UNITED NATIONS

UNEP

UNEP/OzL.Pro.37/9

Montreal Protocol on Substances that Deplete the Ozone Layer

Distr.: General
12 November 2025

Original: English

Thirty-Seventh Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer
Nairobi, 3–7 November 2025

Report of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

Introduction

1. The Thirty-Seventh Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer was held at the headquarters of the United Nations Environment Programme (UNEP), in Nairobi, from 3 to 7 November 2025.

Part one: preparatory segment (3–5 November 2025)

I. Opening of the preparatory segment

2. The preparatory segment was opened by its Co-Chairs, Annie Gabriel (Australia) and Shontelle Wellington (Barbados), at 10.05 a.m. on Monday, 3 November 2025. An opening statement was delivered by Megumi Seki, Executive Secretary of the Ozone Secretariat.

3. Welcoming participants, Ms. Seki invited them to observe a minute of silence in memory of Cornelius Rhein (European Union), who had died unexpectedly some days earlier. Accordingly, a minute of silence was observed. Paying tribute to Mr. Rhein, Ms. Seki said that he had been admired for his professionalism, enthusiasm and unwavering commitment to the protection of the ozone layer and the environment. Among his endeavours, he had played a key role in the Montreal Protocol process and in the negotiations and implementation of the Kigali Amendment to the Protocol, had participated in the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol and had been a member of the steering committee of the European Union-funded pilot project on regional quantification of emissions of substances controlled under the Protocol.

4. Turning to the work of the current meeting, Ms. Seki said that a number of key issues were to be addressed, including the terms of reference for the study on the 2027–2029 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol, feedstock uses of controlled substances, halon 1301 and its continuing use in the aviation industry, and national and regional initiatives to support implementation of the Kigali Amendment to the Protocol. During the one-day informal meeting, held the previous day, participants had discussed how to strengthen the Protocol. She expressed the hope that the dialogue had been useful and would translate into specific action at the current meeting.

5. She recalled that, at the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol, held in Bangkok in July 2025, the Co-Chair of the Advisory Committee of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention for the Protection of the Ozone Layer had delivered a presentation on, and the Secretariat had reported on progress in the implementation of activities related to, the atmospheric monitoring of controlled substances. At the current meeting, further updates would be provided on work carried out to evaluate the suitability of potential sites for monitoring regional

emissions of controlled substances and to refine cost estimates for the establishment of monitoring stations. The Scientific Assessment Panel and the Technology and Economic Assessment Panel would present their updated reports on emissions of hydrofluorocarbon-23 (HFC-23), providing an opportunity to demonstrate the Protocol's agility in responding to emerging threats. Science remained the backbone of the Protocol, and closing the gap in atmospheric monitoring would represent a vital step in further strengthening the Protocol and the Vienna Convention.

6. Finally, in the light of the changing geopolitical climate, growing challenges to multilateralism, financial uncertainty and shifting priorities, the United Nations, including UNEP, had taken measures to improve efficiency and reassert the value of multilateralism. The Secretariat had likewise taken steps to save funds wherever possible, while working even harder and with fewer staff to ensure the effectiveness of the Montreal Protocol – a treaty that stood as a beacon of hope and proof that global cooperation worked.

II. Organizational matters

A. Attendance

7. The following parties to the Montreal Protocol were represented: Albania, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bhutan, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Comoros, Cook Islands, Costa Rica, Côte d'Ivoire, Cuba, Cyprus, Czechia, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Eswatini, European Union, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Haiti, Holy See, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Micronesia (Federated States of), Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands (Kingdom of the), New Zealand, Nicaragua, Niger, Nigeria, North Macedonia, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Russian Federation, Rwanda, Saint Kitts and Nevis, Samoa, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Slovakia, Solomon Islands, South Africa, South Sudan, Sri Lanka, State of Palestine, Sweden, Switzerland, Syrian Arab Republic, Tajikistan, Thailand, Timor-Leste, Togo, Tunisia, Türkiye, Uganda, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay, Vanuatu, Viet Nam, Yemen, Zambia and Zimbabwe.

8. The following United Nations bodies and specialized agencies were represented: secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol, secretariat of the Basel, Rotterdam and Stockholm conventions, United Nations Development Programme, UNEP, United Nations Industrial Development Organization, World Bank, World Customs Organization and World Meteorological Organization. The Montreal Protocol assessment panels were also represented.

9. The following intergovernmental, non-governmental, industry, academic and other bodies were also represented: A-Gas (Australia) Pty Limited; Alliance for Responsible Atmospheric Policy; Association des Distributeurs, Conditionneurs, Récupérateurs and Retraiteurs de Réfrigérants; Carbon Containment Lab; Centre for Environment Justice and Development; Chemours Belgium BVBA; children and youth major group; Collaborative Labeling and Appliance Standards Programme (CLASP); Daikin; Daikin Industries Limited; Danfoss A/S (Denmark); Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH; Environmental Investigation Agency; Glencoe Strategies LLC; Global Policy Associates; Guidehouse Germany GmbH; Gulf Cooperation Council; iFOREST; Industrial Technology Research Institute; Institute for Energy and Climate Strategies; Institute for Governance and Sustainable Development; International Energy Initiative; International Institute of Refrigeration; Labtech International Limited; League of Arab States; Leiden University; Manitoba Ozone Protection Industry Association; MEBROM Corporation; Mexichem UK Limited; Natural Resources Defense Council; Ökorecherche; Overseas Environmental Cooperation Centre; Refrigerant Gas Manufacturers Association; Refrigerant Reclaim Australia; Refrigerants Australia; Renerge Resources Limited; Siemens Energy; SilverLining; Solutions for Our Climate; SRADeV; SRF Ltd.; Sustainable Energy for All; Sustana Cooling Partners; The Energy Commission; The Japan Refrigeration and Air Conditioning Industry Association; and Tradewater. A few independent experts also attended the meeting.

B. Adoption of the agenda of the preparatory segment

10. Introducing the provisional agenda for the preparatory segment set out in document UNEP/OzL.Pro.37/1, the Co-Chair reported that, on 30 October 2025, the Secretariat had been notified that the State of Palestine wished to defer consideration of the agenda item entitled "Classification of the State of Palestine as a party operating under paragraph 1 of Article 5 of the Montreal Protocol and access to support from the Multilateral Fund" to the Thirty-Eighth Meeting of the Parties. Accordingly, the parties agreed to defer consideration of the item to the Thirty-Eighth Meeting of the Parties.

11. The representative of the State of Palestine said that, taking into account the discussions at the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol, his delegation had requested the deferral of the agenda item to allow for additional time and consultations in order to achieve consensus on the matter.

12. One representative said that he wished to maintain and reiterate his delegation's general observations and reservations previously made on matters related to the agenda item in question. Another representative said that he wished to reiterate the points made by his delegation at previous meetings, including the forty-seventh meeting of the Open-ended Working Group, that consideration of the agenda item would involve a discussion of the classification of parties operating under paragraph 1 of Article 5 (Article 5 parties) more generally. One representative emphasized that discussions should remain constructive and focused on technical issues, that the introduction of broader, politicized issues should be avoided and that Article 5 developing-country parties were entitled to financial and technical assistance to support the implementation of the Montreal Protocol.

13. The following agenda for the preparatory segment was adopted on the basis of the provisional agenda set out in document UNEP/OzL.Pro.37/1, as orally amended:

1. Opening of the preparatory segment.
2. Organizational matters:
    (a) Adoption of the agenda of the preparatory segment;
    (b) Organization of work.
3. Administrative matters:
    (a) Budget of the Trust Fund for the Montreal Protocol and financial reports;
    (b) Consideration of the membership of Montreal Protocol bodies for 2026:
        (i) Members of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol;
        (ii) Members of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol;
        (iii) Co-chairs of the Open-ended Working Group.
4. Terms of reference for the study on the 2027–2029 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol.
5. Emissions of hydrofluorocarbon-23 (HFC-23) (decision XXXVI/3).
6. Enhancing regional atmospheric monitoring of substances controlled by the Montreal Protocol (decision XXXVI/1).
7. Development of studies and strategies to find medium- and long-term solutions to the significant accumulation of inventories of refrigerant gases nearing the end of their life cycles in parties operating under paragraph 1 of Article 5 of the Montreal Protocol.
8. Feedstock uses of controlled substances.
9. Halon 1301 and its continuing use in the aviation industry; management of other controlled substances used for fire suppression.
10. National and regional initiatives to support the implementation of the Kigali Amendment to the Montreal Protocol.

11. Technology and Economic Assessment Panel organizational issues:

(a) Options for the organization of the Technology and Economic Assessment Panel and its technical options committees (decision XXXV/20);

(b) Changes in the membership of the Technology and Economic Assessment Panel.

12. Further strengthening Montreal Protocol institutions (decision XXXVI/9).

13. Compliance and data reporting issues: work and recommendations of the Implementation Committee.

14. Status of ratification of the Kigali Amendment.

15. Other matters.

14. Under agenda item 15, "Other matters", the parties agreed to consider a proposal by the United States of America on the issue of optimizing the schedule of meetings of the Montreal Protocol and associated work of the Ozone Secretariat.

C. Organization of work

15. The parties agreed to follow their customary procedure and to establish contact or informal groups as necessary and to avoid, to the extent possible, the holding of meetings of contact or informal groups in parallel with each other.

III. Administrative matters

A. Budget of the Trust Fund for the Montreal Protocol and financial reports

16. Introducing the item, the Co-Chair drew attention to the information set out in paragraphs 11 to 16 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2); notes by the Secretariat on the proposed budgets for 2026 and 2027 of the Trust Fund for the Montreal Protocol (UNEP/OzL.Pro.37/4) and on the financial report for the trust funds for the Vienna Convention and the Montreal Protocol for the fiscal year 2024 (UNEP/OzL.Pro.37/5). She also drew attention to notes by the Secretariat entitled "Approved budget for 2026 of the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer: fact sheets" (UNEP/OzL.Pro.37/INF/1) and "Financial report for the trust funds for the Vienna Convention for the Protection of the Ozone Layer and for the Montreal Protocol on Substances that Deplete the Ozone Layer and for the Montreal Protocol on Substances that Deplete the Ozone Layer: updated indicative financial report for 2025 as at 30 September 2025" (UNEP/OzL.Pro.37/INF/2). A draft decision on the matter was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[AA]). Documents UNEP/OzL.Pro.37/4, UNEP/OzL.Pro.37/5 and UNEP/OzL.Pro.37/INF/1 had been posted on the meeting portal three months prior to the current meeting for review by the parties.

17. The parties agreed to follow their standard practice and established a budget committee to review the proposed budget for the Montreal Protocol trust fund and the financial reports for the Vienna Convention and Montreal Protocol trust funds and to prepare a draft decision for consideration by the parties. It was decided that the committee's work would be facilitated by Sebastian Schnatz (Germany) and Ryan Ooi Chean Weai (Malaysia).

18. Subsequently, the co-facilitator reported that the budget committee had completed its work and had produced a draft decision and budget for consideration by the parties. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

B. Consideration of the membership of Montreal Protocol bodies for 2026

1. Members of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol

19. Introducing the sub-item, the Co-Chair said that the parties needed to decide on the membership of the Implementation Committee for 2026. Information on the positions to be filled was presented in paragraphs 17 to 20 of document UNEP/OzL.Pro.37/2 and a draft decision on the matter was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[BB]).

20. Subsequently, the representative of the Secretariat reported that each of the regional groups of the African States, the Asia-Pacific States, the Latin American and Caribbean States and the Western European and other States had submitted their nomination. No nomination had been received from the Eastern European States. The Co-Chair proposed that a draft decision listing the four nominations be included in the compilation of decisions for the parties' consideration and possible adoption during the high-level segment.

21. The representative of Czechia presented her party's candidacy for the remaining seat for the Eastern European States on the Implementation Committee, noting that the member of the Committee from Czechia had served on the Committee for the past two years and had proved to be a reliable, impartial and responsible member of the Committee.

22. One representative, supported by another representative, stated their objection to the nomination. They expressed the view that in seeking to exclude the five Central Asian parties from the Eastern European Group, Czechia had shown that it was not ready to represent the interests of all the members of the Group. They said that the parties should not ignore the established procedure of the Montreal Protocol, which was that candidates were nominated by regional groups, not by themselves.

23. Responding to a question, the representative of the Secretariat confirmed that under the terms of paragraph 5 of the non-compliance procedure of the Montreal Protocol, members of the Committee who had served for one term of two years were eligible for re-election for a further two-year term.

24. Given the lack of consensus, the Co-Chair proposed that a draft decision listing the four nominations be included in the compilation of decisions for parties' consideration during the high-level segment. The representative of Czechia objected, noting that it was the right of any party to put forward a nomination in the absence of consensus within the relevant regional group and that its aim was to fill the remaining seat on the Implementation Committee and thus enable the Committee to continue its work. The representative of Czechia, supported by other representatives, said that her delegation was not seeking to change the composition of the regional group and that the current meeting was not the appropriate forum to discuss changes in the composition of United Nations regional groups. Responding to a question, the Co-Chair confirmed that self-nomination did not constitute a breach of the rules of procedure of the Montreal Protocol.

25. Many representatives expressed support for the nomination of Czechia to the Implementation Committee. Some of them pointed out that a self-nomination procedure had already been followed at the current meeting, when Kazakhstan had nominated itself for a seat on the Executive Committee of the Multilateral Fund (see para. 38 of the current report).

26. One representative added that discussions on the composition of regional groups were not matters for discussion in the present forum, but rather for other institutions within the United Nations. Another observed that there was no strict definition of the composition of the regional groups in the United Nations, and it was up to each convention or protocol to determine its regional groupings. No rules of procedure were being broken. The key issue at stake at the current meeting was the need to elect members of the Implementation Committee in order to ensure the efficient and effective functioning of the Montreal Protocol.

27. Other representatives, however, maintained their opposition, expressing the view that self-nomination was a violation of the established procedures of the Montreal Protocol. One stated that the Eastern European Group had never discussed nominations during the current meeting.

28. Another representative, speaking on behalf of a regional group, observed that while he had no opinion on the specific question under discussion, he was of the view that it was important to maintain the principle that regional groups should agree on nominations by consensus. Regional groups had often experienced internal disagreements in the past, but had always found ways to overcome them.

29. The Co-Chair said that, on the basis of the overwhelming support expressed for the nomination of Czechia, the party's name should be added to the list of nominations in the draft decision on the membership of the Implementation Committee. One representative, however, disagreed, saying that it was clear that decisions on nominations had to be agreed within the regional groups; to do otherwise would represent a brazen disregard of existing practice. He added that the current situation of lack of consensus had arisen from the attempt to exclude the five Central Asian countries from the Eastern European Group.

30. Noting the continuing absence of consensus, the Co-Chair proposed that the parties adopt a decision authorizing the Secretariat to organize an extraordinary Meeting of the Parties back-to-back with the forty-eighth meeting of the Open-ended Working Group, to enable parties to take a decision on the outstanding membership of the Implementation Committee for 2026, prior to the seventy-sixth

meeting of the Committee. The provisional agenda for the extraordinary Meeting of the Parties would include only one substantive agenda item, namely the membership of the Implementation Committee. The annex to the proposed draft decision would include, in square brackets, for discussion at the extraordinary Meeting of the Parties, a draft decision on the membership of the Implementation Committee, which would include Czechia alongside the other nominations that had been received, and would note the selection of Linda Kosgei (Kenya) as President and Matej Mrlina (Czechia) as Vice-President and Rapporteur of the Committee. She said that, in her view, the formulation of the draft decision in such a way represented the most equitable way forward, especially in the light of the overwhelming support expressed for the nomination of Czechia.

31. Responding to questions, the representative of the Secretariat said that, ideally, the membership of the Implementation Committee should be confirmed at least one month before the Committee's meeting, to allow sufficient time for the circulation of documents. However, the five members of the Committee who were halfway through their two-year term of office were already confirmed as members; if it was necessary to convene the Committee, the Secretariat could do so with the five existing members. Although those five members were listed in the draft decision on membership, it was not strictly necessary to include them; they had been elected in 2024 for a term of two years and would therefore remain members of the Committee regardless of any decisions taken by the Thirty-Seventh Meeting of the Parties or at the proposed extraordinary Meeting of the Parties.

32. Some representatives agreed to the Co-Chair's proposal. Another objected to the inclusion of Czechia in the draft decision, noting that the list should include a placeholder for a nominee from the Eastern European States without naming any specific party. He added that the comparison that some representatives had drawn with the self-nomination of Kazakhstan to the Executive Committee of the Multilateral Fund was false, since there had been no objection to the nomination of Kazakhstan; that was clearly not the case with Czechia.

33. The Co-Chair pointed out that everything in the draft decision annexed to the draft decision on the extraordinary Meeting of the Parties remained in square brackets and would therefore be open to discussion. One representative proposed that the paragraph noting the selection of the President and Vice-President should be deleted, as it would be wrong to decide on their selection before the Committee itself had been elected. Another representative suggested instead that the references to Czechia in the list of members and the selection of the Vice-President should be deleted; the rest of the draft decision was acceptable.

34. In response, the first representative suggested instead that two decisions be adopted; the first would approve the nominations of those members of the Implementation Committee that had been proposed by the regional groups, while the second would authorize the organization of an extraordinary Meeting of the Parties to consider the remaining position. While one representative agreed, others expressed the view that the complete list of nominations should be maintained in square brackets in a single draft decision.

35. Noting the continued lack of consensus, the Co-Chair put forward a revised proposal for a draft decision, which would, she said, include only the authorization to organize an extraordinary Meeting of the Parties, with the proposed agenda for the meeting set out in an annex to the decision and without a previously suggested draft decision on the membership of the Implementation Committee. Instead, the Secretariat would prepare and circulate a standard draft decision in advance of the extraordinary meeting. She also confirmed that all the views expressed by representatives during the current discussion would be reflected in the report of the meeting, which would serve as background to the discussions at the extraordinary Meeting of the Parties.

36. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

2. Members of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

37. Introducing the sub-item, the Co-Chair said that the parties needed to endorse the selection of members of the Executive Committee of the Multilateral Fund for 2026. Information on the positions to be filled was presented in paragraphs 21 to 24 of document UNEP/OzL.Pro.37/2 and a draft decision on the matter was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[CC]).

38. Subsequently, the representative of the Secretariat reported that it had been informed of the selection of seven members representing Article 5 parties and six representing parties not operating under paragraph 1 of Article 5 (non-Article 5 parties). The representative of Kazakhstan nominated his party to fill the remaining seat for the non-Article 5 parties.

39. The parties agreed to forward a draft decision on the matter for the parties' consideration and possible adoption during the high-level segment.

3. Co-chairs of the Open-ended Working Group

40. Introducing the sub-item, the Co-Chair said that the parties needed to decide on the co-chairs of the Open-ended Working Group for 2026. Information on the positions to be filled was presented in paragraphs 25 and 26 of document UNEP/OzL.Pro.37/2 and a draft decision on the matter was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[DD]).

41. Subsequently, the representative of the Secretariat reported that, upon receipt of the names of the persons selected by Article 5 parties and non-Article 5 parties, a draft decision on the matter had been included in the compilation of decisions for the parties' consideration and possible adoption during the high-level segment. The parties agreed to forward a draft decision on the matter for the parties' consideration and possible adoption during the high-level segment.

IV. Terms of reference for the study on the 2027–2029 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol

42. Introducing the item, the Co-Chair recalled that parties had begun discussions on the terms of reference for the study on the 2027–2029 replenishment of the Multilateral Fund at the forty-seventh meeting of the Open-ended Working Group and that Australia, Canada, Japan and the United Kingdom of Great Britain and Northern Ireland had submitted a draft decision, which, alongside the terms of reference for the previous study, as set out in decision XXXIV/2 on the replenishment of the Multilateral Fund for the triennium 2024–2026 (see UNEP/OzL.Pro.34/9/Add.1/Rev.1), had formed the basis of discussions in a contact group. Owing to time constraints, the contact group had been unable to conclude its work; the Working Group had therefore agreed to resume discussions at the current meeting. She drew attention to the relevant documentation, namely document UNEP/OzL.Pro.37/2 (paras. 27–32), the report of the forty-seventh meeting of the Working Group (UNEP/OzL.Pro.WG.1/47/6 (paras. 28–38)) and the revised draft decision set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[A]).

43. The Co-Chair proposed that a contact group be established to discuss the terms of reference for the study on the 2027–2029 replenishment of the Multilateral Fund.

44. In the ensuing discussion, several representatives stressed the importance of the Multilateral Fund in helping Article 5 parties to achieve their HFC phase-down compliance targets under the Kigali Amendment. Some representatives emphasized that the replenishment study should reflect implementation realities and cover all other previously agreed elements, including the financial solutions stipulated in decision XXVIII/2 related to the amendment phasing down HFCs adopted by the Twenty-Eighth Meeting of the Parties. One representative added that the key elements identified by the Executive Committee of the Fund in its decision 96/57 needed to be considered when estimating the funding requirement for the 2027–2029 period.

45. One representative said that the 2027–2029 replenishment must be adequate, equitable and aligned with real implementation needs. A second representative specified that the study's methodology must be transparent and regionally balanced, incorporate realistic cost factors for Article 5 parties and encourage input from parties. He said that the results of the study should feed directly into a timely, needs-based replenishment decision and that a forward-looking funding horizon was needed. Another representative said that support must be made available to all developing countries without differentiation. Some representatives called for a realistic assessment of cash flow to the funding windows, including the revolving fund mechanism, agreed on by the Executive Committee. One representative called for the current level of financing to be maintained until 2029.

46. A number of representatives highlighted specific challenges faced, in particular by Article 5 parties, in achieving the sustainable phase-down of HFCs. Those challenges included the use of flammable refrigerants in refrigeration, air-conditioning and heat pump appliances; difficulties in accessing and adopting low global warming potential (GWP) technologies; the lack of alternatives to air conditioning in States experiencing intense and rising temperatures; and the need for stable, sufficient and predictable funding.

47. Several representatives highlighted specific aspects that they deemed important, regardless of whether they were required for compliance, and for which they considered that sufficient funding should be available. Those elements included: energy efficiency; holistic life-cycle refrigerant

management, including recovery, reclamation and cost-effective disposal; the specific situation of high-ambient-temperature countries; sustained reductions in HFC consumption and emissions, as well as time-based targets; training, capacity-building, institutional strengthening and regional cooperation; digital and artificial intelligence-assisted tools; outreach programmes, including technology roadshows and demonstration activities; access to sustainable cooling; digitalization of the servicing sector; and equitable treatment of landlocked developing countries.

48. Some representatives said that no new policies or guiding principles should be introduced during the 2027–2029 replenishment period. One representative underscored the importance of avoiding conflicts of interest with regard to the replenishment task force.

49. The Working Group agreed to establish a contact group, to be co-chaired by Azra Rogović-Grubić (Bosnia and Herzegovina) and Ralph Brieskorn (Kingdom of the Netherlands).

50. Subsequently, the co-chair of the contact group reported that the contact group had reached agreement on a draft decision on the terms of reference for the study on the 2027–2029 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol, for consideration by the parties.

51. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

V. Emissions of hydrofluorocarbon-23 (HFC-23) (decision XXXVI/3)

52. In considering the sub-item, the parties had before them paragraphs 33 to 36 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), the report of the Scientific Assessment Panel entitled “Response to decision XXXVI/3: emissions of HFC23”, the report of the Technology and Economic Assessment Panel entitled “Response to decision XXXVI/3: emissions of HFC-23”, and paragraphs 4 to 18 of, and annexes I and II to, the addendum to the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2/Add.1).

53. Introducing the sub-item, the Co-Chair recalled that, in paragraph 5 of decision XXXVI/3, on HFC-23 emissions, the Scientific Assessment Panel and the Technology and Economic Assessment Panel were requested to update their decision XXXV/7 reports on HFC-23 to reflect any additional or new information that became available, and to submit their reports to the Thirty-Seventh Meeting of the Parties. In addition, the Technology and Economic Assessment Panel was requested to provide information on and a comparison of best practices and guidelines relating to measuring, estimating, reporting and verifying HFC-23 by-product emissions and their destruction.

54. In response to the parties’ requests, the panels had coordinated their work on the matter and had each produced a report. Summaries of the reports were available in the addendum to the note by the Secretariat, with the respective executive summaries reproduced in annexes I and II to the addendum, and the full reports had been made available on the meeting portal.

55. Lucy Carpenter, Co-Chair of the Scientific Assessment Panel, and Nick Campbell, member of the Medical and Chemicals Technical Options Committee, speaking on behalf of the Technology and Economic Assessment Panel, delivered presentations on the response of each panel to the requests in decision XXXVI/3. The presentations are set out in sections A and B, respectively, of annex I to the present report.

56. Following the presentations, several representatives posed questions to the panel members with a view to clarifying some of the issues raised.

57. Some representatives asked about the sharp increase in the gap between atmosphere-derived and reporting-based total global emissions as of 2015. Mr. Campbell said that no new industries that might lead to such an increase in the gap had appeared around that time, but the clean development mechanism of the Kyoto Protocol to the United Nations Framework Convention on Climate Change had ceased to operate in 2015. At that time, one region had adopted a regulation that had caused the price of the HFC-23 credits to drop sharply. He clarified that, under the clean development mechanism, credits were generated from the destruction of HFC-23 and, with its closure, there was perhaps less incentive to continue to destroy the HFC-23. One member pointed out, however, that the change in the credit system did not happen instantaneously and the projects were phased out over several years. Another representative proposed that some sort of mechanism could be established to replace the clean development mechanism.

58. One representative asked about the discrepancies between the reporting-based estimates and the atmosphere-derived estimates for parts of China from 2011 to the present, as set out in figure 7 in the presentation of the Scientific Assessment Panel. Ms. Carpenter said that the figures for atmosphere-derived estimates were for eastern China only, whereas the reporting-based estimates were for the whole of China. There were no HFC-23 emissions estimates for China as a whole. In response to a question about monitoring sites inside China and the availability of related data, Stefan Reimann, member of the Scientific Assessment Panel, confirmed that data had been collected in China for the past 15 to 20 years and that they had been used for various publications on various gases. A new publication on global emissions of HFC-23 had been prepared by China, which used data from China. New measurements from China were slowly becoming available.

59. In response to a comment about the absence of data on the United States, Ms. Carpenter said that preliminary data from the country were in fact available, but they had yet to be published. Once published those data could appear in a subsequent presentation by the Scientific Assessment Panel. The representative of the United States gave further details, confirmed by Ms. Carpenter, regarding the data, which had already been made public. Preliminary, unpublished data, from 2018 to 2021, showed emissions of 0.4 kilotonnes per year.

60. Responding to questions from other representatives about possible future scenarios involving HFC-23 and whether atmospheric oxidation would become a greater problem, Ms. Carpenter said that the panels' 2026 assessment reports would contain both general scenarios for the future and projections for the atmospheric oxidation from the increasing emissions of hydrofluorooelfins (HFOs) up to 2100. The contribution of atmospheric oxidation to HFC-23 emissions was extremely low compared with the HFC-23 emissions associated with the production of HCFC-22. Mr. Campbell said that, although it was assumed that the low levels suggested by the Scientific Assessment Panel would increase, the increase was not expected to be large and it would happen slowly.

61. Asked about whether atmosphere-derived estimates of country emissions could really be attributed to just one country, as opposed to being carried by wind from elsewhere, Mr. Reimann said that the models used to calculate the emissions levels were well developed, relied on weather models and were continually improved over time, leading to a good level of confidence in those models. Ms. Carpenter confirmed one representative's understanding that emissions of HFC-23 were predominantly in the northern hemisphere. Another representative expressed the view that the critical threshold for action in relation to HFC-23 emissions had been reached.

62. Responding to a query about the origin of the information on HFC-23 emissions before the entry into force of the Kigali Amendment, Mr. Campbell said that there had been several sources. An overall calculation could be obtained from the Article 7 data reporting on HCFC-22. There was also a wealth of data from reporting under the clean development mechanism, including precise data on HCFC-22 production and HFC-23 destruction. Various site measurements were also factored in.

63. In response to a question about whether fence-line monitoring had been undertaken at any individual facilities, Ms. Carpenter said that one fence-line measurement had been undertaken, by the Scientific Assessment Panel, in the Kingdom of the Netherlands, in a factory producing HCFC-22. The measurement had been quite difficult to do and was labour- and cost-intensive, as it used a gas chromatograph mass spectrometer, of which there were only about 20 in the world. Of those, 15 were in use taking measurements for the estimation of global emissions. New measurement systems were thus required.

64. A representative speaking on behalf of a group of countries, asked about the possibility of conducting flask sampling at the fence. Mr. Reimann said that, although flask sampling would be a possibility, a gas chromatograph would still be needed in the end. A lot of flasks would be required as sampling would need to be conducted at least once a day. It would be possible but not cheap.

65. Asked whether the Technology and Economic Assessment Panel had looked at emissions from lines that intentionally manufactured HFC-23 for sale, Mr. Campbell said that the Panel had been told, informally, that there was at least one, potentially two, plants that specifically manufactured HFC-23. The levels produced were in the hundreds of tonnes and were aimed at specific markets. He had no information on whether the plants employed abatement techniques. Responding to a follow-up question about the economic model behind the manufacture of such small quantities and whether the facilities were in fact swing plants, Mr. Campbell said that he had been told about the existence of a small, specific semi-tech unit. In the past, a number of companies had run semi-tech units to produce a substance that was required by an industry, thereby making it economically feasible.

66. In response to a question about HFC-23 generation, Mr. Campbell explained that more than 90 per cent of parties had reported on the production of HCFC-22. One representative proposed that the format for reporting on HFC-23 be further refined to ensure that the panels obtained the information required to close the gap in emissions reporting. Mr. Campbell said that he was very happy with the information already received, which had enabled the Technology and Economic Assessment Panel to improve their understanding of the generation, emission and uses of HFC-23. The Panel would like, however, to have more information on the consumption of HFC-23 in the three main areas to help in refining its numbers. He stressed, however, that such information would not serve to close the gap in emissions reporting. Mr. Campbell also said that the Panel would like to examine HFC-23 emissions from lithium ion batteries.

67. Providing further information on monitoring stations in Africa, Mr. Reimann said that the only station taking measurements related to air pollution and greenhouse gases in Africa was a newly built station in Rwanda. He looked forward to receiving its data on hydrochlorofluorocarbons (HCFCs) and HFCs to help with regional estimates on the continent. He also noted that under another European Union-funded project, new stations could be established around the world, including in Africa. In response to a question about the station in Rwanda, Ms. Carpenter said that it had been installed a year previously and data were available within the Advanced Global Atmospheric Gases Experiment (AGAGE) network where several stations worked together. The data would soon be published.

68. One representative asked why the Technology and Economic Assessment Panel had not analysed and compared parties' methodologies for estimating, reporting and verifying HFC-23 emissions and made observations with regard to that information. He asked whether that was something the Panel could do in the future. Mr. Campbell explained that he had not felt capable of concluding which methodology was better as there were many different ones. For example, some parties had used the guidelines on reporting on chlorinated gases of the United Nations Framework Convention on Climate Change, which had led to some very detailed submissions. In response to a comment from another representative about the fact that the panels had not produced any recommendations on the way forward with regard to HFC-23 emissions, Ms. Carpenter said that the panels did as mandated by the decisions of the parties.

69. In response to a question about the flammability of HFC-23 and its use in refrigeration, Mr. Campbell said that HFC-23 was not a flammable gas, yet, owing to its properties, the benefits in refrigeration were drawn only at extremely low temperatures, such as those needed for the initial vaccines against the coronavirus disease (COVID-19).

70. In the ensuing discussion, several representatives thanked the panels for their reports.

71. Several representatives expressed concern about the continued gap between the atmosphere-based estimates and reporting-based estimates of HFC-23 emissions. Some representatives noted, however, that the gap had become smaller despite an increase in the production of HCFC-22.

72. One representative expressed the view that the updated report of the Scientific Assessment Panel presented the information in a more objective manner, avoided potentially misleading causal interpretations and provided more complete and comparable data on relevant countries and regions. Nevertheless, she considered that the information was still very limited and there had been no substantive change in the panels' conclusions, demonstrating that parties faced challenges in estimating and reporting on HFC-23 emissions. Further research was needed to ensure better understanding among the international community of the sources, scale and mechanisms of HFC-23 emissions.

73. One representative expressed the view that, as long as the gap was as large as it was, the issue should remain on the agenda of Meetings of the Parties. Another representative said that parties should be open to revisiting past assumptions, exploring new research approaches and recognizing that scientific discovery took time, patience and a calm and rigorous attitude.

74. One representative sought a better understanding of the methodologies used by parties to estimate and report on their HFC-23 emissions. He asked whether the Technology and Economic Assessment Panel could explain in layman's terms how the approaches differed from one party to another, as the gap might, in part, be attributable to the way that emissions were being estimated.

75. Some representatives urged parties that had not yet done so to provide information on HFC-23 consumption for use by the Technology and Economic Assessment Panel. One representative sought clarification of the 10-fold increase in the tonnage reported by one party since the previous year. Some representatives said that bridging the gap called for greater cooperation between the Global North and South; it was important to provide technical support to countries without extending the scope of decision XXXVI/3; and it was necessary to take into consideration the specific conditions in and

capacities of developing countries. One representative said that there needed to be a clearer definition of production. He also said that the updating of data on feedstocks and on the destruction of by-products went beyond the scope of decision XXXVI/3.

76. One representative explained the extensive efforts by the Government, private sector and academia in her country to identify the causes of HFC emissions and find solutions, including on-site, independent verification of all known enterprises that generated HFC-23; technical consultations with industry experts; the development of technical guidelines for determining and reporting on HFC-23 by-product emissions at HCFC-22 production facilities; and collaboration between research institutions, including on the development of technology. Furthermore, a manufacturer had built and put into operation the world's first industrial facility that converted HFC-23 to HCFC-22. Another representative expressed appreciation of all the country's efforts.

77. Subsequently, the representative of the United States provided additional information regarding his country's data. He reiterated that the National Oceanic and Atmospheric Administration of the United States was preparing to release data for a study on HFC-23 emissions for the period 2018–2021. The data showed around 0.4 kilotonnes per year derived from the atmosphere compared to reported data of 0.31 kilotonnes per year from specific manufacturing facilities, within the error bar of the atmospheric estimates. Regarding one delegation's reference to the 0.04 kilotonnes reported by the United States for 2023, which were from industrial sources only, the representative of the United States explained that the substantially lower number was due to domestic action that had taken place after the years of data presented from the National Oceanic and Atmospheric Administration. The United States had ratified the Kigali Amendment in October 2022 and was now implementing it.

78. One representative recalled that work on HFC-23 was ongoing under the Multilateral Fund. The Executive Committee had approved projects related to one HCFC-22 production line in Argentina and two lines in Mexico, which were successfully being implemented and reducing HFC-23 emissions from the three lines. He expressed his appreciation to the two countries and the implementing agencies.

79. One representative joined previous speakers in stressing the importance of addressing the high levels of emissions and the disconnect between reported emissions and those derived from inverse modelling. It was indeed important, he said, to consider the methodologies used by parties for estimating and reporting emissions, and other technical details, but parties had to take more decisive action to avoid undermining the past successes of the Montreal Protocol, just as they had in response to the unexpected emissions of chlorofluorocarbon-11 (CFC-11).

80. The representative of Canada introduced a proposal for a draft decision submitted by Canada, the European Union, Norway and Switzerland, set out in a conference room paper. He explained that it requested the Scientific Assessment Panel and the Technology Economic Assessment Panel to update their decision XXXVI/3 reports to reflect any additional or new information. He expected the updates not to be substantial. The Technology Economic Assessment Panel was also requested to provide a description and comparison of the methodologies for estimating HFC-23 that had been submitted by the parties. He acknowledged that the additional information would not enable parties to resolve the discrepancy, but the proponents deemed it important for parties to understand how emissions were estimated, reported and verified. The idea behind the comparison was not for the Panel to analyse which methodologies were better, but simply for it to point out the differences among then. The Panel was also requested to describe the key elements of the methodologies used under the clean development mechanism under Article 12 of the Kyoto Protocol; to suggest best practices for estimating HFC-23 emissions from HCFC-22 production; and to provide an indication of the levels of HCFC-22, where there were three or more producing facilities, and of HFC-23 produced and generated by country or region, together with measured atmospheric abundances of HFC-23 over the same countries or regions, as reported by the Scientific Assessment Panel when available, and to show, to the extent possible, the relative contribution of each country and region to the total HFC-23 emissions measured in the atmosphere. In its report, the Panel had provided a comparison of measured emissions versus reported emissions for different countries and regions, but it was not clear what the actual levels of HCFC-22 production and HFC-23 by-production were in those regions. The draft decision invited parties that had HCFC-22 production facilities that had not submitted information thereon to do so by 31 March 2026. Parties that had HFC-23 production and/or generation were urged to report data on the amounts of HFC-23 generated, captured, used, destroyed and stored; to ensure that the HFC-23 was effectively destroyed and that they had proper leak management and repair programmes and an effective monitoring, reporting and verification process in place; and to consider including site-specific monitoring in regions where high emissions had been found or where large HCFC-22 production facilities were located.

81. The representative of Norway, as a proponent of the draft decision, noted that, although several parties were making extensive efforts to enhance collective understanding of the issue and providing information to support the work of the assessment panels, they were far from clearly understanding the underlying causes of the significant discrepancies highlighted by the panels. That was a major concern to her party, and it was essential that parties continued to collaborate to better explain and address those discrepancies.

82. The representative of the European Union, as a proponent of the draft decision, acknowledged the work on improving estimates of HFC-23 emission that was being undertaken by one party, including the holding of a recent workshop that he had attended and the development of technical guidelines on the monitoring, reporting and verification of HFC-23 emissions. Nevertheless, the issue affected all parties and needed to be addressed collectively, which is what the draft decision aimed to do. He noted the importance of looking at potential emission sources; ensuring that efficient abatement technologies were used; of drawing out best practices; and of ensuring transparency in reporting and better enforcement.

83. In the ensuing discussion, many representatives agreed regarding the seriousness of the issue and said that they wished to discuss the matter and the draft decision in a contact group.

84. One representative asked whether it was worth asking the assessment panels to update their reports, given their heavy workloads and the fact that the new information was expected to be limited. She recalled the comment made by Mr. Campbell that he had not felt capable of concluding which methodology was better. Each methodology had its own advantages and strengths. She further sought clarification regarding the request relating to parties with three or more facilities producing HCFC-22 and questioned the use of the word “urge” for voluntary actions. Recalling the projects in Argentina and Mexico, she said that, according to decision XXVIII/2, the costs associated with reducing emissions of HFC-23 should be funded by the Multilateral Fund, yet the majority of Article 5 parties had not yet received funding. She asked the Executive Committee to consider, as soon as possible, providing eligible countries and enterprises with the support required.

85. Another representative highlighted the lack of deadline for the provision of additional information by parties, despite that information being intended to help the panels in updating their reports for submission to the Thirty-Eighth Meeting of the Parties.

86. In response to a question by one representative, the Co-Chair noted that, while emissive uses were being phased out under the Montreal Protocol, there was still considerable production of HCFC-22 related to feedstock, resulting in HFC-23 as a by-product.

87. The parties agreed to establish a contact group, co-chaired by Heidi Stockhaus (Germany) and Leslie Smith (Grenada), to further discuss the draft decision.

88. Subsequently, the co-chair of the contact group reported that the contact group had reached agreement on a draft decision on emissions of HFC-23, for consideration by the parties.

89. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

VI. Enhancing regional atmospheric monitoring of substances controlled by the Montreal Protocol (decision XXXVI/1)

90. In considering the item, the parties had before them paragraphs 37 to 43 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), paragraphs 20 to 60 of the addendum to that note (UNEP/OzL.Pro.37/2/Add.1), a note by the Secretariat on updates to the cost estimates associated with enhancing regional atmospheric monitoring of substances controlled by the Montreal Protocol (UNEP/OzL.Pro.37/INF/6), paragraphs 154 to 164 of section VI of the report of the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP/OzL.Pro.WG.1/47/6), and paragraphs 54 to 63 of an addendum to a note by the Secretariat on issues for discussion by and information for the attention of the Open-ended Working Group of the Parties to the Montreal Protocol at its forty-seventh meeting (UNEP/OzL.Pro.WG.1/47/2/Add.1).

91. Introducing the item, the Co-Chair recalled that, in decision XXXVI/1, the Secretariat had been requested to report at the current meeting on progress and any outcomes of the evaluation of the suitability of potential sites for monitoring regional emissions of controlled substances for review by the parties, and to provide any updates on its cost estimates and options for long-term financing associated with atmospheric monitoring. At the forty-seventh meeting of the Open-ended Working

Group, the Secretariat and the Advisory Committee of the Vienna Convention General Trust Fund had reported on progress relating to the evaluation of potential monitoring sites. Following discussions on the matter, parties had requested the preparation of a strategy detailing the activities under the various funding streams and showing how those activities complemented one another for regional atmospheric monitoring.

92. The final report on progress in the implementation of decision XXXVI/1 were presented by A. R. Ravishankara, one of the Co-Chairs of the Advisory Committee, and Sophia Mylona, the Secretariat's representative on the Advisory Committee. The presentations summarized the Committee's progress in evaluating the suitability of potential sites for monitoring regional emissions of controlled substances, including the main findings of the pilot project carried out on Bhola Island and two scientific studies, as well as updates to cost estimates associated with enhancing such monitoring, as set out in documents UNEP/OzL.Pro.37/2/Add.1 and UNEP/OzL.Pro.37/INF/6.

93. Mr. Ravishankara presented a list of 10 potential regions and locations for setting up monitoring stations that had been selected by the Advisory Committee at its nineteenth meeting, held online on 2 October 2025. The list included the following five regions and locations that had been prioritized by the Committee based on information on emissions strengths, observing system simulation experiments, as well as available infrastructure and expertise: Southern Asia (India/Bangladesh); South-East Asia (Viet Nam); Southern Africa (Botswana/South Africa); the Middle East (Saudi Arabia); and Central and Southern South America (Brazil/Argentina). Other potential regions that had been examined by the Committee but had not yet been prioritized were: North Africa (Algeria); North America (Mexico); Northern South America (Ecuador); Eastern Europe (Russian Federation); and West Africa (Nigeria). The Co-Chair reported that the Committee had also agreed on the approach of carrying out initial flask sampling for two years at the identified site to confirm its suitability before embarking on longer-term monitoring.

94. Following the presentation, Mr. Ravishankara and Ms. Mylona responded to questions and comments by representatives.

95. Responding to a question on the process for the selection of regions in which future monitoring stations might be located, Mr. Ravishankara said that priority had been given to those regions where current emissions were the greatest. The availability of infrastructure was an important consideration – the greater the initial availability of infrastructure, the lower the costs needed to instigate a monitoring programme. The availability of a suitable tower, for example, would be very helpful. In the stepwise or phased approach that was adopted for the programme, flask sampling would be undertaken at the sites initially selected to collect six months of data in less than a year, in order to ensure that those sites were providing the required data. Responding further to the issue of the criteria that had been taken into account when selecting regions for monitoring stations, he said that the gaps between top-down and bottom-up calculations of emissions of certain substances, concern over which had been one of the main drivers of the current programme to establish monitoring stations, had been taken into account, as had consideration of the potential challenges that might be facing the Montreal Protocol in the future. The current location of Global Atmospheric Watch stations had also been taken into account. On the matter of whether a threshold of concentrations of controlled substances had been considered when deciding on the regions, he said that that was a difficult issue, given the variability that could occur with daily or weekly sampling. He also stressed the importance of observing system simulation experiments in identifying locations for the establishment of stations to monitor emissions, and the potential to rerun those experiments to more precisely define locations, for example in areas of varied topography. Responding to an observation that decision XXXVI/1, which had established the mandate for the current work, made no reference to emission levels as a criterion for site selection, Mr. Ravishankara said that while global coverage was the long-term aim, a choice had to be made as to where to invest in the first steps, and investigating places where emissions were high offered the most potential for collecting useful data.

96. Responding to a question on the criteria that might be applied in deciding whether to opt for high-frequency in situ sampling or flask sampling, Mr. Ravishankara said that the matter was not clear-cut, as high-frequency flask sampling could also be undertaken. As a general rule, the higher the frequency of measurement, the more accurate the results of emission inversion. Both methods involved the calculation of the emission strength; the main difference was that in the case of a high-frequency station the analytical instrumentation and expertise were available on site, while for flask sampling the analytical facilities were located in established laboratories away from the sampling site. On the matter of data quality, he said that great care was required to ensure the quality of the data, as estimation of the emission levels depended on that. Logistical issues were also critical – in the case of the monitoring station on Bhola Island, Bangladesh, for example, some results were skewed due to a leak in a flask.

97. In response to a question about the future financing of an atmospheric monitoring programme beyond the proposed five-year timeline, Mr. Ravishankara highlighted the importance of in-kind domestic contributions, especially in the form of skilled personnel who could accurately take measurements and interpret the data. Significant savings were also possible, for example, the significant amount of data obtained from the Bangladesh study had been made possible by the in-kind contributions that had been mobilized. Most existing monitoring stations were funded by national agencies, including laboratories and universities. The proposed regional atmospheric monitoring programme of the Montreal Protocol would involve a paradigm shift, whereby all the data from such sources would be put on a common footing using the same calibration scales to enable global comparability. In terms of costs, there was a potential for the capital infrastructure cost of monitoring activities to diminish as more stations were built and a market was established for the highly specialized instruments they housed, leading to lower prices as more suppliers entered the market. Responding to a question on potential collaboration with relevant institutions to enhance cost-effectiveness, efficiency and fund sustainability, he said that indeed further collaboration of that nature would be welcomed, given that a number of countries had significant technical capacity in carrying out atmospheric monitoring activities, supported by advanced facilities. There was also potential for collaboration with non-governmental organizations. It would be useful to make contact with all relevant programmes to prevent duplication and ensure synergy. He stressed that one of the key components of the programme was knowledge transfer in both directions, as local knowledge was crucial for the operation of monitoring stations. There was potential for innovative training modalities, for example pairing a particular station with a particular laboratory for in-service training. On the matter of whether suitable partners had yet been identified for the 10 potential monitoring locations thus far examined, he said that the process was under way, and discussions were taking place with possible partners.

98. Regarding the potential for collaboration with Comprehensive Nuclear-Test-Ban Treaty sites, he said that a significant difference was that the Treaty mainly undertook measurements at surface level whereas monitoring of substances controlled by the Montreal Protocol was carried out in the atmosphere. Having said that, the Comprehensive Nuclear-Test-Ban Treaty experts had been extremely helpful in collaborating with Montreal Protocol atmospheric monitoring initiatives.

99. Responding to a question on the possible climatic impacts that might have an effect on monitoring stations located in areas of extreme weather such as hurricanes, Mr. Ravishankara said that extreme weather could indeed destroy a weather station, and the cost of erecting a tower resilient to such weather had already been considered.

100. Ms. Mylona responded to questions on the financial aspects of the measurement programme. Regarding the various options for the establishment of sampling systems, she said that those were linked to the funding available and the preferred mix of sampling methods. For example, the pending European Union grant to the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention could potentially finance one high-frequency in situ monitoring station and two flask sampling stations. Further information on the cost estimates for various options was provided in document UNEP/OzL.Pro.37/2/Add.1. On the matter of whether the cost estimates had taken into account the existing infrastructure, she said that in building the model experts in atmospheric monitoring from around the globe had been consulted to ensure that regional variations in costs had been taken into account. At the next stage, investigations would be carried out to establish what existing infrastructure was available close to identified sites and to establish the impact on the cost estimates of utilizing that infrastructure.

101. On the matter of the proposed interactive online tool that could be used by parties to estimate the costs for establishing and operating stations in their countries, she said that that would involve no extra cost because the European Union had agreed to allow the use of some left-over funds from the European Union-funded pilot project for development of the online tool.

102. Regarding the wide range in the personnel costs presented, Ms. Mylona said that a factor in that variability was the type of sampling; flask sampling, for example, might entail lower sample collection costs, whereas high frequency in situ sampling would require higher costs owing to permanent attendance of highly qualified personnel at the monitoring station.

103. During the ensuing discussion, all the representatives who spoke thanked Mr. Ravishankara and Ms. Mylona for their presentation, the Secretariat and the Advisory Committee for the document and the European Union for providing the funding for the pilot study.

104. All the representatives who spoke stressed the importance of effective atmospheric monitoring for the continued success of the Montreal Protocol and one highlighted the valuable lessons learned from the pilot project at Bhola Island. Another representative drew attention to the need to formulate

long-term strategies, identify priority tasks, set objectives and secure financial resources, as well setting up monitoring and evaluation systems, in order to guide the overall development of monitoring work under the Montreal Protocol. Some representatives expressed their appreciation for the proposed four-step phased approach to monitoring outlined in document UNEP/OzL.Pro.37/INF/6.

105. One representative highlighted in particular the role of atmospheric monitoring in observing emissions of substances not controlled under the Montreal Protocol, including very short-lived substances, and emissions from exempted uses, such as feedstock or quarantine and pre-shipment use, from banks of substances and end-of-life equipment and from illegal production of controlled substances.

106. Several representatives stressed the need for adequate technical and financial support from the Multilateral Fund, in the form of a dedicated and predictable funding window to ensure long-term operation and maintenance. Some representatives expressed their appreciation for the work of the Executive Committee of the Multilateral Fund in undertaking a number of pilot projects in the near future for regional atmospheric monitoring of controlled substances, and said that they were looking forward to further discussions at the ninety-eighth meeting of the Committee. Another representative expressed appreciation for the approach to funding streams contained in the document from the Secretariat.

107. Several representatives stressed the need for funding to be sustainable, and called for further consideration of the issue. One representative expressed the hope that, in the long term, the operating costs of the monitoring stations would be absorbed by the host institution or country or another international institution, but said that he recognized that in some cases further support from the Multilateral Fund might be necessary.

108. The representative of the European Union said that he was pleased that his party's funding for the successful pilot project had helped generate findings and methodological approaches for future use. Through its Horizon Europe programme, the European Union was able to offer further funding, and the Secretariat, in collaboration with the Advisory Committee, had already submitted a proposal. That funding stream would only become definite, however, after the evaluation of the proposal had been completed and contracts finalized. The implication was that there would be a shortage of funds in the short term; he suggested that money unused so far could be carried over to 2026. He said that he hoped to be able to discuss the matter further with other representatives, the Secretariat and the Advisory Committee, and added that his delegation was currently preparing a proposal for a draft decision which could be introduced later in the meeting.

109. A number of other representatives stated their agreement with the proposal to carry over funding to 2026.

110. Several representatives highlighted the potential for partnering with scientific institutions that could provide personnel or technical expertise in the collection of samples, data analysis and management, as well as existing infrastructure. Those or other in-kind contributions would be helpful in saving costs, and would also help to develop local technical capacity for atmospheric observation and research. Some representatives suggested institutions in their countries which could play a role in that regard.

111. One representative expressed the view that the list of scientific institutions working on atmospheric monitoring, regional networks and ongoing projects being compiled by the Secretariat would be very valuable. Joint monitoring projects and data sharing should be encouraged. Another representative agreed with the presenters that data obtained from monitoring stations should be open access. One stressed the importance of respecting national sovereignty over the data collected. Another emphasized the need to obtain permission from the relevant national atmospheric monitoring services and other related institutions to implement the project at the location of the monitoring station for emissions of substances regulated by the Montreal Protocol, as determined by experts.

112. One representative expressed support for the Advisory Committee's approach of evaluating potential sites for monitoring stations based on scientific and technical criteria. Another representative urged the creation of stations in regions which currently lacked them, including countries which experienced high ambient temperatures. Another called for effective monitoring to be carried out in all five United Nations regions at suitable locations, taking into account differences in geographical topography, land area and region-specific challenges.

113. One representative expressed his pleasure that his country had been identified as a possible site for a monitoring station, and stated his country's willingness to host one, especially as it already possessed some scientific capacity in that regard. Another representative suggested that a station should be situated in West Africa.

114. The representative of Ecuador pointed out that his country had been wrongly identified in the presentation as being located in Central America rather than South America.[1] He suggested the Andes as a suitable location for a monitoring station.

115. Another representative called for further discussion of the total number of monitoring stations that could be established, given the funding available, and whether preliminary work should be carried out to identify suitable locations. Agreeing with that suggestion, another representative called for particular attention to be paid to sites where there was a clear host country commitment to contribute financial support as well as long-term commitment by a hosting institution to provide resources to help support the work beyond the five-year duration of the prospective new European Union grant.

116. Subsequently, the representative of the European Union introduced a proposal for a draft decision set out in a conference room paper aimed at furthering work on enhancing regional atmospheric monitoring of substances controlled by the Montreal Protocol. In the draft decision, the Secretariat was requested, in consultation with the Advisory Committee of the General Trust Fund of the Vienna Convention, to continue the evaluation of the suitability of potential sites for monitoring emissions of controlled substances, to progress those efforts by identifying infrastructure and existing stations in and around the 10 locations identified by the Advisory Committee and to prepare for the next steps towards establishing monitoring activities at those sites. The decision also included the following requests: (a) that a budget line item be provided in 2026 to enable that work to continue; (b) that the Secretariat report to the Open-ended Working Group at its forty-eighth meeting and the Thirty-Eighth Meeting of the Parties on the progress made; and (c) that the Executive Committee of the Multilateral Fund take into consideration certain information and estimated costs when developing guidelines and considering a funding window to support pilot projects.

117. A number of representatives thanked the European Union for introducing the proposal for a draft decision, and made a number of suggestions for modification and clarification. One representative suggested adding text stressing the importance of the topic to the continued implementation of the Montreal Protocol, and also adding a reference to parties that were willing to agree to the establishment of monitoring stations in their countries. Another noted the need to reach a decision on the appropriate level of funding for 2026. He also suggested the need to clarify whether the reference to the 10 potential sites meant only those identified by the Advisory Committee, or whether there might be additional sites worthy of consideration. Another representative suggested adding a reference to potential sites where suitable infrastructure already existed.

118. The parties agreed to establish a contact group, to be co-chaired by Alain Wilmart (Belgium) and Sophia Anselm-Larocque (Dominica), to further discuss the draft decision.

119. Subsequently, the co-chair of the contact group reported that the contact group had reached agreement on a draft decision on enhancing regional atmospheric monitoring of substances controlled by the Montreal Protocol, for consideration by the parties.

120. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

VII. Development of studies and strategies to find medium- and long-term solutions to the significant accumulation of inventories of refrigerant gases nearing the end of their life cycles in parties operating under paragraph 1 of Article 5 of the Montreal Protocol

121. In considering the item, the parties had before them paragraphs 44 to 47 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), paragraphs 77 to 90 of and annex I to the report of the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP/OzL.Pro.WG.1/47/6) and section 6.9 of the progress report of the Technology and Economic Assessment Panel, May 2025, volume 1.

122. The Co-Chair recalled that at the forty-seventh meeting of the Open-Ended Working Group, in the context of discussions on life-cycle refrigerant management, Cuba had introduced a draft decision to highlight concerns about the increasing volume of refrigerant gases nearing the end of their life cycles in Article 5 parties. While the contact group that had considered the draft decision had made

[1] The correction was subsequently made in the presentation slide and has been made in paragraph 93 of the present report.

good progress, it had not been possible to reach agreement. The Working Group had therefore agreed to resume discussions on life-cycle refrigerant management at the Thirty-Seventh Meeting of the Parties on the basis of the draft decision, as revised by the contact group. The revised draft decision was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[B]).

123. The parties agreed to establish a contact group, to be co-chaired by Morane Godfrin (France) and Sergio Merino (Mexico), to further discuss the draft decision.

124. Subsequently, the co-chair of the contact group reported that the group had reached agreement on a draft decision, concerning a study on quantities of and options for used and unwanted controlled substances under the Montreal Protocol, including those at their end of life, for consideration by the parties.

125. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

VIII. Feedstock uses of controlled substances

126. In considering the item, the parties had before them paragraphs 48 to 54 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), paragraphs 143 to 148 of and annex I to the report of the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP/OzL.Pro.WG.1/47/6), paragraphs 52 and 53 of the note by the Secretariat on issues for discussion by and information for the attention of the Open-ended Working Group of the Parties to the Montreal Protocol at its forty-seventh meeting (UNEP/OzL.Pro.WG.1/47/2/Add.1) and the note by the Secretariat on the compilation of information provided by parties on practices and technologies used to reduce emissions of controlled substances and on their established national procedures and frameworks for management of production and use of controlled substances for feedstock (UNEP/OzL.Pro.WG.1/47/3 and UNEP/OzL.Pro.WG.1/47/3/Add.1). A draft decision on the matter was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[C]).

127. The Co-Chair recalled that at the forty-seventh meeting of the Open-Ended Working Group, the European Union, also on behalf of Switzerland, had presented a draft decision on feedstocks. While the contact group that had considered the draft decision had made good progress, it had not been possible to conclude its work. The Working Group had therefore agreed to resume discussions on feedstocks at the Thirty-Seventh Meeting of the Parties on the basis of the draft decision, as revised by the contact group. She suggested that the parties could consider establishing a contact group to discuss the draft decision further.

128. One representative reminded the parties that, as had been decided in decision IV/12, insignificant quantities of controlled substances originating from inadvertent or coincidental production during a manufacturing process, from unreacted feedstock, or from their use as process agents which were present in chemical substances as trace impurities, or that were emitted during product manufacture or handling, were to be considered not to be covered by the definition of a controlled substance contained in paragraph 4 of Article 1 of the Montreal Protocol. Under decision XXXV/6, parties had already submitted information on best practices, and national procedures and frameworks for the management of emissions from feedstock.

129. Another representative agreed, pointing out that despite the fact that the use of controlled substances for feedstock had increased, there had been no corresponding rise in emissions. Any decision should reflect those scientifically proven facts, and focus on improving data and collaboration, and increasing capacity-building, without imposing new obligations on developing countries.

130. The parties agreed to establish a contact group, to be co-chaired by Liana Ghahramanyan (Armenia) and Morgan Simpson (United Kingdom), to further discuss the draft decision.

131. Subsequently, in response to concerns raised by a number of representatives participating in the contact group who took the floor, a representative of the Secretariat clarified that, while it was not unusual for consultations to be held in the margins of a contact group in an effort to find consensus or streamline the proposed text of a draft decision, it was important that any new, revised or deleted text following those consultations be introduced in the contact group. Following discussions, the parties agreed to a proposal whereby the text of the draft decision that was under discussion in the contact group would be reverted to the text that had been referred to the parties by the Open-ended Working Group, as set out in the document containing the draft decisions for consideration by the

Thirty-Seventh Meeting of the Parties (UNEP/OzL.Pro.37/3 (draft decision XXXVII/[C])). Any proposed amendments could then be made in the contact group. One representative stressed that the work of contact groups should begin with a general discussion of the matter among parties before turning to consideration of the content of the draft decision in question.

132. Subsequently, the co-chair of the contact group reported that the group had been unable to reach agreement on a draft decision on feedstock uses of controlled substances.

IX. Halon 1301 and its continuing use in the aviation industry; management of other controlled substances used for fire suppression

133. In considering the item, the parties had before them paragraphs 55 to 60 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), paragraphs 116 to 128 of and annex I to the report of the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP/OzL.Pro.WG.1/47/6) and chapter 3 of the progress report of the Technology and Economic Assessment Panel, May 2025, volume 1. A draft decision on the matter was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[D]).

134. The Co-Chair recalled that at the forty-seventh meeting of the Open-Ended Working Group, the parties had discussed the issue of halon 1301, based on a report by the Fire Suppression Technical Options Committee. Australia, also on behalf of Canada, the European Union, New Zealand, Switzerland, the United Kingdom and the United States, had submitted a proposal on halon 1301 in the aviation industry and other controlled substances used for fire suppression. While the contact group that had considered the draft decision had made good progress and had removed most of the square brackets in the draft, it had not been possible to reach agreement. The Working Group had therefore agreed to resume discussions on halon 1301 at the Thirty-Seventh Meeting of the Parties on the basis of the draft decision, as revised by the contact group.

135. The parties agreed to establish a contact group, to be co-chaired by Juan José Galeano (Argentina) and Jana Mašíčková (Czechia), to further discuss the draft decision.

136. Subsequently, the co-chair of the contact group reported that consensus had been reached on a draft decision on halon 1301 and its continuing use in the aviation industry, and management of other controlled substances used for fire suppression, for consideration by the parties.

137. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

X. National and regional initiatives to support the implementation of the Kigali Amendment to the Montreal Protocol

138. In considering the item, the parties had before them paragraphs 61 to 67 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2) and paragraphs 195 to 206 of and annex I to the report of the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP/OzL.Pro.WG.1/47/6). A draft decision on the matter was set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[E]).

139. The Co-Chair recalled that at the forty-seventh meeting of the Open-Ended Working Group, a draft decision on national and regional initiatives to support the implementation of the Kigali Amendment had been presented. A contact group had discussed the proposal, and the Working Group had agreed to resume discussions on national and regional initiatives at the Thirty-Seventh Meeting of the Parties on the basis of the draft decision, as revised by the contact group. She noted that the draft decision had subsequently been supported by the African Group of Negotiators.

140. The parties agreed to establish a contact group, to be co-chaired by Mariska Wouters (New Zealand) and Camilla Noel (Vanuatu), to further discuss the draft decision.

141. Subsequently, the co-chair of the contact group reported that the group had reached agreement on a draft decision for consideration by the parties.

142. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

XI. Technology and Economic Assessment Panel organizational issues

A. Options for the organization of the Technology and Economic Assessment Panel and its technical options committees (decision XXXV/20)

143. In considering the item, the parties had before them paragraphs 73 to 80 of and annexes I and II to the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), paragraphs 99 to 111 of the report of the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP/OzL.Pro.WG.1/47/6) and the terms of reference of the Technology and Economic Assessment Panel, its technical options committees and temporary subsidiary bodies, as set out in the annex to decision XXIV/8 (see UNEP/Ozl.Pro.24/10).

144. The Co-Chair recalled that at the forty-seventh meeting of the Open-Ended Working Group, an informal group of interested parties had met the co-chairs of the Technology and Economic Assessment Panel and of its technical options committees in the margins of the meeting to discuss further the options for the organization of the Panel and its technical options committees. At the end of the meeting, the Panel had indicated that it needed more time to provide the additional information requested by parties, and parties had also suggested that they needed more time to consider the issue. The Working Group had agreed to resume discussions on the organization of the Panel and its technical options committees at the Thirty-Seventh Meeting of the Parties.

145. The Panel had subsequently prepared the additional information requested by parties during the informal group discussions and stood ready to respond to any questions. The Co-Chair invited parties to indicate how they would like to proceed with the agenda item.

146. Some representatives said that it would be useful to continue with an informal discussion between interested parties and the co-chairs of the Panel; the co-chairs could provide information that could help parties in identifying a path forward to a decision, although it was not clear whether a decision could be agreed at the current meeting.

147. The parties agreed to establish an informal group, to be co-facilitated by Cindy Cunil (Belize) and Matěj Mrlina (Czechia), to continue discussions on the issue, on the understanding that discussions might need to continue at the forty-eighth meeting of the Open-ended Working Group, in 2026.

148. Subsequently, the co-facilitator of the informal group reported that, while the group had discussed various options, in the light of the commitments of the Technology and Economic Assessment Panel and a desire not to disrupt its ongoing work, which included the preparation of its quadrennial assessment, the group considered that it was not appropriate to restructure the Panel and its technical options committees at present. The importance of continued discussions was nevertheless highlighted, in particular with regard to workload optimization, membership and financial constraints, and information on cost implications was requested for inclusion in the Panel's report. Finally, there was broad consensus between parties that discussions on the matter should continue at the forty-eighth meeting of the Open-ended Working Group.

149. The parties agreed to include the item on the agenda of the forty-eighth meeting of the Open-ended Working Group.

B. Changes in the membership of the Technology and Economic Assessment Panel

150. In considering the item, the parties had before them paragraphs 73 to 80 of and annexes I and II to the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2); paragraphs 61 to 65 of the addendum to the note (UNEP/OzL.Pro.37/2/Add.1); annexes 4 and 5 of the progress report of the Technology and Economic Assessment Panel, May 2025, volume 1; the terms of reference of the Technology and Economic Assessment Panel, its technical options committees and temporary subsidiary bodies, as set out in the annex to decision XXIV/8; the Technology and Economic Assessment Panel primer and the matrix of needed expertise.

151. The Co-Chair recalled that at the forty-seventh meeting of the Open-Ended Working Group, the attention of the parties had been drawn to the list of the co-chairs and members of the Technology and Economic Assessment Panel and technical options committees whose membership expired at the end of 2025, as indicated in the Panel's 2025 progress report. To date, the Secretariat had received

four nominations: Marta Pizano to serve as co-chair of the Methyl Bromide Technical Options Committee for an additional term of four years; Ian Porter to serve as co-chair of the Methyl Bromide Technical Options Committee for an additional term of two years; Helen Tope to serve as co-chair of the Medical and Chemicals Technical Options Committee for an additional term of four years; and Helen Walter-Terrinoni to serve as co-chair of the Flexible and Rigid Foams Technical Options Committee for an additional term of four years. The nominations had been posted on the meeting portal. She requested any parties submitting additional nominations to do so as soon as possible and the Secretariat would then prepare a draft decision for discussion at the current meeting.

152. One representative expressed her appreciation for the dedication of Sergey Kopylov to his role as co-chair of the Fire Suppression Technical Options Committee. She called on the parties to ensure that the Panel and its technical options committees included members from developing countries, including high-ambient-temperature countries, in line with decision XXXI/8.

153. The parties agreed to establish an informal group to continue discussions on the issue.

154. The Co-Chair informed the parties that the informal group had reached agreement on a draft decision on the matter for consideration by the parties.

155. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

XII. Further strengthening Montreal Protocol institutions (decision XXXVI/9)

156. In considering the item, the parties had before them paragraphs 81 to 84 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), paragraphs 168 to 179 of the report of the forty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP/OzL.Pro.WG.1/47/6) and a note by the Secretariat entitled “Concept note and provisional programme” for the informal meeting.[2]

157. The Co-Chair recalled that, at the forty-seventh meeting of the Open-Ended Working Group, interested parties had met the Secretariat to consider the topics to be discussed at the meeting that had been requested in decision XXXVI/9. That one-day informal meeting of the parties on facilitating the implementation of the Montreal Protocol had been held on Sunday, 2 November 2025. The Secretariat had prepared and posted a summary of the outcomes of the meeting (UNEP/OzL.Pro.37/7), based largely on the key takeaway messages that the facilitators of the breakout groups had reported to the informal meeting of the parties in plenary session. She emphasized that the richness of discussions at the informal meeting could not be fully captured by the summary, but that presentations made during the informal meeting were available on the meeting portal.[3] On behalf also of her Co-Chair, she expressed her gratitude to all the facilitators, presenters, resource experts and participants for their valuable contributions to the informal meeting.

158. Later in the meeting, the representative of the European Union introduced a proposal for a draft decision, set out in a conference room paper. She explained that the proposal focused on streamlining the information that parties provided to the Secretariat on their licensing systems, with the aim of strengthening such systems. It requested the Secretariat to prepare a template for parties to use in providing information, including the elements of the licensing system required to be established and implemented under Article 4B of the Montreal Protocol, as well as other elements useful for information, by 30 September 2026 and to ensure that the information remained up to date thereafter. It also requested the Secretariat to prepare a compilation of the information thus provided, for consideration by the Implementation Committee at its seventy-seventh meeting and by the Thirty-Eighth Meeting of the Parties. Finally, it requested the Secretariat to prepare a checklist of the core features of licensing systems, considering Article 4B of the Montreal Protocol and relevant decisions of Meetings of the Parties on licensing issues. She looked forward to discussing the proposal with the parties.

159. One representative expressed concerns with the proposal, saying that it was not clear how it was supposed to assist parties in fulfilling their obligations under the Montreal Protocol. Parties should be very careful in adding to the work of the Secretariat and parties, which were already overburdened

[2] https://ozone.unep.org/system/files/documents/IM_concept-note-and-provisional-programme_final-draft_for-posting.pdf.

[3] https://ozone.unep.org/meetings/informal-meeting-facilitating-implementation-montreal-protocol/presentations.

with requests to supply additional information on a voluntary basis. It was not clear whether the proposal could really help parties to improve their capacity and address their current challenges.

160. Other representatives echoed those concerns, stating that more clarity was needed over the purpose and contents of the proposed template. The Montreal Protocol itself did not set out any specific guidance with regard to licensing systems. Another representative expressed her concern that the proposed template might not capture every feature of a well-designed licensing system.

161. One representative, while welcoming the proposal, observed that it had derived from discussions in the informal meeting held on Sunday, 2 November. Participants in that meeting, however, had discussed other important issues, including illegal trade, data collection and reporting and capacity enhancement. She was concerned that if a contact group was established to discuss the European Union proposal, the remaining issues would be reflected only in the outcome document of the informal meeting, which had no real status and would not be followed up. She suggested that if a contact group was established, it should also work on preparing next steps on the other issues.

162. Another representative said that the organization of the informal meeting had fulfilled the mandate decided by the parties in decision XXXVI/9. It did not necessarily follow that any draft decision had to cover the entire range of issues discussed in the meeting. While welcoming the European Union proposal, and recognizing the important role that licensing systems played, particularly in combating illegal trade, she expressed a number of concerns with the proposal as drafted. In particular, she said that parties would need to have the opportunity to provide input in the design of the proposed template before it could be circulated by the Secretariat. It was not reasonable to expect parties to be able to submit information on their licensing systems in line with an unknown template, which would potentially imply reorganizing information they had already submitted, by 30 September 2026. It was also not clear what the Implementation Committee was expected to do with the compilation of information thus provided. Finally, the reference in the proposal to "core features" of licensing systems was concerning, as the parties had not reached any agreement as to what those core features might be. It did not seem appropriate for the Secretariat to provide a checklist of core features that had not been discussed. Despite those criticisms, however, she would welcome the opportunity to discuss the proposal further.

163. Other representatives welcomed the proposal and requested an opportunity to discuss it further in a contact group. One agreed to the suggestion that the remit of the contact group should be extended to cover other issues discussed at the informal meeting but, recognizing that the time available at the current meeting was limited, suggested that the topic should be included in the agenda of the forty-eighth meeting of the Open-Ended Working Group. Another observed that restricting the coverage of the present proposal to licensing systems did not preclude the other issues being taken up subsequently.

164. The parties agreed to establish an informal group, to be co-facilitated by Sandrine Benard (Norway) and George Chaumba (Zimbabwe), to further clarify and exchange views on the draft decision as well as other key issues raised during the informal meeting held on 2 November.

165. Subsequently, the co-facilitator of the informal group reported that a number of parties had voiced appreciation for the one-day informal meeting on facilitating the implementation of the Montreal Protocol. Recognizing the number of issues remaining to be discussed and owing to time constraints, the informal group had been unable to consider the conference room paper submitted by the European Union. Given parties' interest in a continued dialogue on the outcomes of the informal meeting, there was agreement that discussions on the matter should continue at the forty-eighth meeting of the Open-ended Working Group.

166. The parties agreed to include the matter on the agenda of the forty-eighth meeting of the Open-ended Working Group.

XIII. Compliance and data reporting issues: work and recommendations of the Implementation Committee

167. In considering the item, the parties had before them paragraphs 85 and 86 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2) and the Non-Compliance Procedure of the Montreal Protocol. The draft decisions forwarded by the Implementation Committee for consideration and possible adoption by the Thirty-Seventh Meeting of the Parties were set out in a conference room paper.

168. The President of the Implementation Committee, Martijn Hildebrand (Kingdom of the Netherlands) presented a summary of the work of the Implementation Committee at its seventy-fourth and seventy-fifth meetings, including an overview of the nine draft decisions approved by the Committee for consideration by the Thirty-Seventh Meeting of the Parties.

169. The Committee had considered data reporting issues related to Articles 7 and 9 of the Montreal Protocol, including the reporting requirements for HFCs under the Kigali Amendment, cases of non-compliance, including adherence or non-adherence by individual parties to commitments in their plans of action to return to compliance, requests for changes to baseline data for HFCs and HCFCs, information on the establishment of licensing systems for HFCs, the submission of provisional data in the context of Article 7 reporting and systemic issues in relation to compliance. The Committee had also received reports from the secretariat of the Multilateral Fund on relevant decisions of the Executive Committee of the Fund and on activities carried out by the implementing agencies to facilitate compliance by parties.

170. While reviewing the status of parties covered by decision XXXVI/13, on non-compliance with their Article 7 data reporting obligations, the Committee had considered the status of compliance of eight parties, and all eight had reported the outstanding data as requested in the decision. It had also considered parties' commitments to return to compliance contained in their plans of action. Libya had adhered to all its commitments under its plan of action and a draft decision to close the issue had been forwarded to the Thirty-Seventh Meeting of the Parties for its consideration. Kazakhstan had continued to adhere to its commitments in its plan of action.

171. The Committee had examined the issue of submission of provisional data following the discussions on the matter by the Committee and the Thirty-Sixth Meeting of the Parties. As had been mentioned by the previous President of the Committee in his report to the Thirty-Sixth Meeting of the Parties, that practice was problematic for the work of the Committee as, without finalized data, it was impossible to ascertain compliance with the control measures under the Protocol. A party that had submitted provisional data for its baseline years could circumvent the process for revising baseline data set out in decision XIII/15.

172. Considering that the concept of "provisional data" was not included in the Montreal Protocol or in any decision of Meetings of the Parties, the Committee had agreed that the Secretariat would stop treating any data as provisional. Non-baseline data could be corrected under the procedure set out in paragraph 3 of decision VI/5. The revision of baseline data required a request to be submitted to the Committee under the terms of decision XIII/15, following the methodology set out in decision XV/19.

173. The Committee had also discussed a document on systemic issues in relation to compliance (UNEP/OzL.Pro/ImpCom/74/6, annex II). A summary of the discussions had been presented at the beginning of the informal meeting on facilitating the implementation of the Montreal Protocol and would be reflected in the report of the seventy-fifth meeting of the Committee.

174. The Committee was forwarding nine draft decisions for consideration by the Thirty-Seventh Meeting of the Parties. The first related to data reporting under Article 7 of the Protocol. It noted that 194 of the 198 parties that should have reported data for 2024 had done so by 31 October 2025, that 123 parties had done so via the online reporting system and that 170 parties had reported their data by 30 September 2025, as required under paragraph 3 of Article 7 of the Protocol.

175. The draft decision further noted with appreciation that 74 of those parties had reported their data for 2024 by 30 June 2025, in accordance with the encouragement in decision XV/15 and that reporting by 30 June each year greatly facilitated the work of the Implementation Committee and the Executive Committee of the Multilateral Fund in assisting Article 5 parties to comply with the control measures.

176. The Committee had noted with concern that four parties, namely Armenia, Comoros, Iceland and Sao Tome and Principe, had not reported their 2024 data by 31 October 2025, placing them in non-compliance with their data reporting obligations under the Montreal Protocol until the Secretariat received their outstanding data. The draft decision urged those parties to report their data as soon as possible and requested the Committee to review their situation at its seventy-sixth meeting.

177. The draft decision also noted that a lack of timely data reporting by parties impeded the effective monitoring and assessment of parties' compliance with their obligations under the Montreal Protocol. That issue was one of several highlighted in the document on systemic issues in relation to compliance prepared by the Secretariat and discussed by the Committee during the informal meeting. Such late reporting created challenges both for the Committee and for the Secretariat. To discourage late reporting, particularly on the day the Committee met to adopt its recommendations, and during the Thirty-Seventh Meeting of the Parties, and noting that annual data were due no later than nine months

after the end of the year to which the data related, the draft decision on data reporting listed those parties that had not reported by a specific date, 31 October 2025, which was the day before the Committee adopted its recommendations. The draft decision also encouraged parties to continue reporting their data as soon as the figures became available, preferably by 30 June each year, as encouraged in decision XV/15.

178. The second draft decision concerned adherence by Libya to its commitments under its plan of action to return to compliance, as set out in decision XXVII/11. At its seventy-fourth meeting, the Committee had congratulated Libya on its return to compliance with its HCFC control measures and also for imposing an import ban on air-conditioning equipment containing HCFCs. The Committee had requested Libya to provide additional information on refrigeration and air-conditioning equipment containing HCFCs already in stock, as well as information on its implementation of the ban on procurement. Libya had subsequently provided the required information and the Committee had concluded that the party had adhered to its commitments under its plan of action. Consequently, the draft decision forwarded for consideration by the Thirty-Seventh Meeting of the Parties declared that no further action was necessary.

179. The third draft decision concerned non-compliance with the Montreal Protocol by the Democratic People's Republic of Korea. The party had not adhered to its commitments for 2021, 2023 or 2024 concerning annual production and consumption of HCFCs, as set out in its plan of action to return to compliance contained in decision XXXII/6. The party had been cautioned by three decisions of Meetings of the Parties, in accordance with item B of the indicative list of measures that might be taken by a Meeting of the Parties in respect of non-compliance, which provided that if the party failed to return to compliance, the parties would consider measures consistent with item C of the indicative list of measures, including the possibility of ensuring that the supply of HCFCs was ended so that exporting parties did not contribute to a continuing situation of non-compliance.

180. The Committee had made repeated requests to the party, through its recommendations 68/4, 69/4, 70/2, 72/3 and 74/2, to provide an explanation for the deviations in the data reported, and to submit a revised plan of action to ensure its return to compliance and a progress report on its efforts to establish additional national policies facilitating the phase-out of HCFCs, as set out in the plan of action.

181. Although a representative of the Democratic People's Republic of Korea had attended the seventy-fourth meeting of the Committee, the party had not provided the information requested by the Committee. Consequently, in its recommendation 74/2 the Committee had reminded the party of the caution in decision XXXVI/16 and had informed the party that if it failed to provide relevant responses, as requested in the recommendation, for consideration by the Committee at its seventy-fifth meeting, the Committee would recommend that the parties undertook measures consistent with item C of the indicative list of measures.

182. Despite repeated reminders from the Secretariat, the party had not provided the information requested by the Committee. Therefore, the Committee was forwarding for consideration by the Thirty-Seventh Meeting of the Parties a draft decision whereby the Thirty-Seventh Meeting of the Parties, in order to assist the Democratic People's Republic of Korea in returning to compliance with the control measures in relation to HCFCs, would agree to suspend, consistent with item C of the indicative list of measures that might be taken by a Meeting of the Parties in respect of non-compliance with the Protocol, trade in HCFCs, the substances that were the subject of non-compliance, between the Democratic People's Republic of Korea and other parties to the Protocol, such that no such trade would be permissible under the Protocol.

183. In addition, the draft decision stated that the suspension of trade in HCFCs with the Democratic People's Republic of Korea would continue until such time as the party returned to compliance with control measures in relation to HCFCs under the Montreal Protocol as recommended by the Committee on the basis of data reported pursuant to Article 7 or until otherwise decided by a Meeting of the Parties.

184. The fourth, fifth, sixth and seventh draft decisions concerned non-compliance with consumption control measures for HFCs by Mali, Saint Vincent and the Grenadines, Tajikistan and Zambia. Mali, Saint Vincent and the Grenadines and Zambia had reported HFC data for 2024 above their allowable limits, while Tajikistan had reported data for 2023 and 2024 above its control levels. All four draft decisions therefore declared the parties to be in non-compliance.

185. Mali had informed the Secretariat of its intention to request a revision to its HFC baseline data but had not yet provided the information required under decision XV/19 to substantiate its request. In the fourth draft decision, the party was therefore invited to submit to the Secretariat for consideration

by the Committee at its seventy-sixth meeting either a request to revise its HFC baseline data, including the information required under decision XV/19, or a plan of action to return to compliance.

186. Saint Vincent and the Grenadines had submitted a plan of action to return to compliance which had been reviewed by the Committee. The Committee had noted that the plan of action had a prolonged timeline for the return to compliance, namely not until 2035, and had also noted that the party's Kigali implementation plan had not yet been approved by the Executive Committee of the Multilateral Fund. The fifth draft decision requested Saint Vincent and the Grenadines to submit a revised plan of action after the approval of its Kigali implementation plan by the Executive Committee.

187. Tajikistan had informed the Secretariat of its intention to submit a plan of action to return to compliance, but the plan had not been submitted at the time of the seventy-fifth meeting of the Committee. The sixth draft decision requested Tajikistan to submit to the Secretariat for consideration by the Implementation Committee at its seventy-sixth meeting a plan of action to return to compliance.

188. The seventh draft decision urged Zambia to provide an explanation for the deviation in its reported HFC data for 2024, which had indicated consumption above the limit allowed under the Protocol and, if appropriate, to submit a plan of action to return to compliance for review by the Committee at its seventy-sixth meeting.

189. Those four draft decisions also proposed to monitor closely the progress of parties in fulfilling their commitments. To the degree to which the parties were working towards and meeting their control measures, or were providing the information required, the draft decisions indicated that those parties should continue to be treated in the same manner as parties in good standing, and should continue to receive international assistance to enable them to meet their commitments, in accordance with item A of the indicative list of measures that might be taken by a Meeting of the Parties in respect of non-compliance.

190. Finally, where appropriate, the draft decisions also cautioned the parties, in accordance with item B of the indicative list of measures, that, in the event that they failed to return to compliance in a timely manner, a Meeting of the Parties would consider measures consistent with item C of the indicative list of measures.

191. The eighth draft decision related to the establishment of licensing systems for HFCs under Article 4B, paragraph 2 *bis*, of the Montreal Protocol. It noted with appreciation that 161 of the 169 parties that had ratified the Kigali Amendment had established such licensing systems, and that 4 parties that had not yet ratified the Kigali Amendment had also reported the establishment and operation of such licensing systems.

192. The draft decision urged Djibouti, Oman and San Marino to provide information to the Secretariat on the establishment and operation of their licensing systems for HFCs. It noted with concern that San Marino, which had accepted the Kigali Amendment in 2020, had not yet reported on the establishment and operation of its licensing system, and invited that party to send a representative to the Committee's seventy-sixth meeting.

193. The ninth draft decision concerned the requests of 11 parties to revise their baseline data, namely Bosnia and Herzegovina, Brazil, Guinea, Kiribati, the Marshall Islands, Morocco, Nauru, Nigeria, Niue, Tuvalu and Vanuatu. The draft decision confirmed that those parties had presented sufficient information, in accordance with decision XV/19, to justify their requests to revise their baseline data for HFCs and, when appropriate, for HCFCs, and therefore approved the requests.

194. In conclusion, he thanked all 10 members of the Committee for their constructive contributions and fruitful discussions, the Secretariat for its efforts in preparing and organizing the meetings, and the secretariat of the Multilateral Fund and the implementing agencies for their important work.

195. The Co-Chair thanked the President of the Implementation Committee for his comprehensive presentation and the members of the Committee for their work.

196. In the ensuing discussion, one representative said that he looked forward to the final endorsement of the recommendation related to his party at the high-level segment of the current meeting.

197. In response to a question by one representative about the impact of marginal errors on compliance, the representative of the Secretariat explained that the Implementation Committee had discussed in the past whether marginal errors, or de minimis data above the control level, were a compliance issue and had decided that they were.

198. The representative of Oman informed the parties that, since the closure of the seventy-fifth meeting of the Implementation Committee, his party had notified the Secretariat about the operation of a licensing system for HFCs in his country.

199. The representative of the Secretariat confirmed that the Secretariat had received an email from the party following the closure of the meeting of the Implementation Committee. He said that, when the Secretariat received information from parties on licensing systems for HFCs, it checked whether that information confirmed the following: that a licensing system had been established and that it was operating. The email from Oman had confirmed both.

200. The Co-Chair therefore suggested that mention of Oman be removed from the draft decision on the status of the establishment of licensing systems to be forwarded to the high-level segment, clarifying that the decision did not contain a date at which the information therein was to be deemed correct.

201. Some representatives expressed concern at the suggestion that the parties would modify a draft decision prepared by the Implementation Committee and asked whether that was normal procedure.

202. In response, the representative of the Secretariat explained that the past practice of the Committee had been to agree during its meeting to revise any of the draft decisions and recommendations based on information received after the Committee meeting up until the related decisions were adopted by the relevant Meeting of the Parties. Although it had not been discussed at the seventy-fifth meeting, the same approach had been proposed by the Co-Chair.

203. The representative of the Comoros apologized for his party's non-compliance, which had occurred accidentally, owing to miscommunication. He assured parties that, since the closure of the seventy-fifth meeting of the Implementation Committee, the outstanding 2024 data had been communicated to the Secretariat and the Executive Committee. He asked that the Secretariat also consider his party's submission with a view to the mention of the Comoros being removed from the relevant draft decision.

204. In response, the Co-Chair clarified that the situation of the Comoros differed from that of Oman. Oman had submitted information about its licensing system, whereas the Comoros was submitting its 2024 data. The draft decision made specific reference to the fact that four countries, including the Comoros, had not reported their 2024 data by 31 October 2025.

205. In the light of the information provided, the representatives that had expressed concern said that they agreed with the removal of Oman from the draft decision because the case was clearly procedural, relating to a notification, rather than one that involved data, information and assessment. They did not want to take any decision that might lead to a party's submission bypassing review by the Implementation Committee.

206. The parties agreed to forward the set of draft decisions, as orally amended, for further consideration and possible adoption during the high-level segment.

XIV. Status of ratification of the Kigali Amendment

207. In considering the item, the parties had before them paragraphs 93 and 94 of the note by the Secretariat on issues for discussion by and information for the attention of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.37/2), a note by the Secretariat on the status of ratification, approval or acceptance of the Kigali Amendment to the Protocol (UNEP/OzL.Pro.37/INF/5) and a draft decision set out in document UNEP/OzL.Pro.37/3 (draft decision XXXVII/[EE]).

208. Introducing the item, the Co-Chair said that, as at 31 October 2025, a total of 169 parties had ratified the Kigali Amendment – just 29 parties short of the goal of achieving universal ratification. The number of ratifications would be updated, as appropriate, at the time of the consideration and possible adoption of draft decision XXXVII/[EE] during the high-level segment.

209. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

XV. Other matters

Ensuring the viability of Montreal Protocol operations

210. The Co-Chair recalled that during the adoption of the agenda, it had been agreed to consider a proposal on optimizing the Montreal Protocol meeting schedule.

211. The representative of the United States introduced a draft decision entitled "Ensuring viability of Montreal Protocol operations" set out in a conference room paper, which was co-sponsored by Norway, explaining that it was important for all multilateral bodies to conduct periodic reviews of the organization of their work to ensure that it remained efficient, effective and best designed to support implementation. As the majority of parties to the Montreal Protocol were approaching the end of the HCFC phase-out and had begun implementing the HFC phase-down, it was appropriate to hold a strategic conversation about the likely future workload and whether the current meeting schedule was consistent with that workload. The draft decision was intended to take a first step towards that goal by requesting the Secretariat to prepare a report for consideration by the Open-ended Working Group at its forty-eighth meeting on potential options, and associated cost estimates, for making changes to the timings and length of meetings of the Protocol's bodies and to the replenishment decision cycle.

212. As co-sponsor of the draft decision, the representative of Norway noted that the current challenging financial situation was unlikely to improve in the coming years and recalled that, following budget reductions at the Thirty-Sixth Meeting of the Parties, the Secretariat had been forced to scale back certain of its activities. To secure the long-term sustainability of the Protocol, it would be useful to begin a broader discussion on how to ensure cost-effective operations under the Montreal Protocol without undermining ongoing work or compromising the instrument's ability to address emerging challenges.

213. In the ensuing discussion, a number of representatives said that they considered the proposal pertinent, emphasizing that the aim was to gather information and cost estimates on possible options as a starting point for discussions among parties; improve efficiency, without undermining the objectives and effectiveness of the Montreal Protocol; and ensure effective resourcing and support for the Secretariat's activities, which underpinned the Protocol's success. Several stressed that the outcomes of the proposal should not be prejudged.

214. Some representatives expressed concerns about the timing of the proposal. One cautioned against making changes that could jeopardize what was a successful body; others emphasized that major projects requiring a significant discussion by parties were about to be launched. One representative warned that the proposal could have implications beyond achieving administrative efficiencies, with changes to the timing, duration and structure of meetings, and to the replenishment decision cycle, affecting the participation of Article 5 parties and their implementation of the Montreal Protocol.

215. A number of representatives suggested that informal discussions would be vital so as to better understand the scope and possible impacts of the proposal and to provide clearer terms of reference to the Secretariat so that it could prepare the report requested on possible improvements to operations. One representative added that no rational decisions on possible modifications to the meeting schedule could be made without objective analysis of the success of past meetings and decisions; and stressed that all decisions should be aimed at helping parties to implement the Montreal Protocol.

216. The parties agreed to establish a contact group, co-chaired by Carmen Rivero (Argentina) and Alessandro Peru (Italy), to further discuss the matter. To ensure that as many delegations as possible could participate, concerted efforts would be made to avoid scheduling conflicts with other groups.

217. Subsequently, the co-chair of the contact group reported that the group had reached agreement on a draft decision on ensuring the viability of Montreal Protocol operations for consideration by the parties.

218. The parties agreed to forward the draft decision for further consideration and possible adoption during the high-level segment.

Part two: high-level segment (6 and 7 November 2025)

I. Opening of the high-level segment

219. The high-level segment was opened at 10.05 a.m. on Thursday, 6 November 2025 by Ndiaye Cheikh Sylla (Senegal), Vice-President of the Thirty-Sixth Meeting of the Parties to the Montreal Protocol, acting as President. The meeting began with a cultural music performance.

A. Statement by the President of the Thirty-Sixth Meeting of the Parties to the Montreal Protocol

220. In his remarks, Mr. Sylla recalled that the Thirty-Sixth Meeting of the Parties to the Montreal Protocol had adopted several key decisions on the advancement of the implementation of the Protocol, which had laid the foundations for many of the discussions taking place at the Thirty-Seventh Meeting. Foremost among those was the decision on enhancing regional atmospheric monitoring of controlled substances. He looked forward to the next steps towards enhancing monitoring capacity in regions where gaps existed.

221. He noted that the continued discussions on addressing the gap between observed and expected emissions of HFC-23, feedstocks, further strengthening the Montreal Protocol institutions and restructuring the assessment panels, and the openness which parties were showing, demonstrated to the world why the Montreal Protocol had become the most successful multilateral environmental agreement. Key to the continuing success of the Protocol was the Multilateral Fund. He expressed confidence that discussions on the terms of reference for its replenishment for the triennium 2027–2029, which would shape the efforts of Article 5 parties for the foreseeable future, would end in agreement.

222. He noted that 2025 marked the fortieth anniversary of the Vienna Convention and expressed the hope that parties would remember the legacy of those who had laid down the bricks of the ozone treaties and on whose shoulders they stood today. He called on the 29 parties that had yet to ratify the Kigali Amendment to do so, so that universal ratification could be achieved by 2026, the tenth anniversary of the Amendment.

223. In closing, he thanked the parties, his fellow Bureau members, the assessment panels, the Implementation Committee, the Executive Committee of the Multilateral Fund and its implementing and bilateral agencies, the Ozone Secretariat and the secretariat of the Multilateral Fund, the co-chairs of the preparatory segment, and all the other members of the ozone family for their contributions to the shared responsibility for the protection of the ozone layer and the climate. He declared that he was proud to have served a process that had, time and time again, demonstrated what dedication, trust and mutual understanding could deliver for the planet.

B. Statement by a representative of the United Nations Environment Programme

224. Sheila Aggarwal-Khan, Director, Industry and Economy Division, UNEP, welcomed parties to the meeting on behalf of Inger Andersen, Executive Director of UNEP, who was unable to be present. In a statement delivered via video message, Ms. Andersen noted that 2025 marked 40 years of the Vienna Convention, through which Governments had established one of the first truly science-based environmental treaties, paving the way for the Montreal Protocol. Four decades later, the Protocol's three assessment panels continued to be guided by science in keeping the treaties robust, relevant and trusted.

225. Two years earlier, in 2023, parties had agreed the highest-ever replenishment of the Multilateral Fund: $965 million for the period 2024–2026, a decision which had underscored parties' collective resolve to protect the ozone layer and the climate while supporting Article 5 parties. Work had now begun on the terms of reference for the next replenishment study. Recognizing that Article 5 and non-Article 5 parties possessed widely diverging positions on the issue, she encouraged all parties to keep talking and listening. Parties to the Montreal Protocol had always found their way to a consensus when it mattered the most, and she was confident that it could happen once more.

226. She drew the attention of parties to the significant gap that had been observed between top-down atmospheric measurements and bottom-up reported emissions of HFC-23, a very powerful and long-lived greenhouse gas. Strengthening atmospheric monitoring was central to parties' efforts, allowing the assessment panels to provide timely updates. She recalled that when atmospheric

monitoring had flagged a similar anomaly in emissions of CFC-11, parties had moved quickly and kept the recovery of the ozone layer on track.

227. She also highlighted the issue of life-cycle refrigerant management, where concern over the growth in banks of refrigerant gases had been raised by Article 5 parties. Comprehensive adoption of strategies for life-cycle refrigerant management, from better servicing and leak prevention to recovery, reclamation and destruction, could help to avoid up to 39 gigatonnes of CO_2-equivalent emissions.

228. As the tenth anniversary of the Kigali Amendment approached, she encouraged the 29 parties that had yet to ratify it to seize the opportunity and do so as soon as possible. She cautioned that the Montreal Protocol was not immune to the impacts of cost-cutting pressures on the United Nations, but said that she was confident that parties would find a way to ensure its continued effectiveness and success.

C. Statement by a representative of the Government of Kenya

229. Welcoming participants to Nairobi, Deborah Barasa, Cabinet Secretary for Environment, Climate Change and Forestry of Kenya, observed that Kenya had acceded to the Vienna Convention and ratified the Montreal Protocol in November 1988, and had ratified all five amendments to the Protocol. She encouraged those parties that had not yet ratified all the amendments to so, particularly the Kigali Amendment.

230. She said that she was gratified to note that the items on the agenda of the Thirty-Seventh Meeting of the Parties covered a wide range of issues of critical importance in ensuring the continued success of the Montreal Protocol in keeping the ozone layer on its path to recovery and combating climate change. She was sure that parties would agree with her on the continued need for sufficient funding for activities in developing countries, including developing Kigali implementation plans, funding national and regional centres of excellence for sustainable cooling, capacity-building for refrigeration and air conditioning technicians, and establishing the necessary infrastructure for recovery, recycling and destruction, among other things.

231. She said that Kenya was currently preparing its own Kigali implementation plan for submission to the Multilateral Fund, which would enable the development of an overarching strategy to allow Kenya to meet its HFC phase-down targets. Her ministry, through the National Ozone Unit, was exploring means of collecting and transporting recovered refrigerant gases for safe disposal in countries with destruction facilities. In cooperation with the Government of Germany, the Unit was in initial discussions with seven private companies on the use or safe disposal of recovered gases. The licensing system of Kenya included HFCs and HFC blends, and, in collaboration with the customs, revenue and environmental management agencies, was facilitating the monitoring of imports.

232. Given that cooling technologies were one of the biggest contributors to global warming, there was a need to target reducing emissions from that sector, improving energy efficiency and implementing climate-friendly cooling actions such as using natural refrigerants. However, most of the refrigeration and air-conditioning equipment in Kenya was still based on obsolete technologies; ozone and climate-friendly alternatives were not readily available, and there was a lack of trained technicians. The National Cooling Action Plan for Kenya was therefore aimed at enhancing access to sustainable cooling for all Kenyans. With assistance from international donors, the implementation of the Plan had so far included training over 200 custom officers and over 1,000 refrigeration and air-conditioning technicians on control measures and the use of hydrocarbons and other natural refrigerants. She concluded by calling on parties to maintain the success of the Montreal Protocol by continuing to provide financial assistance for Article 5 parties in fulfilling their obligations.

II. Organizational matters

A. Election of officers for the Thirty-Seventh Meeting of the Parties to the Montreal Protocol

233. In accordance with paragraph 1 of rule 21 of the rules of procedure for Meetings of the Parties to the Montreal Protocol, the following officers were elected, by acclamation, to the Bureau of the Thirty-Seventh Meeting of the Parties:

President:	Paul Krajnik (Austria) (Western European and other States)
Vice-Presidents:	Chen Haijun (China) (Asia-Pacific States)
	Obed Meringo Baloyi (South Africa) (African States)
Rapporteur:	Cristina Vaca (Panama) (Latin American and Caribbean States)

234. No nomination for a Vice-President had been received from the Eastern European States.

235. On taking the chair, Mr. Krajnik thanked his predecessor as President, Kerryne James, and Mr. Sylla, and said that it was an unexpected honour to have been elected as the President of the Bureau for a second time.

B. Adoption of the agenda of the high-level segment

236. The following agenda for the high-level segment was adopted on the basis of the provisional agenda set out in section II of document UNEP/OzL.Pro.37/1:

1. Opening of the high-level segment:
   (a) Statement by the President of the Thirty-Sixth Meeting of the Parties to the Montreal Protocol;
   (b) Statement by a representative of the United Nations Environment Programme;
   (c) Statement by a representative of the Government of Kenya.
2. Organizational matters:
   (a) Election of officers for the Thirty-Seventh Meeting of the Parties to the Montreal Protocol;
   (b) Adoption of the agenda of the high-level segment;
   (c) Organization of work;
   (d) Credentials of representatives.
3. Presentations by the assessment panels on their progress reports, including any emerging issues.
4. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies.
5. Statements by heads of delegation and discussion of key topics.
6. Report by the co-chairs of the preparatory segment and consideration of decisions recommended for adoption by the Thirty-Seventh Meeting of the Parties.
7. Dates and venue of the Thirty-Eighth Meeting of the Parties to the Montreal Protocol.
8. Other matters.
9. Adoption of decisions by the Thirty-Seventh Meeting of the Parties.
10. Adoption of the report of the meeting.
11. Closure of the meeting.

237. The representatives of Kazakhstan, Kyrgyzstan and Tajikistan requested the inclusion of an item under agenda item 8, "Other matters", to highlight their deep concern that attempts were being made to exclude their three parties, together with Turkmenistan and Uzbekistan, from the Eastern European Group, which, they said, explained why the Eastern European States had not been able to reach consensus on its nominations for a Vice-President of the Bureau, a member of the Implementation Committee and other bodies. According to the proponents, Central Asian parties had been members of the Eastern European Group for some 30 years and had held positions within the institutions of the Montreal Protocol; Kyrgyzstan was currently a member of the Executive Committee of the Multilateral Fund. They were also members of the Eastern European Group in many other international institutions, such as the World Health Organization, the International Postal Union, and the World Tourism Organization. Under international law and the customary procedures of the Montreal Protocol, it was the sovereign choice of each party to decide which regional group to join, and any changes to the status of countries within regional groups could only be agreed on the basis of consensus. They called on parties to stop the politicization of what was a strictly procedural issue and to uphold the values of partnership, inclusivity and mutual respect that had guided the Montreal Protocol for nearly four decades.

238. The parties agreed to consider the matter under agenda item 8, "Other matters".

C. Organization of work

239. The parties agreed to follow their customary procedures.

D. Credentials of representatives

240. In accordance with rule 19 of the rules of procedure for Meetings of the Parties to the Montreal Protocol, the Bureau of the Thirty-Seventh Meeting of the Parties to the Montreal Protocol met to examine the credentials of representatives of parties and submitted its report to the Thirty-Seventh Meeting of the Parties. In its report, the Bureau recommended the approval of the credentials of the representatives of 97 of the 154 parties represented at the meeting, which had been found to be in good order. The Bureau noted that the credentials of 66 of those 97 parties were originals, while 31 were copies that were accepted on the understanding that originals would be submitted as soon as possible. The Bureau also recommended that the Thirty-Seventh Meeting of the Parties provisionally approve the participation of 57 parties on the understanding that they would forward their credentials to the Secretariat as soon as possible. The Bureau urged all parties attending future Meetings of the Parties to make their best efforts to submit credentials to the Secretariat as required under rule 18 of the rules of procedure. The Bureau further recalled that the rules of procedure required that credentials be issued either by a Head of State or Government or by a minister for foreign affairs or, in the case of a regional economic integration organization, by the competent authority of that organization.

241. The parties agreed to approve the report on credentials presented by the Bureau.

III. Presentations by the assessment panels on their progress reports, including any emerging issues

242. The co-chairs of the Scientific Assessment Panel, Lucy Carpenter and Ken Jucks, gave a presentation on the work of the Panel. A summary of the presentation, prepared by the presenters, is set out in section C.1 of annex I to the current report.

243. The Co-Chair of the Environmental Effects Assessment Panel, Janet F. Bornman, gave a presentation on the work of the Panel. A summary of the presentation, prepared by the presenter, is set out in section C.2 of annex I to the current report.

244. The co-chairs of the Technology and Economic Assessment Panel, Marta Pizano and Ashley Woodcock, gave a presentation on the work of the Panel. A summary of the presentation, prepared by the presenter, is set out in section C.3 of annex I to the current report.

245. Representatives thanked the three panels for their work and for their presentations.

246. Several representatives, including one speaking on behalf of a group of parties, welcomed various elements of the presentations, including the large amount of additional information; the specific information on carbon tetrachloride, very short-lived substances and alternatives to methyl bromide; work on scenarios for the impact on the ozone layer of emissions from feedstocks; the fact that there had been less ozone loss in 2025; and the focus on breakdown products of controlled substances, such as per- and polyfluoroalkyl substances (PFAS), including trifluoroacetic acid, and their alternatives.

247. Mr. Woodcock said that it was the panels' aim to provide parties with objective information on PFAS, given that the issue was controversial and there was a lot of misinformation. A further update, prepared by the three panels, was due to be included in the 2026 progress report of the Technology and Economic Assessment Panel. The three panels were working towards consensus on the matter and would keep the parties informed. One representative, noting the challenges in defining PFAS, asked how parties could ensure that evolving PFAS-related policies remained science-based and did not unintentionally hinder the transition to safer and more sustainable alternatives. Ms. Bornman said that the work of the three panels would always remain science based.

248. Citing the indication, in the presentation by the Environmental Effects Assessment Panel, that the Panel's quadrennial assessment report would involve information on the measurement, actual amounts and estimates of PFAS relevant to the Montreal Protocol in flowing waters, freshwater lakes and oceans, one representative said that her party was also aware of studies showing increased concentrations of trifluoroacetic acid in drinking water, living organisms, such as plants, and human blood. Responding, Ms. Bornman clarified that some of the information in the presentation had been taken from the less-detailed introductory document to the quadrennial assessment. She confirmed that the actual 2026 quadrennial assessment report would indeed look at the concentrations of

trifluoroacetic acid in animals, humans, drinking water and natural regions. Another representative suggested that the assessment look at how many substances were regularly detected in blood.

249. A representative speaking on behalf of a group of parties said that his region's future legislation on PFAS, which was under development, would aim to provide certainty in the face of public concern about the substances. Furthermore, any adopted legislation would likely contain essential-use exemptions for essential sectors, such as aviation. Those parties therefore had a different reading of the uncertainty regarding halon use in fire suppression in aviation that had been described in the presentation by the Technology and Economic Assessment Panel. It was their understanding not that the 2024 moratorium on using halon 1301 in cargo compartments of completely new aircraft designs had been removed but that a new one would be set and, until then, the current date of 2024 remained in place.

250. One representative noted that the Technology and Economic Assessment Panel had stated that regulatory uncertainty with regard to PFAS might slow the transition to lower-global-warming-potential technologies for Article 5, group 1 parties. She therefore sought guidance from the Panel on how to ensure continued and balanced progress in HFC phase-down, particularly in the identification of safe, cost-effective and environmentally sound alternatives. Responding to a question about the content of the new table that aimed to assess information on breakdown products, being prepared by the Scientific Assessment Panel in collaboration with the other two panels, Ms. Carpenter explained that it had not been possible to show the full table in the presentation. She assured parties, however, that the table would indeed contain information on alternatives.

251. In response to questions about the scenarios for the impact on the ozone layer of emissions from feedstocks, Ms. Carpenter confirmed that the scenarios used the emission factors as recently revised by the Technology and Economic Assessment Panel, which were higher than those used in the previous assessment, and that, in terms of abatement technology, the baseline scenario assumed full compliance with the Montreal Protocol and the Kigali Amendment. Recalling that in the last assessment, the delay in the recovery of the ozone layer had been estimated to be about five years, Ms. Carpenter said that, although it had not yet been calculated, it could be expected to be greater given the higher emission factors.

252. In response to a question about the role that emissions values played in the work of the panels, Ms. Carpenter said that the calculation of emissions levels allowed the panels to employ their computer models and was the driving force behind calculations related to the recovery of the ozone layer. The monitoring of emissions enabled the panels and the parties to follow the phase-out and phase-down of controlled substances; identify emerging issues; and highlight situations where reporting showed emissions levels that were different from those seen in the atmosphere.

253. Responding to a question about the availability of alternatives to pharmaceutical-grade propellants in Article 5 parties, Mr. Woodcock said that, 30 years ago, there had been very few companies producing inhalers, and it had been possible to manage the phase-out of CFCs closely and carefully. Currently, however, there were 94 inhaler manufacturers around the world, and the prevalence of asthma and chronic obstructive pulmonary disease was increasing. The first companies, which were in non-Article 5 parties, had begun the transition to low-global-warming-potential alternatives; some had selected HFC-152a, the use of which would lead to an improvement in global-warming potential of about 90 per cent. At least one company had started using an HFO, and the first HFO-based metered-dose inhaler had received regulatory approval in Europe and in the United Kingdom in the past few months. He expressed the view that many companies were waiting to see how regulators reacted before acting themselves. There were unfortunately no near-term solutions in the pipeline for Article 5 parties. One of the issues was the supply of the propellant, which currently came mainly from one company in the United Kingdom. Pharmaceutical-grade propellants were increasingly being sourced from China and India, however, and more information was needed on whether those propellant supplies were secure and whether the pharmaceutical companies could transition in an orderly manner. HFC-152a, for example, was a more flammable propellant, requiring companies to take new safety measures.

254. On the topic of flammability, one representative expressed concern about the use of flammable substances for sprays and foams, which was often subject to misconceptions. In addition, Mr. Woodcock suggested bilateral discussions in the margins of the meeting regarding a question about which sub-sector of the refrigeration and air-conditioning sector presented the greatest difficulty in terms of the use of natural refrigerants.

255. One representative voiced concern, which he said was felt throughout his region, about the low level of progress in terms of investment in alternatives to HFCs, which limited, or put at risk, the sustainability of conversions or made them much more complicated to undertake.

256. In response to a question about the new metric “ozone mass deficit”, Mr. Jucks said that it aimed to give a more complete picture of ozone loss. It looked at the total amount of ozone over the ozone hole, as opposed to the size of the hole or the average minimum ozone loss, which did not convey all the loss that had occurred.

257. In response to a question about the impact of natural cycles, including the solar cycle, on ozone, Ms. Carpenter explained that the impact was mainly in the upper stratosphere and was included in the Panel’s models. There was no evidence that the impact of the solar cycle on climate was anything other than minor. In terms of the recovery of the ozone layer, although there was a lot of variability, it generally followed the pattern that was expected. Episodic natural variability was not only from solar cycles, but also from phenomena like wildfires and volcanoes.

258. Responding to a comment by one representative about how little coverage there had been in the panels’ report of the issue of the discrepancy of between atmospheric measurements and reported emissions of HFC-23, Ms. Carpenter said that the Scientific Assessment Panel and the Technology and Economic Assessment Panel had recently prepared updated reports on the issue, presented at the preparatory segment, and thus had chosen to focus on the matter less in its presentations under the current agenda item. Projections of HFC-23 would of course be included in the 2026 quadrennial assessment reports. Mr. Woodstock agreed that the issue of the discrepancy was important and should have been dealt with more expansively.

259. One representative asked the panels, in their future reports, to present more clearly the information on substances with significant natural sources.

260. The parties took note of the information presented.

IV. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund’s implementing agencies

261. Alessandro Peru, Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, reported on the work of the Executive Committee, the Multilateral Fund secretariat and the implementing agencies of the Fund since the Thirty-Sixth Meeting of the Parties, summarizing the information set out in document UNEP/OzL.Pro.37/8. His statement is set out in annex II to the present report.

262. The parties took note of the information presented.

V. Statements by heads of delegation and discussion of key topics

263. During the high-level segment, statements were made by the heads of delegation or their representatives of the following parties: Angola, Azerbaijan, Bangladesh, Barbados, Bosnia and Herzegovina, Brazil, Burundi, Cambodia, China, Colombia, Comoros, Costa Rica, Cuba, Ecuador, European Union, Fiji, Gambia, India, Indonesia, Iraq, Islamic Republic of Iran, Malaysia, Maldives, Mauritius, Mexico, Mozambique, Myanmar, Nigeria, Peru, Philippines, Qatar, Saudi Arabia, Senegal on behalf of the African group of negotiators on ozone, Sri Lanka, Tunisia, Türkiye, Uganda, Viet Nam and Yemen. Statements were also delivered by representatives of the children and youth major group and the International Institute of Refrigeration.

264. Many representatives who spoke expressed thanks to the Government and people of Kenya for their hospitality. Appreciation was also extended to the Ozone Secretariat and Bureau, the secretariat and Executive Committee of the Multilateral Fund, UNEP, implementing agencies, donor partners, assessment panels, international organizations and other stakeholders for their role in ensuring the success of the meeting in particular and of the Montreal Protocol in general.

265. Several representatives spoke of the contextual significance of the meeting, which represented an opportunity to reflect on the progress achieved, identify remaining challenges, and renew the collective commitment to protecting the ozone layer and mitigating climate change. Some representatives noted that 2025 marked the fortieth anniversary of the Vienna Convention, which, together with its Montreal Protocol, had laid the foundation for subsequent international cooperation in research, systematic observation and scientific assessment to overcome the challenge of the depletion of the ozone layer.

266. The success of the Montreal Protocol and its parties in controlling and phasing out ozone-depleting substances, with immense benefits to human health and the environment, was credited by many who spoke. The Montreal Protocol stood as a landmark of multilateral achievement – an example of what could be accomplished when nations recognized that environmental challenges transcended borders and united around that common purpose. That success was rooted in the collective recognition that science, and trust in the outcomes of scientific work, were the foundation of effective action. A major cornerstone of that accomplishment was the Multilateral Fund, which had enabled many countries to take the necessary action at the national level to phase out ozone-depleting substances. More recently, the Kigali Amendment to the Montreal Protocol had taken its place as one of the pillars of international environmental cooperation. As one representative remarked, the true value of the Montreal Protocol lay in its demonstration that, even with their different economic and political realities, countries could reach agreements, share responsibilities, and fulfil them. Several representatives referred to the principle of common but differentiated responsibilities, which had provided a fair and effective legal and institutional foundation for ensuring compliance and providing technical and financial support.

267. Several representatives reaffirmed their commitment to the objectives of those instruments and the principles that underlay them: science as the basis for decisions, equity as the driving force behind action, cooperation as a precondition for success, and a consensus approach to reaching agreement.

268. Despite those impressive achievements, a number of challenges – both present and future – would continue to test the resourcefulness of the "ozone family". Those included uncertainty as to the market availability and cost of alternative substances and technologies; the availability of funds to facilitate the implementation of the Montreal Protocol; inadequate capacity-building and training at different levels of governance; insufficient engagement of a wide range of stakeholders; the growing banks of used ozone-depleting substances requiring disposal; and the impact of armed conflict and a challenging geopolitical environment.

269. A major challenge related to unexplained gaps between bottom-up reported data and actual global levels of certain controlled substances. In that regard, according to atmospheric monitoring, actual emissions of HFC-23, a by-product of HCFC-22 production with extremely high global warming potential, were significantly higher than reported emissions, presenting a global puzzle that required urgent resolution. Such anomalies and events pointed to the urgent need to take measures to increase the global spread of atmospheric monitoring by setting up additional stations in priority locations to identify needs and gaps that must be addressed, and to verify the impact of implemented actions on the ozone layer. The representative of Bangladesh said that his country took pride in hosting the atmospheric monitoring station at Bhola Island, which had contributed valuable data to enhance global atmospheric observation and strengthen the scientific foundation underpinning the Montreal Protocol's policy decisions.

270. Other emerging challenges related to PFAS, whose production and emissions were linked to feedstocks and precursors used in manufacturing fluorinated substances, and the continued use of halon 1301 in the aviation sector.

271. With regard to the organizational structure of the Montreal Protocol, it remained important to strengthen the institutions of the Protocol to ensure ongoing compliance and to respond to the rapidly changing global institutional environment. The growth in illegal trade was an issue requiring increased vigilance, highlighting the need for parties to continue sharing information, best practices and lessons learned in order to enhance licensing, verification and reporting systems.

272. In facing and responding to all of those challenges, the Montreal Protocol needed to remain alert to the specific needs and requirements of particular groups of vulnerable countries, including small island developing States and low-volume- and very-low-volume-consuming countries.

273. Financing and other assistance remained critical to the success of the Montreal Protocol, particularly as developing countries faced financial constraints, technological limitations and increasing social pressure to maintain economic growth and inclusion. Several countries alluded to the need for further technical and financial assistance, including technology transfer, to assist institutional strengthening, capacity-building and safety training, and to address emerging issues such as PFAS, flammable refrigerants, and the growing cooling demand at data centres. Other funding priorities identified included energy efficiency, gender mainstreaming, end-of-life management and digitalization in the servicing sector. Concern was expressed at the high cost of currently available alternative technologies, particularly in the air-conditioning and refrigeration sectors, with repercussions for national economies. To address that matter, increased technical and financial support was needed, including from the Multilateral Fund. Some representatives said that that support should be dispensed fairly and equitably and without political bias.

274. The Multilateral Fund remained the central, essential mechanism that enabled developing countries to navigate complex challenges and achieve compliance with the phase-out and phase-down schedules of the Montreal Protocol and the Kigali Amendment, as well as being a platform for innovation, capacity-building and shared progress. However, while the Multilateral Fund had been an exemplar of effective cooperation, it required strengthening for the new stages being faced. More agile, predictable and sustainable funding mechanisms were needed to scale up action and ensure that no country was left behind.

275. Of crucial importance, therefore, were the discussions at the current meeting on the terms of reference for a study on the 2027–2029 replenishment of the Montreal Protocol. For the long-term viability of the Montreal Protocol, it was paramount that compliance-based activities and policies related to the HFC phase-down were continued, including the development of solutions using natural refrigerants. The level of replenishment must reflect the real challenges faced by developing countries, including those with small, low-consumption markets, where the requirements of the service sector, technology transfer, technical training, data verification and regulatory adjustments were a significant burden.

276. Several representatives described the continuing actions being taken in their own countries, with assistance from the Multilateral Fund and implementing agencies, to phase out ozone-depleting substances, implement the various stages of their HCFC phase-out management plans, and achieve compliance with the provisions of the Montreal Protocol, including through legislative, policy, fiscal, institutional and programmatic measures. A wide range of activities were outlined, including a ban on the import and use of HCFC-based air conditioners; strengthening institutional and regulatory frameworks through collaboration with key agencies; training and certification programmes for technicians, customs officials, enforcement officers and industry stakeholders; awareness-raising campaigns among schoolchildren and the general public; the development of an online licensing and quota management system for the import and export of controlled substances; assigning customs classifications for controlled substances, with the assistance of the Ozone Secretariat and World Customs Organization; and the establishment of an interactive panel with updated data on HCFC and HFC consumption to enhance management efficiency and transparency.

277. With regard to the Kigali Amendment, several representatives said that their countries had now ratified the Amendment or were in the process of doing so, recognizing its significance for the future direction of the Montreal Protocol and its critical role in global efforts to combat climate change through reduced greenhouse gas emissions. A number of countries were undertaking relevant actions in line with their obligations under the Kigali Amendment, including collecting data to establish HFC baseline consumption and developing HFC phase-down plans. Several representatives said that their countries had submitted their nationally determined contributions under the Paris Agreement on climate change.

278. One representative noted the paradox that global warming had increased demand worldwide for cooling systems, yet that very demand had the potential to further increase warming through emissions of greenhouse gases such as HFCs. Addressing the dual challenge of meeting demand for cooling needs while fulfilling the obligations to safeguard both climate and the ozone layer required a delicate balance. In that regard, one representative said that her country's vision of the implementation of the Kigali Amendment was to adopt a balanced approach, fulfilling Montreal Protocol and climate commitments while fostering sustainable growth.

279. Several representatives outlined the actions that their countries had taken to address that dual challenge, including through strategic, policy and legislative measures. Such actions included establishment of public–private partnerships; developing refrigerant recovery and regeneration centres; promoting technological conversion of industry towards natural refrigerants and climate-friendly alternatives; enactment of legislation targeting net zero emissions and green development; putting in place measures to facilitate climate finance and action, including an emissions trading system and a carbon offsetting and credit system; preparation of mitigation and adaptation strategies; and launch of a cooling action plan to sustainably meet national cooling needs. Energy efficiency was a prime consideration, including through certification and use of high-efficiency, low-global-warming-potential technologies; undertaking vocational training programmes and establishing a national certification system for refrigeration and air conditioning technicians and service providers; creating centres of excellence; and putting in place or updating minimum energy performance standards in coordination with relevant national institutions; and a labelling system for electrical products that met those standards.

280. There were, however, a number of challenges to the successful implementation of the Kigali Amendment. The issue of refrigeration went beyond the basic demand for cooling; the management of large volumes of refrigerants at the end of their useful life stretched the resources of many countries. Several representatives highlighted the importance of life-cycle refrigerant management, particularly for end-of-life refrigerants destined for destruction. One representative said that the challenges faced were very different from those faced during the phase-out of ozone-depleting substances. Many of the new low-global-warming-potential alternatives were flammable, toxic or operated under high pressure, and needed to be handled and regulated cautiously. Countries needed to implement long-term sustainable cooling strategies to reduce dependence on HFCs.

281. One representative reported that her country had made progress in developing national inventories and implementing pilot programmes for the recovery, recycling and environmentally sound disposal of those gases, and planned to develop a circular refrigerant management model capable of recovering and regenerating used gases, eliminating non-reusable gases, and integrating trained technicians with recovery, recycling and reclamation centres. Another representative referred to the development of national safety standards for handling flammable and toxic refrigerants to support a safe transition to climate-friendly alternatives, and stressed the importance of maintaining the integrity and quality of refrigerants on the market. The representative of an observer said that her organization believed that a just refrigeration transition, with equitable access for all, could only be facilitated through collaboration among all refrigeration stakeholders and evidence-based policy decisions grounded in independent and unbiased scientific knowledge.

282. Several representatives said that while the assistance provided by the Multilateral Fund and the implementing agencies for Kigali Amendment-related activities was recognized and appreciated, there remained a need for enhanced international support to accelerate implementation and strengthen compliance. Assistance was required in such areas as data collection, including carrying out HFC baseline surveys; technical support with refrigerant identification to prevent illegal trade and counterfeit refrigerants; tools and infrastructure for life-cycle refrigerant management and sound refrigerant stewardship; and capacity-building and technical assistance for enforcement, technician training and raising public awareness. Countries with high ambient temperatures faced particular technical and operational challenges in implementing alternatives, requiring international cooperation and assistance in such areas as technical and financial support, capacity-building and technology transfer, while ensuring the sustainability of solutions, achieving mutual benefits, and maintaining the stability of markets and supply chains.

283. The representative of the African group of negotiators on ozone announced the creation of that group, whose mission would be to ensure that the voice of Africa was heard within the framework of Meetings of the Parties and to bolster the contribution of the countries of Africa to the implementation and operation of the Montreal Protocol and its various bodies. He said that among the outcomes of the meeting of African national ozone officers in Dakar from 22 to 26 September 2025, was a commitment to accelerate and improve access to alternative, climate-friendly refrigeration technologies and to combat the dumping in Africa of refrigeration equipment containing obsolete refrigerants. He called for greater continuity and reliability of financing to assist African countries in undertaking those tasks.

284. There was general acknowledgement of the role of partnership and collaboration in achieving environmental and human well-being objectives, including those of the Montreal Protocol. The Protocol's success demonstrated how multilateral mechanisms could deliver real climate benefits through technology transfer, capacity-building and equitable support. Collective commitment, mutual trust, and a forward-looking perspective would empower people to seize opportunities and effectively address both immediate challenges and the long-term sustainability of the planet. Multilateral environmental agreements embodied that approach and represented a fundamental tool for strengthening international cooperation in addressing global environmental challenges. Several representatives expressed their commitment to regional and international collaboration as a means of sharing experiences and building joint solutions to protecting the ozone layer, mitigating climate change and protecting the health of the environment and humanity. One representative said that her country had proposed a global governance initiative emphasizing the core principles of upholding sovereign equality, adhering to the rule of international law, practising multilateralism, advocating a people-centred approach and focusing on action. Such an initiative could help enhance global climate and environmental governance.

285. The representative of Azerbaijan said that her country would host the thirteenth session of the World Urban Forum from 17 to 22 May 2026 and World Environment Day on 5 June 2026, and invited all parties to join and contribute to those events.

286. The representative of the children and youth major group commended the Secretariat for ensuring inclusivity and the engagement of young people in the work being undertaken under the Montreal Protocol and its Kigali Amendment. Millions of young people viewed the outcomes of that work as vital for their collective future. The Global Youth Survey on Ozone and Climate Protection 2025, launched at the second Youth Forum on Climate Protection, Nairobi, 2 November 2025, revealed that an overwhelming majority of young people were deeply concerned about climate change. It was essential to incorporate the knowledge and skills of young people in future ozone- and climate-related activities.

287. Several representatives described how their countries had recognized the value of collaboration in adopting a holistic approach to overcoming environmental challenges at the national level while enabling economic growth. Equity and fairness, including gender mainstreaming and commitment to the needs of vulnerable populations and young people, were viewed as vital components of actions to ensure an inclusive society with equal opportunities for all. Many countries had a long-term vision of sustainable development that was enshrined in a range of national instruments and initiatives, including climate change policy and strategy; green economy policies that promoted the transition to clean energy and energy efficiency; the adoption of a circular model for managing waste according to best global practices; the implementation of a national energy transition road map to harness the multiple co-benefits emanating from the integration of HFC phase-down with energy efficiency; and the enactment of laws, codes and regulations to underpin environmental programmes with strong legislation. Those measures were invariably aligned with regional and international environmental agreements and programmes.

288. Such an overriding, integrated approach encompassed a range of interrelated activities, including reducing carbon emissions and transitioning to a low-carbon economy; efficient management and monitoring of natural resources, including water, soil and air; and support for scientific research, in collaboration with national academic and research centres, to encourage innovation in environmental problem-solving.

289. Several representatives offered their thoughts on the way forward for the Montreal Protocol. Many representatives reiterated their unwavering support for the Protocol as it sought to achieve its ozone-related and wider environmental goals, including with regard to climate change and global warming. The Montreal Protocol stood as a model for global concerted action on environmental challenges. Its success was a reminder that global challenges demanded global solutions rooted in science, guided by cooperation and driven by action. It exemplified the spirit of the United Nations: a system based on trust, solidarity and the capacity to unite humanity around common causes.

290. In a world currently strained by conflict, inequality and disinformation, it was crucially important to renew that trust and demonstrate that consensus could prevail over division, and that science and good faith remained unifying forces. If society had shown itself capable of reversing the destruction of the ozone layer, then it should be capable of achieving its other environmental objectives, thus bequeathing a healthier environment to future generations.

VI. Report by the co-chairs of the preparatory segment and consideration of decisions recommended for adoption by the Thirty-Seventh Meeting of the Parties

291. The President noted that the work of the preparatory segment had concluded successfully and draft decisions had been approved for consideration and possible adoption during the high-level segment.

VII. Dates and venue of the Thirty-Eighth Meeting of the Parties to the Montreal Protocol

292. Introducing the item, the President recalled that the dates of the Thirty-Eighth Meeting of the Parties to the Montreal Protocol had been agreed as 2 to 6 November 2026. He invited any party willing to offer to host the meeting to take the floor.

293. The representative of Rwanda announced the offer of her Government to host the Thirty-Eighth Meeting of the Parties in Kigali in November 2026. The Thirty-Eighth Meeting would mark the tenth anniversary of agreement on the Kigali Amendment, which had made a key contribution to the record of the Montreal Protocol as the most effective international climate agreement, avoiding an estimated 1.1 degrees Celsius of global warming by 2100. Her offer was accompanied by a video presentation.

294. The parties agreed that the Thirty-Eighth Meeting of the Parties to the Montreal Protocol would be held in Kigali from 2 to 6 November 2026.

295. Subsequently, the parties adopted a decision on the matter. The decision is set out in document UNEP/OzL.Pro.37/9/Add.1.

VIII. Other matters

Membership of the Eastern European Group

296. The President recalled that, during the adoption of the agenda, the parties had agreed to consider the issue concerning the membership of the Eastern European Group.

297. The representative of Kyrgyzstan, introducing the matter, reiterated that, in the Eastern European Group, attempts had been made to exclude the five Central Asian countries – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan – from nominating candidates for membership of Montreal Protocol bodies for 2026 and for the election of officers for the Thirty-Seventh Meeting of the Parties, thus affecting the work of the Protocol, ignoring established practice within the United Nations system and leading to the politicization of a procedural matter. He recalled that, at the Thirty-Fifth Meeting of the Parties, where a similar effort had been mounted, a representative of the Secretariat had explained that parties had the right to decide to which regional grouping they belonged. He pointed out that the Central Asian countries had been members of the Eastern European Group for more than 30 years, with several having been nominated for and elected to positions in the Protocol's bodies on behalf of the group. Just the previous year, for example, Kyrgyzstan had been elected to the Executive Committee of the Multilateral Fund. Membership of the informal regional groups under the Protocol was a sovereign right; it was not subject to interpretation by other countries. He called upon parties and the Secretariat to assist in finding a resolution and proposed that the informal regional grouping under the Protocol be renamed the Eastern European, Caucasus and Central Asian Group, a proposal that was supported by another representative.

298. The representative of Tajikistan, as a proponent of the proposal, emphasized that the principle of equal and inclusive participation of all countries in the regional groups should remain at the core of decision-making under the Montreal Protocol. Any proposed changes affecting members of a regional group should be discussed in a transparent manner and be based on consensus, international law and established practice by Meetings of the Parties. Any effort leading to the exclusion or reassignment of countries without their consent would undermine the principles of solidarity, inclusion and cooperation that had been the hallmark of the Protocol's success.

299. One representative voiced support for the previous speakers' statements, emphasizing the need to follow established practice and act in accordance with the principle of consensus. He said that his delegation opposed the wilful exclusion or removal of countries from a regional group to which they were affiliated. He urged parties to focus on the substantive science-based issues on the agenda, avoid politicizing the Thirty-Seventh Meeting of the Parties and abide by the principles of solidarity and cooperation, with the overriding aim of ensuring the full implementation of the Montreal Protocol. Another representative said that his delegation was deeply concerned by efforts to exclude five long-standing members from the informal regional group and to discredit their work. The situation was unprecedented: it was the sovereign right of countries to decide in which informal group they were represented in the United Nations system.

300. One representative stated that the bodies of the Montreal Protocol functioned within the United Nations system and pursuant to the practice established by the General Assembly. A Meeting of the Parties was therefore not the appropriate forum for the discussion of such issues. Several other representatives endorsed his statement. Another representative, agreeing that a Meeting of the Parties was not the appropriate forum for a decision on the matter, noted that rule 21 of the rules of procedure for Meetings of the Parties referred to the five groups of States established by the General Assembly in resolution 2997 (XXVII) on institutional and financial arrangements for international environmental cooperation. Another representative underscored the importance of dialogue and compromise. Further guidance was needed from the Secretariat on a way forward; no decision could be taken at the current stage.

301. One representative questioned why the issue could not be negotiated in the current forum. Given that the composition of the informal regional groups had been unchanged since the Protocol's establishment and that the five countries concerned had been members of the Eastern European Group for three decades, he questioned why there was now an effort to align the membership of that particular group more closely with the regional group within the United Nations system. Another

representative endorsed those sentiments, emphasizing that the success of the Protocol depended on cooperation aimed at preserving the environment for current and future generations. Ignoring past practice risked undermining cooperation and unity among the parties.

302. The representative of Kazakhstan, as a proponent of the proposal, said that his delegation strongly opposed the initiative to exclude the Central Asian countries from the Eastern European Group, considering that it lacked any legal basis, contradicted established practice and violated the rights of parties to elect, and be elected as, members of the Montreal Protocol's governing and subsidiary bodies. Kazakhstan had previously been elected to the Bureau and wished to put forward its candidacy for election to the Executive Committee of the Multilateral Fund. He pointed out that General Assembly resolution 2997 (XXVII) was outdated: it did not reflect the current political map. It had been adopted in 1972, when the five Central Asian countries had been part of the Union of Soviet Socialist Republics. Moreover, it had been superseded by resolution 67/251, by which the Governing Council of UNEP had become the United Nations Environment Assembly, thereby abolishing the 1972 seat allocation model and introducing universal membership. Following the dissolution of the Union of Soviet Socialist Republics, in 1991, the five newly independent States had continued to participate in the Eastern European Group. They were also members of Eastern European regional groups in other United Nations entities.

303. He added that any reference to rule 21 of the rules of procedure should be understood as a historical reference to equitable geographical representation and not as a legally binding framework. In the absence of a legally binding instrument redefining the composition of the regional groups, customary institutional practice guided countries' participation therein. The Central Asian countries' uninterrupted participation in the Eastern European Group since their independence constituted a long-standing institutional fact protected by the principles of legitimate expectation and acquired rights. Once a State had for decades exercised membership functions within a regional group without objection from other members, it acquired procedural rights that could not be altered unilaterally or retroactively without its express consent or a formal intergovernmental decision. The principles of sovereign equality of States, as enshrined in Article 2 of the Charter of the United Nations, and of legal certainty needed to be upheld. He asked the Secretariat to prepare a document containing comprehensive information on and analysis of the decisions, resolutions and practices of all United Nations entities, including subsidiary bodies and convention secretariats, concerning the allocation to regional groups of States Members of the United Nations. Further dialogue on the basis of mutual respect and adherence to international law was needed; the parties' collective focus should remain on achieving shared environmental goals and securing a sustainable future for all.

304. Some representatives said that the proposals for changes to existing regional groups, including the criteria for membership thereof, required more in-depth assessment and discussions that were beyond the scope of a Meeting of the Parties.

305. The representative of Kyrgyzstan, referring to a letter received from a representative of the Secretariat, said that the rules of procedure did not extend to the informal regional groups. At the time of the adoption of General Assembly resolution 2997 (XXVII), in 1972, all 15 republics of the Union of Soviet Socialist Republics had belonged to the Eastern European Group. In the interim, there had been no official United Nations document clarifying the list of countries belonging to that regional group. Moreover, the regional groups had not been established as bodies of the Montreal Protocol, they met unofficially, there was no rule governing their composition and decision-making in those groups was based on consensus.

306. Responding to a question on whether parties could choose to which regional group they belonged, a representative of the Secretariat recalled that, during the Thirty-Fifth Meeting of the Parties, informal consultations had been held on the issue of the Eastern European and Central Asian countries. During those consultations, she had indicated that a party that was a member of one regional group could choose to associate itself with another regional group, provided that the group in question agreed. Parties could not, however, be members of more than one regional group.

307. In response to a question regarding the nomination of candidates at the Thirty-Seventh Meeting of the Parties, the President clarified that nominations could be presented during the preparatory segment.

308. Following a proposal by the President of the Thirty-Seventh Meeting of the Parties, the parties agreed that interested parties would continue discussions in the intersessional period and that the Secretariat would provide a summary of background information by the forty-eighth meeting of the Open-ended Working Group.

IX. Adoption of decisions by the Thirty-Seventh Meeting of the Parties

309. The Thirty-Seventh Meeting of the Parties to the Montreal Protocol adopted the decisions approved during the preparatory segment. The decisions are available in document UNEP/OzL.Pro.37/9/Add.1.

X. Adoption of the report of the meeting

310. The parties adopted the present report on Friday, 7 November, on the basis of the draft report that had been circulated. The President, with the assistance of the Secretariat, was entrusted with the finalization of the report.

XI. Closure of the meeting

311. Following the customary exchange of courtesies, the meeting was declared closed at 12.10 a.m. on Saturday, 8 November 2025.

Annex I

Summaries of presentations by members of the assessment panels and technical options committees*

A. Report of the Scientific Assessment Panel on the response to decision XXXVI/3

1. The presentation summarized the contents of the report, highlighting the findings that were deemed to be of most interest to the parties. In that report, emission estimates for hydrofluorocarbon (HFC)-23 were derived from atmospheric observations through 2022. In this Supplemental Report, emission estimates are updated with atmospheric observations through 2023. The fundamental conclusions in this report remain unchanged based on the additional year of measurements, derived emissions, and updates to reported quantities and quantities derived from reporting that have become available for 2024.

2. During 2023 the global mean atmospheric abundance of HFC-23 (CHF_3) continued to increase. The measured global mean abundance in 2023 was 36.8 ± 0.9 parts per trillion (ppt), which was 0.97 ± 0.04 ppt greater than the 35.9 ± 0.9 ppt measured in 2022. This annual increase was slightly less than the mean change observed from 2015 to 2023 of 1.10 ± 0.13 ppt/yr.

3. Global HFC-23 emissions in 2023 derived from measured atmospheric abundances totaled 14.2 ± 0.7 kt and were similar to emissions in 2022 (14.4 ± 0.6). The small change in emissions during these years contrasts with the larger annual decline during 2019 to 2022 that averaged 0.8 kt/yr. Reported HCFC-22 production for all uses, which remains the largest known source of HFC-23 by-product, was 1.9% smaller in 2023 compared to 2022 (1197 kt in 2022 and 1175 kt in 2023).

4. New scientific results confirm that HFC-23 is produced in oxidation reactions of some fluorinated gases present in the atmosphere. This HFC-23 source is estimated to be less than 0.22 kt/yr in 2023. This revised value is smaller than estimated previously (SAP, 2024) and remains an upper limit, meaning that the actual value is likely smaller.

5. The difference or gap between global emissions derived from atmospheric measurements and those reported or estimated from information provided to the United Nations Framework Convention on Climate Change (UNFCCC), the Multilateral Fund for the Implementation of the Montreal Protocol (MLF), and the Ozone Secretariat persisted in 2023 and remains substantial.

6. With the small changes from 2022 to 2023 in emissions derived from global atmospheric abundance changes and available reported emissions, the gap in our understanding of HFC-23 emissions in 2023 of 11.4 – 12.8 kt/yr is similar to the gap estimated for 2022 in the previous HFC-23 report (SAP, 2024) of 10.5 – 12.5 kt/yr.

7. The gap between reported HFC-23 emissions and those inferred from atmospheric abundances is not reconciled by considering all known sources beyond HCFC-22 production. The 2025 updated assessment by the Technology and Economic Assessment Panel (TEAP) estimates HFC-23 emissions from all known sources and reported abatements after 2020 to be in the range of 1.6 – 3.7 kt/yr, which is substantially smaller than the atmospherically-derived emission of 14.2 ± 0.7 kt/yr during 2023. Adding production from the atmospheric oxidation of fluorinated industrial gases to TEAP's updated estimates results in an emissions gap in 2023 of 9.6 – 13.3 kt/yr.

8. The increasing emission gaps between 2015 and 2018 coincide with increases in reported abatement of HFC-23 from a limited number of Article 5 countries. After 2019, the emission gap decreased from a high of 15 kt/yr to 11 – 12.5 kt/yr in 2023; reported abatements from all countries increased during these years to a value of 23 kt/yr in 2023.

9. The decrease in emission gaps after 2019 was concurrent with a declining ratio of the decrease in emission gaps after 2019 was concurrent with a declining ratio of emissions derived from global observations relative to reported total HCFC-22 production (E23/P22). The E23/P22 ratio in 2023 of 1.1% is unchanged from 2022. The declines in the emission gaps and E23/P22 values after 2019 are consistent with an increase in overall abatement of HFC-23 emissions, improved optimization of HCFC-22 production to further minimize HFC-23 by-product generation and associated emission, or reduced emissions of HFC-23 from sources that are unknown or not accurately accounted.

* The summaries are presented as received, without formal editing.

10. Our understanding of regional contributions to global HFC-23 emissions remains incomplete. The sum of all available observationally derived regional emission estimates accounted for only 6.1 ± 0.7 kt/yr of HFC-23 in 2023, or 43 ± 10 % of global emissions in that year. These estimates include emissions for a number of countries or portions of countries that have been updated through 2023 based on continued atmospheric measurements. HFC-23 emission estimates from a significant number of regions remain unavailable because of gaps in atmospheric monitoring.

11. From continued measurements made at the Gosan Station in the Republic of Korea: HFC-23 emissions in 2023 were estimated to be 5.6 ± 0.7 kt/yr from the eastern portion of China; 0.23 ± 0.02 kt/yr from the Republic of Korea; 0.10 ± 0.07 kt yr from the western portion of Japan; and 0.01 ± 0.01 kt/yr from the Democratic People's Republic of Korea.

12. HFC-23 emissions from eastern China in all years after 2019 were smaller than the peak value derived for 2019 of 8.0 ± 0.4 kt/yr. Emissions from eastern China in 2023 were 4.7 ± 0.7 kt greater than the 0.9 kt reported to the Ozone Secretariat for all of China in that year, and this emission accounts for 40 ± 10% of the global emission gap in 2023. The sum of emissions for the Republic of Korea, western Japan, and the Democratic People's Republic of Korea were notably smaller in 2023 than they were during 2018-2022 and remained greater than reported to the Ozone Secretariat or UNFCCC in recent years, by approximately 0.3 ± 0.07 kt, accounting for 1.5 to 3% of the global emission gap.

13. From continued atmospheric measurements at a network of sites in Europe, HFC-23 emissions in 2023 were estimated to be 0.15 ± 0.04 kt/yr from the sum of countries in the north-western Europe including Ireland, the United Kingdom, France, the Netherlands, Belgium, Luxembourg, and Germany. This emission was 0.1 ± 0.04 kt greater than reporting to the UNFCCC in 2022 (latest available year), and this region accounts for 0.7 to 1.5% of the global emission gap.

14. From continued atmospheric measurements made at the Cape Grim Baseline Air Pollution Station in southern Australia, HFC-23 emissions in 2023 from Australia were estimated to be 0.025 kt/yr (no uncertainty specified), which is 0.03 kt/yr less than reported to the UNFCCC in that year.

15. HCFC-22 production from countries for which regional emissions in 2023 have been estimated, i.e., China, the Republic of Korea, the Democratic People's Republic of Korea, Japan, the European Union and the United Kingdom, accounted for about 85% of reported HCFC-22 production in that year. For the countries that account for the remaining HCFC-22 production reported to the Ozone Secretariat during 2023 (Argentina, India, Mexico, the Russian Federation, and the United States of America), atmospherically derived HFC-23 emission estimates remain unavailable in the Kigali Amendment era (i.e., after 2019).

B. Report of the Technology and Economic Assessment Panel on the response to decision XXXVI/3

16. Takeshi Eriguchi, co-chair of the Medical and Chemicals Technical Options Committee (MCTOC) introduced Nick Campbell who presented the response by the TEAP to decision XXXVI/3 on emissions of HFC-23.

17. Mr. Campbell stated that TEAP was tasked with updating previous reports on HFC-23 emissions and providing comparisons of best practices for measurement and verification. The presentation only covered the update, and the comparison of best practices was included in the full report. He noted that key reports previously written by the TEAP included: the MCTOC Assessment Report 2022 and TEAP responses to decisions XXXIV/7 and XXXV/7 regarding HFC-23 emissions. MCTOC led the report preparation, collaborating with the Scientific Assessment Panel (SAP) to provide coordinated conclusions which included updated information on emissions from consumptive uses of HFC-23 and by-products from other substances.

18. As background, it was noted that HFC-23 is generated through various chemical mechanisms during production processes, including over-reaction and unintended side reactions. The consumption data for HFC-23 is limited as HFC-23 is produced mainly for feedstock and has very few emissive uses. Global HFC-23 consumption was reported between 1,000 and 10,000 tonnes in 2023, with significant increases from 2021 to2023, in particular from electronics applications.

19. Mr. Campbell provided an updated estimate on quantities of HFC-23 generated at emissions from F-gas production facilities, stating that total HCFC-22 production in 2023 was 1,174,751 tonnes, with an estimated HFC-23 by-product generation between 18,000 to 36,000 tonnes. This did not take into account incineration of HFC-23 at facilities. The reported HFC-23 emissions from F-gas production by parties were 959 tonnes in 2023.

20. A table was shown detailing the updated TEAP estimates of HFC-23 emissions from known emissions sources which were 1,600–3,700 tonnes per year. SAP had estimated a top-down estimate of 14,200 ± 700 tonnes for 2023.

21. As a summary, it was noted that there remains a substantial shortfall in understanding global HFC-23 emissions, with gaps between reported and atmospheric-derived estimates ranging from 9.6 to 13.3 kt/yr. The TEAP believes that it has included all major known sources of HFC-23 in its bottom-up estimates and that small uncertainties in these estimates cannot explain the emissions gap.

C. Presentations by the assessment panels on progress in their work and emerging issues for the 2026 quadrennial assessment

1. Presentation by the Scientific Assessment Panel

22. The presentation highlighted the more than 40-year history of the Science Assessment of Ozone Depletion. The presentation reminded the parties of the terms of reference given to the Scientific Assessment Panel and showed how the report will be organized in response to those terms. Leaving the chapter organization the same as the last assessment effectively addresses all the terms.

23. A diverse range of nationalities, genders, and career stage of the leadership in the production of each chapter will be used for this assessment. When co-authors are included, the representation is from 17 nations. The representation is much wider when all other contributors to the chapters and peer review process are included.

24. The timeline of the creation of the quadrennial report was presented, showing that the assessment is on schedule and ready for reporting at the next Meeting of the Parties. The presentation also showed all the other documents that the chapter authors are drawing from for several of the chapters.

25. The presentation then went through each chapter and chose one or two scientific highlights from each chapter, as the first drafts now exist and are out for review. This included the update to the Annex containing critical physical scientific data for many relevant molecules to the Montreal Protocol. New to the Annex will be a table with fundamental knowledge of how Montreal Protocol and related gases break down to key persistent acids (and HFC-23) of concern to the parties and the public and will provide a solid reference table for the future work of the Scientific Assessment Panel, the Technology and Economic Assessment Panel and the Environmental Effects Assessment Panel.

26. Finally, the presentation showed the status of the 2025 Antarctic ozone hole and how it compared to past years. According to some of the traditional metrics, it was a modest hole, slightly weaker than average. A more comprehensive metric of ozone loss showed much less total ozone loss in 2025 compared to the 1990–2010 range. The ozone hole is breaking down much earlier this year than in the past due to increased atmospheric instability this year compared to past years.

2. Presentation by the Environmental Effects Assessment Panel

27. On behalf of the Environmental Effects Assessment Panel (EEAP) and Co-Chair Paul Barnes, Co-Chair Janet Bornman presented a Summary of Progress and Emerging issues for the 2026 Quadrennial Assessment in line with the environmental effects of stratospheric ozone depletion, UV radiation, and interactions with climate change.

28. The timelines leading up to the Quadrennial Assessment were presented for 2025 and 2026; and an overview of the 10 Chapters was provided: Changes in the ozone layer & ultraviolet radiation and their interaction with the climate system, Potential consequences of stratospheric aerosol injection, UV radiation-induced effects on the troposphere, Per- and Polyfluorinated Alkyl Substances (PFAS) related to the Montreal Protocol: Definitions, Relevance, & Implications, Chemistry, Fate & Toxicology of Replacements for Ozone-depleting Substances & their Degradation Products, Terrestrial & Aquatic Ecosystems, Synthetic & Natural Materials in the Environment, Fate of Plastic in the Environment, and Interactive Effects of Ultraviolet Radiation & Climate Change on Human Health.

29. Emphasis was placed on some of the emerging issues, which included: a) projected increases in UV radiation due to supersonic aircraft, rocket launches, and nitrous oxide; b) potential effects were presented of stratospheric aerosol injection (SAI, e.g., using sulphate from sulphur dioxide) as one type of climate intervention that has been suggested for temporarily reducing global warming by reflecting radiation away from the Earth's surface; and c) the development of an introductory text, coordinated by EEAP together with TEAP and SAP, to address misconceptions and to increase

understanding of those per- and polyfluorinated alkyl substances (PFAS) that are relevant to the Montreal Protocol, including the very persistent TFA, perfluoropropanoic and perfluorobutanoic acids.

3. Presentation by the Technology and Economic Assessment Panel

30. Marta Pizano, co-chair of the Technical and Economic Assessment Panel (TEAP) introduced the presentation on the progress of work and emerging issues for the panel, on behalf of her co-chairs Ashley Woodcock and Bella Maranion, stating that Ms. Maranion had not been able to attend the meeting. She then proceeded to thank her fellow members on the panel and the more than 150 members of the Technical Options Committees (TOCs) working under the TEAP to produce the reports requested by the parties, on a voluntary basis. Ms. Pizano then gave a summary of the TEAP reports due in 2026 and 2027, highlighting for 2026 the Progress Reports, the Multilateral Fund replenishment reports (likely needing a supplemental report later in the year) and the Quadrennial Assessment Reports due at the end of the year from both the TOCs and the TEAP itself. She added that in 2027, aside from the usual Progress Reports, TEAP would need to prepare the Synthesis Report together with the other panels plus a periodic review of alternatives to HFCs as per decision XXVIII/2.

31. Ms. Pizano then described current work under way, ahead of the final terms of reference resulting from MOP 37 for the replenishment study that the panel will need to prepare in time for the OEWG next year. This is a short time frame of about 4 months so the panel is updating its approach to modelling and initiated contact and coordination with the Ozone and Multilateral Fund secretariats for updated data until the end of 2025.

32. She then gave a brief summary of topics that will be addressed in the 2026 Assessment Reports under decision XXXV/3 including technical progress in the production and consumption sectors in the transition to alternatives for controlled substances in all sectors; process agents and feedstock uses; emissions of controlled substances; the status of banks and stocks of said substances; challenges faced by parties in maintaining the phase-outs already achieved; the impact of ODS phase-out and HFC phase-down on sustainable development; advances made in developing alternatives to HFC taking into account energy efficiency, safety and suitability for HAT countries; information on uses where HCFCs were not previously used; an assessment of whether production of HFO results in fugitive emissions of HFCs; potential impacts of evolving policies and regulations (e.g. on PFAS) in relation to the management of controlled substances, their alternatives and breakdown products; and information on refrigerant management with particular attention to leakage prevention and end-of-life management.

33. In concluding her presentation Ms. Pizano mentioned that the 2026 Assessment Report would further address eight additional decisions taken by the parties over recent years and relating to laboratory and analytical uses, process agents, HFCs not listed in Annex F of the Protocol, HCFC availability, LRM, VSLS, developments regrading MDIs and alternatives to HFCs in Article 5, Group 2 parties.

34. Ashley Woodcock started the second part of the TEAP presentation by thanking the Technical Options Committees for permission to present the key issues in their sectors.

35. In foams, there have been successful transitions from HCFCs and HFCs as blowing agents. Fluorinated blowing agents are more expensive, and as a result, many companies have transitioned to non-fluorinated alternatives or blends. But there is a trade-off; fluorinated blowing agents can enhance thermal performance. And so foams with smaller amounts of fluorinated blowing agents may have difficulty meeting thermal standards. Some non-fluorinated foam blowing agents have higher flammability and toxicity than fluorinated blowing agents and may require different handling and precautions for their safe use. The Foams TOC expressed concern that some small and medium enterprises have reportedly adopted flammable blowing agents without adequate safety precautions.

36. Mr. Woodcock then turned to fire suppression. The uncertainty created by potential broad PFAS regulations, has led the International Civil Aviation Organization (ICAO) to remove the 2024 moratorium on using halon 1301 in cargo compartments of completely new aircraft designs, (Resolution A42-11). As a result, civil aviation is committing to require halon 1301 for at least 50+ years, well beyond all estimated run-out dates. The Fire Suppression TOC continues to work with ICAO and will monitor their efforts on a potential halon 1301 essential use nomination (EUN). Other enduring uses may also require halons for longer, further increasing the possibility of a future EUN. Life-cycle management remains essential to minimize emissions, and to conserve banks of fire suppression agents for future use.

37. Mr. Woodcock then moved onto Methyl Bromide (MB). Data for 2024 shows an increase of approximately 2000 t or 25% of QPS use. MB emissions are no longer declining, and a substantial gap remains with respect to natural baselines. He stated that alternatives now exist for the remaining ~10,000 tonnes of QPS MB use, and some are being adopted for key sectors including timber and grain (e.g. phosphine, ethyl formate, ethane dinitrile). In particular, there are alternatives for most pre-shipment (PS) uses which account for about one third of QPS volumes. The MBTOC Assessment Report will report on MB preplant soil uses, and the impact of decreasing worker safety limits (from 5 ppm to 1 ppm) which could reduce its use. On a positive note, the report will also summarise the major benefits to the ozone layer arising from the complete phase out of 62,000 t of non-QPS uses of methyl bromide.

38. The Medical and Chemical TOC has a very broad portfolio. Their Assessment Report will include production and feedstocks use of controlled substances and information received from parties under decision XXXVI/5; Updated information on HFC-23, CTC, VSLS, n-propyl bromide, process agents, laboratory and analytical uses, including relevant information on alternatives; HFCs not listed in Annex F, including information on the use of products, as identified by the SAP. There will be updates on the increasing quantities of controlled substances used in surface coating of chips of semiconductor and other electronics manufacturing, and the use of controlled substances, and the availability and adoption of alternatives for Aerosols and for pressurized metered dose inhalers (pMDIs). It will also include any new information on destruction technologies.

39. In the refrigeration air conditioning and heat pumps sector, Mr. Woodcock stated that no new single-component refrigerants have been introduced and only a limited number of zeotropic blends have been announced. The RTOC Assessment will report on the continued transition to lower GWP A1, A2L/B2L and A3 refrigerants, although the pace of change differs between different RACHP sectors, and by region. Mr. Woodcock stated that limited information and knowledge of the use of flammable refrigerants, both A2L and A3, continues to be a significant hurdle for the adoption of lower GWP refrigerants, both in A5 and some non-A5 parties. The Assessment Report will focus on cross-cutting issues such as energy efficiency, life-cycle refrigerant management, and the growth of data centres.

40. Lastly, Mr. Woodcock moved on to discuss PFAS and their potential impact on the Montreal Protocol. He discussed the media and public interest in “forever chemicals” which have become mistakenly equated with the term “PFAS”. He stated that there are over 15 PFAS definitions largely based on chemical structure rather than impact to human health and the environment. This was initiated with controls for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) which are persistent, bioaccumulative toxins (PBT) and included in all PFAS definitions. The issue is that these PBT properties of PFOA/PFOS are being improperly extended to other chemicals including Montreal Protocol controlled substances and their alternatives.

41. Mr. Woodcock asserted that Montreal Protocol controlled substances and their alternatives are not persistent, bioaccumulative toxins. However, some Montreal Protocol controlled substances and their alternatives degrade to a variable degree to trifluoroacetic acid (TFA) salts. TFA is persistent in surface waters and in some areas are increasing. TFA has low toxicity and is currently projected to remain well below concentrations of toxicity concern. Nevertheless, there are also knowledge gaps on the relative contributions of TFA in the environment from other sources (e.g. pharmaceuticals, pesticides).

42. Mr. Woodcock explained that the uncertainty about potential broad PFAS regulations is delaying commercial investment in transition, and could narrow the availability of alternatives in some applications. This could slow the phasedown of HFCs due to the slow uptake of lower GWP alternatives, and even decrease energy efficiency in some applications. He also provided two examples of sector-specific impacts. In fire suppression, there is real uncertainty for long term management of halons. For low GWP metered dose inhaler propellants, the transition is already beginning, but there is uncertainty as to which low GWP propellants will be available in the long term. And he stated that there are potentially 94 pharmaceutical companies to convert, and over a billion patients whose health needs to be protected.

43. The three panels will coordinate our efforts to keep the parties fully informed of new developments with PFAS regulations that could impact the Montreal Protocol.

Annex II

Statement by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies*

Mr. President, distinguished parties,

On behalf of the Executive Committee of the Multilateral Fund, I am pleased to report to the parties on the strides made by the Executive Committee since the Thirty-Sixth Meeting of the Parties in 2024. The big picture is dominated by two decisions that had been the result of many years of discussions.

- First, the implementation of the Kigali Amendment through the agreement on the cost guidelines for the phase-down of HFCs in Article 5 countries regarding eligible incremental costs for the manufacturing sector including its funding level, as well as on the starting point for sustained aggregate reductions in HFC consumption, responding to your decision XXVIII/2 (28/2);
- Second, the operational framework for maintaining and/or enhancing the energy efficiency of replacement technologies and equipment in the manufacturing sector when phasing down HFCs, and the funding levels for such projects including an innovative revolving funding modality for end users.

Document 37/8 provides a comprehensive description of the deliberations and outcomes of the Committee's work in the reporting period, the policy issues decided upon, the projects approved, the status of implementation of ongoing projects, as well as business planning, financial and administrative matters. The annual newsletter of the Multilateral Fund Secretariat also provides an overall view of the accomplishments in 2024.

In my presentation, I will give you a snapshot of a few decisions.

The Executive Committee had previously agreed on the principles and funding levels regarding the eligible incremental costs for the refrigeration servicing sector for stage I of the Kigali HFC implementation plans (KIPs). At the 95th meeting, the Committee reached agreement on the cost guidelines in the manufacturing sector and at the 96th meeting, on the starting point for sustained aggregate reductions. These decisions ensure funding and encourage countries to submit their plans. This process, in response to your decision XXVIII/2 (28/2), concluded the negotiations that had been ongoing since 2017.

Small and medium enterprises (SMEs) were prioritised in the guidelines. SMEs in the polyurethane (PU) foam and refrigeration and air-conditioning sectors may receive additional funding to support compliance. The guidelines promote a flexible, country-driven approach, allowing Article 5 countries to prioritize HFCs, define sectors, select technologies and tailor strategies to national circumstances.

The Committee also approved the template for the Agreement between Article 5 countries and the Committee for stage I of the KIPS and agreed on the verification of HFC consumption for low-volume consuming (LVC) countries with approved stages. Imported pre-blended polyols in the PU foam sector can also be included for funding under stage I of the KIPs for their complete phase-out and funding for consumption of HFCs in the local installation and assembly subsector will be decided on a case-by-case basis.

In relation to disposal, the Committee has already taken several decisions and will continue to consider the matter as part of the discussion on life-cycle refrigerant management pursuant to decision XXXV/11 (35/11), at its 97th meeting.

Following the breakthrough decision on the operational framework to enhance energy efficiency when phasing down HFCs, agreed at the 94th meeting, the Committee approved an innovative revolving fund mechanism at its 95th meeting with a $40 million US dollar funding window. This window will support two pilot projects in Article 5 countries, designed to create revolving funds for energy efficiency end-users. With this mechanism, repayments from beneficiaries will replenish the funds, ensuring an additional cycle of financial support to other beneficiaries. Set to run over an eight-year

* The statement is reproduced as received, without formal editing.

period, the pilot projects will eventually return the funds back to the Multilateral Fund, maximizing the impact of the initial investment. The selection of these two pilot projects will be decided next year at the 98th meeting of the Executive Committee.

Half-day sessions on strategic approaches to the implementation of the Kigali Amendment and the contribution to sustainable cooling under the Multilateral Fund were held on the margins of the 95th and 96th meetings aiming at identifying high-impact opportunities for the Fund to support efforts beyond compliance with the Kigali Amendment. This issue will be further discussed based on a document prepared by the Fund Secretariat at the 98th meeting of the Executive Committee.

At the same meeting, the challenges related to supply chain issues that become more evident when implementing projects will also be further considered based on a document prepared by the Fund Secretariat.

The Committee at its 96th meeting also decided to consider establishing a funding window at the 98th meeting for three pilot projects to enhance regional atmospheric monitoring of substances controlled by the Montreal Protocol and requested the Secretariat to prepare draft guidelines for the preparation and implementation of such pilot projects. This is a topic that was extensively discussed at the preparatory segment of this Meeting and showcases the level of collaboration that is taking place between the different institutions of the ozone treaties.

Mr. President, distinguished parties,

In this reporting period, we approved projects for 136.5 million US dollars. How successful we are, depends on the delivery on the ground and whether those who need these funds are able to adapt with the least financial and social impact to the environmental goals of our treaties. This is therefore the time to thank UNDP, UNEP, UNIDO, the World Bank but also the bilateral agencies for their dedicated work with the countries.

UNDP is providing technical support to 47 countries to meet their HCFC targets under the Montreal Protocol and has provided support to 34 countries to prepare their KIPs, out of which 22 have already been submitted while enhancing the capacity building of Article 5 countries in support of the Kigali Amendment. The agency received approval for preparation of a revolving fund to promote energy efficiency for end-users in the tourism sector in Colombia, Ghana and Jordan. Their work also resulted in an increase of women's participation in courses and meetings organized under the Montreal Protocol portfolio.

UNEP is assisting 101 countries with institutional strengthening, policy and quota setting, and data reporting, and facilitated compliance through regional networks and information clearinghouse tools. UNEP helped 102 countries implement HCFC phase-out management plans (HPMPs) and supported 50 countries with KIPs, including promotion of low-GWP, energy-efficient technologies in the refrigeration servicing sector. Special attention was given to LVC countries through tailored technical and policy assistance. UNEP assists 63 countries to prepare inventories and plans for managing banks of used or unwanted controlled substances.

UNIDO is implementing HPMPs in 68 countries, KIPs in 22, institutional strengthening projects in 14, and HFC-23 by-product emission destruction in two. Three HFC investment projects are ongoing in residential air-conditioning and domestic and commercial refrigeration manufacturing. UNIDO continues to support countries in completing HCFC phase-out and HFC phase-down. Through the funding windows, UNIDO is delivering energy efficiency activities in 11 LVCs, pilot projects in 14 countries, and inventories for managing banks of used or unwanted controlled substances in 25 countries.

The World Bank continued advancing the preparation of KIPs which strive to integrate aspects such as energy efficiency and lifecycle management, aligning with its broader commitment to maximizing climate co-benefits. This includes the approval of a pilot project to enhance energy efficiency in commercial refrigeration alongside HFC phase-down. The Bank assisted countries through knowledge-sharing events, and technical and advisory support, including guidance on quota allocation. The Bank continued supporting countries to complete stage II HPMPs and stage II HCFC production phase-out in one country. The Bank is preparing projects to support end-users in Grenada, Thailand and Türkiye under the revolving fund mechanism.

Mr. President, distinguished parties,

The work of the Multilateral Fund has been transforming economies and empowering people. The Fund has invested in technology transfer, training and capacity building. New business opportunities are created, and technological innovation is spurred in countries across the globe, creating new jobs and improving livelihoods.

Allow me to express my sincere appreciation to the members of the Executive Committee for their support in my role as the Chair, the Fund Secretariat, and the bilateral and implementing agencies, for their continued hard work and dedication to our common goals. I would like to thank my colleague, Ms. Maria Antonella Parodi of Argentina, as she was the Chair in one of the Executive Committee meetings since the last Meeting of the Parties.

I would also like to thank the parties for their strong commitment to the implementation of the Montreal Protocol and the guidance you provide to the Executive Committee.

Thank you