

Summary of the 48th meeting of the Open-ended Working Group and the 6th Extraordinary Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer: 13-17 July 2026

For nearly four decades, the Montreal Protocol on Substances that Deplete the Ozone Layer has evolved in response to advances in science, changes in technology, and new implementation challenges. Having successfully eliminated many ozone-depleting substances (ODS), the Protocol is now simultaneously completing the phase-out of hydrochlorofluorocarbons (HCFCs), and implementing the phase-down of hydrofluorocarbons (HFCs) under the Kigali Amendment. Maintaining this progress requires sufficient financial resources, accessible alternatives, reliable monitoring, and institutions capable of responding to an expanding workload.

At the 48th meeting of the Open-ended Working Group (OWEG 48), the Technology and Economic Assessment Panel (TEAP) and its Technical Options Committees (TOCs) provided delegates with information on the financial, technological, and practical dimensions for implementing the Protocol. Particular attention focused on the TEAP's initial assessment of the funding required for the 2027–2029 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol (MLF). Parties also considered technical developments and institutional questions that will inform negotiations at the 38th Meeting of the Parties to the Protocol (MOP 38) scheduled for November 2026.

Other issues addressed during the week included:

- the continued use of halon 1301 in civil aviation;
- metered-dose inhalers using low-global-warming-potential propellants;
- options for reorganizing the TEAP and its TOCs;
- the approval of a new destruction technology;
- enhancing regional atmospheric monitoring of controlled substances;
- strengthening institutions and addressing illegal trade;
- ensuring the viability of Protocol operations and frequency and organization of meetings;
- the participation of the Central Asian States in the group of Eastern European States;
- the implementation needs of low-volume- and very-low-volume-consuming countries; and
- the possible future consideration of nitrous oxide.

Delegates made notable progress on several issues. They agreed to forward a draft decision on Steam Plasma Arc technology for the destruction of controlled substances to MOP 38 and developed guidance for the TEAP's supplementary report on the MLF replenishment. Lesotho withdrew its proposal requesting further scientific and technical assessment of nitrous oxide, while indicating that they may raise the issue again at a future meeting.

The issues discussed at this session also raised broader questions about how the Protocol should evolve. How can Parties ensure that the next MLF replenishment reflects both realistic implementation needs and the particular circumstances of countries with low levels of consumption? How can the Protocol address increasing workloads and financial constraints without reducing participation or ambition? How should it strengthen licensing and enforcement systems while avoiding additional burdens on developing countries? And how should its scientific and technical bodies be organized to

In this Issue

A Brief History of the Ozone Regime	2
OWEG 48 Report	3
Report of the TEAP on the 2027–2029 MLF Replenishment	3
Presentations by TEAP on its 2026 Progress Report and Related Discussions	6
Enhancing Regional Atmospheric Monitoring of Controlled Substances	9
Ensuring the Viability of Montreal Protocol Operations ..	9
Further Strengthening Montreal Protocol Institutions ...	10
Status of Preparations for MOP 38	11
Other Matters	11
Closing Plenary	12
Sixth Extraordinary Meeting of the Parties	13
A Brief Analysis of OWEG 48	13
Upcoming Meetings	15
Glossary	15

respond effectively to an expanding range of issues? The discussions initiated at OEWG 48 point to significant negotiations ahead at MOP 38, where Parties will also commemorate the tenth anniversary of the Kigali Amendment.

OEWG 48 convened in Bangkok, Thailand, from 13–17 July 2026, with over 530 registered participants representing governments, international organizations, academia, industry, and civil society. During the week, Parties also convened the sixth extraordinary Meeting of the Parties (ExMOP 6), where they resolved the outstanding membership of the Implementation Committee and approved its members by acclamation.

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 releasing 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, 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.

Vienna Convention: 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 calls for cooperation on monitoring, research, and data exchange, but does not impose obligations to reduce the use of ODS. The Convention has 198 Parties, which represents universal ratification. Parties meet every three years.

Montreal Protocol: 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 (known as 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 has 198 Parties.

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, while adjustments enter into force automatically. All amendments have been ratified by 197 Parties except for the newest, the Kigali Amendment, which has 173 ratifications to date.

Key Turning Points

London Amendment and Adjustments: At the second MOP, 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 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 (HBFCs), and HCFCs. MOP 4 also agreed to enact non-compliance procedures. It established an Implementation Committee (ImpCom) 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. MOP 9 also banned 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 (also known as halon 1011), additional controls on HCFCs, and reporting on methyl bromide for quarantine and pre-shipment applications.

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. HFCs are produced as replacements for HCFCs and are therefore a result of ODS phase-out. HFCs are not a threat to the ozone layer but have a very high global-warming potential (GWP). The Kigali Amendment entered into force on 1 January 2019.

Recent Meetings

MOP 35: At this meeting, which took place from 22–27 October 2023 in Nairobi, Kenya, Parties adopted the largest-ever replenishment of the MLF for the implementation of the Protocol, just shy of USD 1 billion. Delegates took key decisions on: life-cycle refrigerant management (LRM); stratospheric aerosol injection; the impacts of the COVID-19 pandemic on HFC baseline consumption for certain Parties; energy efficiency; and very short-lived substances (VSLS). They also took decisions on feedstock uses of methyl bromide; the import and export of prohibited cooling equipment and the related long-standing issue of dumping; and further strengthening Protocol institutions, including those concerned with combating illegal trade.

COP 13/MOP 36: This combined meeting of the Conference of the Parties (COP) to the Vienna Convention and the MOP was held in Bangkok, Thailand, from 28 October – 1 November 2024. Parties took key decisions related to: evaluating the suitability of potential sites to close gaps in the global atmospheric monitoring network; undertaking atmospheric monitoring of HFC-23 and research on sources of HFC-23 emissions to address the gap between global HFC-23 emissions reported by Parties and emission estimates derived from measured atmospheric abundances; providing further guidance and information on LRM and encouraging Parties to adopt a systemic approach to LRM; requesting the TEAP and Scientific Assessment Panel (SAP) to provide updated information on the most abundantly used VSLS; minimizing emissions of controlled substances used as feedstocks; transitioning to metered-dose inhalers (MDIs) with low-GWP propellants; sustainably managing halons and ensuring sufficient stocks of recovered, recycled, or reclaimed halons remain available for anticipated future needs; and preventing illegal trade in controlled substances through best practices.

OEWG 47: At this meeting, held in Bangkok, Thailand, from 7–11 July 2025, delegates deliberated draft decisions for MOP 37. They agreed to keep the current 2.5% servicing tail for HCFCs and concluded there was no need for a formal decision. As it stands, each Article 5 Party that has completed the accelerated phase out of production and consumption of HCFCs in 2030 will be allowed consumption of an annual average of 2.5% of the average of its calculated levels of production and consumption in 2009 and 2010 for the period 2030–2040, provided that such production and consumption is restricted to the servicing of refrigeration and air-conditioning equipment existing on 1 January 2030.

MOP 37: This meeting, held in Nairobi, Kenya, from 3–7 November 2025, agreed on the terms of reference (ToR) for the study on the 2027–2029 MLF replenishment and took other key decisions on: the continued evaluation of additional potential sites for atmospheric monitoring of controlled substances; additional analysis of the discrepancy between reported emissions and those derived from atmospheric measurements, in particular for HFC-23; a request to the TEAP to estimate the global quantity of used and unwanted refrigerants containing controlled substances; a request to the Secretariat to prepare a report on options for making effective and efficient changes to the modalities for meetings under the Protocol; and a range of compliance-related issues including—for the first time—the suspension of the rights and privileges relating to trade in HCFCs between a Party (Democratic People’s Republic of Korea) and other Parties, so no such trade will be permissible under the Protocol. Parties postponed decisions on controlled substances used as feedstocks, further strengthening Montreal Protocol institutions, and TEAP organizational issues.

OEWG 48 Report

On Monday, 13 July 2026, OEWG Co-Chair Igobe Mbulawa (Botswana) opened the meeting and expressed her appreciation for the warm welcome by the government and people of Thailand. The OEWG confirmed Mbulawa as Co-Chair, replacing Leila Akello Gonasa (Uganda), who could not be in Thailand due to travel restrictions related to the current Ebola outbreak. The US sought and obtained clarity that this confirmation was undertaken in accordance with the Montreal Protocol’s rules of procedure.

Dechen Tsering, Director, UNEP Regional Office for Asia and the Pacific, praised the Montreal Protocol as a model of innovation and adaptability for responding to emerging scientific evidence, evolving technologies, and changing economic circumstances, and appealed to Parties for a continued sense of cooperation despite resource constraints.

Megumi Seki, Executive Secretary, Ozone Secretariat, highlighted key agenda items, including the replenishment of the MLF, which is informed by TEAP cost estimates based on a calculation tool that makes the replenishment process more accessible, functional, flexible, and transparent. Referring to the agenda item on ensuring the viability of Montreal Protocol operations, she highlighted that under a business-as-usual scenario, the Montreal Protocol Trust Fund cash balance would drop below the required level of cash reserves by 2031, making it impossible for the Secretariat to service Parties and the Protocol. The Executive Secretary also expressed her hope that ExMOP 6, scheduled to confirm the membership of the Implementation Committee (ImpCom) after MOP 37 was unable to do so, could find consensus

and did not have to resort to a vote, which would be a first under the Montreal Protocol.

Organizational Matters: On Monday, the Secretariat introduced the provisional agenda ([UNEP/OzL.Pro.WG.1/48/1](#)) and the documents containing issues for discussion by, and information for, the attention of OEWG 48 ([UNEP/OzL.Pro.WG.1/48/2](#) and [Add.1](#)).

KAZAKHSTAN, supported by TURKMENISTAN and UZBEKISTAN, proposed an agenda item and highlighted a conference room paper (CRP) on the composition of the group of Eastern European States (EES) and called parties to “focus on what unites all of us instead of differences.” Ireland, for the EUROPEAN UNION (EU), did not oppose the proposal, but argued this is “not the right forum to discuss the composition of regional groups,” as they operate on an informal basis.

CANADA proposed the addition, under agenda item 4(e), of an agenda item on destruction technologies considered in Chapter 5 of the TEAP progress report. CAMEROON noted it would submit a CRP from the African Group on strengthening Montreal Protocol institutions. LESOTHO proposed an agenda item requiring information from the TEAP and the SAP on nitrous oxide, arguing it is the last ODS not controlled by the Protocol.

AZERBAIJAN suggested a new agenda item on the implementation of paragraphs 2 and 4 of Article 2(j) of the Montreal Protocol (on HFCs), following its ratification of the Kigali Amendment.

The OEWG adopted the agenda with the additional items proposed by Kazakhstan, Canada, Lesotho, and Azerbaijan, and agreed to the organization of work, as orally proposed by Co-Chair Mbulawa.

Report of the TEAP on the 2027–2029 MLF Replenishment

In decision [XXXVII/6](#), the TEAP was asked to prepare a report to enable MOP 38 to adopt a decision on the appropriate level of the 2027–2029 MLF replenishment.

On Monday, the TEAP Replenishment Task Force (RTF) gave a [presentation](#) about its [May 2026 report](#), which includes sections on HCFC phase-out, HFC phase-down, estimated funding for 2027–2029 and future triennia (2030–2032 and 2033–2035), and additional requests and information for Parties’ consideration.

They noted that the next two triennia represent significant milestones for the Montreal Protocol, with the complete phase-out of HCFCs by 1 January 2030 and the extension of the HFC phase-down to all Parties.

On the **HCFC phase-out**, the total funding to address compliance targets covers the phase-out costs of: the HCFC production sector; the HCFC consumption sector (including energy efficiency projects for low-volume consuming countries (LVCs)); and project preparation and verification.

On the **HFC phase-down**, the estimates are based on Article 5 Parties meeting the relevant Group 1 or Group 2 reduction targets. Estimated funding requirements for the HFC consumption sector include committed funding for approved Kigali Implementation Plans (KIPs) and estimated funding for: new KIPs; project preparation costs; HFC consumption verification; energy efficiency activities; and enhancing regional atmospheric monitoring capacity.

The RTF presented additional information, particularly with regard to the special needs of LVCs and very-low-volume consuming countries (VLVCs), and issues impacting their ability to transition out of HFCs. They indicated that they had also looked at

digital technologies and tools within the servicing sector, and life-cycle refrigerant management (LRM). While detailed information is provided on these topics, they did not factor it into the estimated funding requirements for the three triennia.

In total, the recommendations for the 2027–2029 triennium range between USD 1.282–1.755 billion, covering HCFC phase-out, HFC phase-down, and institutional strengthening and standard activities.

In the subsequent **question and answer session**, the TEAP responded to questions from CUBA, LESOTHO, and the FEDERATED STATES OF MICRONESIA confirming that the cost estimates for LVCs and VLVCs are mainly for fixed and training costs, and would leave little room for other activities such as demonstration projects and capacity-building. The TEAP also stated that cost-effective approaches for regional cooperation could be considered in the supplementary report.

In response to BAHRAIN, the TEAP explained that there was flexibility in the calculation tool regarding how the costs are distributed between the next three replenishment triennia. The TEAP also confirmed that the 15% deduction in funding to manufacturing sectors to account for foreign ownership was based on a reasonable legacy assumption. The TEAP's response to LEBANON confirmed that digital implementation tools were not included in the cost estimates and that there was no methodology for doing so.

In response to IRAN, the TEAP said it will double check that all Article 5 Parties that have not yet ratified the Kigali Amendment are included in the cost estimates.

Answering further questions from INDIA, the TEAP clarified that Chapter 7 of the report reviews four Executive Committee (ExCom) decisions related to funding for energy efficiency, which are incorporated into the RTF's estimated funding requirements for the HCFC phase-out and HFC phase-down in the 2027–2029 triennium.

In response to the US, the TEAP explained that, according to the ToR, they calculated target reductions based on the baseline rather than actual consumption. On cost efficiency, the TEAP welcomed a suggestion by the US to use HCFC phase-out data as a proxy to address the lack of historical data for estimating the cost efficiency of HFC phase-down.

Responding to a question from JAPAN, the TEAP acknowledged that its assumption that the 19 Article 5 Parties that have not yet ratified the Kigali Amendment would do so was optimistic and could be revisited. Responding to MALDIVES, they noted that the training cost estimates did not include certification, licensing, safety standards, or appropriate equipment, but said the figures could be further disaggregated. Responding to the EU, the TEAP clarified that discrepancies between the estimates for the 2027–2029 triennium in the previous and current reports reflected allocation decisions and data that had not been previously available.

Discussion continued on Monday afternoon. CUBA explained how LVCs and VLVCs have a greater implementation burden due to greater fixed costs, which need to be reflected in the cost estimates for the replenishment. COOK ISLANDS and SAMOA welcomed the chapter relating to the special needs of LVCs and VLVCs. They noted that while Pacific Island countries consume low quantities of refrigerants, they are still expected to undertake the necessary implementation activities, which presents unique challenges for the region. TRINIDAD AND TOBAGO shared practical experience from testing the market for digital monitoring and performance tools, highlighting the substantially higher relative cost for LVCs and VLVCs.

BAHRAIN, SAUDI ARABIA, NIGERIA, and ARMENIA reiterated the need for cost estimates to include all aspects of compliance, including digital technologies, energy efficiency, atmospheric monitoring, and LRM.

CANADA noted the importance of Parties having a technical analysis of obligations for Article 5 countries to achieve targets. CANADA, JAPAN, the EU, and the US called for credible and realistic estimates of funding needs, including that: cost estimates should be based on actual consumption figures, not maximum allowable levels; historical experience should be used; and historical utilization rates should be reviewed to see how they compare with the funding levels requested in the RTF's report.

AUSTRALIA and the US called for augmenting the scenarios in the supplementary report, noting that funding agreed in the last triennium far exceeded the needs of Article 5 Parties. NORWAY and the UK called for more discussion on the assumptions underpinning the estimates provided, with the US adding it does not accurately assess actual needs and focuses on "costing out scenarios that are maximalist."

The EU cited Article 10 of the Montreal Protocol, which encourages non-Article 5 Parties to contribute to the MLF. NEW ZEALAND, echoed by the US, lamented that any overestimate resulted in a large rollover.

INDONESIA, TÜRKIYE, CHINA, and LEBANON emphasized the increasing technical and financial needs of Article 5 countries and called for the MLF replenishment to be commensurate with the needs identified by the TEAP. TÜRKIYE highlighted the need for adequate infrastructure for the environmentally sound disposal of waste refrigerants.

CHINA questioned the grouping of countries according to consumption levels and opposed the use of selective methodology for individual countries. MALAYSIA called for further work on the implementation of LRM, including on eligible activities and support for Article 5 countries in establishing national LRM systems.

The OEWG established a **contact group**, co-chaired by Ralph Brieskorn (Netherlands) and Miruza Mohamed (Maldives), which first met on Monday evening. Parties asked further questions aimed at clarifying the methodology and assumptions for the replenishment study, and members of the TEAP responded to these questions.

The contact group reconvened midday Tuesday. The TEAP resumed answering delegates' questions, including: the differences between, and the allocation of funding across, the various scenarios; the accuracy of estimates; the differences in the methodology used in the previous RTF assessment; assumptions for filling data gaps; the possibility to develop additional scenarios, especially on HFC cost effectiveness in the manufacturing sector; and the use of historical data and additional data sources.

The TEAP said its new bottom-up approach is based on snapshots of the number of Parties with Stage 1 KIPs approved. They also explained that, unlike in the previous assessment, they had more data on HFCs and used the gross domestic product (GDP) growth rate for forecasts. One Party emphasized that supplementary work performed by the TEAP should be strictly consistent with the initial mandate.

On Wednesday morning, the contact group started to compile a list of aspects for the RTF to consider in its supplementary report for consideration by MOP 38. Key issues brought up related to: the needs of LVCs and VLVCs; how to account for the uncertainty from canceled HCFC Phase-out Management Plans (HPMPs) and

Article 5 Parties that have not yet ratified the Kigali Amendment; how to present low-end and high-end scenarios, and whether the two scenarios should be merged into one; and what role historical data should play in the estimates needed for future implementation of the Protocol.

On Thursday morning, the contact group attempted to consolidate the list into a more concise request with “packages” to be bundled around, *inter alia*, the needs of LVCs and VLVCs, LRM, and energy efficiency. There was disagreement over the extent to which digital technologies in the servicing sector would (at least initially) increase or (overall) decrease relevant costs. Several delegations also added elements to the list for the RTF to consider, with others calling for focusing on compliance-related elements and not overburdening the RTF.

The contact group reconvened Thursday evening. Participants discussed draft paragraphs submitted by various delegations, including on:

- reviewing Stage 2 KIP funding brackets for LVC and VLVC countries and estimating the additional resources needed for identified fixed-cost activities;
- requesting an assessment of post-2035 technical and cost trends, which some argued fell beyond the replenishment period under consideration;
- consolidating small and medium enterprises scenarios into one, presenting a single funding range instead of two, and refining the funding estimates using updated assumptions on cost-effectiveness and allocations for large Article 5 Parties;
- applying historical cost-effectiveness factors when estimating the funding requirement for HPMPs and KIPs;
- reviewing the 15% foreign ownership deduction using available Secretariat information;
- updating funding estimates for LRM; and
- considering a dedicated funding window to support national implementation plans.

Regarding the low-end estimate, several Parties argued against calculating funding requirements for HCFCs and HFCs based on reductions required from “latest consumption.” Others requested more time to consider the proposals.

The contact group convened twice on Friday to finalize the list. Supported by the Co-Chairs, delegates first identified the following general topics under which the various textual proposals could be grouped to facilitate consensus building: LVCs and VLVCs; LRM; energy efficiency, including cost effectiveness; cost scenarios; and methodological issues.

On Friday afternoon, following separate consultations among Article 5 and non-Article 5 countries, the contact group engaged in lengthy discussions on the draft proposals, starting with the most pressing issues of costing scenarios and methodology. On scenarios, one delegation tabled a new bridging proposal requesting the RTF to assess the impact of alternative assumptions on: HFC baselines; KIP implementation timelines; HFC-23 mitigation; energy efficiency funding; and funding distribution across levels of country consumption. Following several rounds of discussions, delegates removed all brackets from the proposal.

On methodology, delegates agreed to request the RTF, when estimating the funding requirements for HPMPs and KIPs, to draw on: historical cost-effectiveness data; cost-effectiveness factors over the last six years; and, for Article 5 Parties, average funding levels

over the past six years. They also agreed to request the RTF to adjust all elements of the funding requirements based on decisions taken at the 98th meeting of the ExCom, and to include a high-end funding estimate for a potential LRM funding window to be considered at the 100th ExCom meeting, which is scheduled to be held from 7–11 June 2027.

Delegates also discussed how to better reflect the funding needs of LVCs and VLVCs in Stage 2 KIPs. Views diverged between requesting a detailed estimate of additional resources for fixed-cost activities, and a shorter request for a high-end funding scenario. After some discussion, the latter option was retained.

On energy efficiency, several delegates opposed considering additional draft text, arguing, with support from the TEAP, that the issue was already addressed under the paragraph on scenarios, with one cautioning against “snatching defeat from the jaws of victory.” One delegation nevertheless insisted on tabling a shorter proposal, part of which was ultimately incorporated into the scenario language.

Delegates also debated a request to explore technological solutions to strengthen the implementation and monitoring of the Protocol, with several, including the Secretariat, arguing the request was too broad for an already overstretched RTF whose mandate is to develop a funding range. The proponents agreed to remove their text.

Ultimately, delegates were able to forward the [agreed requests for the RTF](#) to plenary. During the closing plenary, Parties agreed to include the document as an annex to the meeting report.

Review of HFC phase-down cost guidelines under the MLF: On Thursday, CUBA introduced an issue related to the MLF replenishment by presenting a conference room paper (CRP), [UNEP/OzL.Pro.WG.1/48/CRP.2/Rev.1](#), requesting the MLF ExCom to incorporate the conclusions of Chapter 6 of the RTF’s report (special needs of LVCs and VLVCs) into the 2028 review of the cost guidelines. They highlighted the specific challenges that LVCs and VLVCs face in implementing the Kigali Amendment. They also warned that the allocation of funds is already insufficient for Stage 1 of the KIPs, and the challenge will be even more acute for Stage 2.

GRENADA, BAHRAIN, and LESOTHO supported the CRP, while MEXICO expressed “agreement with the spirit behind the proposal.” BAHRAIN highlighted that low consumption does not mean lower implementation costs, and that the proposal does not prejudice the review of costs but should provide information to the ExCom to allow Parties to make enlightened decisions.

The EU, echoed by CANADA and the US, argued that the report should not be used to formulate requests to the ExCom. While recognizing the specific challenges of LVCs and VLVCs, CANADA and the US added that the replenishment contact group was already discussing the matter. TRINIDAD and TOBAGO noted a separate process under the ExCom for considering Stage 2 guidelines.

OEWG Co-Chair Annie Gabriel (Australia) noted there was no consensus, but proposed incorporating the CRP’s principles and ideas into the guidance for the RTF. She also asked Cuba to discuss the matter with interested Parties informally.

During the closing plenary late on Friday, Cuba was not available to report on their consultations. Parties agreed to close the item without further action.

Presentations by TEAP on its 2026 Progress Report and Related Discussions

Presentations and question and answer sessions: On Monday afternoon, OEWG considered the TEAP's [2026 Progress Report](#), prepared in response to decisions adopted by MOP 37 on halon 1301 ([decision XXXVII/4](#)), by MOP 36 on MDIs with low-GWP propellants ([decision XXXVI/6](#)), and by MOP 35 on options for the organization of the TEAP and its TOCs ([decision XXXV/20](#)). Following the [presentations](#) of the different TOCs, Parties asked questions on Monday and Tuesday afternoons and Wednesday morning.

Fire Suppression TOC (FSTOC): The FSTOC reported they are not aware of any new fire suppression/extinguishant agents under active development. The status of halon alternatives in civil aviation is unchanged as both engines and cargo compartments are still reliant on halon 1301. Current aircraft designs in production will rely on halon 1301 for at least 50 years, well beyond the FSTOC projected run-out date, which is 2035+/-4 years. They said Parties may want to consider changes in the essential use nomination (EUN) process, given that other sectors using halon 1301 may come forward. Reducing aviation emissions would extend the run-out date and give more time to implement a cargo bay alternative.

In response to a question from the EU, the FSTOC said since aircraft have a 50-year lifespan, those manufactured over the next decade will still be using halon 1301 until the end of their life. In response to questions by the EU, CAMEROON, and the US about why the map presented in the report only covered Europe, the FSTOC said the map was an example based on available data. The FSTOC added, in response to a question from the UK, that if there was more accurate regional monitoring, they would have the data to pinpoint emission sources.

In response to a question by the US, the FSTOC said data centers are protected by a range of fire suppression options, often HFCs, but could be protected by inert gas systems as well. The US also asked if halons could be reprocessed and reused rather than just destroyed. The FSTOC responded that halons don't have to be 100% pure to be reprocessed to the required specification, but it is a question of time and money.

In response to a question from SWITZERLAND, the FSTOC said under the broader definitions of per- and poly-fluoroalkyl substances (PFAS), many in-kind halon alternatives, including 2-bromo-3,3,3-trifluoropropene (2-BTP) could be considered as PFAS. However, the aviation industry is indicating that unless there is certainty that 2-BTP will have long-term viability in the 12- to 25-year time frame, they will not commit to it as an alternative.

Flexible and Rigid Foams TOC (FTOC): The FTOC noted that successful transitions are underway for foam blowing agents (FBAs) from HCFCs in Article 5 Parties, and from high-GWP HFCs in non-Article 5 Parties and some Article 5 Parties. They added that regulation and supply phase-down are driving transitions. Manufacturers of hydrofluoroolefins (HFOs) and hydrochlorofluoroolefins (HCFOs) have increased their capacity to meet the demand for lower GWP FBAs. There is continued use of HFC-245fa in many Article 5 Parties due to the costs of HFO/HCFO alternatives.

In response to BAHRAIN's question on pre-blended substances containing HFCs, the FTOC responded that there is limited data available, but they did look at it.

In response to a question from the US, the FTOC confirmed there are no identified new alternatives for foam blowing, but there are different blends that can reduce costs as transitions continue. ARGENTINA expressed concern that there is only a single supplier of FBAs in Latin America, leading to market insecurity. In response to AUSTRALIA, the FTOC said they continue to see transitions away from fluorochemicals and HCFC-141b. The EU asked about the discrepancy of HCFC-141b emissions between modeled and observed data, to which the FTOC said some of the emissions could be due to changes in the use of the chemical, the thermal properties of insulation, and indirect emissions.

Methyl Bromide TOC (MBTOC): The MBTOC reported that 62,000 tonnes of methyl bromide have been phased out globally. However, atmospheric concentrations of methyl bromide have stopped declining as quarantine and pre-shipment uses and emissions continue unabated despite the existence of effective and safer alternatives. They called for improved accuracy of reported data so the TEAP can compare bottom-up and top-down estimates of methyl bromide emissions. They also stressed that over the last decade, New Zealand and China have sharply reduced methyl bromide consumption, while India and Pakistan have increased consumption considerably.

Responding to BARBADOS, the MBTOC explained that non-chemical alternatives to methyl bromide, such as heat or cold treatment and irradiation, may be considered, but their suitability depends heavily on the specific application and pest. On questions from the EU, they reported that the large reduction in emissions from quarantine and pre-shipment use in New Zealand is due to emission policies adopted in response to Montreal Protocol obligations and health and safety standards, and that a wider range of alternatives is available for pre-shipment than for quarantine.

Medical and Chemicals TOC (MCTOC): The MCTOC recalled that the use of controlled substances as feedstock in the manufacture of other chemicals is not subject to the control measures of the Montreal Protocol. They reported that since 2020, the increase in ODS in metric tonnes is mainly due to the increased use of HCFC feedstocks, such as HCFC-22, with lower ozone depleting potential.

On destruction technologies, the MCTOC introduced information submitted for evaluation by Canada regarding a patented Steam Plasma Arc technology. The MCTOC said that although this technology appears technically similar to previously approved technologies that can also use steam, it is a distinct category in the listing of approved technologies and Parties may wish to consider approving the technology for destruction of concentrated sources.

On MDIs with low-GWP propellants, the MCTOC stressed that the transition from high to lower GWP propellants in pressurized MDIs (pMDIs) presents many challenges, including: the continued availability and affordability of alternative devices; regulatory approval and launch of lower GWP pMDIs; and patient acceptability. They reported that two pharmaceutical-grade lower GWP propellants, HFC-152a and HFO-1234ze(E), are in the research and development stage for a range of drugs in pMDIs. The first pMDI containing HFO-1234ze(E) has launched in the UK, and pMDIs containing HFO-1234ze(E) have also been approved for patient use in Australia, Europe, and New Zealand. The MCTOC emphasized that small and medium enterprises and patients in Article 5 countries are particularly vulnerable to small changes in the price of inhalers.

Responding to the US, the MCTOC noted that the information submitted on the patented Steam Plasma Arc technology does not specify whether the technology is already in use. In response to the EU, they explained that the recent growth in feedstock emissions is mainly driven by increasing demand for tetrafluoroethylene and hexafluoropropylene. They also stressed that variation in uptake of dry powder inhalers (DPIs) is mainly due to low affordability, especially in Article 5 countries.

The MCTOC also stressed that estimates on feedstock, a more detailed assessment of MDIs, and a discussion of challenges faced by Article 5 countries will be provided in the next version of the report.

Refrigeration, Air Conditioning, and Heat Pumps TOC (RTOC): The RTOC highlighted that the global demand for refrigeration, air conditioning, and heat pump (RACHP) systems is growing, in part due to extreme weather events and increased urbanization. This increasing demand creates a dual climate challenge from both direct refrigerant leakage and indirect electricity consumption, requiring comprehensive life-cycle assessments, including passive measures such as insulation and shading. They stressed that there is no single “ideal” refrigerant. Selection requires balancing multiple factors, including environmental impact, legal and regulatory obligations, safety requirements, performance, materials compatibility, component availability, affordability, and access to competent technicians.

They stressed that servicing RACHP systems is critical to achieving both ozone protection and climate mitigation, but is challenged by a deepening skills gap. This is also due to rapid technological development, including digitalization.

In response to BAHRAIN, the RTOC stated that they don’t have evidence on how variable refrigerant flow systems perform in high ambient temperature countries. They assured TRINIDAD AND TOBAGO that the needs of LVCs and VLVCs will be more substantially addressed in the forthcoming quadrennial assessment report. Replying to a question from the EU, the RTOC said the trade-offs between refrigerant characteristics, including environmental impact, safety requirements, performance, affordability, and other aspects, must be addressed by equipment manufacturers, for which there are no RTOC recommendations.

On questions by BANGLADESH, EGYPT, and LESOTHO, the RTOC explained that the challenge of reclamation and destruction is shared by many developing economies, where limited and diffuse capacity, weak cylinder return systems, and insufficient technician training constrain effective implementation. Responding to the US, the RTOC said there are many Parties that have Minimum Energy Performance Standards (MEPS) or energy efficiency labels in place. In response to another US question on newly approved refrigerant blends, the RTOC stated they were not yet aware of any specific commercial uses for these blends. Replying to AUSTRALIA, the RTOC responded that they have greater concern about the impact on climate change from the increased energy use by data centers than their use of coolants.

Per- and poly-fluoroalkyl substances (PFAS): The TEAP explained that in public discourse, the term “PFAS” has become broadly equated with the term “forever chemicals,” which incorrectly implies long-term adverse impacts. They pointed out that there is a misconception that all PFAS and their breakdown products are persistent, bioaccumulative toxins (PBTs) like perfluorooctanoic

acid (PFOA) and perfluorooctane sulfonate (PFOS). They warned that although PFOA and PFOS are not directly relevant to the Montreal Protocol, they have driven broad regulations that could impact the availability of controlled substances and their alternatives, particularly in fire suppression. Therefore, the TEAP advocated for greater alignment between regulatory approaches in different jurisdictions, taking into account individual PFAS characteristics and uses.

The TEAP responded to questions from the EU and affirmed that it is always “policy neutral” although it considers the potential impacts of policies on the transition, and that its assessment is neither targeting any single country nor just refrigerants. They also said they are coordinating with the SAP and the Environmental Effects Assessment Panel (EEAP) on difficult issues, such as trifluoroacetic acid (TFA), and are currently considering all available scientific evidence on TFA toxicity. In addition, they clarified that delays are expected in the transition from halon 1301 because the civil aviation industry is unwilling to commit significant resources before PFAS regulations are adopted. Responding to NORWAY, they pointed out two existing PFAS definitions in the US states of Maine and Minnesota.

TEAP procedures and organizational matters: [Decision XXXI/8](#) requested that TEAP progress reports include a summary outlining the procedures that the Panel and its TOCs have undertaken to ensure adherence to the Panel’s ToR. The TEAP reiterated that Parties have been relying on over 150 volunteer experts serving on the Panel and its TOC experts in all areas of production, consumption, and end-use of controlled substances. They highlighted challenges to fund face-to-face meetings, keep up with the Protocol’s expanding scope, and manage the increasing workload.

Options for the organization of the TEAP and its TOCs: [Decision XXXV/20](#) requested the TEAP to present options for “new ways of organizing their work” given the composition, balance, and workload of the Panel and its TOCs. The TEAP provided further information in response to informal consultations at MOP 37, outlining its reasons for keeping or amending the current configuration of its TOCs to reflect current developments in each of the TOCs’ remits. They reiterated their proposal to split the MCTOC into two formal subcommittees on aerosols/medical and chemicals.

Responding to the US, the TEAP admitted possible bias when asking the TOCs whether they should be restructured. They also explained that a subgroup of the TEAP is currently considering the organization of task forces and other temporary subsidiary bodies, and that having all TOCs meeting simultaneously in one location is not practicable. Responding to IRAN, they clarified that annual meetings only gather TEAP members, not the 150 volunteers. They also called for the Parties to help them improve gender, geographical, and age balance in the membership.

Responding to the UK, the EU, and Canada, the MCTOC said they already operate in two subcommittees with a total of 40 members, and that having a fourth co-chair would be useful. Responding to Canada, the RTOC reported that its current structure consists of two 20-member subcommittees and that the majority of the work on cross-cutting issues, such as LRM and energy efficiency, is performed by 15 members from each subcommittee. They also stressed that “RTOC is working extremely well,” and the final report will “show the quality of its work.”

Responding to BARBADOS, the TEAP noted that the Secretariat has financially supported non-Article 5 experts' participation, but that they did not have an estimate of how many such experts required assistance.

Halon 1301 and its continuing use in the aviation industry; management of other controlled substances used for fire suppression: Co-Chair Gabriel noted that [decision XXXVII/4](#) requested Parties to submit information about the development of alternatives suitable for use in fire suppression. The Secretariat received 35 submissions and the TEAP will consider this information in its 2027 progress report. She also noted that the Ozone Secretariat, the Basel Convention, and the MLF have prepared a [draft guide](#) on transboundary movements of Montreal Protocol controlled substances and related equipment.

INDIA called for speeding up the development of alternatives that are affordable and economically viable in Article 5 Parties. They said the FSTOC should review the essential use nomination (EUN) process and simplify the framework so it is responsive to Article 5 countries.

The EU said there are alternatives available for some applications, including handheld fire extinguishers. They said the EU has approved 2-BTP as an alternative and is ready to approve "anything" submitted by the airline industry. The EU said it will make a proposal on PFAS, which could include exemptions in critical sectors that lack available alternatives.

AUSTRALIA and CANADA expressed concern about the halon 1301 run-out date and the risk it poses to the ODS phase out. AUSTRALIA said to preserve existing banks of halons as fire suppressants, destruction should be avoided unless the substance is no longer viable and cannot be reclaimed. CANADA called for further discussion, since there will be a need for halon 1301 for at least an additional 50 years.

KENYA said they are assessing the remaining use of halons, alternatives, and future supply, noting remaining uses must be managed sustainably while making the transition to alternatives.

The US said they have approved 2-BTP and approval is pending for 2-BTP/CO₂. They are looking for suitable alternatives for other uses of halon 1301. They also expressed concern about the destruction of halon 1301 for certain markets where there may be short-term financial gain at the expense of longer-term problems.

SAUDI ARABIA called for increased cooperation with the International Civil Aviation Organization (ICAO) and said it is important to use recycled halons to meet growing needs.

Parties agreed with Co-Chair Gabriel to close this agenda item, which could be taken up again in 2027.

MDIs with low-GWP propellants: Co-Chair Mbulawa noted that [decision XXXVI/6](#) required the TEAP to continue to provide updated information on low-GWP MDI propellants.

The EU noted positive developments, including approval and further development of low-GWP alternatives in several countries and DPIs becoming more common. They encouraged other Parties to submit information so the TEAP can provide a more comprehensive picture.

INDIA pointed to its MDI manufacturing sector and intellectual property barriers for low-GWP propellant uptake, and, together with the RUSSIAN FEDERATION, TÜRKIYE, and KENYA, pleaded that public health and affordability considerations must be prioritized.

MOROCCO expressed satisfaction that low-GWP propellants are available for use in its manufacturing industry, with CUBA adding that expertise should be made available by the TEAP for converting its factories to lower-GWP propellants. CANADA suggested that the EU and US submissions to the TEAP should be published on the Secretariat's website for all Parties' benefit with the submitters' permission, which the Secretariat confirmed as feasible.

Parties agreed with Co-Chair Mbulawa to close this agenda item until further information in the forthcoming TEAP quadrennial assessment report can be considered.

Options for the organization of the TEAP and its TOCs: On Wednesday, OEWG Co-Chair Gabriel introduced this item, related to [decision XXXV/20](#). After the earlier presentation by the TEAP and the opportunity for delegates to ask questions, Parties now made general comments and suggestions for a way forward.

The US stressed that the TEAP should remain "fit for purpose" and its reorganization not be viewed negatively. Echoed by AUSTRALIA, the UK, the EU, and NORWAY, they proposed the establishment of a contact or informal group.

AUSTRALIA said senior experts should not be members of the TEAP and TOCs simultaneously.

The UK, echoed by the EU, recalled that discussions of the issue started at MOP 22. They did not support splitting the RTOC into two separate TOCs but endorsed such a division for the MCTOC, arguing that both medical and chemical workstreams require dedicated attention.

SENEGAL highlighted that any reform of the TEAP should aim at enhancing effectiveness, transparency, and inclusivity. They emphasized the need for: enhanced participation from Article 5 countries, including African states; capacity-building and mentoring mechanisms; and membership renewal.

Co-Chair Gabriel proposed, and delegates agreed, to establish an **informal group**, co-facilitated by Camilla Noel (Vanuatu) and Heidi Stockhaus (Germany).

The informal group first met on Wednesday, when the TEAP answered questions from delegates on: variation in TOC workload, increasing the number of MCTOC co-chairs, and the difference between members and consultant experts. The group then exchanged differing views on whether to split the MCTOC into two separate TOCs or formalize its two operating subcommittees. One delegate requested that the item remain open for consideration by the MOP, while another noted that the MOP should work on a CRP and not lose time answering questions.

The informal group met again on Thursday afternoon. Delegates discussed how the TOCs' workloads have changed and how their structure and size should be adjusted. One delegate commented that some topics could be looked at less frequently. She also stated that if a TOC doesn't have the experts to deal with an emerging issue, they could use a task force.

The TEAP reminded delegates that some current members will likely leave after completing the quadrennial assessment and they will have to bring new people in, while trying to ensure regional and gender balance. They also raised the challenge experts face in getting funding from their governments to cover travel expenses. The Secretariat clarified that only Article 5 country experts get financial support from the Secretariat, although sometimes there are some extrabudgetary funds for a non-Article 5 country expert who needs funding.

Parties agreed to continue discussions at the next meeting.

Changes in the membership of the Panel: On Wednesday, Co-Chair Mbulawa introduced this item. SAUDI ARABIA argued any future change must preserve technical expertise and ensure Article 5 Parties' representation, including high ambient temperature countries. They also called for large-scale consultations with the Parties and a clear impact assessment before any decision is made. Parties agreed with Co-Chair Mbulawa to close this item and to consider it further at MOP 38.

Any other issues: On Wednesday, CANADA presented [UNEP/OzL.Pro.WG.1/48/CRP.5](#), containing a draft decision on destruction technologies for controlled substances. They reiterated, following the TEAP's conclusions, that Steam Plasma Arc is a distinct category of destruction technology.

Answering questions from the US, they reported that: destruction and removal efficiency for CFCs, HFCs, and HFCFs considered exceeded 99.99% by at least an order of magnitude; although the technology was currently used only to a limited extent, the company was exploring commercial opportunities; tests could be conducted on other substances in the future; the technology had a physical footprint of 15–25 sq m and could be containerized; and no fossil fuel input was required.

AUSTRALIA and the US supported the CRP and suggested moving it forward. IRAN asked if an annex could be added to the CRP containing a form for Parties to provide information to the Secretariat regarding this technology. CANADA responded that the TEAP will advise Parties about what information is needed.

BAHRAIN noted the cost of these technologies, which could affect their feasibility in Article 5 countries, and called for sufficient support from the MLF.

Parties agreed to forward the CRP to the MOP for approval.

Enhancing Regional Atmospheric Monitoring of Controlled Substances

On Wednesday, OEWG Co-Chair Gabriel introduced this item. The Secretariat and the Advisory Committee of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention [presented](#) on progress in implementing [decision XXXVII/1](#). The Secretariat described the development of an online tool to be used by Parties to estimate the costs they would incur in establishing monitoring sites, noting it should be launched at MOP 38.

On the suitability of potential sites, the Secretariat explained that 10 locations were identified by the Advisory Committee in five priority regions: Southern Asia, South-East Asia, Southern Africa, Middle East, and Central South America. Brazil, South Africa, and Viet Nam have already notified the Secretariat of their interest in setting up monitoring stations.

The Secretariat also announced that in June 2026, the MLF ExCom adopted [decision 98/62](#) to establish a funding window for pilot projects.

Advisory Committee Co-Chair A. R. Ravishankara discussed how potential monitoring locations were determined and provided a list of essential needs for a successful station, including infrastructure, logistical support, scientific capability and interest, common measurement standard, and data sharing.

MEXICO asked whether the Advisory Committee is planning on going beyond the five priority areas, noting they have infrastructure that could be used to strengthen atmospheric monitoring.

The EU said it was still mobilizing EUR 4.5 million for atmospheric monitoring, and hoped to have the green light this year to establish at least another three monitoring stations. They said they may produce a CRP for discussion at MOP 38. BANGLADESH referred to its experience with the Bhola Island monitoring site, which could help with the establishment of further pilot sites.

SAUDI ARABIA and INDIA underlined that establishing regional monitoring stations was voluntary, at the full discretion of host countries, and would not represent a policing or enforcement mechanism. BRAZIL reiterated its interest in hosting a site and advocated for long-term financial viability. IRAN asked whether neighboring countries covered by the sensitivity of a proposed monitoring station would also need to agree on its establishment.

CANADA welcomed the progress made and asked what would happen with monitoring gaps that remained after the current enhancement. KENYA advocated for existing sites like the one in East Africa to be upgraded. The US asked for coordination between the EU and MLF funding streams. CHINA advocated for a smooth implementation with sustained and predictable funding, with the Advisory Committee adding that China is setting up a large monitoring station and calibration facility.

AUSTRALIA asked about cooperation between the Secretariat, Advisory Committee, and World Meteorological Organization (WMO), and the UK wondered about engagement with the wider scientific community. The Advisory Committee responded that they are working “in sync” with WMO and are “very tucked in” with the fairly small scientific community.

Parties accepted Co-Chair Gabriel's proposal to discuss this matter further on the margins of the meeting and intersessionally, and revisit it at the MOP.

Ensuring the Viability of Montreal Protocol Operations

On Tuesday, OEWG Co-Chair Mbulawa introduced this item, which follows up on [decision XXXVII/7](#) requesting the Secretariat to prepare a report ([UNEP/OzL.Pro.WG.1/48/4](#) and [Add.1](#)) on costed options for making effective and efficient changes to the timing of, Secretariat support for, and length of meetings under the Protocol, and the timing of replenishment decisions.

AUSTRALIA highlighted that the financial difficulties of the Protocol, are due to, among others: Parties' decision to keep contributions at the same rate; differences between budgets and decisions; some Parties not making the required contributions; and the funding of extra-budgetary activities. They also supported the Secretariat's suggestion to hold MOPs biennially, arguing one year is often not enough to see the results of decisions.

INDIA, seconded by BAHRAIN, CUBA, VANUATU, LEBANON, TRINIDAD AND TOBAGO, SOUTH AFRICA, COLOMBIA, SYRIA, TÜRKIYE, GRENADA, SAINT KITTS AND NEVIS, CAMEROON, BELIZE, and BANGLADESH, raised “critical concerns” on scenarios B (annual online OEWGs and extended MOPs) and C (biennial alternation between OEWG and MOP meetings) of the report, including the lack of inclusivity of online and hybrid formats for Article 5 Parties and a potential backlog of critical decisions or more extraordinary meetings. They also stressed that even with substantial cuts, the Protocol's operations will remain at risk if contributions remain at 75%.

The UK called for a clearer and shared understanding of the problems Parties are trying to address to ensure that the measures taken are warranted and proportionate, while taking note, with

the US, of the UN80 reform agenda, which could provide useful outcomes to draw upon.

JAPAN highlighted that none of the scenarios proposed by the Secretariat reduce the scope or ambition of the Protocol and said they will approach the issue with an open mind.

The US requested a robust, open discussion to ensure the Protocol “remains fit for purpose.” They welcomed the ideas put forward by the Secretariat, including MLF replenishment every four years and biennial meetings. They also requested more time to think about the consequences of each idea and, with ARGENTINA, IRAN, and GRENADA, proposed establishing a contact group.

KENYA emphasized the importance of exploring options, especially given the increasing workload under the Protocol, but stressed that any changes must take the needs of Article 5 Parties into account.

CANADA noted that the current meeting pattern has historically served the Protocol well, but expressed openness to consider some efficiencies. He called for all Parties to meet their financial obligations and supported the calls for a contact group.

NIGERIA advocated for the current meeting structure to be maintained while exploring streamlining meeting efficiency.

CHILE suggested adding an additional variable to the discussion, which is to review the Protocol’s rules of procedure for flexibility and appropriate opportunities for cost savings. NORWAY pointed out that reducing travel is a legitimate consideration for an environmental body, but opined that any operational changes should be made on a trial basis.

NEW ZEALAND saw some value in scenario C, but not scenario B, which would remove the important intersessional period used for in-person negotiations. The EU and SWITZERLAND stressed that many ongoing and emerging issues remain to be resolved, including the implementation of the Kigali Amendment. The EU, supported by ISRAEL, suggested lessons learned from other multilateral environmental agreements (MEAs) should be considered, while GRENADA and IRAN stressed that other MEAs are not as successful as the Montreal Protocol, and asked: “If it isn’t broken, why fix it?”

CHINA highlighted that both cost and compliance challenges should be addressed going forward, with a broader look at the functioning of the Protocol and the impact of the proposed scenarios. They agreed with many others that Parties need to pay their outstanding financial contributions.

CAMEROON emphasized that the Protocol is entering a new era, not only addressing ozone layer depletion but also climate change, stressing the importance of not undermining the Protocol.

The OEWG then established a **contact group**, co-chaired by Alessandro Peru (Italy) and Sergio González (Mexico).

The contact group first met on Tuesday evening, when the Secretariat responded to questions about the UN80 process, noting that UNEP is working to establish an administrative hub that MEAs could use to reduce secretariat costs. However, they noted that the process is at an early stage, and not all MEAs support the initiative.

The Secretariat also explained that the increased costs of the ImpCom reflect the extension of each meeting from one day to two, together with the associated documentation and interpretation costs. Several delegates expressed concerns about Parties in arrears with their contributions, with one arguing this is the “root cause” of the Protocol’s financial challenges and several others stressing this should be part of the contact group’s discussions.

Delegates resumed discussions on Thursday afternoon. Several Parties said it would be difficult to justify to their capitals long-distance travel for a two- or three-day meeting, or for two meetings a year, for both financial and environmental reasons. One delegate suggested that, beyond being a cost-cutting measure, biennial meetings would: allow for better preparation; free up capacity to engage with other MEAs; and provide more time for domestic cross-ministerial coordination.

Several delegates emphasized the need for further information on expected outcomes and efficiency before moving the discussion forward, including the impacts, advantages, and disadvantages of each proposed scenario for the effective functioning of the Protocol. Another delegate suggested reducing interpretation time and/or the amount drawn from the cash reserve, without incurring additional costs, noting that USD 600,000 had been drawn from the reserve the previous year.

The Secretariat then delivered a presentation about the UN80 initiative. They reported that Work Package 27 offers 10 recommendations to optimize, rather than replace, the existing environmental governance framework. The strategy focuses on: elevating the environment in the multilateral system; strengthening MEA governance; and accelerating country-level implementation through improved integration and collaboration.

The contact group met for a third time on Friday morning. The Secretariat introduced a compilation of delegates’ questions and asked Parties to submit additional questions by 31 August 2026 for the Secretariat to answer before MOP 38. Delegates added questions to the list, including on: how the scenarios could support the programme of work; whether organizational changes would be temporary; the effects of any past reductions in meeting frequency; and whether revenue could be increased.

Co-Chair González reported back to the closing plenary on Friday night and Parties agreed to close this agenda item and continue the discussion at MOP 38.

Further Strengthening Montreal Protocol Institutions

On Wednesday afternoon, Co-Chair Mbulawa introduced this agenda item ([UNEP/OzL.Pro.37/9](#), para. 166), along with other relevant documents, including information provided by Parties on illegal trade in controlled substances and synthesis of best practices ([UNEP/OzL.Pro.WG.1/48/3](#)).

Cameroon, on behalf of the AFRICAN GROUP, introduced [UNEP/OzL.Pro.WG.1/48/CRP.3](#), which requests to the Secretariat to: prepare a report on available tools to enhance tracking and monitoring of controlled substances; develop standard operating procedures to support a harmonized approach for detection of illegal trade, handling of cases, management of seizures, reporting, and sanctions; and explore the feasibility of developing open-source licensing software. It also requests the MLF to assess additional training and capacity needs for Article 5 Parties.

CANADA, also on behalf of AUSTRALIA, the EU, NORWAY, and SWITZERLAND, introduced [UNEP/OzL.Pro.WG.1/48/CRP.4](#), which seeks to close loopholes for illegal trade by improving licensing systems. The CRP addresses licensing systems, data sharing, improving verification for imports and exports, improving data reporting, and continued reporting on the exports and imports of controlled substances. It also requests the Secretariat to make information available on those Parties that did not report data required under Article 7, by 30 September each year.

In the subsequent discussion, a number of countries, including BANGLADESH, CHINA, INDIA, VANUATU, SAUDI ARABIA, BAHRAIN, COLOMBIA, LEBANON, KENYA, and QATAR, agreed that licensing systems are important, but said any new measures, including reporting requirements, should remain voluntary, facilitative, and recognize the realities on the ground in Article 5 Parties, noting that additional obligations would be a burden.

INDIA stated that publishing the names of countries not in compliance could be seen as punitive and, supported by many others, said the emphasis should be on financial and technical assistance. NIGERIA and TOGO welcomed CRP.3 and expressed their willingness to discuss the issue.

The US and UK noted that it is important to realize that Parties have different types of licensing systems. The EU said some ideas are common between the two CRPs.

ISRAEL said it may be useful to consider the UN Office of Drugs and Crime's (UNODC) work on illegal trade of ODS to see if there is any overlap. ARGENTINA stated they want to ensure that countries, like themselves, who have had an effective licensing system for many years, do not have to change what they are already doing, and called for prudence going forward.

Parties agreed with Co-Chair Mbulawa to establish a **contact group**, facilitated by Paul Krajnik (Austria) and Liana Ghahramanyan (Armenia).

The contact group first met on Wednesday evening and delegates agreed to start with CRP.3. They explored the meaning, scope, and practicality of the approaches and steps proposed in CRP.3.

On Thursday afternoon, the contact group started a paragraph-by-paragraph review of CRP.4. The CRP's proponents explained that the proposal: requests the Secretariat to prepare a checklist of elements that countries could use voluntarily when providing information on their licensing systems; clarifies that licensing systems cover not only new but also used, recycled, and reclaimed substances; encourages Parties to cover substances in trans-shipment and re-export and to track trade in free trade zones through their licensing systems, which some argued could pose feasibility challenges; and encourages Parties to establish automated systems and standardized procedures to strengthen import and export verification.

On Friday morning, the contact group finished the paragraph-by-paragraph review of CRP.4 and discussed the preambular paragraphs of both CRPs. The discussion revolved around: the need for reconciliation between export and import data; how to merge the current two reporting systems into one under Article 7 of the Protocol; and the need to differentiate between the trade in substances and equipment. Delegates were reluctant to engage on Co-Chair Ghahramanyan's proposal to merge the two CRPs, but showed willingness to at least further streamline and clarify the CRPs for further consideration at MOP 38.

During the closing plenary, Parties agreed to keep this item on the agenda for MOP 38.

Status of Preparations for MOP 38

On Thursday, OEWG Co-Chair Mbulawa introduced this item and reminded delegates that decision [XXXVII/5](#) invited Parties to submit to the Secretariat information related to centers of excellence for sustainable cooling and testing centers for energy efficiency

related to the implementation of the Kigali Amendment. Thus far, 23 Parties have submitted information.

Pearl Inagh Nkusi, Rwanda, presented on the arrangements for MOP 38. She welcomed everyone in advance to the city where the Kigali Amendment was adopted 10 years ago. She announced there would be a Kigali Amendment 10th anniversary workshop on 1 November 2026, an industrial exhibition on sustainable cooling and cold chain development, and a reception showcasing Rwanda's culture and hospitality on 5 November 2026.

She also announced that the African Group will be proposing a declaration that captures the political spirit and forward-looking ambition of MOP 38. She called on Parties to join Africa and sign the declaration.

In the subsequent discussion, CUBA asked the Secretariat and Rwanda to ensure that logistical details are available well in advance to facilitate travel arrangements. BAHRAIN expressed concern about the situation in certain regions that could affect Parties' attendance.

Senegal, on behalf of the AFRICAN GROUP, supported by KENYA, NIGERIA, CAMEROON, SOUTH AFRICA, EGYPT, TOGO, and SIERRA LEONE, congratulated Rwanda on its preparations for MOP 38, welcomed the proposal for a ministerial declaration, and expressed hope for universal ratification of the Kigali Amendment and the strengthening of the MLF.

SWITZERLAND supported the idea of a forward-looking declaration and hoped that a draft could be shared soon to give policymakers the opportunity to review it. MYANMAR also supported Rwanda's efforts.

RWANDA thanked everyone for their support and trust in Rwanda to organize and make sure the MOP is successful. She said an information note regarding logistics, and the text of the African declaration, will be available soon.

Other Matters

Participation of the Central Asian States in the EES Group:

On Wednesday afternoon, KAZAKHSTAN introduced [UNEP/OzL.Pro.WG.1/48/CRP.1](#), which invites Parties to continue recognizing and engaging the Central Asian States within the EES group, noting that for more than three decades, they have actively participated in the group's work and have been regularly nominated and elected to the governing and subsidiary bodies of the Montreal Protocol and the Vienna Convention.

Echoed by KYRGYZSTAN, TURKMENISTAN, UZBEKISTAN, AZERBAIJAN, and the RUSSIAN FEDERATION, they highlighted the longstanding and constructive participation of Central Asian States in the EES group. They argued that forcing a country to change regional groups is a violation of its sovereignty and inconsistent with the principles of fairness, inclusiveness, and consensus underpinning the Protocol. They also stressed that CRP.1 was not intended to set a precedent, but rather to prevent a similar situation from arising in the future. They urged Parties to support the CRP and forward it to MOP 38 for consideration. BAHRAIN, LEBANON, SAUDI ARABIA, CHINA, QATAR, and IRAN supported the CRP.

KYRGYZSTAN asked what specific challenges to the implementation of the Protocol had arisen from the participation of Central Asian States in the EES group, and requested that any such claims be supported by evidence. They stressed that

membership should not be determined by geographical or political considerations, but by whether the proposed change would contribute to more effective implementation of the Protocol.

Ireland, for the EU, echoed by CANADA, AUSTRALIA, the UK, and the US, argued that the decision should not be taken by the MOP but by consensus among members of the regional group. CZECHIA supported the EU and emphasized that no country ever sought to change the membership of the UN regional groups.

CANADA acknowledged the legitimacy of all views and, echoed by the US, suggested continuing informal discussions on the margins of the meeting. They also offered to facilitate such discussions.

The RUSSIAN FEDERATION argued that decisions concerning UN regional groups should not automatically apply to all MEAs. They asked the Secretariat whether a country could be compelled to move to another regional group, to which the Secretariat replied that it could not, also noting it is for each regional group to determine its members.

TÜRKIYE said that the informal nature of regional groups affords them autonomy in determining their membership and that any way forward should preserve longstanding arrangements.

Co-Chair Gabriel proposed that interested Parties continue informal consultations on the margins of the meeting, without facilitation by the Secretariat, and that the agenda item remain open. The RUSSIAN FEDERATION argued that further consultations would be “simply superfluous” and that the discussion should be closed.

Informal consultations on participation of Central Asia in the EES group took place on Thursday afternoon, facilitated by Liana Ghahramanyan (Armenia). One delegate explained that established practice was to utilize the Europe and Central Asia Network for the Montreal Protocol, which was established at MOP 16 in 2004. He said that this Network was meant to provide a platform for collaboration of the countries in Eastern Europe, the Balkans, Caucasus, and Central Asia, and that this group often met in the margins to nominate members to Protocol bodies, and argued this practice should be continued.

Other participants stood firm on their request to formalize these arrangements in a renamed group that includes Central Asian and Caucasus states, which has been the practice for 35 years. A number of delegates pointed out that they don’t have the mandate to change the membership of the EES group or its name.

The informal consultations continued on Friday. One Party proposed a compromise in that Parties from Central Asian may be nominated by the EES group for the bureaux of the COP to the Vienna Convention and the MOP to the Montreal Protocol, provided that there is a consensus of the 23 members of that group.

A number of other Parties did not accept the proposal. They argued again that the Central Asian countries have always been part of the EES group and should continue to be full members, not subject to the consensus of the group.

Facilitator Ghahramanyan expressed hope that bilateral consultations will continue so that Parties can reach a satisfactory agreement.

Status of Azerbaijan under the Protocol: On Thursday morning, AZERBAIJAN presented its draft decision on consideration of the implementation of paragraphs 2 and 4 of Article 2(j) of the Montreal Protocol in respect of Azerbaijan ([UNEP/OzL.Pro.WG.1/48/CRP.6](#)). They highlighted that the Kigali Amendment has only entered into force in 2026 for Azerbaijan, which raises

practical implementation issues, including establishing an HFC consumption baseline, setting up a regulatory framework, and sequencing control measures. They said their submission is aimed at ensuring clarity and consistency in the application of the Protocol.

KAZAKHSTAN, UZBEKISTAN, and BAHRAIN supported the proposal. CANADA, the US, and the EU signaled openness to discuss the proposal, but asked for further clarification about its rationale, the data behind it, and how it would make a practical difference. CANADA reminded delegates that Azerbaijan had submitted a similar proposal in 2019 and that the original differentiation of non-Article 5 Party pathways under the Kigali Amendment depended on Parties’ self-identification at the time rather than on objective criteria.

Co-Chair Gabriel suggested that Azerbaijan engage with Canada, the US, and EU and report back to plenary on Friday.

During the closing plenary, AZERBAIJAN reported on its informal consultations. She said Parties asked for further clarification to understand Azerbaijan’s proposal. She asked for CRP.6 to be forwarded to the MOP for further consideration. There were no objections.

Nitrous oxide: On Thursday, LESOTHO briefly presented its CRP on nitrous oxide before withdrawing the proposal, clarifying that this item required further consultation within the African Group. They said they hoped to present it again at the next MOP or OEWG meeting. They also clarified that they did not necessarily expect a MOP decision requesting Parties to work on the issue, but rather an assessment from the TEAP and SAP.

BAHRAIN, supported by SAUDI ARABIA, QATAR, TURKMENISTAN, LEBANON, SYRIA, and KUWAIT, argued that countries are already devoting significant resources and time to the implementation of the Protocol and the Kigali Amendment, and that any new commitment could put these efforts at risk. They also stressed that agriculture is one of the main uses of nitrous oxide, which many Article 5 countries depend on for their economic development, and that the matter would be better addressed under other conventions.

SWITZERLAND highlighted that nitrous oxide is also used for industrial purposes, which could fall under the Protocol’s scope, and, with the EU, UK, and SOUTH AFRICA, welcomed future discussions on the matter.

The RUSSIAN FEDERATION pointed to the 1979 Convention on Long-Range Transboundary Air Pollution, whose first protocol covers nitrous oxide. They argued that there is no connection between the substance and atmospheric ozone and urged parties to consider the scientific studies produced over the last four decades.

Parties agreed with Co-Chair Mbulawa to close the discussion on this item for the time being.

Closing Plenary

The closing plenary convened at 6:30 pm on Friday in parallel to the contact group on the MLF replenishment. The Co-Chairs received reports back from the different contact groups and informal consultations, and those items were forwarded to the MOP for further consideration.

ARMENIA reported on the informal consultations on the participation of Central Asian States in the EES group, noting that several proposals had been put forward, but no resolution reached.

KAZAKHSTAN, supported by TURKMENISTAN, KYRGYZSTAN, the RUSSIAN FEDERATION, TAJIKISTAN, and

UZBEKISTAN, said the Central Asian countries will continue to follow the long-established institutional process under the Montreal Protocol and participate in the EES group. He said the Central Asian States would be willing to withdraw their CRP if this established practice is maintained.

CZECHIA, also on behalf of ESTONIA, LATVIA, LITHUANIA, POLAND, and SLOVAKIA, said they had presented a pragmatic and balanced proposal based on consensus within the EES group, but it was not accepted.

KYRGYZSTAN added that no state has the right to exclude another state from a regional group. The RUSSIAN FEDERATION said it is not sure why certain EU states have taken a destructive approach and are splitting the regional group.

The EU said the group has to figure this out among themselves. CZECHIA rejected the reference to its actions as unfair, noting they have never tried to change the membership of the regional group and have always acted in the spirit of cooperation.

After consulting, Co-Chair Gabriel proposed forwarding this issue to the MOP for further discussion as a separate agenda item. There were no objections.

Delegates then adopted the meeting report ([UNEP/OzL.Pro.WG.1/48/L.1](#) and [Add.1](#)), with editorial amendments from the EU and AZERBAIJAN, and with the conventional understanding that the report would be finalized by the Secretariat under the OEKG Co-Chairs' supervision.

The plenary was suspended at 7:45 pm to wait for the contact group on the MLF replenishment to conclude its work. The RUSSIAN FEDERATION pointed out that the meeting had to conclude by 9:00 pm and could not continue without interpretation.

Plenary resumed at 8:30 pm. Since Cuba was not available to report on consultations on CRP.2/Rev.1, Co-Chair Gabriel concluded that since there was no consensus to continue on this item, it would be closed.

MLF replenishment contact group Co-Chair Miruza Mohamed reported that the group had successfully concluded negotiations on the requests to the TEAP for its supplementary report. The plenary agreed to include the [document](#) as an annex to the meeting report.

On behalf of her Co-Chair and the Secretariat, Co-Chair Gabriel thanked delegates for their hard work and wished them all safe journeys home. She gavelled the meeting to a close at 8:39 pm.

Sixth Extraordinary Meeting of the Parties

As agreed by Parties at MOP 37 ([decision XXXVII/21](#)), ExMOP 6 convened on Tuesday, 14 July, to enable Parties to take a decision on the outstanding membership of the ImpCom for 2026.

The start of ExMOP was delayed to enable further informal consultations between Parties, including within the EES group. Close to an hour after the meeting was scheduled to start, President Paul Krajnik (Austria) called the Bureau members into a huddle at the front of the room.

Shortly thereafter, the President formally opened the ExMOP. He thanked Parties for their spirit of collaboration and compromise, and led delegates through the approval of the agenda ([UNEP/OzL.Pro.ExMOP.6/1](#)), organization of work, and preliminary credentials of representatives, with CHILE, IRAN, and the US commenting on procedural matters.

ARMENIA then reported on EES group deliberations and informed Parties that the group, in a constructive spirit of

cooperation, mutual respect, and understanding, had agreed on the nomination of Azerbaijan as an ImpCom member from their group. UZBEKISTAN offered an alternative candidacy, but supported Azerbaijan's nomination in the interest of consensus.

The ExMOP then approved the selection of the following ImpCom members and roles until the end of 2027 by acclamation: Azerbaijan, Ecuador, Kenya (Linda Kosgei as President), Lebanon, and Norway (Sandrine Benard as Vice-President and Rapporteur). The ExMOP also confirmed the positions of Benin, Dominican Republic, Montenegro, Netherlands, and Saudi Arabia as ImpCom members until the end of 2026. AZERBAIJAN thanked Parties for their trust in her active and responsible ImpCom membership.

After the ExMOP authorized the Secretariat to complete the meeting report under President Krajnik's guidance, he gavelled the meeting to a close at 11:59 am.

A Brief Analysis of OEKG 48

The Montreal Protocol is at an inflection point. Nearly 40 years after the Protocol's adoption, Parties are both ready to celebrate its past achievements and focus on its future at a time when both multilateralism and the United Nations system are facing financial and political challenges. At the 48th meeting of the Protocol's Open-ended Working Group (OEKG 48), it was apparent that nothing less than the future operations, institutions, and instruments of the Protocol are at stake.

The Montreal Protocol's upcoming 40th anniversary in 2027 and the Kigali Amendment's 10th anniversary this year are an invitation to celebrate these agreements, which have not only sheltered humanity from most of the dire consequences of ozone layer depletion and increased ultraviolet radiation, but could also help avert global warming of up to 1°C by 2050 and up to 1.5°C by 2100. These successes are no small feat. However, those attending OEKG 48 had no time to rest on their laurels as they focused on the challenges ahead.

This brief analysis examines several issues addressed at OEKG 48 that will have an impact on the future viability of the ozone regime: the replenishment of the Protocol's Multilateral Fund (MLF) for the 2027–2029 triennium; the timing and length of meetings under the Protocol; the future structure of the Technology and Economic Assessment Panel (TEAP) and its Technical Options Committees (TOCs); and several uncertainties about Protocol operations and Kigali Amendment ratifications.

Growing Financial Tensions

The MLF is replenished every three years and is the key enabler for the successful implementation of the Montreal Protocol. The Fund provides financial and technical assistance to Article 5 (developing) countries. Today, it focuses on the phase-out of hydrochlorofluorocarbons (HCFCs) by 2030 and the phase-down of hydrofluorocarbons (HFCs) by 2047. The Fund is primarily financed by contributions from non-Article 5 (developed and transitioning) countries.

For the 2024–2026 MLF triennium, the 35th Meeting of the Parties (MOP 35) had approved a record-high replenishment of USD 965 million. Parties agreed that the budget increase was needed given that HCFC phase-out and HFC phase-down obligations were starting to overlap. Although about half of this budget was made up of "roll-over" funds from the 2021–2023 triennium (mainly due

to the COVID-19 pandemic), the 2024–2026 replenishment was a substantial step up from the USD 540 million in the previous triennium.

With the need to reach agreement on the next MLF replenishment this year, delegations were acutely aware of the tight fiscal environment they are facing. Many delegates were wondering to what extent the upcoming MOP 38 would be able to agree on a replenishment figure that will ensure the further successful implementation of the Protocol and its amendments. At the same time, they needed to assess to what extent the cost estimates by the TEAP Replenishment Task Force (RTF) were based on appropriate assumptions, including past implementation experience and future funding needs.

The RTF estimated funding needs for the 2027–2029 triennium at between USD 1.282–1.755 billion, a range many considered too large. Donor country delegations called for credible and realistic estimates based on actual consumption figures (rather than maximum allowable levels) and historical experience, while many Article 5 Party delegations stressed that all aspects of compliance needed to be included in cost estimates, including: the needs of low- and very-low-volume consuming countries (LVCs and VLVCs) with their relatively higher fixed costs; life-cycle refrigerant management (LRM); and energy efficiency. In other words, donor countries emphasized improving the methodology and assumptions underpinning the estimates to avoid another substantial overestimate in a fiscally tight environment, while recipient countries sought more comprehensive figures.

After a marathon contact group debate, OEWG 48 managed to finalize a list of elements for the RTF to consider in a supplementary report on the MLF replenishment to be discussed at MOP 38. The list includes several further or alternative low-end and high-end scenarios, including for: the needs of LVCs and VLVCs; reported consumption data; eligible consumption levels; energy efficiency; and LRM. It remains to be seen whether the RTF will revise the overall funding ranges, but OEWG 48 made it clear that while the current funding environment is tight, Parties' trust and goodwill may depend on the level of support available to implement the Montreal Protocol and its Kigali Amendment in the future. No doubt this will be the dominating agenda item at MOP 38 given the MLF's role and the need to agree on its replenishment this year.

Organizational Uncertainties

OEWG 48 also considered a range of organizational questions. MOP 37 asked the Secretariat to prepare a report with costed options for making effective and efficient changes to the timing of, Secretariat support for, and length of meetings under the Protocol, and the timing of replenishment decisions. Looking for efficiencies is an endeavor many multilateral processes currently share “amid shrinking resources and rising needs,” to use the words of the UN80 Initiative that is looking to “build a simpler, more effective, and more coherent UN System.” Structural changes, programme realignments, and shared core services are all under consideration. Although some delegates welcomed aligning the Protocol's efforts with the UN80 Initiative, others cautioned against implementing reforms that might undermine the distinctive practices that have made the Protocol effective.

The Secretariat warned that, under the business-as-usual Scenario A, the Protocol's Trust Fund could fall below the required reserve level by 2031. Other options included Scenario B, which would

move OEWG meetings online while extending MOPs by two days; and Scenario C, which would retain in-person meetings, but move to biennial MOPs with OEWG meetings held in the intervening years. Over 2028–2031, Scenario B would save an estimated USD 0.93–1.08 million per year and Scenario C an estimated USD 1.50–1.73 million per year.

Many delegates were skeptical about changing the current meeting arrangements. One asked: “If it isn't broken, why fix it?” Others urged addressing the “root cause” of the financial challenges: Parties who haven't made their assessed contributions. Many delegations also raised concerns about the shortcomings of online meetings, while others warned that justifying long-distance travel for short meetings is becoming increasingly challenging domestically. While delegates recognized the need to assess and further discuss these scenarios for operational changes, there was consensus that any changes must not jeopardize the effective implementation of the Protocol.

Beyond the meeting frequency and modalities, the Protocol's Assessment Panels are also under strain from the expanding scope and increasing complexity of their work. This is particularly true for the TEAP, the largest and busiest of the Panels, which has 19 members, over 150 volunteer experts, and five TOCs. These experts cover all areas of production, consumption, and end-use not only of controlled substances, but also of alternative substances. What's more, many experts on the Panels have served the Protocol for well over a decade, and many are expecting a generational change. However, it is increasingly difficult to ensure gender and geographical balance with experts who have the freedom to volunteer their time to help provide the scientific basis for actions under the Protocol.

OEWG 48 explored how the TEAP's work could be conducted more effectively and efficiently, discussing the structure of its TOCs and subcommittees, and the financial implications of in-person meetings that need to cover travel-related expenses for eligible experts. A potential restructuring, including splitting the Medical and Chemicals TOC into two TOCs, has been discussed for a few years now, but will unlikely be decided upon by MOP 38, which is expected to focus more on the MLF replenishment and the Panels' production of the quadrennial assessment report. Nevertheless, many delegates understood the importance of ensuring that the TEAP and its TOCs remain “fit for purpose” and this issue will need resolution at some point in the near future.

Looking Ahead to MOP 38 and Beyond

Many had hoped that 2026 would see the universal ratification of the Kigali Amendment and, with it, the most effective phase-down of HFCs. With 173 ratifications to date, the Amendment is still 25 ratifications away from universality in the middle of this 10th anniversary year.

Many OEWG 48 participants quietly expressed doubt about whether the goal is still achievable. The lack of universal ratification not only makes the Kigali Amendment lag behind other Montreal Protocol amendments, but also complicates future planning. For instance, what volume of controlled substances and how many Kigali Implementation Plans (KIPs) should Parties budget for in the next MLF replenishment? And when will the ozone regime be ready for a step further, potentially including additional substances, like nitrous oxide, under the Protocol?

To commemorate the 10th anniversary, the MOP is scheduled to reconvene in Rwanda, the birthplace of the Kigali Amendment, this November. Many delegations congratulated Rwanda following their presentation on preparations for MOP 38. However, between the lines and in the corridors, delegates worried that the still-expanding Ebola outbreak in Eastern Africa might make it increasingly difficult to give Parties the certainty they need to make travel and other arrangements. This point was highlighted when the Ugandan OEWG 48 Co-Chair could not travel to Bangkok due to travel restrictions related to Ebola. The result could be that MOP 38 may have to be relocated and possibly even rescheduled. Nevertheless, Parties remained hopeful that this anniversary MOP will be in Kigali.

Speaking of uncertainties, another element which has not been officially, but informally, addressed at this OEWG 48 is the upcoming retirement of Executive Secretary Megumi Seki, and who will be chosen to replace her. While the work of the Protocol is driven by its Parties, it is up to its small Secretariat and its leader to ensure all its components run smoothly.

But uncertainty was not the only sentiment in Bangkok. The election by acclamation of five new Implementation Committee (ImpCom) members at an extraordinary MOP (ExMOP 6), which lasted for just one hour on Tuesday, reinforced delegates' conviction that conflicts can still be resolved in a spirit of compromise under the ozone regime. The election was deferred at MOP 37 in November 2025 because the group of Eastern European States (EES) could not reach consensus on its ImpCom nomination.

OEWG 48 also successfully forwarded a draft decision on a new destruction technology to MOP 38 and advanced work on atmospheric monitoring sites.

Despite some contentious debates over the formal rather than conventional participation of Central Asian countries in the EES group, guidance for the RTF to conduct additional analyses, and the possible inclusion of nitrous oxide under the Protocol, the overall success of ExMOP 6 and OEWG 48 gave participants hope. Perhaps it is still possible that the current global political and financial turmoil will not negatively impact the ozone regime?

As delegates departed OEWG 48, many were hoping this current inflection point will ensure the ozone regime continues to set the bar for multilateral effectiveness, and will remain a model for protecting the planet and its people from serious environmental harm for decades to come.

Upcoming Meetings

22nd Meeting of the Chemical Review Committee (CRC):

The Rotterdam Convention's CRC will meet to review notifications of final regulatory action on several chemicals and proposals for severely hazardous pesticide formulations. **dates:** 15–18 September 2026 **location:** Rome, Italy **www:** pic.int

22nd Meeting of the Persistent Organic Pollutants Review Committee:

The Stockholm Convention's Persistent Organic Pollutants Review Committee (POPRC) will consider the draft risk profile to list polyhalogenated dibenzo-p-dioxins and dibenzofurans (PXDD/PXDF) in Annex C to the Convention. **dates:** 21–25 September 2026 **location:** Rome, Italy **www:** pops.int

Pre-COP to the 2026 Annual UN Climate Change Conference:

The Presidency of the 2026 UN Climate Change Conference will hold a Pre-COP meeting in Fiji, and a "leaders meeting" in Tuvalu.

dates: 5–8 October 2026 **location:** Fiji and Tuvalu **www:** [letter by COP 31 President-Designate](http://letter.by/COP31/President-Designate)

65th Session of the Intergovernmental Panel on Climate Change (IPCC-65): IPCC-65 will advance work related to the seventh assessment cycle. Delegates will consider its budget and the timeline for the contribution of the three Working Groups to the seventh assessment report (AR7). **dates:** 12–15 October 2026 (TBC) **location:** Addis Ababa, Ethiopia **www:** ipcc.ch

Montreal Protocol MOP 38: The 38th Meeting of the Parties to the Montreal Protocol is expected to adopt the next replenishment of the Multilateral Fund, among other issues, and commemorate the 10th anniversary of the Kigali Amendment. **dates:** 2–6 November 2026 (TBC) **location:** Kigali, Rwanda (TBC) **www:** ozone.unep.org

For additional meetings, see sdg.iisd.org

Glossary

2-BTP	2-bromo-3,3,3-trifluoropropene
CFCs	Chlorofluorocarbons
COP	Conference of the Parties
CRP	Conference room paper
DPIs	Dry powder inhalers
EES	Eastern European States
ExCom	Executive Committee of the Multilateral Fund
ExMOP	Extraordinary Meeting of the Parties
FSTOC	Fire Suppression Technical Options Committee
FTOC	Flexible and Rigid Foams Technical Options Committee
GWP	Global-warming potential
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
HFO	Hydrofluoroolefin
ImpCom	Implementation Committee
KIPs	Kigali Implementation Plans
LRM	Life-cycle refrigerant management
LVCs	Low-volume consuming countries
MBTOC	Methyl Bromide Technical Options Committee
MCTOC	Medical and Chemical Technical Options Committee
MDI	Metered-dose inhaler
MEAs	Multilateral environmental agreements
MLF	Multilateral Fund
MOP	Meeting of the Parties
ODS	Ozone depleting substances
OEWG	Open-ended Working Group
PFAS	Per- and polyfluoroalkyl substances
pMDI	Pressurized metered-dose inhaler
RTF	Replenishment Task Force
RTOC	Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee
SAP	Scientific Assessment Panel
TEAP	Technology and Economic Assessment Panel
TOC	Technical Options Committee
ToR	Terms of reference
UNEP	United Nations Environment Programme
VLVCs	Very-low-volume consuming countries