

Thirtieth Meeting of the Parties to the Montreal Protocol: 5-9 November 2018

The Thirtieth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP 30) opens Monday, 5 November 2018 in Quito, Ecuador.

Expectations for this Meeting

Adopted in 1987, the Montreal Protocol is the sole protocol to the 1985 Vienna Convention for the Protection of the Ozone Layer. Since its inception, the Protocol has sought to control and phase out ozone-depleting substances (ODS) such as chlorofluorocarbons (CFCs), halons, carbon tetrachloride (CTC), methyl chloroform, methyl bromide, hydrobromofluorocarbons, and hydrochlorofluorocarbons (HCFCs). With its most recent amendment adopted in 2016 in Kigali, Rwanda, the Protocol also seeks to phase down hydrofluorocarbons (HFCs), substitutes for many ODS that have been found to have high global warming potential (GWP).

The Meeting of the Parties (MOP) meets annually to consider reports from its scientific and technical advisory bodies, decide on critical and essential use exemptions from Protocol controls on ODS requested by parties, and debate and decide on any other legal or technical issue affecting the implementation of the Protocol and its amendments and adjustments. MOP 30 will address the issues assigned to it by the 29th MOP and other matters prepared for it by the 40th meeting of the MOP's Open-ended Working Group (OEWG 40). These include issues important to the 1 January 2019 entry into force of the Kigali Amendment on HFCs, including:

- Data reporting, including revised timeline reporting forms, ways to report mixtures and blends, and setting GWP values for HCFC-141 and HCFC-142;
- Decision on approved destruction technologies to be used for HFCs;
- Multilateral Fund (MLF) Executive Committee's (ExCom) progress in developing guidelines for the financing of the HFC phase-down;
- Consideration of linkages between HCFCs and HFCs in transitioning to low-GWP alternatives; and
- Issues related to energy efficiency while phasing down HFCs.

Other issues on the agenda for MOP 30 include:

- Future availability of halons and their alternatives, especially in sectors such as civil aviation and merchant shipping;
- Nominations for critical-use exemptions for methyl bromide for 2019 and 2020;
- Development and availability of laboratory and analytical procedures that can be performed without using substances controlled under the Protocol;
- Proposals for changes in ODS approved for process-agent applications;
- A proposal to permit essential use exemptions for HCFCs for specific uses by certain parties;
- Unexpected emissions of CFC-11 recently confirmed;
- A review of the work and recommended decisions of the Implementation Committee (ImpCom); and
- A review of the terms of reference, composition and balance of the scientific and technical advisory bodies.

A Brief History of the Montreal Protocol

Concerns that the Earth's stratospheric ozone layer could be at risk from CFCs and other anthropogenic substances first arose in the early 1970s. At that time, scientists warned that releasing these substances into the atmosphere could deplete the ozone layer, hindering its ability to prevent harmful ultraviolet 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, a UN Environment Programme (UNEP) conference held in March 1977 adopted a World Plan of Action on the Ozone Layer and established a Coordinating Committee to guide future international action.

Negotiations on an international agreement to protect the ozone layer were launched in 1981 under the auspices of UNEP. 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 it did not impose obligations to reduce ODS usage.

In September 1987, efforts to negotiate binding obligations to reduce ODS usage led to the adoption of the Montreal Protocol, which entered into force in January 1989. The Montreal 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 and all amendments except its newest, the Kigali Amendment, have been ratified by 197 parties.

Key Turning Points

Since 1987, several amendments and adjustments have been adopted, adding new obligations and additional ODS and adjusting existing control schedules. Amendments require ratification by a certain number of parties before they enter into force; adjustments enter into force automatically.

London Amendment and Adjustments: At MOP 2, held in London, UK, in 1990, delegates tightened control schedules and added ten more CFCs to the list of ODS, as well as carbon tetrachloride and methyl chloroform. MOP 2 also established the Multilateral Fund (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.

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 HCFCs. MOP 4 also agreed to enact non-compliance procedures. It established an Implementation Committee to examine possible non-compliance and make recommendations to the MOP aimed at securing full compliance.

Montreal Amendment and Adjustments: At MOP 9 held in Montreal, Canada, in 1997, delegates agreed to: a new licensing system for importing and exporting ODS, in addition to tightening existing control schedules; and banning trade in methyl bromide with non-parties to the Copenhagen 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 reporting on methyl bromide for quarantine and pre-shipment applications.

Road to the Kigali Amendment: In 2009, at MOP 21, delegates first considered a proposal to amend the Protocol to include HFCs, non-ODS with a high GWP produced as a consequence of ODS phase-out. For the next six years, this issue was considered in an informal setting, with delegates engaging in heated discussions on the mandate of the Montreal Protocol *vis-à-vis* the UN Framework Convention on Climate Change (UNFCCC), and the Protocol's obligation to effectively address unintended consequences related to its actions.

At COP 10/MOP 26 in Paris, France, in 2014, delegates discussed possible ways to move the HFC issue forward, deciding to convene a two-day workshop in 2015 to continue discussions on HFC management.

During MOP 27 in Dubai, United Arab Emirates, in November 2015, parties adopted the Dubai Pathway on HFCs, a "roadmap" for negotiating an HFC amendment, including provisions for an additional OEWG meeting and an extraordinary MOP during 2016.

At the third Extraordinary MOP to the Montreal Protocol (ExMOP 3) in July 2016, delegates considered issues contained in the Dubai Pathway on HFCs and convened a ministerial roundtable entitled "Moving Forward to Deliver in 2016 on the Mandate of the Dubai Pathway on HFCs." Delegates adopted a decision for the Technology and Economic Assessment Panel (TEAP) report to MOP 28 to assess the climate benefits and MLF financial implications of proposed HFC phase-down schedules.

Kigali Amendment: At MOP 28, held in Kigali, Rwanda, in 2016, delegates agreed to amend the Protocol to include HFCs as part of its ambit and to set phase down schedules for HFCs. To date, 59 parties to the Montreal Protocol have ratified the Kigali Amendment, which will enter into force on 1 January 2019.

Intersessional Highlights

ExCom 81: The 81st meeting of the MLF ExCom (18-22 June 2018, Montreal, Canada) decided on the funding sources for enabling activities for the phase-down of HFCs and approved pilot projects on incremental costs on phasing down HFCs in the "consumption manufacturing sector." ExCom continued work on the draft template on cost guidelines for the phase-down of HFCs, agreeing to include text on: flexibility in implementation that enables parties to select their own strategies and priorities in sectors and technologies; cut-off dates for eligible incremental costs for the production, consumption manufacturing and refrigeration servicing sectors; and eligibility of Annex F substances subject to high ambient temperature exemptions. ExCom agreed not to include text on "other costs" in the template as any other identified cost items emanating as a result of the conversion to low-GWP alternatives could be added later. ExCom decided that further work was needed on the refrigeration servicing sector, methodology for establishing the starting point for sustained aggregate reductions, energy efficiency, capacity building to address safety, and effective cost management of stockpiles.

ImpCom 60: The 60th session of Implementation Committee (8 July 2018, Vienna, Austria) considered a Secretariat report on information provided by parties in accordance with Articles 7 and 9; heard a presentation by the MLF Secretariat on ExCom decisions and activities carried out by implementing agencies to facilitate compliance; and issued recommendations to MOP 30 on compliance by Libya and Ukraine.

OEWG 40: OEWG 40 (9-14 July 2018, Vienna, Austria) was preceded by a workshop on energy efficiency opportunities while phasing down HFCs. OEWG 40 considered the outcomes of the workshop and the report by the TEAP on energy efficiency in the refrigeration, air-conditioning and heat pump sectors, and how to take up energy efficiency opportunities while phasing down HFCs under the Protocol in the future. Much of OEWG 40 focused on addressing appropriate action in response to an unexpected detection of trichlorofluoromethane (CFC-11) emissions. Parties also discussed HCFC "adjustments" or essential use exemptions for non-Article 5 parties, and several Kigali Amendment implementation issues, including data reporting modalities and possible HFC destruction technologies.