



TWENTY-FIFTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER: 21-25 OCTOBER 2013

The twenty-fifth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP25) begins today in Bangkok, Thailand. The preparatory segment will take place from Monday to Wednesday. The high-level segment will take place on Thursday and Friday. Throughout the week, delegates will address issues including: the implementation of the Montreal Protocol with regard to small island developing states (SIDS); proposed amendments to the Protocol; the harmonization and validation of the Multilateral Fund (MLF) climate impact indicator; issues related to Article 2 of the Protocol, including nominations for essential-use and critical-use exemptions (CUEs) for 2014 and 2015, the handbook on critical-use nominations (CUNs) for methyl bromide and the uses of controlled substances as process agents; organizational issues related to the Technology and Economic Assessment Panel (TEAP); and the final report by the TEAP on additional information on alternatives to ozone-depleting substances (ODS).

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 first arose 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 197 parties, which represents universal ratification.

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 ODS use before taking on commitments. The Protocol currently has 197 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 they enter into force, while adjustments enter into force automatically.

LONDON AMENDMENT AND ADJUSTMENTS:

Delegates to MOP2, 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, 197 parties have ratified the London Amendment. MOP2 also established the MLF, which 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 MLF Secretariat. The Fund is replenished every three years and has received pledges of over US\$3.11 billion since its inception.

COPENHAGEN AMENDMENT AND ADJUSTMENTS:

At MOP4, held in Copenhagen, Denmark, in 1992, delegates tightened existing control schedules and added controls on methyl bromide, hydrobromofluorocarbons and hydrochlorofluorocarbons (HCFCs). MOP4 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, 197 parties have ratified the Copenhagen Amendment.

MONTREAL AMENDMENT AND ADJUSTMENTS:

At MOP9, 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, 194 parties have ratified the Montreal Amendment.

BEIJING AMENDMENT AND ADJUSTMENTS:

At MOP11, held in Beijing, China, in 1999, delegates agreed to controls on bromochloromethane, additional controls on HCFCs, and to reporting on methyl bromide for quarantine and pre-



shipment (QPS) applications. At present, 190 parties have ratified the Beijing Amendment.

MOP15 AND FIRST EXTRAORDINARY MOP: MOP15, held in Nairobi, Kenya, in 2003, resulted in decisions on 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 were available. Delegates could not reach agreement and took the unprecedented step of calling for an “extraordinary” MOP. The first Extraordinary Meeting of the Parties to the Montreal Protocol (ExMOP1) took place in March 2004, in Montreal, Canada. Parties agreed to CUEs for methyl bromide for 2005, with the introduction of a “double-cap” concept distinguishing between old and new production of methyl bromide as central to this compromise. Parties agreed to a cap on new production of 30% of parties’ 1991 baseline levels, meaning that where the capped amount was insufficient for approved critical uses in 2005, parties were required to use existing stockpiles.

MOP16 AND EXMOP2: MOP16 took place in Prague, Czech Republic, in 2004. Work on methyl bromide exemptions for 2006 was not completed and parties decided to hold a second ExMOP. ExMOP2 was held in July 2005, in Montreal, Canada. Parties agreed to supplementary levels of CUEs for 2006. Under this decision, parties also agreed that: CUEs allocated domestically that exceed levels permitted by the MOP must be drawn from existing stocks; methyl bromide stocks must be reported; and parties must “endeavor” to allocate CUEs to the particular use categories specified in the decision.

COP7/MOP17: MOP17 was held jointly with the seventh Conference of the Parties to the Vienna Convention (COP7) in Dakar, Senegal, in December 2005. Parties approved essential-use exemptions for 2006 and 2007, supplemental CUEs for 2006 and CUEs for 2007, and production and consumption of methyl bromide in non-Article 5 parties for laboratory and analytical critical uses. Other decisions included a US\$470.4 million replenishment of the MLF for 2006-2008, and agreement on terms of reference for a feasibility study on developing a monitoring system for the transboundary movement of controlled ODS.

MOP18: MOP18 took place in New Delhi, India, from 30 October - 3 November 2006. Parties adopted decisions on, *inter alia*: future work following the Ozone Secretariat’s workshop on the Special Report of the Intergovernmental Panel on Climate Change (IPCC) and the TEAP; difficulties faced by some Article 5 parties manufacturing CFC-based metered dose inhalers (MDIs); treatment of stockpiled ODS relative to compliance; and a feasibility study on developing a system for monitoring the transboundary movement of ODS.

MOP19: MOP19 took place in Montreal, Canada, in September 2007. Delegates adopted decisions on: an accelerated phase-out of HCFCs; CUNs for methyl bromide; and monitoring transboundary movements of, and illegal trade in ODS. Parties also adopted an adjustment accelerating the phase out of HCFCs.

COP8/MOP20: MOP20 was held jointly with COP8 of the Vienna Convention in Doha, Qatar in November 2008. Parties agreed to replenish the MLF with US\$490 million for 2009-2011 and adopted other decisions concerning, *inter alia*: the environmentally sound disposal of ODS; approval of 2009 and 2010 CUEs for methyl bromide; and compliance and reporting issues.

MOP21: MOP21 took place in Port Ghalib, Egypt, in November 2009, and adopted decisions on: alternatives to HCFCs; institutional strengthening; essential uses; environmentally sound management of ODS banks; methyl bromide; and data and

compliance issues. This was the first meeting at which delegates considered, but did not agree to, a proposal to amend the Montreal Protocol to include hydrofluorocarbons (HFCs) submitted by the Federated States of Micronesia (FSM) and Mauritius.

MOP22: MOP22 took place in Bangkok, Thailand, in November 2010 and adopted decisions on, *inter alia*: the terms of reference for the TEAP study on the MLF replenishment and for the evaluation of the financial mechanism; and assessment of technologies for ODS destruction. Delegates considered, but did not agree to, two proposals to amend the Montreal Protocol to address HFCs, one submitted by the US, Mexico and Canada and another submitted by FSM.

COP9/MOP23: COP9/MOP23 took place in Bali, Indonesia, in November 2011 and adopted decisions on, *inter alia*: a US\$450 million replenishment of the MLF for the 2012-2014 period; issues related to exemptions; updating the nomination process and recusal guidelines for the TEAP; the treatment of ODS to service ships; and additional information on alternatives. Delegates considered, but did not agree to, two proposed amendments to address HFCs, one submitted by the US, Mexico and Canada and the other submitted by FSM.

MOP24: MOP24 took place in Geneva, Switzerland, in November 2012 and adopted decisions on, *inter alia*: the review by the Scientific Assessment Panel (SAP) of RC-316c; procedural issues related to the TEAP and its subsidiary bodies; budget; and data and compliance issues. MOP24 did not reach agreement on a draft decision on clean production of HCFC-22 through by-product emission control or on draft decisions to amend the Montreal Protocol to include HFCs.

INTERSESSIONAL HIGHLIGHTS

OWWG 33: The thirty-third meeting of the Open-ended Working Group (OWWG 33) of the parties to the Montreal Protocol convened in Bangkok, Thailand, from 24-28 June 2013. Delegates considered, *inter alia*: the 2013 Progress Report of the TEAP; exemptions under Articles 2A-2I of the Montreal Protocol; nominations for CUEs for 2014-2015; the handbook on CUNs for methyl bromide; QPS uses of methyl bromide; uses of controlled substances as process agents; the TEAP report on additional information on ODS; organizational issues related to the TEAP; controlled substances used on ships; and the review by the SAP of RC-316c; issues related to funding; and two proposed amendments to the Montreal Protocol. Significant accomplishments included discussion on the organization of the TEAP, and initiation of formal discussions on the financial, legal and technical issues associated with HFC management.

CURRENT ODS CONTROL SCHEDULES: Under the amendments and adjustments to the Montreal Protocol, non-Article 5 parties were required to phase out production and consumption of: halons by 1994; CFCs, CTCs, hydrobromochlorofluorocarbons and methyl chloroform by 1996; bromochloromethane by 2002; and methyl bromide by 2005. Article 5 parties were required to phase out production and consumption of: hydrobromochlorofluorocarbons by 1996; bromochloromethane by 2002; and CFCs, halons and CTC by 2010. Article 5 parties must still phase out production and consumption of methyl chloroform and methyl bromide by 2015. Under the accelerated phase-out of HCFCs adopted at MOP19, HCFC production and consumption by non-Article 5 parties was frozen in 2004 and is to be phased out by 2020, while in Article 5 parties, HCFC production and consumption is to be frozen by 2013 and phased out by 2030 (with interim targets prior to those dates, starting in 2015 for Article 5 parties). There are exemptions to these phase-outs to allow for certain uses that lack feasible alternatives.



MOP-25 HIGHLIGHTS: MONDAY, 21 OCTOBER 2013

The twenty-fifth Meeting of the Parties to the Montreal Protocol (MOP25) opened on Monday, 21 October 2013, in Bangkok, Thailand.

In the morning, delegates heard opening statements, adopted the agenda, agreed on the organization of work and addressed administrative matters. Other topics discussed included nominations for essential-use exemptions (EUEs) and critical-use exemptions (CUEs) for 2014 and 2015 and the handbook on CUNs for methyl bromide.

In the afternoon, delegates discussed uses of controlled substances as process agents, the final report of the TEAP on additional information on ODS, organizational issues related to the TEAP and issues related to funding.

OPENING OF THE PREPARATORY SEGMENT

Chumpon Cheewaprapanunt, Deputy Director-General, Ministry of Industrial Works, Thailand, welcomed parties to the meeting and emphasized the importance of striking a balance between protecting the environment and meeting the needs of the developing world. He said that additional efforts should be made to fully implement decision XIX/6 (selection of alternatives to HCFCs). On the MLF, he urged parties to fund energy efficiency projects under the 2015-2017 replenishment to maximize climate benefits.

Marco González, Executive Secretary, Ozone Secretariat, lauded the international community for creating an instrument that “works,” reaches its goals and targets, and has a high level of compliance. He said that 183 parties have submitted data and are in full compliance of the obligations of the Protocol. He noted that the Ozone Secretariat hoped for full ratification of all amendments in 2013 but five parties have yet to ratify all the amendments. Outlining topics for discussion during the week, he noted that recent statements by the G20 and others provide a solid political setting within which the discussion on the phase-down of HFCs can take place.

ORGANIZATIONAL MATTERS

Preparatory Segment Co-Chair Patrick McInerney (Australia) introduced the provisional agenda (UNEP/OzL.Pro.25/1). GRENADA asked that the item on staffing issues at the Ozone Secretariat be included under other matters.

INDIA, supported by SAUDI ARABIA, KUWAIT, CUBA and LIBYA, called for the agenda item on proposed amendments to the Protocol to be removed and noted that, as HFCs do not fall under the purview of the Montreal Protocol, it is not the correct forum for such a discussion.

The US, with MEXICO, the EU, BURKINA FASO, CANADA, CAMEROON, NIGERIA, TOGO, MOROCCO, KENYA and MOZAMBIQUE, said the proposal has been submitted in good faith and should therefore be discussed. The US expressed frustration that a decision to establish a contact group to discuss the issue has yet to be taken.

Delegates adopted the agenda with Grenada’s proposal.

ADMINISTRATIVE MATTERS

CONSIDERATION OF MEMBERSHIP OF THE MONTREAL PROTOCOL BODIES FOR 2014: Preparatory Segment Co-Chair Javier Camargo (Colombia) introduced the item, requesting that parties finalize their nominations for the Montreal Protocol Bureau for 2014 by Wednesday, 23 October.

FINANCIAL REPORTS OF THE TRUST FUNDS AND BUDGETS FOR THE MONTREAL PROTOCOL: Co-Chair McInerney introduced this item (UNEP/OzL.Pro.25/4 and Add.1). A budget committee chaired by Fiona Walters (UK) and Tumau Faasoina (Samoa) was established to consider this item.

ISSUES RELATED TO EXEMPTIONS FROM ARTICLES 2A–2I OF THE MONTREAL PROTOCOL

EUE NOMINATIONS FOR 2014 AND 2015: Co-Chair Camargo introduced this item, noting the Russian Federation’s nomination of 85 tons of CFC-113 for aerospace uses. On the nomination of 212 tons of CFCs for the manufacture of MDIs, the RUSSIAN FEDERATION expressed their gratitude to the TEAP for recommending that parties approve their nomination.

The TEAP presented a review of additional information on the essential use of CFCs for MDIs by the Russian Federation. Co-Chair Camargo recommended forwarding the draft decision to the High Level Segment (HLS) for further consideration.

On their nomination of 235.05 tons of CFCs for the manufacture of MDIs, CHINA highlighted the need to ensure the supply of medicine and expressed their willingness to take part in discussions on the issue. A contact group was established to further discuss the matter.

CUE NOMINATIONS FOR 2014 AND 2015: Co-Chair Carmargo introduced the item on nominations for CUEs for 2014-2015, inviting the Methyl Bromide Technical Operations Committee (MBTOC) to present their final recommendations.

The MBTOC detailed progress made on phasing out methyl bromide, stating that global consumption has fallen from 64,428 tons in 1991 to 5,187 tons in 2011. She discussed CUEs in strawberry runners, strawberry fruit and dry-cured pork sectors, and reported on the emergency use of methyl bromide at facilities in Canada to control phosphine-resistant pests. She noted that 43 parties reported QPS consumption of 8,600 metric tons of methyl bromide for 2012.



JORDAN said that the Protocol should explore methods to control methyl bromide in QPS uses. AUSTRALIA said that MBTOC recommendations for its CUEs fall short of its requirements, saying that they are considering alternate chemical usage but that in the interim, the full methyl bromide quantity is needed. He noted that they will submit a draft decision to this effect.

CANADA said they would co-sponsor the draft decision, noting significant regulatory and economic barriers to implementing suitable alternatives. He expressed concern that alternative chemicals may have deleterious effects, such as contaminating groundwater.

The US highlighted its intention to phase out methyl bromide use by 2017, but said that in the interim, methyl bromide is still needed. He also expressed concern that the MBTOC provided a recommendation for methyl bromide stock levels in 2016, when it was not requested.

KENYA said that it may seek a CUE for methyl bromide in the future, as there is some resistance to phosphine in the grain industry. SWITZERLAND said that, if Australia were to consider a date for methyl bromide phase out, it would enable parties to look at the CUE figures for 2013 more favorably.

A contact group was established to discuss the matter.

HANDBOOK ON CRITICAL-USE NOMINATIONS FOR METHYL BROMIDE: Co-Chair Camargo opened the floor for discussion on how to finalize the handbook. The EU requested time to ensure that the handbook is correct and questioned whether a formal decision on its finalization is required. The US observed that some issues highlighted during MOP24 and OEWG33 have not been addressed, including the MBTOC's interpretation of economic guidelines. Informal discussions will take place to resolve the matter.

USES OF CONTROLLED SUBSTANCES AS PROCESS AGENTS: Co-Chair Camargo introduced the agenda item, saying that at OEWG33, parties requested the TEAP to clarify whether carbon tetrachloride is used in the manufacture of vinyl chloride monomer. Ian Rae, Chemicals Technical Options Committee, said that it is not used in vinyl chloride monomer production in North America, but is rather a by-product of the manufacturing process. Upon a request from India for further clarification, Rae said that it is possible for it to be used as a feedstock, should the manufacturer choose to do so.

FINAL REPORT BY THE TEAP ON ADDITIONAL INFORMATION ON ALTERNATIVES TO ODS

Co-Chair McInerney, introducing the item, said that a task force had been established at OEWG33 to finalize the report.

The TEAP said the task force had restructured the report to, *inter alia*, be forward looking, address barriers to progress and highlight specific regional issues. On refrigeration and air conditioning, he said that a number of refrigerants have been assessed, underscoring that the report analyzes current refrigerant usage in addition to articulating overarching issues such as training and standards. He also noted that constraints for penetration rates of refrigerants have been set out, saying these are considered despite complex system issues.

The TEAP asserted that the transition to hydrofluoroolefins (HFOs) is conditional on ongoing steps, including chemical registration. On foam opportunities, he added that HFOs are showing significant benefits in thermal conductivity and that methyl formate is being used in niche areas such as vending machines. He added that technical and economic criteria remain challenging. The TEAP also discussed limitations of solvent alternatives to ODS including low water-tolerance and extreme flammability and toxicity.

INDIA asked for clarification on the percentage of HCFCs being replaced by "so-called" high global warming potential (GWP) alternatives. The US requested a regional breakdown

of the penetration rates of HCFC alternatives. The EU noted that efficiency gains through natural refrigerants are not always reflected in the TEAP report. CANADA emphasized the potential reduction in CO₂-equivalent emissions by 2020 through a switch to low GWP alternatives. IRAQ, with CANADA, stressed that there are few alternatives to ODS in countries with high ambient temperatures.

The TEAP said that supermarket chains are relevant opportunities for greening investments, as there are significant opportunities for applying the use of CO₂ in commercial refrigeration. CHINA inquired about issues including: the impact of refrigerant blends on the performance of products and processes; the impact of incremental costs of alternatives and market acceptance; and whether TEAP, in its analysis of obstacles, differentiated between developing and developed countries.

ORGANIZATIONAL ISSUES RELATED TO THE TEAP

Co-Chair McInerney introduced this agenda item.

Operation and organization of the Panel: AUSTRALIA noted that the draft decision was negotiated during OEWG33 and could be forwarded to the HLS.

Status of membership of the Panel and its technical options committees: The US requested additional time to examine the draft decision.

ISSUES RELATED TO FUNDING

Co-Chair Chair McInerney introduced this agenda item.

Additional funding for the MLF for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of HCFCs: CHINA, with NORWAY, welcomed the proposal on voluntary contributions under the MLF. CHINA further cautioned that any funding would need to be managed in an integrated manner.

ARGENTINA, supported by URUGUAY, CHINA, CUBA, and INDIA, stated that the MLF is a great success and that duplication of work should be avoided. The EU noted its commitment to ensuring assistance for Article 5 countries. The US called for creating a contact group.

SWITZERLAND clarified that the proposal does not put any MLF provisions at risk but rather aims to expand the MLF's scope.

Co-Chair McInerney urged parties to undertake informal discussions to reach consensus.

OTHER MATTERS

The EU, on behalf of Croatia, said, following Croatia's accession to the EU, it requests that it be reclassified as an Article 2 country.

IN THE CORRIDORS

Getting swiftly down to work on day one, many delegates welcomed the opportunity to advance concrete outcomes toward ozone layer protection. Some delegates highlighted the effectiveness of the Protocol, arguing that this is the forum "where things really happen." Behind such optimism, however, was a fundamental concern about the proposed amendment regarding the phase down of HFCs, which has been under debate for the last five years. The proposed amendment and its linkages between the UN Framework Convention on Climate Change (UNFCCC) and the Montreal Protocol are also purportedly responsible for bringing "newcomers" to the ozone family, with some attendees confessing that this is their first Montreal Protocol negotiation.

In the corridors though, several veterans voiced what many already knew, that it is unrealistic to expect a formal decision on HFCs at MOP25, where the intention is rather to launch further work on potential alternatives to HFCs. Sending a "strong signal" to the upcoming Conference of the Parties (COP) to the UNFCCC was also mooted as a potentially satisfactory outcome from MOP25.



MOP-25 HIGHLIGHTS: TUESDAY, 22 OCTOBER 2013

MOP25 reconvened for its second day of deliberations on Tuesday, 22 October 2013, in Bangkok, Thailand.

In the morning, delegates discussed funding of production facilities for HCFCs and the terms of reference for the study on the MLF replenishment for 2015-2017. They also discussed: implementation of the Protocol with regard to SIDS; harmonizing and validating the MLF climate impact indicator; and proposed amendments to the Protocol. A contact group on the funding of production facilities for HCFCs met during lunch, followed by a meeting of the budget committee.

In the afternoon, plenary reconvened to conclude discussions on the proposed amendments to the Protocol, hear a report from the Implementation Committee (ImpCom) on compliance and data reporting issues and discuss staffing issues at the Ozone Secretariat and the reclassification of Croatia to an Article 2 country. They also reviewed a draft decision on the final report by the TEAP on additional information on ODS alternatives. Contact groups met in the evening on the terms of reference for the study on the MLF replenishment for 2015-2017, and on the implementation of the Protocol with regard to SIDS.

ISSUES RELATED TO FUNDING

FUNDING OF PRODUCTION FACILITIES FOR HCFCs: Co-Chair Camargo introduced the item on the funding of production facilities for HCFCs. INDIA recalled decision XIX/6 (adjustments to the Montreal Protocol with regard to HCFCs), which decides that MLF funding shall be stable and sufficient for Article 5 countries to meet the incremental costs of complying with the accelerated phase-out schedule for HCFCs. With ARGENTINA, he said that a decision has been submitted confirming the intent of decision XIX/6 and urges the MLF Executive Committee (ExCo) to, *inter alia*, finalize and approve the funding of HCFC production facilities; and consider any proactive regulatory actions taken by parties to restrict HCFC production ahead of the scheduled phase-out.

CANADA, with AUSTRALIA, opposed India's interpretation of decision XIX/6, and, with CHINA, the US and the EU, called for establishing a contact group, to which delegates agreed.

TERMS OF REFERENCE FOR THE STUDY ON THE 2015-2017 REPLENISHMENT OF THE MLF: Co-Chair

McInerney introduced the item, saying that it will be referred to a contact group for further consideration.

IMPLEMENTATION OF THE MONTREAL PROTOCOL WITH REGARD TO SIDS

Co-Chair Camargo introduced this item. BRAZIL, supported by INDIA, said that approval of the draft decision on the implementation of the Montreal Protocol with regard to SIDS would set a "dangerous" precedent by expanding the mandate of the Protocol, stating that the Protocol itself has a very specific mandate: the phase-out of ODS.

SAINT LUCIA, supported by COOK ISLANDS, SAMOA and TRINIDAD AND TOBAGO, expressed hope that, through further discussion in a contact group, an agreement could be reached in order to forward the draft decision to the HLS.

CANADA highlighted the precedent of the Montreal Protocol liaising with other secretariats, for example, with the IPCC on methyl bromide QPS issues. AUSTRALIA acknowledged the special case of SIDS and, along with the US, said the draft decision could benefit from discussion in a contact group, to which parties eventually agreed.

HARMONIZATION AND VALIDATION OF THE MLF CLIMATE IMPACT INDICATOR

Co-Chair Camargo introduced this agenda item. URUGUAY reported that it was still consulting on this issue. Parties agreed to return to this topic at a later stage.

PROPOSED AMENDMENTS TO THE MONTREAL PROTOCOL

Co-Chair McInerney introduced this item. The US, for CANADA and MEXICO, highlighted their proposal to phase down the production and consumption of HFCs. He observed that: as HFCs are replacements for HCFCs and CFCs, they could be discussed under the Montreal Protocol; the Protocol has a track record of success; and it is the only instrument with universal ratification. He noted that it was clear that HFCs would continue to be included under the UNFCCC and Kyoto Protocol for the purposes of the accounting and reporting of emissions and supported establishing a contact group to consider the proposal.

The ensuing debate focused on whether or not to establish a contact group to consider the amendments proposed by the US, Canada, Mexico and the Federated States of Micronesia. JAPAN, Ethiopia, for the AFRICAN GROUP, MACEDONIA, with ALBANIA, BOSNIA, and others, the EU, BANGLADESH, SAMOA, COOK ISLANDS, TRINIDAD



AND TOBAGO, CÔTE D'IVOIRE and AUSTRALIA called for establishing a contact group. NORWAY proposed considering the amendments in a more systematic manner by assessing the cost implications of the proposals as well as the environmental benefits, suggesting that the TEAP take up this work. SAINT LUCIA said that a contact group would be able to thoroughly investigate the issues surrounding the proposals. MEXICO, with the US and CANADA, clarified that a contact group to discuss the proposed amendments would not necessarily result in the negotiation or adoption of amendments, but would serve to resolve questions and uncertainties surrounding the proposals.

The DOMINICAN REPUBLIC inquired about potential substitutes for HFCs and emphasized the need to discuss the economic aspects of alternatives to HFCs. MALAYSIA called for more time to consider the proposed amendments without establishing a contact group and drew attention to the lack of proven alternatives, particularly for high ambient temperature countries. She further noted that the high cost of conversion to new alternatives would impact industries and economies. FIJI said that the amendments could not be considered until economically- and technically-feasible alternatives to HFCs are available.

SAUDI ARABIA, KUWAIT, BAHRAIN, IRAN, VENEZUELA, OMAN, ARGENTINA, BRAZIL, LIBYA, INDONESIA, the UNITED ARAB EMIRATES (UAE) and CHINA opposed establishing a contact group. CUBA and INDIA said that as HFCs are greenhouse gases and not ODS they do not fall under the remit of the Montreal Protocol.

SOUTH AFRICA questioned whether the amendment would imply exclusion of HFCs under the UNFCCC, given that the Montreal Protocol should not overstep the UNFCCC's mandate. He also noted the need to clarify how Article 5 countries would be assisted. With respect to HFCs, he said that if legally binding targets are accepted under the Montreal Protocol, new sources of funding and technological alternatives must be clearly identified.

Co-Chair McInerney said discussions among the Co-Chairs, the Executive Secretary and interested parties would take place to decide on a way forward.

COMPLIANCE AND DATA REPORTING ISSUES

Co-Chair Camargo invited the ImpCom to present their report. ImpCom President Janusz Kozakiewicz (Poland) provided information on non-compliance issues for three countries: Azerbaijan on HCFC phase-out; France on HCFC production control measures; and Kazakhstan on excess HCFC and methyl bromide consumption. He said that 188 of 197 parties have reported production and consumption data for 2012, representing 95% of parties, and urged that the nine outstanding national reports be submitted as soon as possible. On licensing systems, he requested that Botswana and South Sudan establish systems consistent with Article 4b (licensing the import and export of new, used, recycled and reclaimed controlled substances).

KAZAKHSTAN assured parties that it will ratify the Beijing Amendment before the end of 2013 and provide a response to its excess HCFC and methyl bromide consumption before March 2014. YEMEN said the security situation in her country has hindered data gathering and reporting. JORDAN and KUWAIT assured parties that their data would be reported during the week.

Co-Chair Camargo forwarded the recommendations of the ImpCom to the HLS for further consideration.

OTHER MATTERS

Co-Chair McInerney, introducing the agenda item on other matters, recalled that during the adoption of the agenda, Grenada requested discussion on staffing changes at the Ozone Secretariat and that the EU, on behalf of Croatia, had submitted a proposal for Croatia to be listed as an Article 2 country.

STAFFING CHANGES AT THE OZONE SECRETARIAT: On staffing changes, GRENADA highlighted the need to address several staff member vacancies, including that of the Executive Secretary. He expressed willingness to assist in developing the Secretariat's work plan for 2014 and to consider the need to address these vacancies.

Co-Chair McInerney opened the floor for comments, with several parties commending the work of the Secretariat and Marco González's commitment to advance the ozone agenda effectively. SWITZERLAND highlighted, amongst others, the need to define when the next Executive Secretary will take office. Parties decided to establish a small informal group to further consider these matters.

REQUEST BY CROATIA TO BE REMOVED FROM THE LIST OF DEVELOPING COUNTRIES UNDER THE MONTREAL PROTOCOL: The EU, on behalf of Croatia, introduced a draft decision (UNEP/OzL.Pro.25/CRP.6) requesting Croatia's reclassification from an Article 5 country to an Article 2 country. The draft decision was forwarded to the HLS for consideration.

FINAL REPORT BY THE TEAP ON ADDITIONAL INFORMATION ON ALTERNATIVES TO ODS

The EU introduced its draft decision (UNEP/OzL.Pro.25/CRP.4) on additional information in view of addressing HFCs, which requests that the TEAP establish a temporary subsidiary body to assess and prepare a report for consideration by OEWG34 on, *inter alia*, the economic costs and benefits of various scenarios for the global phase-down of the production and consumption of HFCs. He expressed hope that the draft decision will be discussed in a contact group. BRAZIL noted that several of their concerns had been addressed in the draft decision. INDIA requested more time for consideration.

IN THE CORRIDORS

On Tuesday, delegates devoted extensive time and energy to the proposed amendments for HFC phase-down. The debate, however, offered no surprises. Parties remained entrenched in their positions and there was no indication that either side might warm to a compromise. Many wondered how the impasse could be overcome. Some parties maintained that the Montreal Protocol was not the appropriate forum for addressing the issue since HFCs are not ODS; others observed that as CFC and HCFC phase-out has resulted in a proliferation of HFCs, the Protocol was indeed the correct forum to deal with this topic. The former preferred to continue considering the issue informally, as had happened at OEWG33.

"You can see where they are coming from, with so much uncertainty about alternatives and the cost," said one observer. However, other delegates treated the proposals with suspicion, saying that the willingness on the part of some parties to advance HFCs under the Montreal Protocol is to make up for inaction under the UNFCCC.



MOP25 HIGHLIGHTS:

WEDNESDAY, 23 OCTOBER 2013

MOP25 reconvened for its third day on Wednesday, 23 October 2013, in Bangkok, Thailand.

Following an early morning contact group on the terms of reference (TOR) for the 2015-2017 MLF replenishment, plenary resumed to hear updates on informal and contact group discussions regarding: additional funding for the MLF to maximize the climate benefit of the accelerated phase-out of HCFCs; the TOR for the 2015-2017 MLF replenishment; staffing issues at the Secretariat; CUE nominations for 2014 and 2015; the handbook on CUNs for methyl bromide; the final TEAP report on additional information on ODS alternatives; and proposed amendments to the Protocol.

Contact and discussion groups met throughout the afternoon and evening to discuss, *inter alia*: the proposed amendments to the Protocol; staffing issues; HCFC production facilities funding; additional MLF funding for maximizing the climate benefits of the accelerated phase-out of HCFCs; alternatives to ODS; and the TOR for the 2015-2017 MLF replenishment. Plenary reconvened in the evening to hear report backs on these deliberations.

Delegates agreed to forward two decisions to the HLS for consideration: the implementation of the Protocol with regard to SIDS; and EUE nominations for 2014 and 2015.

PLENARY

Plenary convened in the morning and evening to address outstanding agenda items.

ISSUES RELATED TO EXEMPTIONS FROM ARTICLES 2A–2I OF THE MONTREAL PROTOCOL:

EUE Nominations for 2014 and 2015: The RUSSIAN FEDERATION noted that a consensus on the draft decision (UNEP/OzL.Pro.25/CRP.5) had been reached. It was forwarded to the HLS for further consideration.

CUE Nominations for 2014 and 2015: AUSTRALIA reported that while the group had met informally, further time was needed to reach an agreement.

Handbook on CUNs for Methyl Bromide: The EU noted that more time was needed to assess if the MBTOC had incorporated all the concerns raised by parties. He also reiterated that the process for finalizing the handbook should be as informal as possible.

FINAL REPORT BY THE TEAP ON ADDITIONAL INFORMATION ON ALTERNATIVES TO ODS: Co-Chair McInerney introduced this item in the morning, saying

that a draft decision had been forwarded from OEWG33. He also recalled the EU proposal (UNEP/OzL.Pro.25/CRP.4) introduced on Tuesday, 22 October, as a potential compromise. INDIA, with CUBA and SAUDI ARABIA, said that they did not consider the Montreal Protocol to be the correct forum in which to consider the EU's proposal. NEW ZEALAND, MACEDONIA, for the REGIONAL OZONE NETWORK FOR EUROPE AND CENTRAL ASIA, NORWAY, SWITZERLAND, TRINIDAD AND TOBAGO, CAMEROON, AUSTRALIA and the FEDERATED STATES OF MICRONESIA reiterated their support for further work to take place in a contact group.

MALAYSIA, with INDIA, SAUDI ARABIA, KUWAIT, BRAZIL and CUBA preferred to not establish a contact group for considering the EU proposal in a formal setting.

SWITZERLAND noted that the EU proposal complements the draft decision from OEWG33, and would provide the TEAP with a clear mandate to obtain information that is lacking. AUSTRALIA added that the decision would allow a more informed discussion on HFCs. The US observed that, while the draft decision has no bearing on the proposed amendments, the two issues are inextricably linked. He underscored that parties had requested more information on ODS alternatives during discussions on proposed amendments to the Protocol.

Co-Chair McInerney said that the way forward would not satisfy all parties and called for a discussion on information needs.

INDIA said they are prepared to request the TEAP to provide an update on ODS alternatives, but not on HFCs. He said that only after developed countries phase out "so-called" high-GWP HFCs domestically should they return to talking about low-GWP alternatives in the Montreal Protocol. Noting that no realistic low-GWP alternatives are available, he said he could not agree to a discussion on the EU proposal.

Co-Chair McInerney urged delegates to exercise flexibility and said that as a starting point, parties could address the draft decision that was forwarded by OEWG33.

ISSUES RELATED TO FUNDING: Additional MLF Funding for Implementing the Montreal Protocol to Maximize the Climate Benefit of the Accelerated Phase-Out of HCFCs: CANADA reported that discussions during the contact group had focused on the purpose and objective of the proposal. Delegates also addressed the first paragraph of the decision. Additional time was requested to conclude deliberations.



Funding of Production Facilities for HCFCs: NORWAY said that parties were not able to reach an agreement. INDIA said that the lack of clarity on funding rules impinged on concrete action.

TOR for the Study on the 2015–2017 Replenishment of the MLF: TRINIDAD AND TOBAGO, as co-convenor of the contact group, said that although the group has met a number of times, additional time is needed to reach an agreement.

IMPLEMENTATION OF THE MONTREAL PROTOCOL WITH REGARD TO SIDS: In the morning, BOSNIA AND HERZEGOVINA, as co-conveners, reported that in the previous evening's discussion, consensus had been reached. The draft decision (UNEP/OzL.Pro.25/CRP.7) was forwarded to the HLS.

In the evening, Co-Chair Camargo highlighted a non-substantive revision to the draft decision. INDIA intervened saying that it could not agree to the decision being forwarded to the HLS due to a lack of clarity on the draft decision as his delegation had been unable to attend contact group discussions on the matter. SAINT LUCIA, US, the EU, NIGERIA, BRAZIL, AUSTRALIA, CANADA and others objected arguing that the "un-approval" of the draft decision meant a "process breakdown." AUSTRALIA highlighted that when parties are unable to join the discussions for various reasons, they must abide by the deliberations that have taken place in their absence. Following several interventions requesting the approval of this item, Co-Chair Camargo informed delegates that the decision would be forwarded to the HLS for consideration.

PROPOSED AMENDMENTS TO THE MONTREAL PROTOCOL: Co-Chair McInerney observed that parties had expressed a desire to move forward on this item and noted concerns regarding both the forum in and speed at which the item should be considered. He said that during OEWG33, a discussion group was formed, which was highly valued by participants and seen as constructive way to look at HFCs and provided an opportunity to unpack the issues. McInerney proposed re-forming the discussion group, which he said would consider outcomes from recent international fora, meet over the course of the next few days and report back to plenary, including on options to progress discussions in 2014. He said the outcomes of discussions would be reflected in the MOP25 meeting report.

OTHER MATTERS: Staffing Changes at the Ozone Secretariat: In the morning, Co-Chair McInerney asked the Ozone Secretariat to provide information on staffing. Marco González, Executive Secretary, said that Tina Birbili (Greece) will take up the position of Executive Secretary in November. SWITZERLAND asked for information on an appointment for the post of deputy Executive Secretary. González responded that the internal review process is complete and the final decision will be made by the UNEP Executive Director by the end of the year.

Reporting back on the contact group during afternoon plenary, DENMARK noted that while there was a perception that the Secretariat did not need further assistance on staffing, the group was unable to take a decision on this matter as Grenada, the proponent of the matter, was not able to attend the contact group discussion.

DISCUSSION AND CONTACT GROUPS

MANAGEMENT OF HFCS: Co-Facilitator Gudi Alkemade (the Netherlands) opened the meeting, highlighting the group's

mandate to discuss how to progress on the technical, financial and legal aspects of HFCs management. She invited parties to first consider how to make progress on the technical components of the management of HFCs.

On high-density populations and urban areas, the US mentioned the work of the International Organization for Standardization (ISO) and other standard setting bodies and stressed the importance of safe alternatives. The EU called for focusing on, *inter alia*: the availability of alternatives for refrigerants; emission reduction by containment measures; and maintenance, skilled installation and training. He also highlighted the utility of district cooling in urban areas. INDIA noted that district cooling is not a priority in regions where basic needs have yet to be met.

On high ambient temperatures regions, CHINA supported further work by the TEAP on low-GWP alternatives. She highlighted hydrocarbon as a refrigerant which performed well, but noted differing opinions on this technology and the need to address service sector challenges. She emphasized that for high ambient temperature regions, hydrocarbon is viable, but only with a recognized standard. The US observed that high-GWP HFCs are less efficient in high ambient temperatures. CANADA supported China on international standards regarding the use of refrigerants, observing that barriers need to be addressed and further work is required.

The US presented a US Environmental Protection Agency preliminary analysis on reducing HFC consumption in the US, noting that there are many low-GWP alternatives. He added that the very act of amending the Protocol *vis-à-vis* HFCs would send a signal to the market that the world wants climate-friendly technologies.

ADDITIONAL MLF FUNDING FOR IMPLEMENTING THE MONTREAL PROTOCOL TO MAXIMIZE THE CLIMATE BENEFIT OF THE ACCELERATED PHASE-OUT OF HCFCs CONTACT GROUP: The contact group met to discuss the draft decision forwarded by OEWG33. Discussions focused on: how the decision might mobilize additional funding for the MLF; the length of the trial period; and the original TOR of the MLF.

IN THE CORRIDORS

On the final day of the preparatory segment, fatigue was beginning to set in and deliberations in contact groups and informal sessions proceeded slowly, some behind closed doors.

Consideration of amendments to the Montreal Protocol in the context of phasing down HFCs was "watered-down" into a discussion group debate of technical aspects related to HFCs management and the way forward. Hence, the prospect of an amendment in the near future began to look increasingly elusive for its supporters.

The impression of a "slow rhythm" was reinforced in the evening plenary, when some parties requested that the SIDS decision be reopened due to the "lack of substantive clarity." Widespread expressions of disapproval were voiced as delegation after delegation stated their dismay at the blatant flouting of procedure. The decision was finally forwarded to the HLS, but many were left reflecting on whether true progress could really be made following the episode that had aggravated mistrust and suggested some parties are employing delaying tactics during negotiations.



MOP25 HIGHLIGHTS: THURSDAY, 24 OCTOBER 2013

MOP25 convened for the first day of the HLS on Thursday, 24 October, in Bangkok, Thailand.

Following opening statements from dignitaries, delegates heard reports on: the status of ratification; the work of the assessment panels; and the MLF. Delegates heard national statements during the morning and afternoon plenary sessions. Contact and discussion groups met to discuss: additional information on ODS alternatives; TOR for the study on the MLF replenishment for 2015-2017; additional funding for the MLF to maximize the climate benefit of the accelerated phase-out of HCFCs; and HFCs management.

In the evening, delegates attended a dinner hosted by the Government of Thailand.

HIGH-LEVEL SEGMENT

MOP24 President Raja Hassan Abbas (Pakistan) opened proceedings, lauding parties for their commitment to implementing the Protocol. Noting challenges ahead, including the need for additional information on ODS alternatives, he cautioned against “derailing” the protection of the ozone layer by failing to reach consensus.

Marco González, Executive Secretary, highlighted the Montreal Protocol as an exemplary model of good governance. He discussed work on phasing out HCFCs, saying this presents both challenges and opportunities and urged delegates to continue striving towards new ways to protect the ozone layer.

Prasert Boonchaisuk, Minister of Industry, Thailand, urged parties to bear the challenges and needs of developing nations in mind during their deliberations and underscored the economic and technological barriers to successful implementation of the Montreal Protocol.

ORGANIZATIONAL MATTERS: MOP25 elected, by acclamation, Oleksandr Sushko (Ukraine) as MOP25 President. They also elected Harry Kalaba (Zambia), Itabo Cordoba (El Salvador) and Malcolm McKee (New Zealand) as Vice Presidents. Juan Miguel Cuna (the Philippines) was elected as Rapporteur. Delegates adopted the agenda without amendment.

On the credentials of representatives, Sushko asked delegations to finalize their submissions in order to allow the Secretariat to announce them as scheduled.

STATUS OF RATIFICATION OF THE VIENNA CONVENTION FOR THE PROTECTION OF THE OZONE LAYER, THE MONTREAL PROTOCOL AND THE AMENDMENTS TO THE MONTREAL PROTOCOL:

Sushko congratulated new members that have ratified the Montreal Protocol and its amendments, including: Kazakhstan (Beijing Amendment); Mauritania (Beijing Amendment); Libya (Montreal and Beijing Amendments); and Saudi Arabia (Montreal and Beijing Amendments).

PRESENTATIONS BY THE ASSESSMENT PANELS ON THE STATUS OF THEIR WORK, INCLUDING THE LATEST DEVELOPMENTS: The three panels provided updates on work undertaken in preparation for their 2014 Quadrennial Assessment Reports.

SAP: Ayité-Lô Ajavon (Togo) said that the aim of the report is to improve information availability to enhance decision-making. He said that the publication is expected to be ready in June 2014, and highlighted the main chapters featured in the report, including updates on, *inter alia*, ODS and the current state of the global and polar ozone layers. He also noted chapters on stratospheric ozone changes and climate; and a projection of scenarios, information, and options for policymakers.

EEAP: Nigel Paul (UK) reported on the EEAP’s progress toward completing its quadrennial assessment report, scheduled for release in 2014. He said that it will consider key issues, including the effects that changes in UV radiation and ozone depletion have on: physical, biological and environmental processes; human health; crops and terrestrial ecosystems; aquatic ecosystems; global chemical cycling; tropospheric chemistry and air quality; and materials.

TEAP: Bella Maranion (US) reported on activities leading up to the TEAP 2014 assessment report, including the work of its six TOCs. Regarding methyl bromide phase-out, she explained that Article 5 parties have had difficulty adopting alternatives due to economic challenges. Similarly, technical, regulatory and economic issues persist among non-Article 5 countries in the strawberry nursery and fruit sectors.

PRESENTATION BY MLF: Fiona Walters (UK) shared the MLF’s achievements and future work plans including, *inter alia*: HCFC phase-out management plans (HPMPs); HCFC production sector guidelines; HCFC phase-out in China; contributions to the MLF; and the climate impact indicator for ODS phase-out.

STATEMENTS BY HEADS OF DELEGATION: ZIMBABWE said that with HCFC phase-out still in a preliminary stage, developing countries will need continued funding and financial and technical support for refrigeration and air conditioning. CHINA expressed willingness to work with the international community to agree on a multilateral solution to phase down HFCs.



Acknowledging the need to address the availability of alternatives to HFCs, the US observed that parties in the past have not allowed uncertainty to prevent them from taking action. MOZAMBIQUE called for technology transfer, the provision of economic incentives and ongoing knowledge sharing between stakeholders to further the implementation of the Protocol. SOLOMON ISLANDS called for a representative from SIDS to be included in the composition of the ExCo.

BAHRAIN said it has passed a national law encompassing all ODS, established a quota system and initiated steps to implement its HPMP, which is consistent with the phase-out schedule. He urged parties not to adopt the HFC-related amendment until more information is made available. The PHILIPPINES said it is implementing its HPMP and addressing challenges, including: the illegal trade in ODS; the disposal of its ODS stockpile; and the continued use of HCFC-141b as a flushing agent.

INDONESIA reported that it had successfully met the objectives to phase-out CFCs, Halons, CTC, methyl chloroform and methyl bromide for non-QPS uses and requested clearer information on the legal implications of HFC phase-down. BURKINA FASO stressed the importance of further involving developing countries in the Montreal Protocol community and stated that the ozone agenda cannot be perceived as an issue only for “rich” countries. SOUTH AFRICA called for approaching the proposal to phase down HFCs with caution.

KENYA urged efficient use of MLF resources to ensure compliance with the Protocol and supported continued capacity building for Article 5 countries. SAUDI ARABIA mentioned its recent ratification of the Beijing Amendment, and said that as HFCs are not ozone depleting, they should fall within the ambit of the UNFCCC.

BANGLADESH said that public-private partnerships have enabled it to be successful in meeting its HCFC phase-out targets. COOK ISLANDS requested that the Montreal Protocol conduct an assessment study on the development costs of: ODS phase-out; and replacement technologies that are ozone- and climate-friendly as well as energy efficient. He further requested the Montreal Protocol to take into account the costs of safe disposal of replaced ODS for SIDS and the Pacific Islands.

The EU noted plans to phase down HFCs in the region and said that this would encourage the development of low-GWP alternatives. He called on parties to provide markets with the correct incentives to hasten this process.

REPUBLIC OF CONGO recalled successful domestic actions funded by the MLF that were crucial to compliance with the Montreal Protocol’s obligations. DEMOCRATIC PEOPLES’ REPUBLIC OF KOREA reported that it had already implemented 26 projects responsible for the phase out of CTCs and CFCs. She regretted, however, the delayed approval of its HPMP project by the MLF.

COSTA RICA highlighted the need for improved coordination between the Montreal Protocol and the Kyoto Protocol and stressed that it is working toward becoming the first carbon-neutral country in the world by 2021.

FIJI cautioned against switching to new technologies “too fast and too early” as they are not always adequate. SIERRA LEONE highlighted their successful phase out of CFCs by 2010 and requested additional funding to mitigate ODS that maximize climate benefits.

The DOMINICAN REPUBLIC argued that phasing out ODS is fundamental to coping with the threat of climate change. BRAZIL said that developed countries would need to channel additional resources through the MLF to ensure the successful

phase down of HCFCs in developing countries. The MALDIVES noted her country’s extreme vulnerability to sea level rise and said that it is imperative that the Protocol addresses HFCs, “a side effect of the Montreal Protocol.” TRINIDAD AND TOBAGO said that parties should address ODS phase-out in a way so as not to affect the climate system.

DISCUSSION GROUP ON HFC MANAGEMENT

The group met in the morning and afternoon to continue discussions on the technical, financial and legal aspects of HFCs management.

On financial aspects, CHINA highlighted concerns with the policies and procedures of the MLF, saying that they may need to be reconsidered. INDIA observed that full funding is required for HFC phase-down, as industry will not agree to phase down HFC consumption and production if compensation is provided on an incremental cost basis.

The US acknowledged concerns on the adequacy of funding under the MLF, stating that replenishment negotiations are by their nature contentious. He observed that the current contribution of HFCs to global warming is relatively small but growing rapidly, which could significantly offset progress made in other areas of climate mitigation. He maintained that it would be useful to request the TEAP to prepare an assessment of finance required for HFC phase-down.

On legal issues, the US, citing the Vienna Convention as a basis for phasing down HFCs, pointed out that: the proposed amendment supports the climate change regime; the Rio+20 outcome document endorses a gradual phase down of the consumption and production of HFCs; and that G20 leaders have found a way forward for phasing down HFCs under the Montreal Protocol.

The EU stressed that political will is required for phasing down HFCs. He said more time is needed to move the debate forward, including through workshops and additional sessions of the OEWG in the near future. CHINA said legal issues are crucial and need to be resolved. She also asserted that the UNFCCC and Kyoto Protocol should send a clear message to the Montreal Protocol on HFCs. MEXICO proposed a joint Montreal Protocol/UNFCCC working group to consider cross-cutting issues.

IN THE CORRIDORS

The HLS opened Thursday with a traditional Thai dance performance. Despite the beauty and precision of the dancers’ movements, parties continued to step on one another’s toes during negotiations. As delegations vaunted their successful ODS phase-out strategies, several used the opportunity not only to spotlight the concrete contributions of the MLF, but also to reiterate their reservations on the “fast” and “inappropriate” advancement of the proposed amendments to the Montreal Protocol.

Many echoed the need for new and additional funding for the MLF, particularly since the agreement on the accelerated phase out of HCFCs in Article 5 countries. Some underscored that if parties are struggling to agree on HPMP funding, there is a long road ahead for financing of HFCs to be agreed upon. This was echoed by one delegate, saying that HFC phase-down will have to be fully funded, as there is no incentive for industry to take action otherwise.

ENB SUMMARY AND ANALYSIS: The Earth Negotiations Bulletin summary and analysis of MOP25 will be available on Monday, 28 October 2013, online at: <http://www.iisd.ca/ozone/mop25/>



SUMMARY OF THE TWENTY-FIFTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER: 21-25 OCTOBER 2013

The twenty-fifth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP 25) took place in Bangkok, Thailand, from 21-25 October 2013. Over 560 participants attended the meeting, representing governments, UN agencies, intergovernmental and non-governmental organizations, academia, industry and the agricultural sector.

The preparatory segment took place from Monday to Wednesday, 21-23 October. The high-level segment (HLS), convened on Thursday and Friday, 24-25 October. The preparatory segment considered a number of substantive items as well as considered draft proposals forwarded by the Open-Ended Working Group (OEWG) at its thirty-third meeting in June 2013. The HLS adopted the decisions forwarded to it by the preparatory segment. Since the preparatory segment did not conclude its work by Wednesday, it reconvened several times in parallel to the HLS to complete discussions on outstanding agenda items.

MOP 25 adopted 12 substantive and nine procedural decisions. Substantive decisions adopted include: terms of reference for the study of the 2015-2017 multilateral fund (MLF) replenishment; the implementation of the Montreal Protocol with regard to small island developing states (SIDS); and a Technology and Economic Assessment Panel (TEAP) report on alternatives to ozone depleting substances (ODS). Procedural decisions adopted include: budget; organizational issues related to the TEAP; and membership of Montreal Protocol bodies for 2014.

MOP 25 did not conclude discussions on the Montreal Protocol amendment proposals, additional funding for the MLF for the implementation of the Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons (HCFCs); and the harmonization and validation of the climate impact fund.

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 first arose 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) radiation 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.

VIENNA CONVENTION: Negotiations on an international agreement to protect the ozone layer were launched in 1981 under the auspices of the UN Environment Programme. In March 1985 the Vienna Convention for the Protection of the Ozone Layer was adopted. It called for cooperation on monitoring, research and data exchange, but did not impose obligations to reduce the use of ODS. The Convention now has 197 parties, which represents universal ratification.

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 ODS use before taking on commitments. The Protocol currently has 197 parties.

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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 they enter into force, while adjustments enter into force automatically.

LONDON AMENDMENT AND ADJUSTMENTS:

Delegates to MOP 2, which took place in London, UK, in 1990, tightened control schedules and added ten more CFCs to the list of ODS, as well as carbon tetrachloride (CTC) and methyl chloroform. To date, 197 parties have ratified the London Amendment. MOP 2 also established the MLF, which meets the incremental costs incurred by Article 5 parties in implementing the Protocol's control measures and finances clearinghouse functions. The Fund is replenished every three years and has received pledges of over US\$3.11 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, hydrobromofluorocarbons and hydrochlorofluorocarbons (HCFCs). MOP4 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, 197 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, 194 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, additional controls on HCFCs, and to reporting on methyl bromide for quarantine and pre-shipment applications. At present, 192 parties have ratified the Beijing Amendment.

MOP 15 AND FIRST EXTRAORDINARY MOP: MOP 15, held in Nairobi, Kenya, in 2003, resulted in decisions on 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 were available. Delegates could not reach agreement and took the unprecedented step of calling for an "extraordinary" MOP. The first Extraordinary Meeting of the Parties to the Montreal Protocol (ExMOP 1) took place in March 2004, in Montreal, Canada. Parties agreed to critical-use exemptions (CUEs) for methyl bromide for 2005 and introduced the "double-cap" concept distinguishing between old and new production of methyl bromide as a compromise.

MOP 16 AND EXMOP 2: MOP 16 took place in Prague, Czech Republic, in 2004. Work on methyl bromide exemptions for 2006 was not completed and parties decided to hold a second ExMOP. ExMOP 2 was held in July 2005, in Montreal, Canada. Parties agreed to supplementary levels of CUEs for 2006.

Parties also agreed, *inter alia*, that: CUEs allocated domestically that exceed levels permitted by the MOP must be drawn from existing stocks; and methyl bromide stocks must be reported.

COP 7/MOP 17: MOP 17 was held jointly with the seventh Conference of the Parties to the Vienna Convention (COP 7) in Dakar, Senegal, in 2005. Parties approved essential-use exemptions for 2006 and 2007, supplemental CUEs for 2006 and CUEs for 2007, and production and consumption of methyl bromide in non-Article 5 parties for laboratory and analytical critical uses. Other decisions included a US\$470.4 million replenishment of the MLF for 2006-2008, and agreement on terms of reference for a feasibility study on developing a monitoring system for the transboundary movement of controlled ODS.

MOP 18: MOP 18 took place in New Delhi, India, in 2006. Parties adopted decisions on, *inter alia*: future work following the Ozone Secretariat's workshop on the Special Report of the Intergovernmental Panel on Climate Change (IPCC) and the TEAP; difficulties faced by some Article 5 parties manufacturing CFC-based metered-dose inhalers (MDIs); treatment of stockpiled ODS relative to compliance; and a feasibility study on developing a system for monitoring the transboundary movement of ODS.

MOP 19: MOP 19 took place in Montreal, Canada, in 2007. Delegates adopted decisions on: an accelerated phase-out of HCFCs; critical-use nominations for methyl bromide; and monitoring transboundary movements of, and illegal trade in, ODS. Parties also adopted an adjustment accelerating the phase-out of HCFCs.

COP 8/MOP 20: MOP 20 was held jointly with COP 8 of the Vienna Convention in Doha, Qatar in 2008. Parties agreed to replenish the MLF with US\$490 million for 2009-2011 and adopted other decisions, including: the environmentally sound disposal of ODS; approval of 2009 and 2010 CUEs for methyl bromide; and compliance and reporting issues.

MOP 21: MOP 21 took place in Port Ghalib, Egypt, in 2009 and adopted decisions on: alternatives to HCFCs; institutional strengthening; essential uses; environmentally sound management of ODS banks; methyl bromide; and data and compliance issues. Delegates considered, but did not agree to, a proposal to amend the Montreal Protocol to include hydrofluorocarbons (HFCs) submitted by the Federated States of Micronesia (FSM) and Mauritius.

MOP 22: MOP 22 took place in Bangkok, Thailand, in 2010 and adopted decisions on, *inter alia*: the terms of reference for the TEAP study on the MLF replenishment and for the evaluation of the financial mechanism; and assessment of technologies for ODS destruction. Delegates considered, but did not agree to, two proposals to amend the Montreal Protocol to address HFCs, one submitted by the US, Mexico and Canada and another submitted by FSM.

COP 9/MOP 23: COP 9/MOP 23 took place in Bali, Indonesia in 2011 and adopted decisions on, *inter alia*, a US\$450 million replenishment of the MLF for the 2012-2014 period; issues related to exemptions; updating the nomination process and recusal guidelines for the TEAP; the treatment of ODS to service ships; and additional information on alternatives. Delegates also discussed the two proposed amendments to the Protocol to address HFCs, but no agreement was reached.

MOP 24: MOP 24 took place in Geneva, Switzerland, in 2012 and adopted decisions on, *inter alia*, the review by the Scientific Assessment Panel of RC-316c; procedural issues related to the TEAP and its subsidiary bodies; and data and compliance issues. MOP 24 did not reach agreement on two draft decisions: the clean production of HCFC-22 through by-product emission control; and amendment of the Protocol to include HFCs.

CURRENT ODS CONTROL SCHEDULES: Under the amendments and adjustments to the Montreal Protocol, non-Article 5 parties were required to phase out production and consumption of: halons by 1994; CFCs, CTCs, hydrobromochlorofluorocarbons and methyl chloroform by 1996; bromochloromethane by 2002; and methyl bromide by 2005. Article 5 parties were required to phase out production and consumption of: hydrobromochlorofluorocarbons by 1996; bromochloromethane by 2002; and CFCs, halons and CTC by 2010. Article 5 parties must still phase out production and consumption of methyl chloroform and methyl bromide by 2015. Under the accelerated phase-out of HCFCs adopted at MOP 19, HCFC production and consumption by non-Article 5 parties was frozen in 2004 and is to be phased out by 2020, while in Article 5 parties, HCFC production and consumption is to be frozen by 2013 and phased out by 2030 (with interim targets prior to those dates, starting in 2015 for Article 5 parties). There are exemptions to these phase-outs to allow for certain uses that lack feasible alternatives.

MOP 25 REPORT

PREPARATORY SEGMENT

On Monday morning, Chumpon Cheewaprapanunt, Deputy Director-General, Ministry of Industrial Works, Thailand, welcomed parties to MOP 25. He emphasized the importance of striking a balance between protecting the environment and meeting the needs of the developing world. He said that additional efforts should be made to fully implement decision XIX/6 (selection of alternatives to HCFCs). On the MLF, he urged parties to fund energy efficiency projects under the 2015-2017 replenishment to maximize climate benefits and highlighted the lack of funding for HCFC production facilities.

Marco González, Executive Secretary, Ozone Secretariat, lauded the international community for creating an instrument that “works,” reaches its goal and targets, and has a high level of compliance. He said that 183 parties have submitted data and are in full compliance with the obligations of the Protocol. He noted that the Ozone Secretariat hoped for full ratification of all amendments in 2013, but five parties have yet to ratify them. Outlining topics for discussion during the week, he said that recent statements by the Group of Twenty (G20) and others provide a solid political setting within which the discussion on the phase-down of HFCs can take place.

Patrick McInerney (Australia) and Javier Camargo (Colombia) co-chaired the preparatory segment.

ORGANIZATIONAL MATTERS: Co-Chair McInerney introduced the provisional agenda (UNEP/OzL.Pro.25/1) on Monday morning. Grenada asked that a discussion on staffing issues at the Ozone Secretariat be included under “Other Matters.”

India, supported by Saudi Arabia, Kuwait, Cuba and Libya, called for the agenda item on proposed amendments to the Protocol to be removed. He said that, as HFCs do not fall under the purview of the Montreal Protocol, it is not the correct forum for such a discussion.

The US, with Mexico, the European Union (EU), Burkina Faso, Canada, Cameroon, Nigeria, Togo, Morocco, Kenya and Mozambique, said the proposal has been submitted in good faith and should therefore be discussed. The US expressed frustration that a decision to establish a contact group to discuss the issue has yet to be taken.

Delegates adopted the agenda with Grenada’s proposal.

HIGH-LEVEL SEGMENT

On Thursday morning, MOP 24 President Raja Hassan Abbas (Pakistan) opened proceedings, lauding parties for their commitment to implementing the Protocol. Noting challenges ahead, including the need for additional information on ODS alternatives, he cautioned against “derailing” the protection of the ozone layer by failing to reach consensus.

Executive Secretary González highlighted the Montreal Protocol as an exemplary model of good governance. He discussed work on phasing out HCFCs and urged delegates to continue striving towards new ways to protect the ozone layer.

Prasert Boonchaisuk, Minister of Industry, Thailand, urged parties to bear the challenges and needs of developing nations in mind during their deliberations and underscored the economic and technological barriers to successful implementation of the Montreal Protocol.

ORGANIZATIONAL MATTERS: MOP 25 elected by acclamation Oleksandr Sushko (Ukraine) as MOP 25 President. They also elected Harry Kalaba (Zambia), Itabo Cordoba (El Salvador) and Malcolm McKee (New Zealand) as Vice Presidents. Juan Miguel Cuna (Philippines) was elected as rapporteur. Delegates adopted the agenda without amendment.

On the credentials of representatives, Sushko asked delegations to finalize their submissions in order to allow the Secretariat to announce them as scheduled.

PRESENTATIONS BY THE ASSESSMENT PANELS ON THE STATUS OF THEIR WORK, INCLUDING THE LATEST DEVELOPMENTS: This item was taken up in plenary on Thursday, 24 October, during the HLS. Three panels provided updates on work undertaken in preparation for their 2014 quadrennial assessment reports.

Scientific Assessment Panel: Ayité-Lô Ajavon (Togo) said that the aim of the report is to improve information availability to enhance policy decision-making. He said that the publication is expected to be ready in June 2014, and highlighted the main chapters featured in the report, including updates on, *inter alia*, ODS and the current state of the global and polar ozone layers. He also noted chapters on stratospheric ozone changes and climate; and a projection of scenarios, information, and options for policymakers.

Environmental Effects Assessment Panel: Nigel Paul (UK) reported on the Panel’s progress toward completing its quadrennial assessment report, scheduled for release in 2014. He said that it will consider key issues, including the effects that changes in UV radiation and ozone depletion have on: physical, biological and environmental processes; human health; crops

and terrestrial ecosystems; aquatic ecosystems; global chemical cycling; tropospheric chemistry and air quality; and materials.

Technology and Economic Assessment Panel: Bella Maranion (US) reported on activities leading up to the TEAP 2014 assessment report such as the work of its six Technical Options Committees (TOCs). Regarding methyl bromide phase-out, she explained that Article 5 parties have had difficulty adopting alternatives due to economic challenges. Similarly, technical, regulatory and economic issues persist among non-Article 5 countries in strawberry nurseries and fruit sectors.

PRESENTATION BY THE MLF: During plenary on Thursday, Fiona Walters (UK) shared the MLF's achievements and future work plans including, *inter alia*: HCFC phase-out management plans (HPMPs); HCFC production sector guidelines; HCFC phase-out in China; contributions to the MLF; and the climate impact indicator for ODS phase-out. She noted the appointment of Eduardo Ganem as Chief Officer of the MLF.

STATEMENTS BY HEADS OF DELEGATION: On Thursday and Friday, delegations had the opportunity to address the HLS. A number of delegations, including Bahrain, Costa Rica, the Philippines, Indonesia, Republic of Congo, Democratic People's Republic of Korea, Mozambique and Sierra Leone, highlighted their progress and challenges faced in implementing the Montreal Protocol. Georgia said that the Montreal Protocol is a uniquely successful treaty due to its mechanisms for implementing obligations at the national level. Mexico said it is submitting highly ambitious Phase II proposals for the phase-out of HCFCs. Namibia reported that it has implemented training programmes to ensure all sectors can handle the transition.

Ecuador said its HPMP represents a "quantum leap" regarding technical and industrial conversion. Malaysia observed that it is on track to achieve HCFC phase-out targets, but that challenges to foam, refrigeration and air conditioning industries persist. South Sudan requested UNEP and other UN implementing agencies to be institutionally strengthened and supported the enlargement of the Protocol's scope.

Zimbabwe, with Brazil, Mexico and Kenya, urged continued financial and technical support during HCFC phase-out. Tunisia stated that the UN Industrial Development Organization (UNIDO) was supporting the implementation of its national strategy to phase out ODS, emphasizing the importance of international assistance. Bangladesh said that public-private partnerships have enabled it to be successful in meeting its HCFC phase-out targets. Pakistan, with Cameroon, underscored the challenge of illegal ODS trading. Singapore welcomed technologies that are environmentally feasible, economically viable and technically sound.

Uganda, US, Maldives, Cameroon, Micronesia, Georgia, EU and Ecuador urged that the Protocol address HFC phase-down. China expressed willingness to work with the international community to agree on a multilateral solution to phase down HFCs. Bahrain urged parties not to adopt the HFC-related amendment until more information is available. Indonesia requested clearer information on the legal implications of an HFC phase-down. Fiji cautioned against switching to new technologies "too fast and too early." Malaysia said that proposals on HFC-related amendments to the Montreal Protocol are not currently appropriate. Cuba cautioned against the Protocol "being distracted from its main tasks."

The International Institute of Refrigeration recommended further coordination between the Montreal Protocol and the UN Framework Convention on Climate Change (UNFCCC) and encouraged the expansion of the use of natural refrigerants, such as hydrocarbons, CO₂, ammonia, water and air. Burkina Faso stressed the importance of further involving developing countries in the Montreal Protocol community and stated that the ozone agenda cannot be perceived as an issue only for "rich" countries.

The Federated States of Micronesia underscored the vulnerability of SIDS. Solomon Islands called for a representative from SIDS to be included in the composition of the Executive Committee (ExCom), which is responsible for overseeing the operation of the MLF. Kiribati requested the Secretariat to undertake a study on the economic costs of phasing out ODS in Pacific SIDS, and supported the draft decision on SIDS. Cook Islands requested the costs of safe disposal of replaced ODS for SIDS be taken into account.

A summary of the statements can be found online at: <http://www.iisd.ca/vol19/enb1999e.html>.

REPORT BY THE CO-CHAIRS OF THE PREPARATORY SEGMENT AND CONSIDERATION OF THE DECISIONS RECOMMENDED FOR ADOPTION: On Friday evening, Co-Chair Camargo provided an overview of the activities of the MOP 25 preparatory segment that had taken place throughout the week. He highlighted the spirit of cooperation and camaraderie evident during the weeklong negotiations.

CLOSING PLENARY: On Friday, Rapporteur Juan Miguel Cuna introduced the compilation of draft decisions UNEP/OzL.Pro.25/L.2 and UNEP/OzL.Pro.25/L.2/Add.1 agreed on during the preparatory segment. Delegates adopted the draft decisions without amendment. Cuna also introduced the report of the meeting (UNEP/OzL.Pro.25/L.1, UNEP/OzL.Pro.25/L.1/Add.1 and UNEP/OzL.Pro.25/L.1/Add.2). After going through the report paragraph by paragraph, delegates adopted the report with minor amendment.

A number of delegations, the MLF, the UN Development Programme (UNDP), on behalf of the Montreal Protocol implementing agencies, and the Ozone Secretariat praised the work of the outgoing Executive Secretary Marco González emphasizing his resilience, "balanced mind" and readiness to assist parties in moving the ozone agenda forward.

Vice-President Malcolm McKee closed the meeting at 10:00 pm.

MOP 25 OUTCOMES AND DECISIONS

ADMINISTRATIVE MATTERS: Consideration of membership of the Montreal Protocol bodies for 2014:

Co-Chair Camargo introduced this item, on Monday, requesting that parties finalize their nominations for the Montreal Protocol Bureau for 2014 by Wednesday.

Final Decision: In its decisions UNEP/OzL.Pro.25/L.2, XXV/[BB], XXV/[CC] and XXV/[DD], the MOP decides to confirm the positions of Bangladesh, Bosnia and Herzegovina, Cuba, Italy and Morocco as members of the ImpCom for one further year and to select Canada, the Dominican Republic, Ghana, Lebanon and Poland as members of the Committee for a two-year period beginning on 1 January 2014. It also notes the selection of Azra Rogović-Grubić (Bosnia and Herzegovina) to

serve as President and Elisabetta Scialanca (Italy) to serve as Vice President and Rapporteur of the Committee for one year beginning on 1 January 2014.

The MOP also decides to, *inter alia*, endorse the selection of Australia, Belgium, Italy, Japan, the Russian Federation, Sweden and the United States as members of the ExCom, representing non-Article 5 parties and the selection of China, Comoros, Grenada, Mauritius, Nicaragua, Saudi Arabia and Uruguay as members of the ExCom, representing Article 5 parties.

It further decides to endorse the selection of Richard Mwendandu (Kenya) and Patrick McInerney (Australia) as Co-Chairs of the Open-ended Working Group of the Parties to the Montreal Protocol in 2014.

Financial reports of the trust funds and budgets for the Montreal Protocol: This item (UNEP/OzL.Pro.25/4 and UNEP/OzL.Pro.25/4.Add.1) was taken up in plenary on Monday and Friday. The Budget Committee, chaired by Fiona Walters (UK) and Tumau Faasaoia (Samoa), met throughout the week.

Reporting back on Friday, Walters noted that finalization of the draft decision was delayed pending the outcome of the other contact groups, saying that the draft decision (UNEP/OzL.Pro.25/CRP.9) makes provision for holding a workshop at the time of the thirty-fourth OEWS. The decision was forwarded to the HLS.

Final Decision: In its decision (UNEP/OzL.Pro.25/L.2/Add.1), the MOP decides to, *inter alia*:

- approve the revision of the 2013 budget to US\$4,744,796 and a budget of US\$5,065,460 for 2014;
- approve total contributions from parties of US\$4,276,933 for 2013 and 2014, and to note the contributions of \$4,276,933 for 2015; and
- reaffirm an operating cash reserve at a level of 15% of the annual budget to be used to meet the final expenditures under the Trust Fund.

ISSUES RELATED TO EXEMPTIONS FROM

ARTICLES 2A–2I OF THE MONTREAL PROTOCOL:

Nominations for essential-use exemptions for 2014 and 2015:

Delegates took up this item on Monday, Wednesday and Friday. They considered draft decision UNEP/OzL.Pro.25/3, XXV/[A] put forward by the Russian Federation for an essential-use exemption (EUE) of CFC-113 for aerospace uses. They also considered draft decision UNEP/OzL.Pro.25/3, XXV/[B] for EUEs put forward by the Russian Federation and China (UNEP/OzL.Pro.25/3)

Discussions focused on the use of CFCs for the manufacture of metered-dose inhalers and the recommendations of the TEAP. On their nomination of 235.05 tonnes of CFCs for the manufacture of MDIs, CHINA highlighted the need to ensure the supply of medicine and expressed their willingness to take part in discussions on the issue. The Russian Federation expressed their gratitude to the TEAP for recommending the approval of their request for 212 tonnes of CFCs for the manufacture of MDIs. A contact group was established to further discuss the matter. The TEAP presented a review of additional information on the essential use of CFCs for MDIs by the Russian Federation. Co-Chair Camargo recommended forwarding the draft decision to the HLS for further consideration.

On Wednesday, the draft decision (UNEP/OzL.Pro.25/CRP.5) was forwarded to the HLS, where it was adopted.

Final Decision: In decision UNEP/OzL.Pro.25/L.2, XXV/[EE], the MOP decides to authorize 85 metric tonnes of the production and consumption of CFC-113 for the Russian Federation for EUEs for CFCs in its aerospace industry for 2014.

In decision UNEP/OzL.Pro.25/L.2, XXV/[FF], the MOP, *inter alia*, authorizes the levels of production and consumption for 2014 needed to satisfy the essential use of CFCs for MDIs, as specified in the annex to the decision.

Nominations for critical-use exemptions for 2014 and 2015:

This item was introduced on Monday by Co-Chair Camargo. The Methyl Bromide Technical Options Committee (MBTOC) detailed progress made on phasing out methyl bromide, stating that global consumption has fallen from 64,428 tonnes in 1991 to 5,187 tonnes in 2011. Discussing CUEs in strawberry runners, strawberry fruit and dry-cured pork sectors, she reported on the emergency use of methyl bromide at facilities in Canada to control phosphine-resistant pests. Australia said that MBTOC recommendations for its CUEs fall short of its requirements, saying that they are considering alternate chemical usage but that, in the interim, the full methyl bromide quantity is needed.

Canada noted significant regulatory and economic barriers to implementing suitable alternatives to methyl bromide, expressing the concern that alternative chemicals may have deleterious effects, such as contaminating groundwater. The US highlighted its intention to phase out methyl bromide use by 2017, but said that in the interim, methyl bromide is still needed. Switzerland said that, if Australia were to consider a date for methyl bromide phase-out, it would enable parties to look at the CUE figures for 2013 more favorably. A contact group was established to discuss the matter. On Friday, the group presented a draft decision (UNEP/OzL.Pro.25/CRP.3/Rev.1), which was forwarded to the HLS where it was adopted.

Final Decision: In its decision (UNEP/OzL.Pro.25/L.2/Add.1), MOP 25 decides, *inter alia*:

- to request that Australia submit, by the thirty-sixth OEWS, results of its research programme for the TEAP's consideration;
- to request that Canada submit, by the thirty-sixth OEWS, results of its assessment of the impact of chloropicrin on groundwater for the TEAP's consideration;
- to consider approving a critical use nomination for the US California strawberry sector in 2014 and to approve sufficient methyl bromide for use in 2016 to enable this sector to complete its intended transition out of critical uses for methyl bromide by the end of 2016;
- to permit, for the agreed critical-use categories for 2015 set forth in the annex, the levels of production and consumption for 2015 necessary to satisfy critical uses; and
- to request the TEAP to ensure that its consideration of nominations analyze the impact of national, subnational and local regulations and law on the potential use of methyl bromide alternatives and to include a description of the analysis in the critical-use nomination report.

Handbook on critical-use nominations for methyl

bromide: On Monday, Co-Chair Camargo opened the floor to discuss finalization of the handbook. The EU requested time to ensure that the handbook is correct and questioned whether a formal decision on its finalization is required. The US observed

that some issues highlighted during MOP 24 and OEWG 33 have not been addressed, including the MBTOC's interpretation of economic guidelines. Informal discussions took place to resolve the matter.

On Wednesday, during the report back to plenary, the EU noted that more time was needed to assess if the MBTOC had incorporated all the concerns raised by parties. He also reiterated that the process for finalizing the handbook should be as informal as possible. On Friday, the US noted that all concerns had been addressed and no further work was necessary.

Final Decision: Parties at MOP 25 were satisfied with the handbook in its current format and agreed that no further amendments or work is currently necessary.

Uses of controlled substances as process agents: On Monday, Co-Chair Camargo introduced this agenda item. He noted that at OEWG 33 parties requested the TEAP to clarify whether CTC is used in the manufacture of vinyl chloride monomer. Ian Rae, Chemicals TOC, said that it is not used in vinyl chloride monomer production in North America, but is rather a by-product of the manufacturing process. Upon a request from India for clarification, Rae said that it is possible for it to be used as a feedstock, should the manufacturer choose to do so.

Final Decision: No further discussion on the topic is needed.

FINAL REPORT BY THE TEAP ON ADDITIONAL INFORMATION ON ALTERNATIVES TO OZONE-DEPLETING SUBSTANCES:

Co-Chair McInerney introduced this item during plenary on Monday. The TEAP reported on the task force that was established at OEWG 33 to finalize the report. He noted that the report looked at the status of low-global warming potential (GWP) alternatives to HCFCs and HFCs in, among others, the refrigeration and air conditioning sector, the foam sector, the aviation sector, and in the solvent sector. He said that the report had been restructured to, *inter alia*: be forward looking, address barriers to progress, and highlight specific regional issues.

Delegates asked for, *inter alia*, the percentage of HCFCs being replaced by high-GWP alternatives; a regional breakdown of penetration rates of HCFC alternatives; the impact of blended ODS alternatives on the performance of the products and processes that they are used in; and how the TEAP's analysis of obstacles differentiated between developed and developing countries. Iraq said that there are few alternatives to ODS in countries with high ambient temperatures. The EU said that the TEAP report does not always reflect gains from natural refrigeration, while Canada underscored the potential climate benefits of switching to low-GWP alternatives.

On Tuesday, the EU introduced a draft proposal (UNEP/OzL.Pro.25/CRP.4) that requests the TEAP to establish a temporary subsidiary body to assess and prepare a report for consideration by OEWG 34 on, *inter alia*, the economic costs and benefits of various scenarios for the global phase-down of the production and consumption of HFCs.

Proponents of the EU's proposal supported establishing a contact group. Arguments for the contact group focused on the value that additional research and analysis would add to deliberations on HFCs, with many noting that the additional information will allow for a more informed decision on HFCs, particularly as there had been multiple requests for more information on ODS alternatives during discussions on proposed

amendments to the Montreal Protocol. India noted that it would be acceptable for the TEAP to provide an assessment of ODS alternatives, but that this should not include HFCs. A contact group was established to consider the proposals.

During the final session of the preparatory segment, Australia reported that a draft decision (UNEP/OzL.Pro.25/CRP.10) was agreed. There were no comments from the floor and the decision was forwarded to the HLS, where it was adopted.

Final Decision: In the decision (UNEP/OzL.Pro.25/CRP.10), the MOP requests that the TEAP establish a temporary subsidiary body to prepare a report for consideration by OEWG 34 and an updated report for submission to MOP 26 that would, among others:

- update information on ODS alternatives, differentiating between Article 5 and non-Article 5 parties and considering regional differences;
- estimate current and future demand for ODS alternatives;
- assess the economic costs and implications and environmental benefits of various scenarios of avoiding high-GWP ODS alternatives;
- convene a workshop in tandem with OEWG 34 to continue discussions on HFC management; and
- request the ExCom of the MLF to use the information provided in the report with a view to considering whether additional demonstration projects on low-GWP alternatives and technologies would be useful to HCFC phase-out.

ORGANIZATIONAL ISSUES RELATED TO THE

TEAP: Co-Chair McInerney introduced this agenda item on Monday.

Operation and organization of the Panel: Australia reported that decision was ready to be forwarded to the HLS.

Final Decision: In its decision (UNEP/OzL.Pro.25/L.2,XXV[FF]), MOP 25 requests the TEAP to provide the following information in its 2014 progress report:

- an update on its processes for nominating members to its TOCs;
- the proposed configuration of the TOCs from 1 January 2015; and
- options, if appropriate, to streamline the TEAP's annual technology updates to the parties.

Status of membership of the Panel and its TOCs:

Following consideration by parties, the draft decision (UNEP/OzL.Pro.25/CRP.1/Rev.2) was forwarded to the HLS.

Final Decision: The decision (UNEP/OzL.Pro.25/CRP.1/Rev.2) endorses the reappointments of several TEAP experts, including: Helen Tope (Australia) as Co-Chair of the Medical Technical Options Committee (TOC); Ian Porter (Australia), Marta Pizano (Colombia) and Mohamed Besri (Morocco) as Co-Chairs of the Methyl Bromide TOC; Roberto Peixoto (Brazil) as Co-Chair of the Refrigeration, Air Conditioning and Heat Pumps TOC; Miguel Wenceslao Quintero (Colombia) as Co-Chair of the Flexible and Rigid Foams TOC; Sergey Kopylov (Russian Federation) as Co-Chair of the Halons TOC; Shiqui Zhang (China) as a senior expert member; and Jianjun Zhang (China) as Co-Chair of the Chemicals TOC.

All appointments are for a period of two years.

ISSUES RELATED TO FUNDING: Additional funding for the MLF for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out

of HCFCs: This item was introduced on Monday by Co-Chair McInerney and addressed throughout the week.

During plenary discussions on Monday, parties addressed their concerns. China cautioned that additional funding will need to be managed in an integrated manner. Switzerland said that the proposal expands the MLF's scope. Others cautioned against duplication of work. Discussions continued in a contact group.

Final Decision: Parties did not manage to reach agreement and this agenda item will be discussed at OEWG 34.

Funding of production facilities for HCFCs: Co-Chair Camargo introduced this item on Tuesday. India said that the proposal has been submitted to confirm the intent of decision XIX/6 (adjustments to the Montreal Protocol with regard to HCFCs) to have the MLF provide stable and sufficient funding for Article 5 countries to meet the incremental costs of complying with the accelerated phase-out schedule for HCFCs. He noted that it also urges the MLF ExCom to, *inter alia*: finalize and approve the funding of HCFC production facilities; and consider any proactive regulatory actions taken by parties to restrict HCFC production ahead of the scheduled phase-out. A contact group was established to discuss this matter.

On Wednesday, reporting back to plenary, parties noted no consensus could be reached. India said that although it had sought clarity on the decision, this had not been achieved, so it has to address its request to the Secretariat under Article 8 (non-compliance) of the Protocol in order to avoid non-compliance in the production sector.

Final Decision: As parties did not reach consensus, India will take up the matter with the Secretariat.

Terms of reference for the study on the 2015-2017 replenishment of the MLF: This item was introduced on Tuesday by Co-Chair McInerney, who established a contact group to discuss the matter. Discussions in the contact group took place from Tuesday to Friday. On Friday, delegates agreed to forward the draft decision (UNEP/OzL.Pro.25/CRP.11) to the HLS, where it was adopted.

Final Decision: In its decision (UNEP/OzL.Pro.25/CRP.11), MOP 25 requests the TEAP to prepare a report to be presented on the occasion of MOP 26, which includes:

- a discussion on the special funding needs of low-volume and very-low-volume-consuming countries as well as small- and medium-sized enterprises;
- evaluation of the needs of Article 5 countries to maintain compliance with Articles 2A–2E, 2G and 2I of the Protocol;
- appropriate division of funding related to the 2020 target;
- rules and guidelines for determining eligibility for funding investment projects and non-investment projects; and
- the need to allocate sufficient resources for Stage II of HPMPs through technical assistance.

IMPLEMENTATION OF THE MONTREAL PROTOCOL WITH REGARD TO SIDS: Co-Chair Camargo introduced draft decision UNEP/OzL.Pro.25/3, XXV[I] on Tuesday, where a contact group was established to further consider the phase-out of ODS in SIDS in light of next year's 3rd International Conference on SIDS (also known as the Apia Conference). Contact group discussions took place on Tuesday and Wednesday.

Initial discussion focused on the mandate of the Montreal Protocol, with Brazil, supported by India, arguing that approval

of the SIDS draft decision would exceed the mandate of the Protocol. Proponents of the draft decision, led by St. Lucia, supported by Cook Islands, Samoa and Trinidad and Tobago said they were open to compromise through further discussion. Australia acknowledged the special case of SIDS but said that it was not certain regarding the appropriateness of addressing ODS issues at the Apia Conference as suggested in the draft decision. A contact group met in the evening to negotiate the text (UNEP/OzL.Pro.25/CRP.7).

The draft decision was presented in plenary on Wednesday morning, where parties agreed to forward the decision to the HLS for its consideration.

On Wednesday afternoon Co-Chair Camargo presented a non-substantive change to the draft decision. India explained that due to scheduling conflicts, it could not attend the contact group and as it was not privy to the discussion, it could not support forwarding the decision to the HLS.

Saint Lucia, the US, the EU, Nigeria, Brazil, Australia, Canada and others objected to reopening the draft decision for negotiation, saying that such an "un-approval" meant a "process breakdown."

Co-Chair Camargo informed delegates that the decision would indeed be forwarded to the HLS for consideration, where it was later adopted.

Final Decision: In its decision (UNEP/OzL.Pro.25/CRP.7), the MOP requests the Secretariat to liaise with the organizers of the Apia Conference to promote discussion on implementation challenges among SIDS with regard to the Montreal Protocol.

PROPOSED AMENDMENTS TO THE MONTREAL PROTOCOL: Co-Chair McInerney introduced this item (UNEP/OzL.Pro.25/3, XXV[J]; UNEP/OzL.Pro.25/5, UNEP/OzL.Pro.25/6) in plenary on Tuesday. It was also considered on three occasions in a discussion group co-chaired by Gudi Alkemade (the Netherlands) and Leslie Smith (Grenada). Debate in plenary centered on whether or not to establish a contract group to address the proposed amendments. Delegates also addressed whether the Montreal Protocol had a mandate to consider HFCs. During the discussion group sessions, which met from Tuesday to Thursday, parties focused on the technological, financial and legal aspects of the management of HFCs under the Montreal Protocol.

On Tuesday, in plenary, the US, for Canada and Mexico, outlined their proposal to phase down HFC production and consumption. He observed that: since HFCs are replacements for HCFCs and CFCs, they could be discussed under the Montreal Protocol; the Protocol has a track record of success; and the Protocol is the only instrument with universal ratification. He noted that it was clear that HFCs would continue to be included under the UNFCCC and Kyoto Protocol for the purposes of accounting and reporting of emissions and supported establishing a contact group to consider the proposal.

The ensuing debate focused on whether or not to establish a contact group to consider the amendments proposed by the US, Canada, Mexico and the Federated States of Micronesia. Japan, Ethiopia, for the African Group, Macedonia, for the Regional Ozone Network for Europe and Central Asia, the EU, Bangladesh, Samoa, Cook Islands, Trinidad and Tobago, Côte d'Ivoire, New Zealand and Australia called for establishing a contact group.

Mexico, with the US and Canada, clarified that a contact group to discuss the proposed amendments would not result in the negotiation or adoption of amendments, but would serve to resolve questions and uncertainties surrounding the proposal.

Malaysia called for more time to consider the proposed amendments without establishing a contact group, drawing attention to the lack of proven alternatives, particularly for high ambient temperature countries. Fiji said that the amendments could not be considered until economically- and technically-feasible alternatives to HFCs are available.

Saudi Arabia, Kuwait, Bahrain, Iran, Venezuela, Oman, Kuwait, Argentina, Brazil, Libya, Indonesia, the United Arab Emirates and China opposed establishing a contact group. Cuba and India said that since HFCs are greenhouse gases and not ODS, they do not fall under the remit of the Montreal Protocol.

South Africa questioned whether the amendment would imply exclusion of HFCs under the UNFCCC since the Montreal Protocol should not overstep the UNFCCC's mandate. He also noted the need to clarify how Article 5 countries would be assisted. With respect to HFCs, he said that if legally binding targets are accepted under the Montreal Protocol, new sources of funding and technological alternatives must be clearly identified.

After consultations, parties agreed to reform the discussion group that was established during OEWG 33. Co-Chair McInerney clarified that the mandate provided by the OEWG was to continue the discussions on issues regarding the management of HFCs under the Montreal Protocol and its mechanisms, without prejudging the decisions under the UNFCCC. He noted topics to address include:

- issues on managing HFCs using the Montreal Protocol and its mechanisms, including legal, technical and financial aspects;
- possible processes to address the legal, technical and financial aspects;
- identifying options to establish a relationship between the UNFCCC and the Montreal Protocol; and
- further progress in the discussion, including consideration of the outcomes from recent international fora.

McInerney asked that the discussion group report on the outcomes of the discussions to the plenary, including on options to progress the discussion in 2014, to be reflected in the report to the MOP 25.

On technical aspects, the US mentioned the work of the International Organization for Standardization and other standard setting bodies and stressed the importance of safe alternatives to HFCs. The EU called for focusing on, *inter alia*: the availability of alternatives for refrigerants; emission reduction by containment measures; and maintenance, skilled installation and training. He also highlighted the utility of district cooling in urban areas. India noted that district cooling was not a priority in regions where basic needs have yet to be met.

On high ambient temperature regions, China supported further work by the TEAP on low-GWP alternatives. She highlighted hydrocarbon as an effective refrigerant, noting differing opinions on this technology and the need to address service sector challenges. She added that for high ambient temperature regions, hydrocarbon is viable, but only with a recognized standard.

The US presented a US Environmental Protection Agency preliminary analysis on reducing HFC consumption in the US. He illustrated how the challenges of the availability of

alternatives could be addressed in a phase-down schedule that would take into account the alternatives available for different sectors and subsectors. He said that this would also provide a signal to the market to develop new alternatives. He also highlighted that a phase-down approach under the Montreal Protocol and its mechanisms could provide a delayed schedule for Article 5 parties, as well as financial support from the MLF to assist parties in technology conversion, and that the main technical challenges of conversion to alternatives appear to be in the air conditioning sector.

On the financial aspects, China highlighted concerns with the policies and procedures of the MLF. India observed that full funding is required to phase down HFCs, since industry will not agree to phase down HFC consumption and production if compensation is provided on an incremental cost basis.

The US acknowledged concerns on the adequacy of funding under the MLF, stating that replenishment negotiations are, by their nature, contentious. He observed that the current contribution of HFCs to global warming is relatively small but growing rapidly, which could significantly offset progress made in other areas of climate change mitigation. He maintained that it would be useful to request the TEAP to prepare an assessment of financing required for HFC phase-down.

On legal aspects, the US, citing Article 2 of the Vienna Convention, pointed out that the proposed amendment supports the climate change regime and that the Rio+20 outcome document endorses a gradual phase-down of the consumption and production of HFCs.

The EU stressed that political will is required for phasing down HFCs through workshops and additional sessions of the OEWG in the future. China said legal issues are crucial and need to be resolved. She also asserted that the UNFCCC and Kyoto Protocol should send a clear message to the Montreal Protocol on HFCs. Mexico proposed a joint Montreal Protocol/UNFCCC working group to consider cross-cutting issues.

Co-Chair Alkemade reported on the discussion group deliberations to the preparatory segment plenary on Friday. She observed that with regard to the technical challenges of using alternatives in high population density urban areas and high ambient temperature areas as well as availability of alternatives in different sectors and subsectors, parties had proposed requesting the TEAP to further study and provide information to the parties, taking into account their specific circumstances. Topics identified include:

- variations in the availability of alternatives in sectors and subsectors;
- equipment design and its cost implications for addressing technical challenges in order to assist parties in selecting alternatives;
- updates on the availability of alternatives, including in regions with high ambient temperatures;
- identification of safe, economically viable, environmentally friendly, technically-proven alternatives for ODS and HFCs;
- addressing energy efficiency of alternatives to ODS and HFCs; and
- suggesting an in-depth study by the TEAP on alternatives available in the air conditioning sector that meet requirements with regard to flammability, toxicity and costs of those alternatives.

Alkemade noted that parties highlighted the importance of recognizing: different strategies for the management of HFCs, including measures for containment, conversion to alternatives and equipment design; and the challenges of different parties with regard to the availability of climate-friendly alternatives, depending on their national circumstances, and the importance of being able to select from a variety of technologies. She also noted the proposal for information sharing among parties on the availability of HFC alternatives, domestic experiences with management of HFCs and relevant international initiatives, such as bilateral cooperation, regional cooperation and the Climate and Clean Air Coalition.

Other issues discussed included, *inter alia*:

- the need for further consideration and possible revision of international standards for low-GWP technologies that ensure safety, particularly for hydrocarbon technology;
- the need to discuss how issues related to evaluation and transparency of these standards can be addressed;
- training on servicing and safety regarding low-GWP alternatives in the service sector of Stage II of HPMPs;
- encouraging the ExCom to approve further MLF demonstration projects to test potential low-GWP technologies; and
- beginning a focused and more in-depth discussion of the information on alternatives provided by the TEAP in the context of an additional OEWG meeting in 2014 addressing the technical, financial and legal aspects of HFCs management, and a workshop on the margins of the OEWG in 2014; and
- organizing regional workshops on the availability of ODS alternatives.

On financial aspects, Alkemade reported that the group had discussed:

- how a phase-down approach under the Montreal Protocol could provide technical and financial assistance to Article 5 parties, building on the institutions and experience of the MLF;
- how a phase-down approach could address both the production and consumption of HFCs as alternatives to HCFCs as well as production and consumption of HFCs not related to the phasing out HCFCs under the Montreal Protocol;
- how using the Montreal Protocol and the MLF to phase down HFCs would support the G20 statement and the objective of UNFCCC and the Kyoto Protocol;
- the extent to which the MLF contributes to updating technologies, building capacity and improving the performance and efficiency of equipment and production processes;
- the possibility of providing financial assistance through the provisions of the UNFCCC for emissions of HFCs; and
- the suitability of the Montreal Protocol and its financial mechanism to address intentionally produced substances such as HFCs through production and consumption controls, compared to climate-related financial mechanisms that address emissions.

Alkemade reported that parties identified the need to address issues related to the financial mechanism for a phase-down approach under the Montreal Protocol for the management of

HFCs, including on the coordination between the MOP and the ExCom, technology transfer and patents, liability costs and the difference between the actual costs and the incremental costs of conversion to low-GWP alternatives in light of the difference between an HFC phase-down and an ODS phase-out. The adequacy of funds provided for institutional strengthening and HCFC phase-out was highlighted as well as the capability of non-Article 5 parties to provide additional funding to the MLF for an HFC phase-down approach under the Montreal Protocol. She said that parties also discussed the extent to which the policies of the MLF need to be revised with a view to providing sufficient funding for an HFC phase-down, including policies on baselines, cut-off dates, second conversions, eligibility, and export to Article 2 parties.

Parties proposed options to move discussions forward on financial aspects in 2014, including:

- discussing a comprehensive financial mechanism, taking into account the experience of the MLF;
- agreeing to request the TEAP to provide (e.g., in the Replenishment Study) estimates on the additional costs and environmental benefits of a scenario for an HFC phase-down approach under the Montreal Protocol, taking into account the specific circumstances and challenges of Article 5 parties as a basis for further discussion; and
- organizing an extraordinary session between the OEWG and the MOP to be able to address the issues raised by various parties.

On legal aspects, Alkemade noted that the link between the UNFCCC and the Montreal Protocol, as well as options to progress discussions had been addressed. She observed that some parties noted the effect of Article 3 on the US, Mexico and Canada amendment proposal, which states that the amendment would not exempt HFCs from the coverage of the UNFCCC and the Kyoto Protocol, while other parties noted Kyoto Protocol Article 2.5.7, which excludes substances that are controlled under the Montreal Protocol.

Parties also addressed, among other things, the extent to which a phase-down approach using the Montreal Protocol to manage HFCs is complementary to the objectives of the UNFCCC and the view of some parties that efforts should be made to harmonize legal texts. Some options to advance the discussions in 2014 were proposed, including:

- encouraging cooperation between the Montreal Protocol, the UNFCCC and the Kyoto Protocol;
- organizing a joint UNFCCC/Montreal Protocol workshop to address cross-cutting issues, for example before OEWG 34; and
- to set aside more time in Montreal Protocol meetings for focused discussions on issues related to the technical and financial aspects of a phase-down approach to manage HFCs using the Montreal Protocol and its mechanisms, including in workshops and an additional OEWG meeting.

HARMONIZATION AND VALIDATION OF THE MULTILATERAL FUND CLIMATE IMPACT INDICATOR:

Co-Chair Camargo introduced this agenda item (UNEP/OzL.Pro.25/3 XXV[K]) on Tuesday. On Friday, Uruguay noted insufficient time to consult on the issue, and that it will be proposed at a later meeting. This item will be reconsidered at a later date.

STATUS OF RATIFICATION OF THE MONTREAL AND BEIJING AMENDMENTS TO THE MONTREAL PROTOCOL: During the HLS on Thursday MOP 25 President Sushko congratulated all new members that have ratified the Montreal Protocol and its amendments (UNEP/OzL.Pro.25/3, XXV[AA]), including: Kazakhstan (Beijing Amendment); Mauritania (Beijing Amendment); Libya (Montreal and Beijing Amendments); and Saudi Arabia (Montreal and Beijing Amendments).

Final Decision: In its decision (UNEP/OzL.Pro.25/L.2), MOP 25 notes: the large number of countries that have ratified the Vienna Convention and the Montreal Protocol; that, as at 25 October 2013, 194 parties had ratified the Montreal Amendment to the Montreal Protocol; and 192 parties had ratified the Beijing Amendment to the Montreal Protocol. It also urges all states that have not yet done so to ratify, approve or accede to the amendments, taking into account that universal participation is necessary to ensure the protection of the ozone layer.

DATA AND INFORMATION PROVIDED BY THE PARTIES IN ACCORDANCE WITH ARTICLE 7 OF THE MONTREAL PROTOCOL:

Co-Chair Camargo introduced this item on Tuesday. Janusz Kozakiewicz, ImpCom President, provided information on non-compliance issues for three countries: Azerbaijan on HCFC phase-out; France on HCFC production control measures; and Kazakhstan on excess HCFC and methyl bromide consumption. He said that 188 of 197 parties have reported production and consumption data for 2012, representing 95% of parties, and urged that the nine outstanding national reports be submitted as soon as possible. On licensing systems, he requested that Botswana and South Sudan establish systems consistent with Article 4(b) (licensing the import and export of new, used, recycled and reclaimed controlled substances).

Kazakhstan assured parties that it would ratify the Beijing Amendment by the end of 2013 and provide a response to its excess HCFC and methyl bromide consumption by March 2014. Yemen said the security situation in her country has hindered data gathering and reporting. Jordan and Kuwait assured parties that their data would be reported during the week.

The recommendations of the ImpCom were forwarded to the HLS for further consideration. The decisions were adopted in the closing plenary on Friday.

Final Decision: In its decision (UNEP/OzL.Pro.25[II]) on non-compliance with the Montreal Protocol by Azerbaijan, MOP 25 decides that no further action is necessary to return Azerbaijan to compliance with the HCFC phase-out in 2012 and its implementation of regulatory, administrative and technical measures to ensure compliance with the Protocol's control measures for HCFCs. It also urges Azerbaijan to work with the relevant implementing agencies to implement its plan of action for HCFC consumption.

In its decision (UNEP/OzL.Pro.25[JJ]) on non-compliance with the Montreal Protocol by France, the MOP:

- notes that no further action is necessary in implementing regulatory and administrative measures to ensure compliance with the provisions of the Protocol governing production of HCFCs for subsequent years; and
- cautions France, in accordance with Item B of the indicative list of measures, that, in the event that it fails to return to

compliance in a timely manner, the MOP will consider measures consistent with Item C of the indicative list of measures.

In its decision (UNEP/OzL.Pro.25[KK]) on non-compliance with the Montreal Protocol by Kazakhstan, the MOP:

- requests Kazakhstan to submit to the Secretariat, by 31 March 2014, an explanation for its excess consumption and details of the management systems that had failed to prevent the excess consumption, together with a plan of action with time-specific benchmarks to ensure the party's return to compliance with its HCFC and methyl bromide obligations; and
- cautions Kazakhstan, in accordance with Item B of the indicative list of measures, that, in the event that it fails to return to compliance in a timely manner, the MOP will consider measures consistent with Item C of the indicative list of measures, which may include the possibility of actions available under Article 4, such as ensuring that the supply of HCFCs and methyl bromide is ceased so that exporting parties are not contributing to a continuing situation of non-compliance.

In its decision (UNEP/OzL.Pro.25[LL]) on the request for revising baseline data by the Republic of Congo, the Democratic Republic of the Congo, Guinea-Bissau and Saint Lucia, the MOP: notes that the respective parties have presented sufficient information to justify their requests for revising their consumption data for HCFCs for 2009, 2010 or both; and approves the requests of the parties to revise their baseline HCFC consumption data for those years.

In its decision (UNEP/OzL.Pro.25[MM]) on data and information provided by the parties in accordance with Article 7 of the Montreal Protocol the MOP:

- urges the Central African Republic, Eritrea, Gabon, Israel, Jordan, Kazakhstan, Kuwait, Latvia, Liechtenstein, Saint Kitts and Nevis, South Sudan, Switzerland, the Syrian Arab Republic, Uzbekistan and Yemen, where appropriate, to work closely with the implementing agencies to report the required data as a matter of urgency;
- requests the ImpCom to review the situation of those parties at its 52nd meeting; and
- encourages parties to continue to report consumption and production data as soon as figures are available, and preferably by 30 June each year.

In its decision (UNEP/OzL.Pro.25[NN]) on the status of the establishment of licensing systems under Article 4(b) of the Montreal Protocol, the MOP requests Botswana and South Sudan to establish an import and export licensing system for ozone-depleting substances consistent with Article 4(b) of the Protocol and to report to the Secretariat by 31 March 2014 on the establishment of that system.

DATES AND VENUE FOR THE TWENTY-SIXTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL:

On Friday evening, Executive Secretary González introduced this item, saying that no party has expressed interest to host the twenty-sixth session of the MOP. He said that in the absence of a suitable offer, the Secretariat has made provision for the meeting to be held at a suitable UN venue in November 2014.

Final Decision: In its decision (UNEP/OzL.Pro.25/L.2/Add.1) MOP 25 decides to convene the twenty-sixth MOP at the seat of the Secretariat in Nairobi, Kenya, or at any other UN venue, in November 2014.

OTHER MATTERS: Staffing Issues at the Ozone

Secretariat: On Tuesday Co-Chair McInerney introduced this item. Grenada, the proponent of the discussion, said that there was a need to address vacancies in the Secretariat, including that of the position of Executive Secretary. Switzerland highlighted, among others, the need to define when the next Executive Secretary will take office. A contact group was established to further consider these matters.

On Wednesday morning, in plenary, Co-Chair McInerney asked the Ozone Secretariat to provide information on staffing. Executive Secretary González said that Tina Birbili (Greece) will take up the position of Executive Secretary in November 2013. Switzerland asked for information on an appointment for the post of deputy Executive Secretary. González responded that the internal review process is complete and the final decision will be made by the UNEP Executive Director by the end of the year.

Following the afternoon's contact group discussions, delegates noted that no further assistance on staffing is needed by the Secretariat.

Reclassification of Croatia: On Monday, the EU, on behalf of Croatia, requested consideration of a request that Croatia be reclassified as an Article 2 country following its accession to the EU. On Tuesday, the EU introduced its draft decision (UNEP/OzL.Pro.25/CRP.6) requesting Croatia's reclassification. The draft decision was forwarded to the HLS for consideration, where it was adopted.

Final Decision: In Decision XXV/[OO] in document UNEP/OzL.Pro.25/L.2, MOP 25 decides to approve Croatia's request to be removed from the list of Article 5 countries and approve its request, noting that Croatia shall assume the obligation of a non-Article 5 party beginning 1 January 2014.

A BRIEF ANALYSIS OF MOP 25

NOT SO GREAT EXPECTATIONS

Arriving in balmy Bangkok for MOP 25, Montreal Protocol delegates found themselves once again navigating familiar territory just four months after saying goodbye at the closure of a relatively successful OEWG 33 meeting. This time around delegates expected to build on those small victories—HFC management was discussed in a more formal setting for the first time—and forge a path towards a final decision on a Protocol amendment to phase down HFCs. Hammering out the details of a study for the next MLF replenishment, vital for providing funds to implement the Montreal Protocol, was also very much on the minds of many participants.

The IPCC Working Group I (physical science) contribution to the IPCC fifth assessment report, released at the end of September, was the backdrop for discussion on HFCs. It highlighted that “continued emissions of greenhouse gases will cause further warming and changes in all components of the climate system. Limiting climate change will require substantial and sustained reductions of greenhouse gas emissions.”

And yet, parties in Bangkok were unable to move discussions on the Protocol amendments up a notch and into an open-ended

contact group. As a result, they continued the debates using the June format of an informal discussion. In spite of this, many delegates characterized the engagement and outcome as “constructive.”

On the replenishment, parties agreed to task the TEAP with preparing a study to evaluate the requirements for the 2015-2017 replenishment of the MLF. According to one delegate, this represented a slight victory for some developing countries, which strongly emphasized the need for stable, continuous funding to comply with the ongoing commitments and potential increase in the Protocol's scope. In this context, the previous year's 25th anniversary celebrations, during which the Protocol had been feted so jubilantly, were already receding from memory. Many delegates acknowledged the Protocol's unique and substantial achievements, but noted that continued production and consumption of high-GWP HFCs, which were introduced by the Protocol, threaten to eclipse its triumphs.

This analysis will examine MOP 25 in the context of the proposed Montreal Protocol amendments, replenishment of the MLF, and synergies with the UNFCCC and other multilateral forums.

MONTREAL PROTOCOL AMENDMENTS - A BLEAK HOUSE?

Those observers who traveled to Bangkok in anticipation of a discussion on Protocol amendments taking center stage were not disappointed. Positions remained sharply divided. Those who supported the amendment proposals from the US, Mexico and Canada and the Federation States of Micronesia requested the establishment of an open-ended contact group. Those against the proposals raised legal, technical and financial arguments to defend their positions on why HFCs should not be included within the scope of the Protocol as they have done in previous meetings. They maintained that the debate on HFCs should be carried out informally, as it has been over the last five years.

Behind this apparent paradox and intransigence from some developing countries, what is at stake are deep concerns about the availability and cost of alternatives to HFCs. Countries like India, for instance, have made the switch from HCFCs to HFCs, only to be told they must move on again. Using the air conditioning sector as an example, one developing country delegate explained that in regions with high ambient temperatures for up to ten months of the year, switching to unproven HFC substitutes would be a huge leap of faith and may have potential catastrophic economic and social consequences. Furthermore, non-Article 5 countries have reached saturation in terms of growth in the HFC sector domestically and are therefore poised to move onto the next generation of HFC substitutes. These countries also have complementary, budding industries at the cusp of this new technology, waiting in the wings. For developing countries this is not the case and so what is needed he said, is a “recalibration of the current dialogue to encompass the concept of a “limited phase up of HFCs,” instead of expecting Article 5 countries to “leapfrog” from HCFCs into the uncharted waters of the next generation HFC substitutes, while at the same time grappling with pressing economic and developmental challenges on their doorstep.

Interestingly, HFCs only account for approximately 0.7% of the greenhouse gases controlled by the Kyoto Protocol under the UNFCCC, a fact that India was quick to point out. The US

and Canada rebutted this argument by maintaining that this figure is rising rapidly and will have damaging consequences for the climate system if economic growth is left unchecked. It is widely known that, in the future, rising HFC emissions are likely to come from emerging economies. Additionally, as HFCs were created as substitutes for ODS, parties have, according to some, a “moral” duty to address this issue under the Montreal Protocol—an international agreement that is often praised for its successful implementation and universal membership. What troubles several Article 5 parties, however, is that the US has not ratified the Kyoto Protocol, Canada has withdrawn from it, and the new Australian administration has emphatically down-listed climate change mitigation from its priorities. The commitment of non-Article 5 parties towards combating climate change has repeatedly been called into question in the context of the slow pace of negotiations under the UNFCCC. As several delegates decried, “we are being asked to take on climate change mitigation commitments under the Montreal Protocol, where there is no mandate to do so, while these non-Article 5 countries refuse to act under the UNFCCC.”

Nevertheless, the informal discussion group format provided a secure environment for parties to air their views and concerns. It also served to clarify and request additional information on the identification of safe, economically viable, environmentally friendly, technically proven alternatives for ODS and HFCs. However, parties left with the impression that the HFC amendment is still a long way off and there are many battles left to be fought. As a delegate recalled, “you can’t do the same thing year after year, and expect a different result.” On this note, one proponent of the amendment suggested changing negotiation tactics and discussing HFCs in terms of a “freeze” in consumption rather than a “phase-down” because it changes the focus from reducing consumption to limiting growth in HFCs. This would “simplify negotiations” and also emulate the earlier Montreal Protocol controls, which used similar reasoning.

Moreover, some delegates emphasized that the main outcome of MOP 25 was the agreement for the TEAP to start a focused and more in-depth discussion on HFC alternatives, since the TEAP report would aim to address the technical, financial and legal aspects of management of HFCs using the Montreal Protocol and its mechanisms. There was also an agreement to host a workshop in the margins of the OEWG in 2014 related to HFCs. As one observer mused, “dialogue is a priority now to see how we can bridge our differences, rather than re-tabling the same amendment proposals year after year.”

THE MLF – OUR MUTUAL FRIEND

Finance featured prominently in discussions on the cost of alternatives for HFCs and the need for financial assistance for Article 5 countries to meet their obligations under the Montreal Protocol. MOP 25 was expected to and did finalize the terms of reference for a TEAP study to evaluate the requirements for the 2015-2017 replenishment of the MLF, which will provide the basis for a decision on the replenishment of the MLF at MOP 26 in 2014. The decision includes a discussion on the special funding needs of low volume and very-low-volume-consuming countries as well as small- and medium-sized enterprises, in addition to the rules and guidelines for determining eligibility for funding investment projects and non-investment projects.

The adequacy and certainty of funding was questioned by many delegations, as is typical in multilateral processes. It was acknowledged that previous replenishment discussions had been acrimonious and sufficient funding was required to meet the needs of Article 5 parties. India drew attention to the fact that funding for HFC phase-down would have to be “full,” not just “incremental,” since the Montreal Protocol cannot impose obligations for industry to mitigate GHGs such as HFCs, precisely because they are not ODS, thus they will not agree to bear this burden without financial assistance.

A Swiss draft decision on additional funding for the MLF to maximize the climate benefits of an accelerated phase-out of HCFCs appeared to be a panacea for addressing the funding woes under the MLF. However, no decision on this was forwarded to the HLS. Commenting on this, an observer said: “as has been the previous practice, any decision related to the Montreal Protocol amendment never sees the light of day. In addition, many also called for revisiting the MLF policy issues in parallel with the replenishment discussions to facilitate easier financial transfer to recipient countries and alleviate frustrations experienced when dealing with the Fund.

What is clear is that, without a sizable chunk of money on the table and assurance that finance will be stable and accessible, amendment detractors are unlikely to experience a change of heart. The challenge is to carefully craft the terms of reference for the TEAP study to ensure that they encapsulate the needs of developing countries and that they are also palatable for non-Article 5 countries.

SYNERGIES - A TALE OF TWO PROTOCOLS

Despite the linkages between the HFC issue and the UNFCCC, there is no formal relationship between the two agreements. During the last few years a circuitous argument has evolved over which entity has the mandate to address HFCs. What emerged in Bangkok though, is that many are looking for a more formalized procedure to address the issue, with Mexico going as far as to propose a joint Montreal Protocol/UNFCCC working group. Others would like to see the UNFCCC signal, via decision text, that the Montreal Protocol should address HFCs in the context of a phase-down approach.

Although HFCs are not a key issue under the UNFCCC, they have been addressed under the *Ad Hoc* Working Group on the Durban Platform (ADP), the UNFCCC subsidiary body tasked with negotiating a new climate treaty by 2015. These discussions take place in the context of the so-called ADP Workstream 2, which looks at ways to enhance pre-2020 climate action (i.e., action before the new climate agreement enters into force; this relates to the considerable gap between the existing climate policies and those needed by 2020 to limit temperature increase to below 2°C). Under the UNFCCC, the EU has been particularly active with respect to HFCs, saying these should be addressed both under the UNFCCC and the Montreal Protocol. However, India and more recently others in the coalition of Like-Minded Developing Countries, including China, the Arab Group, and Latin American countries, such as Argentina, Venezuela, Bolivia and Ecuador, oppose addressing HFCs under the Montreal Protocol.

The recent G20 leaders’ summit in St. Petersburg also released a statement in which the G20 expressed support for “complementary initiatives, through multilateral approaches that

include using the expertise and the institutions of the Montreal Protocol to phase down the production and consumption of HFCs, based on the examination of economically viable and technically feasible alternatives.” They also agreed to “continue to include HFCs within the scope of the UNFCCC and its Kyoto Protocol for accounting and reporting of emissions.” Although India signed the statement in St. Petersburg, it took a contrary position at MOP 25.

During bilateral discussions between the US and China in September 2013, on the margins of the G20 summit, President Obama and President Xi agreed to, as a next step on HFCs, establish a contact group under the Montreal Protocol for considering issues related to cost-effectiveness, financial and technological support, safety, environmental benefits, and an amendment to the Montreal Protocol. Previously, China opposed addressing HFCs under the Montreal Protocol. Some observers wryly suggested that China has softened its position because it sees potential in the HFC-substitute sector, possibly using hydrocarbon technology as a likely replacement. It should be recalled that China has always been quick to realize such opportunities, as the initially successful experience with solar photovoltaic technology in the renewable energy sector suggests.

What all this shows is that there is momentum building beyond the borders of the Montreal Protocol and the push to address HFCs might well come from outside the process. As the EU suggested, the real challenge is galvanizing the requisite political will to address the issue of HFCs.

“PLEASE SIR, CAN I HAVE SOME MORE? (TRUST AND ASSURANCES)”

In spite of the odds, MOP 25 indicated that the HFC issue is not insurmountable. The main requirement for progress may be an enabling environment wherein there is certainty and assurances for all parties. There is also a need to interpret the mandate of the Montreal Protocol less strictly, so that parties agree that it can consider a non-ODS like HFCs.

When looking at the divide between non-Article 5 and Article 5 countries, the “chicken or the egg?” dilemma quickly emerges. The market for ODS alternatives needs a signal from the Protocol before low-GWP alternatives to HFCs can be scaled-up and rolled out. Conversely, the MOP is not about to send such a signal with a lack of viable low-GWP alternatives, since doing so, detractors argue, could spell disaster for large swathes of their economies that depend on HFCs. To break the stalemate, at some point, parties will have the hard task to pick which comes first, the “chicken” or the “egg.”

Continued assurances on technology and financing may help to further thaw positions. The Montreal Protocol has succeeded, among other reasons, because of trust. On this, the fact that Executive Secretary Marco González is retiring left parties thinking of the “successful” pathway of the Montreal Protocol since its creation. In the closing session, numerous parties warmly congratulated González for his “outstanding” work. Maintaining trust among all members of the “Ozone family” as it prepares for a leap of faith towards a new phase under the Montreal Protocol will be important towards moving the agenda forward.

UPCOMING MEETINGS

45th Meeting of the GEF Council: The Global Environment Facility (GEF) Council will meet to approve new projects with global environmental benefits in the GEF’s focal areas. Among the topics for discussion at the 45th meeting are guidelines for enabling the activities of the Minamata Convention on Mercury. A consultation with civil society will take place on Monday, and the GEF Council meeting will open on Tuesday. **dates:** 4-7 November 2013 **location:** Washington D.C., US **contact:** GEF Secretariat **phone:** +1-202-473-0508 **fax:** +1-202-522-3240 **email:** secretariat@thegef.org **www:** <http://www.thegef.org/gef/events/council-meeting>

19th Session of the Conference of the Parties to the UNFCCC: COP19, CMP9, ADP, and the Subsidiary Bodies of the UNFCCC (SBI and SBSTA) will convene in Warsaw, Poland. **dates:** 11-22 November 2013 **location:** Warsaw, Poland **contact:** UNFCCC Secretariat **phone:** +49-228-815-1000 **fax:** +49-228-815-1999 **email:** secretariat@unfccc.int **www:** <http://unfccc.int>

Fifth African Regional Meeting on the Strategic Approach to International Chemicals Management (SAICM) and Related Workshops: The fifth regional meeting will, *inter alia*: identify regional priorities, exchange experiences and share information on activities undertaken at the national and regional levels, review and provide input to the draft document on the Overall Orientation and Guidance to facilitate achievement of the 2020 goal of sound chemicals management, and consult on preparations for the fourth session of the International Conference on Chemicals Management (ICCM4). A workshop on the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) toolbox for decision-makers in chemicals management will be held on 18 November, a workshop on endocrine disrupting chemicals on 19 November, an information sharing session on emerging issues on 20 November, followed by the regional meeting. **dates:** 18-22 November 2013 **location:** Pretoria, South Africa **contact:** SAICM Secretariat **phone:** +41-22-917-8532 **fax:** +41-22-797-3460 **email:** saicm@unep.org **www:** <http://www.saicm.org>

International Conference on Climate Change, Water and Disaster in Mountainous Areas: This conference is organized by the Society of Hydrologists and Meteorologists (SOHAM-Nepal). **dates:** 27-29 November 2013 **location:** Kathmandu, Nepal **contact:** Deepak Paudel, SOHAM Nepal **phone:** +977-9841647398 **email:** sohamconference2013@gmail.com **www:** <http://www.soham.org.np/pdf/international-conference.pdf>

Annual Joint Meeting of the Basel and Stockholm Convention Regional Centres: The Directors of the regional centres for the Basel Convention (BC) and Stockholm Convention (SC) will meet to discuss development of a strategic plan for the enhanced delivery of technical assistance and technology transfer through the network of SC and BC regional centres. It will also, *inter alia*: identify new areas for joint collaboration among regional partners; exchange experience and expertise, including best practices; identify centers of excellence in thematic areas; and update the plan of action for the current biennium. **dates:** 27-29 November 2013 **location:** Geneva, Switzerland **contact:** Joint Secretariat of the BRS Conventions **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** brs@unep.org **www:** <http://synergies.pops.int/>

71st meeting of the Executive Committee of the Multilateral Fund (MLF): The MLF is managed by an Executive Committee composed of developing and developed countries. This event discusses projects and activities supported by the fund for implementing the Montreal Protocol. **dates:** 2-6 December 2013 **location:** Montreal, Canada **contact:** secretariat@unmfs.org **phone:** +1-514-282-7862 **email:** secretariat@unmfs.org **www:** <http://ozone.unep.org>

Tenth Meeting of the Basel Convention Implementation and Compliance Committee (ICC-10): ICC-10 is expected to continue the consideration of its 2012-2013 work programme as well as initiate activities pertaining to its 2014-2015 work programme. Chairs of the compliance bodies of the Espoo Convention, Cartagena Protocol, the Montreal Protocol, the London Protocol, the Kyoto Protocol and CITES, as well as the representatives of the secretariats of these treaties, have been invited to attend the session. **dates:** 5-6 December 2013 **location:** Paris, France **contact:** Basel Convention Secretariat **phone:** +41-22-917-8218 **fax:** +41-22-917-8098 **email:** brs@unep.org **www:** <http://www.basel.int/TheConvention/ImplementationComplianceCommittee/Meetings/ICC10/tabid/3355/mctl/ViewDetails/EventModID/9267/EventID/418/xmid/10712/Default.aspx>

IPCC WGII 10th Session and IPCC-38: IPCC WGII will meet for approval and acceptance of the WGII contribution to AR5. WGII assesses the vulnerability of socio-economic and natural systems to climate change, negative and positive consequences of climate change, and options for adapting to it. Subsequently, IPCC-38 will convene to endorse the WGII contribution to AR5. **dates:** 25-29 March 2014 **location:** Yokohama, Japan **contact:** IPCC Secretariat **phone:** +41-22-730-8208 **fax:** +41-22-730-8025 **email:** IPCC-Sec@wmo.int **www:** <http://www.ipcc.ch/>

IPCC WGIII 12th Session and IPCC-39: IPCC WGIII will approve and accept the WGIII contribution to AR5. WGIII focuses on mitigation of climate change. Subsequently, IPCC-39 will convene to endorse the WGIII report. **dates:** 7-13 April 2014 **location:** Berlin, Germany **contact:** IPCC Secretariat **phone:** +41-22-730-8208 **fax:** +41-22-730-8025 **email:** IPCC-Sec@wmo.int **www:** <http://www.ipcc.ch/>

UNFCCC 40th Sessions of the Subsidiary Bodies: SBI 40 and SBSTA 40 will convene in June 2014. **dates:** 4-15 June 2014 **location:** Bonn, Germany **contact:** UNFCCC Secretariat **phone:** +49-228-815-1000 **fax:** +49-228-815-1999 **email:** secretariat@unfccc.int **www:** <http://unfccc.int>

First Session of the United Nations Environment Assembly of UNEP: As a result of the June 2012 UN Conference on Sustainable Development (Rio+20), UNEP's 58-member Governing Council became the United Nations Environment Assembly of UNEP with universal membership in March 2013. **dates:** 23-27 June 2014 **location:** Nairobi, Kenya **contact:** Jamil Ahmad, Secretary of Governing Bodies **phone:** +254-20-7623431 **fax:** +254-20-7623929 **email:** unep.sgb@unep.org **www:** <http://www.unep.org/about/sgb/>

2014 Climate Summit: This event is being organized by UN Secretary-General Ban Ki-moon, with the aim to mobilize political will for an ambitious legal agreement through the

UNFCCC process. **date:** 23 September 2014 (tentative) **location:** UN Headquarters, New York **www:** <http://www.un.org/climatechange/summit2014/>

IPCC-40: This IPCC meeting will be held to adopt the AR5 Synthesis Report and approve its SPM. **dates:** 27-31 October 2014 **location:** Copenhagen, Denmark **contact:** IPCC Secretariat **phone:** +41-22-730-8208 **fax:** +41-22-730-8025 **email:** IPCC-Sec@wmo.int **www:** <http://www.ipcc.ch/>

Tenth Meeting of the Rotterdam Convention Chemical Review Committee (CRC-10): CRC-10 will review chemicals and pesticide formulations according to the criteria set out by the Convention in Annexes II and IV respectively and make recommendations to the COP for listing these chemicals in Annex III. **date:** 20-24 October 2014 **location:** Rome, Italy **contact:** Rotterdam Convention Secretariat **phone:** +41-22-917-8296 **fax:** +41-22-917-8082 **email:** pic@pic.int **www:** <http://www.pic.int/>

Tenth Meeting of the Persistent Organic Pollutants Review Committee (POPRC-10): POPRC-10 will review chemicals proposed for listing in Annex A, Annex B, and/or Annex C. **dates:** 27-31 October 2014 **location:** Rome, Italy **contact:** Stockholm Convention Secretariat **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** ssc@pops.int **www:** <http://www.pops.int>

26th Meeting of the Parties to the Montreal Protocol: MOP 26 is scheduled to consider a number of issues, including nominations for critical- and essential-use exemptions and other draft decisions forwarded from the OEWG. **dates:** November 2014 **location:** to be confirmed **contact:** Ozone Secretariat **phone:** +254-20-762-3851 **fax:** +254-20-762-4691 **email:** ozoneinfo@unep.org **www:** <http://ozone.unep.org>

GLOSSARY

CFCs	Chlorofluorocarbons
COP	Conference of the Parties
CTC	Carbon tetrachloride
CUEs	Critical-use exemptions
ExCom	Executive Committee
G20	Group of Twenty
GWP	Global warming potential
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
HLS	High-level segment
HPMPs	HCFC phase-out management plans
ImpCom	Implementation Committee
IPCC	Intergovernmental Panel on Climate Change
MBTOC	Methyl Bromide TOC
MDIs	Metered-dose inhalers
MLF	Multilateral Fund
MOP	Meeting of the Parties
ODS	Ozone depleting substances
OEWG	Open-ended working group
SIDS	Small island developing states
TEAP	Technology and Economic Assessment Panel
TOC	Technical Options Committee
UNEP	United Nations Environment Programme
UNFCCC	UN Framework Convention on Climate Change