

## MOP 37 Highlights: Monday, 3 November 2025

Participants opened the preparatory segment of the 37th Meeting of the Parties (MOP 37) to the Montreal Protocol and considered organizational and administrative matters, established a budget committee, and began their substantive work. They heard expert reports on hydrofluorocarbon (HFC)-23 emissions and enhancing regional atmospheric monitoring of substances controlled by the Protocol. They further opened discussions and met in a contact group on the terms of reference (ToR) for the study on the 2027–2029 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol (MLF).

### Opening of the Preparatory Segment

Shontelle Wellington (Barbados), Co-Chair of the Preparatory Segment and Open-ended Working Group (OEWG), opened the meeting.

Megumi Seki, Executive Secretary, Ozone Secretariat, highlighted key issues before the MOP, including the ToR for the study on the MLF 2027–2029 replenishment, the strengthening of the Montreal Protocol institutions, and items relating to feedstocks of controlled substances, halons, and growing banks of refrigerants. She also reminded participants that science remains the backbone of the Ozone Treaties' success, and that closing the gaps in atmospheric monitoring is a big step needed in that regard.

### Organizational Matters

**Adoption of the agenda of the preparatory segment and organization of work:** Annie Gabriel (Australia), Co-Chair of the Preparatory Segment and OEWG, introduced the agenda and annotated agenda ([UNEP/OzL.Pro.37/1](#) and [Add.1](#)). The STATE OF PALESTINE proposed, and delegates agreed, to postpone until MOP 38, consideration of its classification as an Article 5 Party to the Montreal Protocol. The US and ISRAEL reiterated their general reservations on this agenda item. CHINA said no one should be left behind.

On Other Matters, the US proposed to add an item relating to the optimization of the Montreal Protocol and the support by the Ozone Secretariat.

Delegates adopted the revised agenda and the organization of work as proposed, basing most of their discussions on the issues for discussion by and information for the attention of the MOP ([UNEP/OzL.Pro.37/2](#) and [Add.1](#)), and the compilation of draft decisions for consideration by the MOP ([UNEP/OzL.Pro.37/3](#)).

### Administrative Matters

**Financial Reports and Budget of the Trust Funds for the Montreal Protocol:** Co-Chair Wellington proposed and delegates agreed to establish a budget committee, co-chaired by Sebastian Schnatz (Germany) and Ryan Ooi Chean Weai (Malaysia), to review the proposed budget and financial reports and prepare a draft decision to be forwarded to the high-level segment.

**Consideration of the Membership of Montreal Protocol Bodies for 2026:** Co-Chair Wellington called on parties to

submit their nominations for membership to the Implementation Committee, the Executive Committee of the MLF, and the OEWG Co-Chairs by Wednesday.

### Terms of Reference (ToR) for the Study on the 2027–2029

**Replenishment of the MLF:** Co-Chair Wellington introduced this agenda item. SAUDI ARABIA, INDIA, LEBANON, KUWAIT, BAHRAIN, and MALAYSIA underscored the challenges related to the HFC phase-down, especially in high ambient temperature countries, and the need for adequate, equitable, and predictable funding to ensure compliance with the Kigali Amendment. LEBANON highlighted the important role of digital and artificial intelligence tools and, with MALAYSIA, support for regional cooperation and institutional strengthening. INDIA called for lifecycle refrigeration management to be addressed holistically. KUWAIT cautioned against conflicts of interest and bias in the Replenishment Task Force.

Delegates agreed to resume discussions on the ToR initiated during OEWG 47 in a contact group co-chaired by Ralph Brieskorn (the Netherlands) and Azra Rogović-Grubić (Bosnia and Herzegovina).

In the evening, the contact group held its first meeting. After initial reflections, participants discussed how the Technology and Economic Assessment Panel (TEAP) should take into account existing control measures and the needs of low-volume and very-low volume consuming countries in the relevant draft decision ([UNEP/OzL.Pro.37/3](#), Section II.A., paragraphs 2(a) and 2(b)).

### Emissions of HFC-23

Co-Chair Gabriel introduced the item. She noted that the TEAP and the Scientific Assessment Panel (SAP) had actioned the request in [Decision XXXVI/3](#) to update their [Decision XXXV/7](#) reports on HFC-23 emissions to reflect any additional or new information (see [Report of the TEAP](#), September 2025, and [Report of the SAP](#), September 2025).

The SAP and TEAP gave [presentations](#) on their updated 2025 reports, highlighting that the fundamental conclusions remain unchanged: a substantial shortfall remains in their understanding of global HFC-23 emissions, despite the new information available. They noted that for 2023: the gap between reported emissions and those inferred from atmospheric abundances is between 11.4 and 12.8 kilotonnes (kt); the gap between emissions from all known sources estimated by TEAP and from atmospheric oxidation is between 9.6 and 13.3 kt; the sum of all available observationally-derived regional emission estimates accounts for only  $43 \pm 10\%$  of global emissions; Eastern China accounted for  $5.6 \pm 0.7$  kt of the available regional emission totals, an amount substantially larger than reported and accounting for  $40 \pm 10\%$  of the global gap; and regional-scale accounting of global emissions remains incomplete as atmospherically-derived HFC-23 emission estimates remain unavailable after 2019 for the countries accounting for the remaining reported HFC-23 generation during 2023: Argentina, India, Mexico, the Russian Federation, and the US.

In the ensuing discussion, the SAP and TEAP responded to questions by CANADA, INDIA, TUNISIA, LIBYA, HAITI, the

US, the EU, CAMEROON, ARGENTINA, GUINEA, CHINA, NIGERIA, SENEGAL, CÔTE D'IVOIRE, and SAUDI ARABIA.

The TEAP clarified that no new industries or HFC-23 sources were identified that could account for the wide divergence observed from 2015. The TEAP noted that, coincidentally, the market for credits for HFC-23 destruction under the UN Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism ended in 2015 but stressed that any links would be speculative.

The TEAP also explained that potential amendments to the reporting format could not account for the scale of the difference and highlighted the extremely detailed reporting on fluorinated gases under the UNFCCC, which allowed for overall methodological consistency in countries' reports.

The TEAP further explained that the intentional production of HFC-23 in the semiconductor industry can be commercially viable even in relatively small amounts, and that the need for HFC-23 as a refrigerant is only for very low temperatures and its use is decreasing.

The US responded to questions from other Parties and explained that their HFC-23 emissions data was preliminary and not yet published, but stated that emissions were relatively minor with around 400 tonnes per year.

The SAP underlined its models were well-developed and continually improved, hence atmospheric measurements should not be distorted from HFC-23 emissions being wind-moved across regions. The SAP also confirmed that increasing HFC-23 emissions are even less explainable as HCFC-22 production decreases, and that its use shifted from air conditioning to antistick coating (e.g. teflon). The SAP further deliberated to what extent gas chromatography could help distinguish between point and diffused emissions sources. They concluded that the ToR for the 2026 Quadrennial Assessment Report would include scenarios for how increased HFC-23 emissions would affect the global climate.

On the way forward, CHINA noted that the updated report is more objective than the previous one and invited Parties "to remain open and avoid direct accusations or attributions without solid scientific evidence." They called for Parties to continue sharing data and suggested the MOP take a new decision on HFC-23 that fully considers the actual capacities of Parties, SAP, and TEAP.

NIGERIA urged continued deliberations to find long-lasting solutions to mitigate the gap problem with the support of SAP and TEAP. SAUDI ARABIA reaffirmed that updating data related to feedstock use of HFC-23 goes beyond the scope of decision XXXVI/3 and called for bridging the gap between real and estimated emissions by fostering North-South cooperation.

CANADA called for clarifications of the methodologies used to estimate and report emissions, explaining how approaches can differ among Parties. CÔTE D'IVOIRE noted that the amount of global HFC-23 emissions is critical and dangerous and called to "raise the alarm" and deliver strong recommendations.

Delegates agreed to keep the agenda item open until a CRP is available to guide further discussions.

### ***Enhancing Regional Atmospheric Monitoring of Controlled Substances***

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 their progress report on enhancing regional atmospheric monitoring of substances controlled by the Montreal Protocol. The [presentation](#) focused on evaluating the suitability of potential sites for monitoring regional emissions of controlled substances, updates to cost elements, and options for long-term financing. They also outlined key monitoring issues, including: the needed frequency of measurements; seasonal emission variations; key elements for successful monitoring stations; and the 10 locations identified to fill major gaps in emissions in the regions of Southern Asia, South-East Asia, Southern Africa, Middle East, and South and Central America.

In the ensuing discussion, questions were raised by delegates from IRAN, SAUDI ARABIA, CANADA, SENEGAL, KENYA, JAPAN, the EU, CHINA, SOUTH AFRICA, the US, and BHUTAN.

In response, the Secretariat and the Advisory Committee noted that:

- the selection of regions was based on where current emissions take place, and stressed that the more infrastructure is in place, the lower the costs;
- domestic contributions, particularly human resources, as well as synergies with existing monitoring (for example by the World Meteorological Organization), would also be important to keep the cost of sampling stations down;
- implementing the interactive online tool to estimate costs for establishing and operating monitoring sites would not imply additional costs, given that extra funding from the EU pilot project can be allocated to this end;
- controlled substances are roughly 1000 times less concentrated than greenhouse gases, which means that monitoring stations installed for the latter will not necessarily provide robust results for the former; and
- high-frequency sampling stations are preferable to flask sampling, but that scientific, cost, and practical aspects need to be considered.

On the way forward, BRAZIL, SOUTH AFRICA, and ECUADOR expressed willingness to host a monitoring station. The RUSSIAN FEDERATION and SAUDI ARABIA cautioned that national sovereignty must be respected in the siting of monitoring stations. CHINA said success depends on partnerships, long-term strategies, and funding. BRAZIL, SAUDI ARABIA, BANGLADESH, GUINEA, and the US noted that sustainability and costs remain an issue. SOUTH AFRICA called for funding from the MLF.

INDONESIA reaffirmed their commitment to collaboration through scientific research and capacity-building. On the proposed interactive tool, PAKISTAN underscored its potential to facilitate cooperation and to enable Parties to connect with scientific partners.

The EU announced that it is working on mobilizing resources for monitoring. AUSTRALIA, CANADA, and others indicated support for the phased approach, estimated timeline of existing and potential funding streams, and the estimated measurement programme costs. CANADA noted some of the funding in the cash balance could be allocated in 2025 to ensure this work is not interrupted until the EU funding is available. They added that operating costs can also be absorbed by the host country or other organizations, noting the MLF should not be the primary source. The US called for prioritizing sites that already have infrastructure in place and highlighted the relevance of partner institutions. Delegates agreed to keep the agenda item open and resume discussions once a CRP is submitted.

### ***In the Breezeways***

Delegates did not waste any time getting to work on this first meeting day in both the conference room and the breezeways on some of the big-ticket items on the agenda. In a clear example of the science-policy interface of the Montreal Protocol, delegates engaged with representatives of the TEAP and SAP as they presented their reports on HFC-23 emissions, which show the gap between higher atmospheric monitoring and lower country reporting remaining stubbornly high. Many delegates in and between plenary sessions agreed that "it's time to start taking action after years of talking."

One participant drew attention to another gap, the one "between expectations and demands in funding the implementation of the Protocol." Indeed, potential sticking points were already emerging in the discussion on the MLF 2027–2029 replenishment, including the needs of high ambient temperature countries as listed under the Kigali Amendment. Notwithstanding, delegates started the week in good spirits trusting that the collegiate and collaborative spirit will prevail.