28.

MONITORING TRANSBOUNDARY MOVEMENTS AND ILLEGAL TRADE IN ODS:

A draft decision on preventing illegal trade in ODS through more effective systems (UNEP/OzL.Pro.19/3, Decision E) was addressed in a contact group chaired by Paul Krajnik (Austria) that met from Tuesday to Thursday. A revised draft decision was presented to the preparatory segment on Thursday evening, and was adopted in the high-level segment on Friday evening. The contact group

also considered a proposal on the prevention of harmful trade in methyl bromide (UNEP/OzL.Pro.19/3, Decision B) on Thursday, but the proposal was not adopted.

In contact group discussions, participants discussed encouraging parties to include permits for each ODS shipment in ODS licensing systems. Many delegates disagreed, citing the onerous nature of shipment-by-shipment approaches, and questioning the effectiveness of this approach in combating illegal trade. On domestic and voluntary options for combating illegal trade, discussion focused on agreeing on a list of options for combating illegal trade. While some participants suggested adding political impetus through language that “encouraged” and “urged” application of the options, many delegates were concerned that the options listed should be voluntary and used at parties’ domestic discretion.

In Thursday’s preparatory session, contact group Chair Krajnik introduced the revised draft decision on illegal trade and noted that the decision contains a list of voluntary options, derived from the “ODS Tracking Feasibility Study” report, for parties to consider applying domestically to combat illegal trade. The decision was then adopted by the high-level segment on Friday.

On Thursday the contact group also considered the prevention of methyl bromide trade that is harmful to Article 5 parties (UNEP/OzL.Pro.19/3, Decision E). Kenya introduced the draft decision, explaining that it aimed to address excess supply of methyl bromide by requiring quantification of stocks and expected imports, but that it was not intended to affect methyl bromide for quarantine purposes. Numerous parties suggested that the issue would be better addressed through effective licensing, a requirement of the Protocol. Many delegates foresaw implementation difficulties, including increased burdens for countries that re-export to smaller markets. Chair Krajnik concluded that no agreement could be reached on the decision. Some participants suggested the issue of harmful trade in methyl bromide would be more appropriately dealt with through a proposal on adaptation of the basic domestic needs. Kenya agreed to withdraw the decision and revisit the issue as an adjustment to basic domestic needs at MOP-20.

Final Decision: In the decision on preventing illegal trade (UNEP/OzL.Pro.19/L.2, Decision XIX/I), the MOP, *inter alia*:

- acknowledges that better implementation and enforcement of existing mechanisms would be an effective step towards monitoring of transboundary movements of ODS;
- acknowledges the initiative to combat illegal trade through informal prior informed consent and the implementation of Project Sky Hole Patching;
- recognizes the benefits of transparency and information sharing on measures established by parties to combat illegal trade;
- reminds parties of their obligation under Article 4B to establish an import and export licensing system for all controlled ODS, and urges parties to fully and effectively implement and actively enforce their systems; and

- suggests that parties wishing to improve implementation and enforcement of their licensing systems consider implementing domestic measures including sharing information with other parties, establishing quantitative restrictions, establishing permits for each shipment, and monitoring transit movements.

MULTILATERAL FUND: ToR for a Study on the Multilateral Fund Replenishment: This issue was raised in Monday’s preparatory segment and considered in a contact group, co-chaired by Jozef Buys (Belgium) and David Omotosho (Nigeria), which met from Monday through Friday. A revised draft decision was presented to the preparatory segment on Friday afternoon (UNEP/OzL.Pro.19/CRP.7/Rev.1) and the decision was adopted in the high-level segment on Friday evening.

The contact group initially discussed the draft decision on the ToR for a study on the 2009-2011 replenishment of the Multilateral Fund (UNEP/OzL.Pro.19/3). The EU introduced an alternative proposal, and the group agreed to integrate the two texts. Discussion focused on longer replenishment periods, and participants decided that the study should consider the financial and other implications of extending the replenishment period to up to six years. Some participants noted that MOP-20 would determine the length of the next replenishment, which is not fixed, although another described a three-year replenishment period as a “tradition” that should be retained. The group agreed to refer to a “longer” replenishment, rather than specifying possible lengths. The agreed text requests the Panel to provide information on the levels of funding required for replenishment in the years 2012, 2013 and 2014, and to study the financial and other implications of a possible longer replenishment period.

A reference introduced by the EU to synergies with other MEAs could not be agreed and language on “identifying also possible areas of cooperation and coordination with other MEAs that provide additional environmental benefits, including climate benefits” was withdrawn and included instead in the Montreal Declaration.

Final Decision: In the decision on the ToR for the study of the 2009-2011 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol (UNEP/OzL.Pro.19/L.2, Decision XIX/G), the MOP, *inter alia*:

- requests TEAP to prepare a short report for MOP-20 and the OEWG-28, to allow MOP-20 to take a decision on the appropriate level of the 2009-2011 replenishment of the Multilateral Fund. The Panel should take into account, *inter alia*: all control measures and relevant decisions and adjustments and decisions related to HCFCs; the need to allocate resources to enable all Article 5 parties to maintain compliance with existing and possible new compliance measures; financial commitments in 2009-2011 relating to national or sectoral phase-out plans; and the impact of the international market;
- asks TEAP to consult widely with all relevant persons and institutions; and
- requests the panels to provide information on the levels of funding required for replenishment in 2012, 2013 and

2014 and to study the financial implications of a longer replenishment period.

ToR of the Executive Committee: On Friday in the high-level segment, the meeting approved an amendment to the ToR of the Executive Committee of the Multilateral Fund to modify, if necessary, the number of times that it meets.

Final Decision: In the decision (UNEP/OzL.Pro.19/L.2, Decision XIX/H), the MOP decides that the Executive Committee shall have the flexibility to hold two or three meetings annually, if it so decides.

FUTURE CHALLENGES TO BE FACED BY THE MONTREAL PROTOCOL: This item was introduced in the preparatory segment on Tuesday, and referred to the contact group on the ToR for a study on the Multilateral Fund replenishment. On Friday in the preparatory segment, the contact group Co-Chairs reported that due to time constraints, the item had not been addressed. Delegates agreed to defer the item to MOP-20.

STATUS OF ROMANIA: On Friday, Romania's request to be removed from the list of developing countries under the Montreal Protocol was introduced in the preparatory segment, and the decision was adopted during the high-level segment.

Final Decision: In the decision (UNEP/OzL.Pro.19/L.2, Decision XIX/P), the MOP approves Romania's request to be removed from the list of developing countries operating under Article 5, and notes that Romania shall assume the responsibilities of a non-Article 5 party from January 2008.

MONTREAL DECLARATION: The issue was discussed in Tuesday's preparatory segment where Canada introduced a draft declaration (UNEP/OzL.Pro.19/3, Decision XIX/K) and a contact group was established, chaired by Pierre Pinault (Canada). The contact group met from Wednesday to Friday and a draft declaration (UNEP/OzL.Pro.19/CRP.16) was circulated on Thursday evening. On Friday, the contact group session was chaired by France Jacovella (Canada), and concluded a draft declaration, which was adopted during the high-level segment on Friday evening.

In the contact group, delegates debated language on common but differentiated responsibilities, and agreed to text stating that the Montreal Protocol "operates," rather than "is founded," on this principle.

In the preparatory segment on Thursday, Nigeria called for text promoting partnerships and cooperation, technology transfer, capacity building and innovative financing. The EC, supported by Mexico and Tanzania, called for text on synergies between the Montreal Protocol and other international agreements.

The contact group reconvened on Friday and final differences were resolved. The final text highlights the Multilateral Fund's role in providing technical, policy and financial assistance, and mentions "cooperation" rather than "synergies" with other international agreements.

Final Decision: The Montreal Declaration (UNEP/OzL.Pro.19/L.2, Decision AA), *inter alia*:

- celebrates the successful conclusion of a "landmark agreement" on accelerated HCFC phase-out;

- acknowledges the historic global cooperation achieved in the last 20 years under the Montreal Protocol, noting various contributors to its success;
- recognizing that the ozone layer remains vulnerable and will require many decades to recover and that its long term protection is dependant on continued vigilance, dedication and action by parties;
- reaffirms commitment to phase-out consumption and production of ODS;
- recognizes importance of near-universal participation in a treaty with demonstrable, measurable, ambitious yet pragmatic goals and the role of mechanisms, particularly the Multilateral Fund, to provide technical, policy and financial assistance;
- recognizes the importance of assisting Article 5 parties through various means including technology transfer, information exchange and partnership for capacity building, in fulfilling their obligations;
- acknowledges the vital contribution of science to our understanding of the ozone layer and the need for sustained levels of scientific research, monitoring and vigilance;
- recognizes the importance of accelerating ozone layer recovery in a way that also addresses other environmental issues, notably climate change; and
- recognizes the opportunity for cooperation between the Montreal Protocol and other relevant international bodies and agreements to enhance human and environmental protection.

STATUS OF RATIFICATIONS: In the high-level segment on Friday, Executive Secretary Gonzalez reported to the meeting on the status of ratifications of the ozone instruments (UNEP/OzL.Pro.19/3, Decision XIX/AA).

CREDENTIALS OF REPRESENTATIVES: In the high-level segment on Friday, Executive Secretary Gonzalez explained that 160 parties attended MOP-19, and that the Bureau approved the credentials of 113 parties and provisionally approved the credentials of one further party.

OTHER MATTERS: Selection of new SAP Co-Chairs: On Friday in the high-level segment, the decision on new SAP Co-Chairs (UNEP/OzL.Pro.19/L.2, Decision Z) was adopted. The new Co-Chairs are John Pyle (UK), Paul Newman (US), and A.R. Ravishankara (US).

DATES AND VENUE FOR MOP-20: In the high-level segment on Friday, Qatar offered to host MOP-20 and the eighth Conference of the Parties to the Vienna Convention (COP-8) in Doha, Qatar. The meeting is tentatively scheduled to take place from 17-21 November 2008. The meeting accepted the offer with thanks.

CLOSING PLENARY

On Friday evening, following the conclusion of work in the HCFC contact group, the preparatory segment forwarded the draft decisions to the high-level segment. Delegates adopted the meeting report with minor textual amendments (UNEP/OzL.Pro.19/L.1, Add.1, Add.2, Add.3, and Add.4). Delegates then adopted all decisions (UNEP/OzL.Pro.19/L.2, UNEP/OzL.Pro.19/CRP.18, UNEP/OzL.Pro.19/CRP.19 and UNEP/OzL.

Pro.19/CRP.12.Rev.2), with the exception of the decision on financial requirements of the MBTOC (UNEP/OzL.Pro.19/L.2, Decision XIX/L), which had been withdrawn.

John Baird, Minister of Environment, Canada, described the HCFC agreement as a historic achievement for ozone protection and the fight against global warming. The Russian Federation noted his country's difficulty in implementing an accelerated HCFC phase-out. He emphasized his desire for compromise and constructive cooperation. Many delegations thanked Canada and congratulated the contact groups for their hard work, and MOP-19 Bureau President Al-Ali gavelled the meeting to a close at 10:54 pm.

A BRIEF ANALYSIS OF MOP-19

The nineteenth Meeting of the Parties to the Montreal Protocol opened with much fanfare marking the twentieth anniversary of the treaty. Many view the Protocol as "the single most successful international agreement to date." The sentiment of this good news story appeared to be widely shared at MOP-19, by participants, and internationally by the world's media as newspapers lavished the event with attention.

Perhaps the ozone process could have afforded to rest on its laurels, enjoy the awards ceremonies, and bask in the approbation of the world. Yet, as many delegations stressed, despite the successes of reducing ODS over the past twenty years, more work remains to be done. The scientific presentations at MOP-19 showed that stratospheric ozone levels remain low, the Antarctic ozone hole is still at its worst, and skin cancer cases are still expected to multiply several times in the next decade. As one delegate noted, this state of affairs was a stark reminder that "once the balance of nature is tipped," no degree of international cooperation can quickly fix it. Delegates rolled up their sleeves and moved swiftly to forge an agreement on the accelerated phase-out of HCFCs. By making progress through substantive discussions on illegal trade, and a reduction of critical-use exemptions for methyl bromide, MOP-19 demonstrated that the accolades are still deserved.

This brief analysis explores the dynamics of the HCFC agreement and the progress on methyl bromide and illegal trade, while evaluating the Protocol's past achievements and looking ahead to the future challenges.

ANOTHER NEW HORIZON: HCFCs

With almost 95% of ODS successfully eliminated under the Montreal Protocol, many believe the Protocol is ready and able to take on new challenges. The Multilateral Fund has long been recognized as a flexible, responsive financial mechanism, key to the successful implementation of the Montreal Protocol. Among other things, the Fund is mandated to provide finance for the transition from CFCs to HCFCs. Some pragmatic observers feared that if the Fund was not mandated to finance a new challenge, such as the phase out of HCFCs, it would run the risk of not being replenished, or being merged into the GEF. Some parties suggested that the Montreal Protocol should explore

synergies with the chemicals conventions, and many speculated this could lead to the Fund being tapped by other related Conventions.

Six years ago, when it was observed that the production and consumption of HCFCs in India and China mirrored that of CFCs historically, and when the idea of accelerated phase-out was first raised, it met with strong opposition from developing countries. At MOP-19, what took most delegates by surprise was how quickly events unfolded. Various factors were conducive to a convergence of views at MOP-19. China, the biggest country producer of HCFCs and main opponent of accelerated phase-out, showed more flexibility than some expected, and secured commitments on funding and access to alternatives in return. The Russian Federation also noted the difficulty of meeting an accelerated phase-out schedule, particularly because it is not eligible for support from the Multilateral Fund, but did not actively oppose the acceleration. Industrialized countries stressed the high global warming potential of HCFCs and the climate benefits of their elimination. The US displayed particular enthusiasm for taking climate-related action outside of the climate regime. According to some, their delegation had "marching orders" to bring climate into the ozone process before the upcoming high-level meetings in Washington and New York on climate change. More skeptical observers suggested that the agreement may also serve to draw attention away from the UNFCCC.

With incentives for action in place on all sides of the negotiating table, an agreement on the acceleration of the HCFC phase-out took "center stage" – albeit behind closed doors. The contact group met throughout the week and most delegates remained tight-lipped about the details until the entire package was agreed. The decision accelerates the phase-out of HCFC production and consumption by a full decade, moving the commitment for phase-out by Article 2 parties from 2030 to 2020, and for Article 5 parties from 2040 to 2030. While the significance of the deal was celebrated by most delegates, China, as one of the parties most affected by the agreement, voiced caution and noted that success is contingent on the availability of alternatives that are ozone and climate friendly, safe and economically viable. Environmental NGOs also repeatedly pointed out the need to ensure that HCFCs are not replaced by substances with high global warming potential or other environmental risks.

An agreement on HCFCs was therefore timely and served several interests. Many developing country delegates saw new policy commitments on HCFCs as a way to ensure continued availability of funding to Article 5 parties. Industrialized countries saw an agreement on accelerated phase-out of HCFC as an easy win for climate, through action by both developed and developing countries. According to some delegates, the Montreal Protocol commitments for an accelerated phase out of HCFCs will actually serve to address climate change more than ozone depletion. Some statistics indicate that the HCFC phase-out could result in reductions of between 18 and 30 billion

tonnes of CO₂ equivalent emissions, which is up to five times the reductions under the Kyoto Protocol in its first commitment period.

OTHER ISSUES

While HCFCs dominated debate, it was not the only issue on the agenda. MOP-19 also achieved progress in reducing critical-use exemption (CUE) tonnages for methyl bromide. Methyl bromide CUEs permitted by MOP-18 for 2008 totaled around 7,500 tonnes, but CUEs granted by MOP-19 for 2009 totaled only 4,400 tonnes – a drop of approximately 42%. Equally significantly, at MOP-18 all parties challenging MBTOC recommendations were granted quantities exceeding MBTOC's recommendations for some categories of use. However at MOP-19, the total amount granted to large consuming and producing countries was actually lower than the MBTOC's recommended amount – with the lion's share of the reduction shouldered by the US, which was granted 20% less than they had requested.

This outcome continues the recent pattern of reductions in CUE totals granted each year, but the drop is greater than at past MOPs, leading some to suggest that methyl bromide may really be on the way out. But others note that CUEs still total thousands of tonnes – and that additional CUEs for 2009 could still be requested by some parties at MOP-20 – demonstrating that work remains to be done to completely phase out this ozone-damaging chemical.

MOP-19 delegates also took a decision on voluntary domestic options for combating illegal trade. While the EC and some others pushed for a decision referring to prior informed consent, the US, Australia and others insisted that illegal trade was most effectively addressed at the national level through effective implementation of licensing systems. With an estimated 20% of traded ODS being traded illegally, many developing country parties noted that there is still much more for parties to do and that they will bring the issue to the table again at MOP-20.

TAKING STOCK: SUCCESSES AND FUTURE CHALLENGES

The outcome of MOP-19 was referred to as a "historic agreement" to accelerate the phase out of HCFCs. The new HCFC amendment opens a new front in the fight against ozone depletion and is yet another gem in a crown that is already resplendent. Clearly, the Montreal Protocol process has much to be proud of. The Protocol and its amendments are ambitious policy instruments and stipulate stringent regulations of many substances. Furthermore, the implementation of these policies has been strong, and the new agreement helps the ozone regime remain on a pedestal of multilateral environmental agreements.

Yet, further challenges lie ahead. Curbing illegal trade of ODS will continue to be a struggle. Methyl bromide also remains a contentious issue despite the big reduction in CUE totals.

The key future task for the ozone regime is to ensure that the momentum created by the HCFC agreement is harnessed and used to implement that agreement. In this context, the particular choice of alternatives for HCFCs will be of critical importance, as will further research into new alternatives, and is likely to

remain a matter of debate in the coming years. Developing countries at MOP-19 appeared to be most concerned with the possible negative impacts of alternatives and persistently called for studies on the matter. Environmental NGOs stressed that one alternative in particular, HFCs, have a global warming potential far greater than HCFCs and that reliance on them may create more problems than it solves. After all, it is important to recall that the HCFCs that are now headed to the guillotine were introduced as an alternative to CFCs. The logical question is whether the next solution will also become the next problem.

UPCOMING MEETINGS

UNITED NATIONS HIGH LEVEL MINISTERIAL MEETING ON CLIMATE CHANGE: A high-level ministerial meeting will take place on 24 September 2007, at UN headquarters in New York. The purpose of the event is to promote dialogue, highlight priority issues within four broad thematic areas, and mobilize support at the highest level for a strong political signal to the UN Climate Change Conference in Bali that governments are ready to accelerate work under the UNFCCC. For more information, see: <http://www.un.org/climatechange/2007highlevel/index.shtml>

US-HOSTED MEETING OF MAJOR ECONOMIES ON ENERGY SECURITY AND CLIMATE CHANGE: US President Bush has issued invitations to major economies to attend this meeting from 27-28 September 2007, in Washington, DC. The invitee list includes the European Union, France, Germany, Italy, the United Kingdom, Japan, China, Canada, India, Brazil, South Korea, Mexico, Russia, Australia, Indonesia, South Africa and the United Nations. For more information, see: <http://www.whitehouse.gov/news/releases/2007/08/20070803-7.html>

TECHNICAL WORKSHOP MEETING ON EMISSIONS FROM AVIATION AND MARITIME TRANSPORT: This workshop, organized by Norway and the European Environment Agency (EEA), will take place from 4-5 October 2007, in Oslo, Norway. For more information, contact: the European Environment Agency; tel: +45-33-36-7100; fax: +45-33-36-7199; e-mail: Bitten.Eriksen@eea.europa.eu; internet: <http://www.eionet.europa.eu/training/bunkerfuelemissions>

27TH SESSION OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE: This meeting will take place from 12-16 November 2007, in Valencia, Spain. IPCC-27 will focus on the adoption of the IPCC's Fourth Assessment Report. For more information, contact: Rudie Bourgeois, IPCC Secretariat; tel: +41-22-730-8208; fax: +41-22-730-8025; e-mail: IPCC-Sec@wmo.int; internet: <http://www.ipcc.ch/>

THIRD MEETING OF THE PERSISTENT ORGANIC POLLUTANTS REVIEW COMMITTEE (POPRC): This meeting of the Stockholm Convention on Persistent Organic Pollutants Review Committee will take place from 19-23 November 2007, in Geneva, Switzerland. For more information, contact: Secretariat of the Stockholm Convention; tel: +41-22-917-8161; fax: +41-22-917-8098; e-mail: ssc@pops.int; internet: <http://www.pops.int>

FIFTY-THIRD MEETING OF THE MONTREAL PROTOCOL MULTILATERAL FUND'S EXECUTIVE COMMITTEE: The fifty-third meeting of the Executive Committee will be held from 26-30 November 2007, in Montreal, Canada. For more information, contact: Secretariat of the Multilateral Fund; tel: +1-514-282-1122; fax: +1-514-282-0068; e-mail: secretariat@unmfs.org; internet: <http://www.multilateralfund.org>

THIRTEENTH CONFERENCE OF THE PARTIES TO THE UNFCCC AND THIRD MEETING OF THE PARTIES TO THE KYOTO PROTOCOL (COP 13/MOP 3): UNFCCC COP 13 and Kyoto Protocol COP/MOP 3 will take place from 3-14 December 2007, in Bali, Indonesia. These meetings will coincide with the 27th meetings of the UNFCCC's subsidiary bodies and the resumed fourth meeting of the *Ad Hoc* Working Group on Further Commitments from Annex I Parties under the Kyoto Protocol. For more information, contact the UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.int; internet: <http://www.unfccc.int>

TWENTY-EIGHTH SESSIONS OF THE UNFCCC SUBSIDIARY BODIES: The 28th sessions of the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA) of the UN Framework Convention on Climate Change (UNFCCC) are scheduled to take place from 2-13 June 2008, in Bonn, Germany. For more information, contact: UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.int; internet: <http://www.unfccc.int>

FORTIETH MEETING OF THE IMPLEMENTATION COMMITTEE UNDER THE NON-COMPLIANCE PROCEDURE FOR THE MONTREAL PROTOCOL: This meeting is tentatively scheduled to take place from 2-4 July 2008, in Bangkok, Thailand. For more information, contact: Ozone Secretariat; tel: +254-20-762-3850/1; fax: +254-20-762-4691; e-mail: ozoneinfo@unep.org; internet: <http://ozone.unep.org>

TWENTY-EIGHTH MEETING OF THE MONTREAL PROTOCOL OPEN-ENDED WORKING GROUP: OEWG-28 is tentatively scheduled to take place from 7-11 July 2008, in Bangkok, Thailand. For more information, contact: Ozone Secretariat; tel: +254-20-762-3850/1; fax: +254-20-762-4691; e-mail: ozoneinfo@unep.org; internet: <http://ozone.unep.org/Events/>

NINTH MEETING OF THE CONFERENCE OF THE PARTIES TO THE BASEL CONVENTION (COP-9): This meeting will take place in September or October 2008, in Indonesia. The exact dates and venue are yet to be determined. For more information, contact: Secretariat of the Basel Convention; tel: +41-22-917-8218; fax: +41-22-797-3454; e-mail: sbc@unep.ch; internet: <http://www.basel.int>

FIFTY-FOURTH MEETING OF THE MONTREAL PROTOCOL MULTILATERAL FUND'S EXECUTIVE COMMITTEE: This meeting is tentatively scheduled to be held from 7-11 November 2008, in Doha, Qatar. For more

information, contact: Secretariat of the Multilateral Fund; tel: +1-514-282-1122; fax: +1-514-282-0068; e-mail: secretariat@unmfs.org; internet: <http://www.multilateralfund.org>

FORTY-FIRST MEETING OF THE IMPLEMENTATION COMMITTEE UNDER THE NON-COMPLIANCE PROCEDURE OF THE MONTREAL PROTOCOL: This meeting is tentatively scheduled to take place from 12-14 November 2008, in Doha, Qatar. For more information, contact: Ozone Secretariat; tel: +254-20-762-3850/1; fax: +254-20-762-4691; e-mail: ozoneinfo@unep.org; internet: <http://ozone.unep.org/>

TWENTIETH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL (MOP-20): This meeting is tentatively scheduled to take place from 17-21 November 2008, in Doha, Qatar, in conjunction with the eighth Conference of the Parties to the Vienna Convention. For more information, contact: Ozone Secretariat; tel: +254-20-762-3850/1; fax: +254-20-762-4691; e-mail: ozoneinfo@unep.org; internet: <http://ozone.unep.org/>

GLOSSARY

CFC	Chlorofluorocarbons
CTC	Carbon tetrachloride
CUE	Critical-use exemption
CUN	Critical-use nomination
EEAP	Environmental Effects Assessment Panel
GWP	Global warming potential
HBFC	Hydrobromofluorocarbons
HCFC	Hydrochlorofluorocarbons
HFC	Hydrofluorocarbons
ImpCom	Implementation Committee
MBTOC	Methyl Bromide Technical Options Committee
MDI	Metered-dose inhaler
Multilateral Fund	Multilateral Fund for the Implementation of the Montreal Protocol
ODP	Ozone-depleting potential
ODS	Ozone-depleting substances
OEWG	Open-ended Working Group
SAP	Scientific Assessment Panel
TOC	Technical Options Committee
ToR	Terms of Reference
TEAP	Technology and Economic Assessment Panel