

**Montreal Protocol  
on Substances that  
Deplete the Ozone Layer**

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**Thirty-Fifth Meeting of the Parties to  
the Montreal Protocol on Substances  
that Deplete the Ozone Layer**  
Nairobi, 23–27 October 2023

**Issues for discussion by and information for the attention of the  
Thirty-Fifth Meeting of the Parties to the Montreal Protocol****Note by the Secretariat****I. Introduction**

1. The present note sets out an overview of the issues on the provisional agenda<sup>1</sup> for the Thirty-Fifth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer. Section II provides an overview of items on the provisional agenda for the preparatory segment and section III an overview of items on the provisional agenda for the high-level segment. For each item, a brief summary of the background is given, in particular the relevant discussion that took place during the forty-fifth meeting of the Open-ended Working Group of the Parties to the Montreal Protocol, held in Bangkok from 3 to 7 July 2023.
2. Further information on certain agenda items will be provided in an addendum to the present note when relevant additional information becomes available, primarily through volumes of the Technology and Economic Assessment Panel September 2023 report, namely the Panel's final report on the evaluation of critical-use nominations for methyl bromide and its report on by-product emissions of hydrofluorocarbon-23 (HFC-23), in response to decision XXXIV/7. The addendum will provide summaries of those reports and any other relevant information.
3. Issues not on the provisional agenda or not directly related to the implementation of decisions and related follow-up but still of possible interest to the parties are addressed in an information note on issues that the Secretariat would like to bring to the attention of the parties (UNEP/OzL.Pro.35/INF/3).

**II. Overview of items on the provisional agenda for the preparatory  
segment (23–25 October 2023)****A. Opening of the preparatory segment (item 1 of the provisional agenda for the  
preparatory segment)**

4. The preparatory segment of the meeting will be opened at 10 a.m. on Monday, 23 October 2023 at the United Nations Office in Nairobi.
5. The preparatory segment will be chaired jointly by Ralph Brieskorn (Kingdom of the Netherlands) and Vidémé Amèh Djossou (Togo), the Co-Chairs of the Open-ended Working Group.
6. As the meeting will be almost completely paperless, participants are urged to bring their own laptops and handheld devices for accessing meeting documents and information.

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<sup>1</sup> UNEP/OzL.Pro.35/1.

7. A statement will be made by the Executive Secretary of the Ozone Secretariat, also representing the United Nations Environment Programme (UNEP).

## **B. Organizational matters (item 2 of the provisional agenda for the preparatory segment)**

### **1. Adoption of the agenda of the preparatory segment (item 2 (a) of the provisional agenda for the preparatory segment)**

8. The provisional agenda for the preparatory segment is set out in section I of document UNEP/OzL.Pro.35/1 and will be before the parties for adoption. The parties may wish to adopt the agenda, including any matters that they may wish to raise under item 24, "Other matters".

### **2. Organization of work (item 2 (b) of the provisional agenda for the preparatory segment)**

9. Under item 2 (b), the Co-Chairs are expected to present a proposal to the parties on how they intend to proceed with the work on the items on the agenda.

## **C. Administrative matters (item 3 of the provisional agenda for the preparatory segment)**

### **1. Budget of the Trust Fund for the Montreal Protocol and financial reports (item 3 (a) of the provisional agenda for the preparatory segment)**

10. The budget of the Montreal Protocol is considered annually by the Meeting of the Parties. In accordance with decision XXXIV/24 of the Thirty-Fourth Meeting of the Parties, budgets for 2024 and 2025 are presented in documents UNEP/OzL.Pro.35/4 and UNEP/OzL.Pro.35/4/Corr.1. The budget for 2024 is presented according to two scenarios: (a) the recommended budget, which reflect the needs foreseen; and (b) the zero nominal growth budget pegged to the approved budget for 2023. The 2024 recommended budget is \$5,852,835 for core activities and \$226,000 for additional activities, for a total of \$6,078,835. The approved 2023 budget was \$5,729,665 for core activities and \$406,235 for additional activities, for a total of \$6,135,900.

11. For 2025, only the recommended budget scenario is presented. The amount is pegged to the amount approved for core activities for 2023, and the Secretariat considers it sufficient for the core activities planned for 2025. The recommended budget for 2025 is \$5,887,865, \$190,970 less than the recommended budget for 2024.

12. In accordance with paragraph 10 of decision XXXIV/24, the Secretariat has produced activity fact sheets on its areas of work for 2024 and related activities, using a format applied since 2019.<sup>2</sup> The fact sheets are presented in document UNEP/OzL.Pro.35/INF/1.

13. The Secretariat did not consider it necessary to submit a proposed revision to the approved budget for 2023, for the following reasons: (a) The Secretariat does not anticipate spending over and above the approved budget. (b) The Secretariat expects to implement the approved budget without making any changes to the planned activities that would have entailed changes to the corresponding budget. (c) Should costs exceed the approved budget for the relevant activity, the Secretariat will ensure that the variances and resulting transfers among the different cost categories do not exceed 10 per cent, in accordance with UNEP standard practice.

14. The budget performance report for 2023 as at 30 September 2023 is provided as an information document (UNEP/OzL.Pro.35/INF/2).

15. The financial reports for the trust funds for the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol are considered by the parties annually. The certified financial statements for 2022 and an overview of the budget performance report for 2022 for the two trust funds are set out in document UNEP/OzL.Pro.35/5. The document also includes the certified financial statement for 2022 for the earmarked contributions that support the work of the Ozone Secretariat. The main information on the Vienna Convention and Montreal Protocol trust funds includes the following:

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<sup>2</sup> The format was adapted from that used by the secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants.

(a) The budget utilization rates were 91 per cent and 95 per cent respectively in 2022.

(b) The reserves and fund balance at the end of 2022 totalled \$2,613,210 for the Vienna Convention trust fund and \$9,189,325 for the Montreal Protocol trust fund, and the cash balances for the funds were \$2,351,341 and \$9,717,762 respectively.

(c) The reserves and fund balance at the end of 2023 is projected to be \$2,637,000 for the Vienna Convention trust fund and \$7,511,000 for the Montreal Protocol trust fund, and the forecast cash balances are \$2,366,000 and \$7,979,432 respectively.

16. Under item 3 (a) of the provisional agenda for the preparatory segment, the parties are expected to establish a budget committee to deliberate on and recommend a draft decision on the budget for adoption, as appropriate, during the high-level segment. A placeholder draft decision is set out in section III of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[AA].

## **2. Consideration of the membership of Montreal Protocol bodies for 2024 (item 3 (b) of the provisional agenda for the preparatory segment)**

### **(a) Members of the Implementation Committee (item 3 (b) (i) of the provisional agenda for the preparatory segment)**

17. Each year, the Meeting of the Parties considers the membership of the Implementation Committee. In accordance with the non-compliance procedure adopted by the parties, the Committee consists of 10 parties, each of which selects an individual to represent it. Those parties are elected for two years on the basis of equitable geographical distribution – that is, two are elected to represent each of the regional groupings of African States, Asia-Pacific States, Eastern European States, Latin American and Caribbean States and Western European and other States. Committee members may serve two consecutive two-year terms. A party that has completed a second consecutive two-year term as a committee member is eligible for election again only after an absence of one year from the Committee.

18. From the current members of the Committee, Lebanon, the Kingdom of the Netherlands, North Macedonia, Senegal and Suriname will complete the first year of their two-year terms in 2023; they will therefore continue as members for 2024. Chile, Egypt and the United States of America will conclude the second year of their first two-year terms in 2023 and will therefore have to be replaced or re-elected. China and Poland will conclude the second year of their second two-year term in 2023 and will therefore have to be replaced.

19. In accordance with decision XII/13, the Committee selects its president and vice-president from among its members, through consultations among the Committee members during a Meeting of the Parties to ensure the continuity of the two offices.

20. During the preparatory segment, the parties may wish to consult among themselves with the aim of nominating new Committee members. The Secretariat has included a placeholder draft decision on the matter in section III of document UNEP/OzL.Pro.35/3, as draft decision XXXV/[DD]. The Secretariat will include the names of nominated parties in the draft decision for consideration and possible adoption, with any amendments that the parties may deem appropriate, during the high-level segment.

### **(b) Members of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol (item 3 (b) (ii) of the provisional agenda for the preparatory segment)**

21. The Thirty-Fifth Meeting of the Parties will consider the membership of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol. In accordance with its terms of reference, the Executive Committee consists of seven members from parties operating under paragraph 1 of Article 5 of the Montreal Protocol (Article 5 parties) and seven members from parties not so operating (non-Article 5 parties). For 2024, the seven members from Article 5 parties are expected to be selected from the regional groups as follows: two members from African States, two members from Asia-Pacific States, two members from Latin American and Caribbean States and one member to fill the seat that rotates among the regions, including the region of Eastern Europe and Central Asia (decision XVI/38). For 2024, the member to fill the seat that rotates among the regions will be from the Asia-Pacific States.

22. Each of the two groups of parties elects its Executive Committee members and reports their names to the Secretariat for endorsement by the Meeting of the Parties. In addition, the terms of reference of the Executive Committee call for the election, from among the members of the Committee, of a Chair and a Vice-Chair, who alternate each year between Article 5 parties and

non-Article 5 parties. As representatives of Australia and Brazil have served as Chair and Vice-Chair respectively during 2023, the Article 5 parties will be expected to nominate the Chair for 2024 and the non-Article 5 parties will be expected to nominate the Vice-Chair.

23. The Thirty-Fifth Meeting of the Parties is expected to adopt a decision endorsing the selection of the new Committee members and noting the selection of the Committee's Chair and Vice-Chair for 2024. The Secretariat has included a placeholder draft decision on the matter in section III of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[EE].

24. During the preparatory segment, the parties may wish to consult among themselves and consider the new composition of the Committee. The Secretariat will include the names of nominated parties in the draft decision for consideration and possible adoption, with any amendments that the parties may deem appropriate, during the high-level segment.

**(c) Co-chairs of the Open-ended Working Group (item 3 (b) (iii) of the provisional agenda for the preparatory segment)**

25. Each year, the Meeting of the Parties selects one representative from among Article 5 parties and one representative from among non-Article 5 parties to serve as Co-Chairs of the Open-ended Working Group in the subsequent year. In accordance with decision XXXIV/21, Ralph Brieskorn (Kingdom of the Netherlands) and Vidémé Amèh Djossou (Togo) have served as the Co-Chairs of the Open-ended Working Group in 2023. The Thirty-Fifth Meeting of the Parties is expected to adopt a decision endorsing the selection of the Co-Chairs of the Open-ended Working Group for 2024. The Secretariat has included a placeholder draft decision on the matter in section III of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[FF].

26. The parties may wish to consult as necessary during the preparatory segment and nominate two individuals to serve as the Co-Chairs of the Open-ended Working Group in 2024. The Secretariat will include the names of the nominated individuals in the draft decision for consideration and possible adoption during the high-level segment.

**D. Replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol for the triennium 2024–2026 (item 4 of the provisional agenda for the preparatory segment)**

**1. Supplementary report of the Technology and Economic Assessment Panel replenishment task force (item 4 (a) of the provisional agenda for the preparatory segment)**

27. In accordance with decision XXXIV/2, the Technology and Economic Assessment Panel carried out a study on the assessment of funding requirement for the replenishment of the Multilateral Fund for the period 2024–2026 and presented the report to the Open-ended Working Group at its forty-fifth meeting. The report of the Panel's replenishment task force was issued as volume 3 of the Panel's May 2023 report and an executive summary was included in an addendum to the note by the Secretariat on issues for discussion by and information for the attention of the Open-ended Working Group at its forty-fifth meeting (UNEP/OzL.Pro.WG.1/45/2/Add.2). Table 1 shows the range of total estimated funding requirement for the replenishment of the Multilateral Fund for the triennium 2024–2026, as set out in the report.

28. Following the presentation by the Panel's task force, the Open-ended Working Group discussed the matter, including in a contact group, and agreed on a list of issues for the replenishment task force to consider in a supplementary report for consideration by the Thirty-Fifth Meeting of the Parties. The discussion that took place in the plenary is summarized in the report of the forty-fifth meeting of the Open-ended Working Group (UNEP/OzL.Pro.WG.1/45/8, paras. 144–160). The agreed list of issues is set out in annex I to the present note. Once the Panel's supplementary report has been completed, the Secretariat will make it available on the meeting portal and include a summary of the report in an addendum to the present note. The initial report of the Panel's task force is available as background document for the parties.<sup>3</sup> Meanwhile, the Secretariat has prepared a placeholder decision on the 2024–2026 replenishment of the Multilateral Fund for the consideration of the parties (UNEP/OzL.Pro.35/3, sect. III, draft decision XXXV/[BB]).

<sup>3</sup> Available at <https://ozone.unep.org/system/files/documents/TEAP-DecisionXXXIV2-replenishment-TF-report-May2023-RTF-report.pdf>.

Table 1

**Range of total funding requirement for the replenishment of the Multilateral Fund for the period 2024–2026 based on different scenarios as specified in the task force report**

(United States dollars)

<i>Triennium 2024–2026</i>	<i>Low end</i>	<i>High end</i>
HCFC activities (including energy efficiency)	363 911 000	363 911 000
HFC activities (including gender mainstreaming activities, project preparation, enabling activities and energy efficiency funding window)	475 491 000	519 142 000
Funding window on end-of-life management and disposal	13 590 000	13 590 000
Institutional strengthening and standard activities	121 581 000	121 581 000
<b>Grand total</b>	<b>974 573 000</b>	<b>1 018 224 000</b>

**2. Extension of the fixed-exchange-rate mechanism for the triennium 2024–2026**

29. The fixed-exchange-rate mechanism, which was first introduced at the Eleventh Meeting of the Parties to the Montreal Protocol, has since been used by many parties contributing to the Multilateral Fund to ease administrative difficulties in making contributions in currencies other than their own and to promote timely payments. One of the mechanism's stated objectives is to ensure that there is no adverse impact on the level of resources available to the Multilateral Fund. Starting with the third replenishment of the Multilateral Fund, in 2000, the mechanism has included a provision to determine the average exchange rate to be applied in using the mechanism in the following replenishment. The parties have also been determining the time period for averaging exchange rates.

30. The scale of assessments and rates of exchange for contributions to the forthcoming 2024–2026 replenishment of the Multilateral Fund is set out in the note by the secretariat on the matter (UNEP/OzL.Pro.35/INF/6). The scale has been adjusted for the purpose of the Multilateral Fund contributions on the basis of the United Nations scale of assessments for the period 2024–2026. The adjusted scale of assessments and the rates of exchange are presented as received from UNEP in its capacity as Treasurer of the Multilateral Fund.

31. As in the past, the Secretariat has included a placeholder draft decision based on the previous decision taken by the parties on the mechanism in 2022 (decision Ex.V/2), for the consideration of the parties (UNEP/OzL.Pro.35/3, section III, draft decision XXXV/[CC]). During the preparatory segment, the parties may wish to consider and make recommendations, as appropriate, on the application of the mechanism, taking into account the current situation with regard to its operation.

**E. Potential areas of focus for the 2026 quadrennial reports, including the issue of synchronization with reports on alternatives to hydrofluorocarbons under decision XXVIII/2 (item 5 of the provisional agenda for the preparatory segment)**

32. Pursuant to Article 6 of the Montreal Protocol, which calls for a review, at least once every four years, of the control measures of the Protocol on the basis of available scientific, environmental, technical and economic information, and in accordance with decision XXXI/2, on the potential areas of focus for the 2022 quadrennial reports, the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel and its five technical options committees<sup>4</sup> completed their quadrennial assessment reports<sup>5</sup> and presented them to the parties at the forty-fifth meeting of the Open-ended Working Group.

<sup>4</sup> Flexible and Rigid Foams Technical Options Committee (FTOC); Fire Suppression Technical Options Committee (FSTOC); Medical and Chemicals Technical Options Committee (MCTOC); Methyl Bromide Technical Options Committee (MBTOC); and Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee (RTOC).

<sup>5</sup> The full reports are available at the Ozone Secretariat website: Scientific Assessment Panel: <https://ozone.unep.org/science/assessment/sap>; Environmental Effects Assessment Panel: <https://ozone.unep.org/science/assessment/eeap>; and Technology and Economic Assessment Panel and its technical options committees: <https://ozone.unep.org/science/assessment/teap>. The highlights and summaries of the reports are set out in the note by the Secretariat and its addendum (UNEP/OzL.Pro.WG.1/45/2 and Add.1), available at <https://ozone.unep.org/meetings/45th-meeting-open-ended-working-group-parties/pre-session-documents>.

33. In accordance with decision XXXI/2, the panels also finalized a synthesis of their 2022 quadrennial assessments, which was contained in the annex to a note by the Secretariat (UNEP/OzL.Pro.WG.1/45/3) and made available to the Open-ended Working Group, in English only. The synthesis report has since been translated in all official United Nations languages and is set out in document UNEP/OzL.Pro.35/8, to be presented by the panels during the high-level segment of the Thirty-Fifth Meeting of the Parties. Parties may also find the synthesis report useful for the discussion of the potential areas of focus for the 2026 quadrennial assessment.

34. During the forty-fifth meeting of the Open-ended Working Group, the parties began discussing the terms of reference of the 2026 quadrennial assessments. The European Union introduced a draft decision proposing potential areas of focus for the 2026 quadrennial assessment.

35. In the ensuing discussion, which is summarized in paragraphs 82–86 of the report of the forty-fifth meeting of the Open-ended Working Group (UNEP/OzL.Pro.WG.1/45/8), several new areas of focus were also proposed and a number of the areas in the European Union proposal were endorsed. Those focus areas included raw materials used as feedstock and input materials; improvement of the safety of low-global-warming-potential alternatives; assessment of whether the production of hydrofluoroolefins resulted in fugitive high-global-warming-potential hydrochlorofluorocarbons (HCFCs); the strengthening of national implementation frameworks; assessment of low-global-warming-potential alternatives and alternative technologies, especially in key industries and fields; how to improve and maintain energy efficiency while phasing down HFCs; solar radiation management; skin cancer rates globally; atmospheric concentrations of chemicals such as HFC-23; the effect of volcanic eruptions and supersonic flights on the ozone layer; refrigeration management; banks; recycling and reuse; and the use of HFCs in applications that did not have a corresponding prior HCFC use. Several representatives also stressed the challenges faced by Article 5 parties and the importance of funding to enable them to meet their compliance targets and requested that the issue be considered in the 2026 report.

36. During the discussion, one representative recalled that, in decision XXVIII/2, the parties had asked for specific reporting of alternatives to HFCs. The reporting schedule, however, was not aligned with the timing of the quadrennial reports, and she proposed that they be aligned to reduce the burden on the Technology and Economic Assessment Panel and to ensure consistency in the information provided to parties. Another representative was not supportive of the proposal but agreed that the issue merited further discussion.

37. A contact group was established and made progress on the consideration of the proposal but was unable to complete its work due to lack of time. The Open-ended Working Group therefore agreed to resume discussions on the issue at the Thirty-Fifth Meeting of the Parties, together with the issue of synchronization of the timing of the reports on HFC alternatives pursuant to decision XXVIII/2. The draft decision that the Open-ended Working Group agreed to use as a basis for its resumed discussion is set out in section II of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[A].

38. During the preparatory segment, parties may wish to resume discussion on the draft decision with a view to finalizing it for consideration and possible adoption during the high-level segment.

## **F. Stratospheric aerosol injection and protection of the ozone layer (item 6 of the provisional agenda for the preparatory segment)**

39. At the forty-fifth meeting of the Open-ended Working Group, parties discussed the issue of stratospheric aerosol injection aimed at solar radiation management, based on the findings of the Scientific Assessment Panel in its 2022 quadrennial assessment report, according to which injection of stratospheric aerosols to reduce global warming would impact stratospheric ozone. The representative of Australia introduced a draft decision, co-sponsored by Canada, on stratospheric aerosol injection and protection of the ozone layer.

40. The Open-ended Working Group agreed to forward the draft decision to the Thirty-Fifth Meeting of the Parties for further consideration.

41. Parties may wish to consider the draft decision, which is set out in section II of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[B], during the preparatory segment.

## **G. Destruction technologies (item 7 of the provisional agenda for the preparatory segment)**

42. At the forty-fifth meeting of the Open-ended Working Group, the parties considered the recommendations of the Technology and Economic Assessment Panel and its Medical and Chemicals

Technical Options Committee, contained in their 2022 quadrennial assessment reports, on possible updates to the current list of approved destruction technologies, adopted through decision XXX/6 in 2019 and set out in annex II to the report of the Thirtieth Meeting of the Parties.<sup>6</sup>

43. The European Union introduced a draft decision on destruction technologies for controlled substances. The draft decision provided for the addition of the cement kilns technology for the destruction of diluted sources of HFCs, as recommended by the Technology and Economic Assessment Panel. It also reflected the Panel's recommendation on consolidating the list of technologies by grouping the portable plasma arc technology under the existing nitrogen plasma arc destruction technology. It further provided for the Panel to report on the matter to the Open-ended Working Group prior to the Thirty-Seventh Meeting of the Parties, or earlier if possible. Thus, parties would be invited to submit to the secretariat any information that might be relevant to destruction technologies so that the Panel could take it into account when assessing the technologies.

44. While the draft decision was welcomed by many representatives, some expressed slight caution, with one seeking confirmation from the Medical and Chemicals Technical Options Committee that, when assessing the listed destruction technologies as requested in the decision, it would consider whether technologies other than cement kilns could similarly be approved for diluted sources based on the same rationale. A concern was also raised as to whether the matter was already covered by past decisions directing the Panel to keep technologies under review. Several representatives underscored their countries' need for an easily accessible destruction facility, possibly in the form of a regional centre, that would handle small quantities to be destroyed and allow for pooled collection (paragraphs 122 and 123, UNEP/OzL.Pro.WG.1/45/8).

45. The Working Group held informal discussions on the matter in the margins of the meeting. Subsequently, it agreed to forward the draft decision to the Thirty-Fifth Meeting of the Parties for further consideration. The draft decision is set out in section II of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[C].

46. During the preparatory segment, parties may wish to further consider the draft decision for possible adoption during the high-level segment.

## **H. Very short-lived substances including dichloromethane (item 8 of the provisional agenda for the preparatory segment)**

47. At the forty-fifth meeting of the Open-ended Working Group, the representative of Canada, speaking also on behalf of Australia, Switzerland and the United States, introduced a draft decision on very short-lived substances, including dichloromethane, not controlled under the Montreal Protocol. The proposal had been triggered by the Scientific Assessment Panel's finding that very short-lived substances had a significant impact on ozone depletion, particularly in the lower stratosphere. The Panel had calculated that the positive effect on the ozone layer from 2020 to 2070 of eliminating emissions of very short-lived substances in 2023 would be about 1 Dobson Unit, about half the effect of eliminating all emissions of ozone-depleting substances in 2023. The Panel noted that despite the small ozone-depleting potential of dichloromethane (0.01–0.02), given that 1.8 million tonnes had been produced in 2020, including about 1.45 million tonnes for emissive uses, and that the use was growing at about 10 per cent a year, its overall impact was large. Accordingly, in the draft decision the Technology and Economic Assessment Panel was requested to include in its 2024 progress report information on existing and projected production, use and emissions of dichloromethane and other very short-lived substances, and alternatives and measures for reducing emissions. Parties were also encouraged to take action to reduce the use and emissions of dichloromethane in applications for which alternatives were available and emissions control measures were feasible.

48. A number of representatives indicated that they would welcome the opportunity to discuss the topic further. Several representatives expressed concern at the proposed draft decision, however, related to, among other things, whether the very short-lived substances referred to in the draft decision fell under the mandate of the Montreal Protocol and a perceived intention to introduce new substances to the Protocol through the draft decision, when Article 5 parties did not have the capacity to undertake any new obligations. Those in support of the draft decision recalled similar instances when the Meetings of the Parties adopted decisions in previous years on another substance that was not controlled by the Montreal Protocol but which nevertheless depleted the ozone layer, pointed to the potential impact of the elimination of dichloromethane on the recovery of the ozone layer, emphasized the benefits of early action and stressed that the draft decision placed no additional requirements on

<sup>6</sup> <https://ozone.unep.org/system/files/documents/MOP-30-11E.pdf>.



any party. A summary of the discussions during the forty-fifth meeting of the Open-ended Working Group is set out in paragraphs 108 to 117 of the report of the meeting (UNEP/OzL.Pro.WG.1/45/8).

49. After informal discussions were held in the margins of the meeting, an informal group was formed. The group held a general discussion on the issue of very short-lived substances rather than the text of the draft decision, and questions raised were addressed by the Scientific Assessment Panel.

50. The Working Group agreed to forward the draft decision to the Thirty-Fifth Meeting of the Parties for further consideration. The draft decision is set out in section II of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[D].

51. The parties may wish to discuss the matter further during the preparatory segment.

## **I. Hydrofluorocarbon-23 (HFC-23) issues (item 9 of the provisional agenda for the preparatory segment)**

### **1. Strengthening institutional processes with respect to information on HFC-23 by-product emissions: report by the Technology and Economic Assessment Panel (decision XXXIV/7) (item 9 (a) of the provisional agenda for the preparatory segment)**

52. The parties, at their Thirty-Fourth Meeting, adopted decision XXXIV/7, in which they requested the Technology and Economic Assessment Panel to prepare a report for the Thirty-Fifth Meeting of the Parties, including:

(a) Information on the possible chemical pathways that could be used in the production of Annex C, Group I, or Annex F substances that might generate HFC-23 as a by-product;

(b) Compilation of information on the amount of HFC-23 generation and emissions from facilities that manufacture Annex C, Group I, or Annex F substances, the reporting of which is required under Article 7 of the Montreal Protocol;

(c) Best practices available to control those emissions.

53. The Panel's report is expected to be available in September 2023, and a summary of the report will be included in the addendum to the present note.

### **2. Emissions of HFC-23 (item 9 (b) of the provisional agenda for the preparatory segment)**

54. At the forty-fifth meeting of the Open-ended Working Group, parties discussed the issue of unexplained emissions of carbon tetrachloride and HFC-23, and in particular the discrepancies between bottom-up and top-down atmospheric observations, as well as feedstock uses. The discussion was based on the findings of the Scientific Assessment Panel in its 2022 quadrennial assessment report. According to the Panel, the global emissions of HFC-23, which are largely a by-product of HCFC-22 production, are as much as eight times larger than expected.

55. The representative of the United States, speaking also on behalf of Australia, Canada and Norway, introduced a draft decision explaining that the proposal was intended to deal with unexplained emissions of HFC-23 in recent years. In the draft decision, the Scientific Assessment Panel and the Technology and Economic Assessment Panel were requested to provide updated information on the topic. Additionally, parties with relevant information were requested to provide that information and parties and other scientific and atmospheric organizations and institutions were encouraged to support efforts to undertake further study of emissions of HFC-23. Parties were also encouraged to take appropriate measures to implement their HFC-23 obligations, in accordance with the provisions of the Kigali Amendment.

56. The proposal was discussed in plenary, with some parties seeking clarifications and some supporting the proposal. The discussion that took place during the meeting is summarized in the report of the meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 98–101). Following the discussion, the Open-ended Working Group agreed to establish a contact group to discuss the matter further. The contact group made good progress, completing its initial review of the six operative paragraphs of the proposed draft decision.

57. The Working Group agreed to forward the revised draft decision on HFC-23 emissions to the Thirty-Fifth Meeting of the Parties for further consideration. The revised draft decision is set out in section II of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[E].



58. During the preparatory segment, parties may wish to continue the discussions on the matter and make recommendations on the way forward, as appropriate, including proposing a draft decision for consideration and possible adoption during the high-level segment.

**J. Potential impacts of the coronavirus disease (COVID-19) pandemic on hydrofluorocarbon consumption for Group 1 parties operating under paragraph 1 of Article 5: proposed adjustments to the Montreal Protocol (UNEP/OzL.Pro.35/7) (item 10 of the provisional agenda for the preparatory segment)**

59. At its forty-fifth meeting, the Open-ended Working Group discussed a proposed adjustment to the Montreal Protocol submitted by Cuba and set out in document UNEP/OzL.Pro.WG.1/45/7 (see paras. 293–295, UNEP/OzL.Pro.WG.1/45/8). The parties also considered a document entitled “Potential impacts of the COVID-19 pandemic on HFC consumption for Group 1 parties operating under paragraph 1 of Article 5: hydrofluorocarbons consumption data reported by relevant Group 1 parties operating under paragraph 1 of Article 5 (decision XXXIV/13, paras. 1 and 2)” that had been prepared by the Secretariat in accordance with decision XXXIV/13 (UNEP/OzL.Pro.WG.1/45/4/Rev.1).

60. A contact group was established to consider the proposal by Cuba and other possible ways of addressing the impact of the COVID-19 pandemic on the HFC baselines of certain Article 5 parties. The contact group made good progress, particularly in exchanging information. The Open-ended Working Group agreed to resume discussions on the matter at the Thirty-Fifth Meeting of the Parties.

61. During the preparatory segment, parties may wish to resume discussions on the proposed adjustment to the Montreal Protocol (reproduced in document UNEP/OzL.Pro.35/7) and other possible ways of addressing the impact of the COVID-19 pandemic on the HFC baselines of certain Article 5 parties.

**K. Energy-efficient and low- or zero-global-warming-potential technologies: outcomes of the workshop on energy efficiency (decision XXXIV/3, para. 4(a)) (item 11 of the provisional agenda for the preparatory segment)**

62. In subparagraph 4 (a) of decision XXXIV/3, the Thirty-Fourth Meeting of the Parties requested the Secretariat to organize a one-day workshop in 2023, back to back with the Meeting of the Parties, to share information, experiences and lessons learned and assess challenges related to ways of improving availability and accessibility of energy-efficient equipment and equipment using low- or zero-global warming-potential alternatives during the implementation of the Kigali Amendment.

63. Furthermore, in subparagraph 4 (b) of the same decision, the Secretariat was requested to prepare a report of existing policies addressing the interlinkages between phasing down HFCs and enhancing energy efficiency.

64. In accordance with the decision, the Secretariat is preparing for a workshop on energy efficiency to be convened on 22 October 2023. The concept note<sup>7</sup> containing the provisional programme will be posted on the meeting portal for the workshop<sup>8</sup> by early September.

65. The Secretariat is also preparing a report on existing policies addressing the interlinkages between phasing down HFCs and enhancing energy efficiency, to be discussed at the workshop, as a note by the Secretariat for the workshop as well as for the Thirty-Fifth Meeting of the Parties (UNEP/OzL.Pro/Workshop.12/2–UNEP/OzL.Pro.35/10). For that purpose, the Secretariat has requested parties to submit relevant information for inclusion in the note.

66. Immediately after the workshop, the Secretariat will prepare a summary of the workshop outcomes for the consideration of the Thirty-Fifth Meeting of the Parties. Parties may wish to consider the documents during the preparatory segment and make recommendations on the way forward, as appropriate.

<sup>7</sup> UNEP/OzL.Pro/Workshop.12/1.

<sup>8</sup> Workshop on Energy Efficiency (2023) | Ozone Secretariat (unep.org).

**L. Shared responsibility to stop dumping of inefficient equipment containing obsolete refrigerants (decision XXXIV/4) (item 12 of the provisional agenda for the preparatory segment)**

67. At its forty-fifth meeting, the Open-ended Working Group discussed actions taken pursuant to decision XXXIV/4. During the discussion, some parties objected to the use of the term “illegal imports” in the title of decision XXXIV/4<sup>9</sup>, the reason being that the real issue was “dumping” of non-waste, used and new equipment that did not meet the standards of the exporting countries. The issue was debated extensively in the plenary. The discussion is summarized in the report of the forty-fifth meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 198–203). On the basis of the discussion in the plenary, an informal group was established with a view to preparing a conference room paper for consideration by the Thirty-Fifth Meeting of the Parties.

68. Subsequently, the representative of Ghana, speaking on behalf of the group of African States, introduced a draft decision on shared responsibility to stop the dumping of inefficient cooling equipment containing obsolete refrigerants. The Open-ended Working Group agreed to forward the draft decision to the Thirty-Fifth Meeting of the Parties for further consideration and to encourage further consultations thereon to take place in the margins of the forty-fifth meeting of the Open-ended Working Group and during the intersessional period.

69. During the preparatory segment, the parties may wish to continue its consideration of the draft decision, which is set out section II of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[F], and make recommendations on the way forward, as appropriate, including proposing a draft decision for consideration and possible adoption during the high-level segment.

**M. Abating emissions of carbon tetrachloride (decision XXXIV/6) (item 13 of the provisional agenda for the preparatory segment)**

70. Decision XXXIV/6 on ongoing emissions of carbon tetrachloride was adopted by the Thirty-Fourth Meeting of the Parties after extensive discussions in 2019 and 2022 and intersessional efforts led by Switzerland. In the decision, parties that had production of carbon tetrachloride, as well as by-production, or use of carbon tetrachloride as a feedstock or as a process agent, were invited to provide to the Secretariat on a voluntary basis, by 1 February 2023, information on the national procedures and frameworks in place for the management of such activities in their respective countries. Submissions were received from five parties, namely China, the European Union, Japan, the United Kingdom of Great Britain and Northern Ireland and the United States. The Medical and Chemicals Technical Options Committee had reviewed the submissions and presented a summary of the information submitted in section 5.4 of the Technology and Economic Assessment Panel’s 2023 progress report.

71. At the forty-fifth meeting of the Open-ended Working Group, the parties continued discussion of the issue of ongoing emissions of carbon tetrachloride, with some representatives noting with concern that the Scientific Assessment Panel had stated in its 2022 quadrennial report that the abundance of carbon tetrachloride continued to decrease at a lower rate than expected, and that therefore estimated emissions and the associated discrepancy in emissions were higher than when the issue had previously been considered by the Open-ended Working Group. There therefore remained a need for additional information in order to close the gap between expected concentrations and observed concentrations. The discussion that took place during the meeting is summarized in the report of the forty-fifth meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 256–260).

72. Subsequently, the representative of Switzerland introduced a draft decision on abating emissions of carbon tetrachloride. A summary of the discussion on the proposal can be found in paragraph 262 of the report of the forty-fifth meeting.

73. The Working Group agreed to forward the draft decision proposed by Switzerland to the Thirty-Fifth Meeting of the Parties for further consideration and to encourage further consultations thereon to take place in the margins of the forty-fifth meeting of the Open-ended Working Group and during the intersessional period. The draft decision is set out in section II of document UNEP/OzL.Pro.35/3, as draft decision XXXV/[G].

<sup>9</sup> Decision XXXIV/4 is titled, “Illegal import of certain refrigeration, air-conditioning and heat pump products and equipment”.

74. The parties may wish to continue the discussions on the matter during the preparatory segment and make recommendations on the way forward, as appropriate, including proposing a draft decision for consideration and possible adoption during the high-level segment.

## **N. Issues related to “exempted” uses under the Montreal Protocol (item 14 of the provisional agenda for the preparatory segment)**

### **1. Nominations for critical-use exemptions for methyl bromide for 2024 (item 14 (a) of the provisional agenda for the preparatory segment)**

75. At the forty-fifth meeting of the Open-ended Working Group, the Methyl Bromide Technical Options Committee presented its report and interim recommendation on the nomination for a critical-use exemption put forward in 2023 by one non-Article 5 party, Canada, for 2024. The discussion that took place and statements made during the meeting are summarized in the report of the meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 252 and 253).

76. The Committee is expected to produce a final report on the evaluation of the nomination, taking into account any additional information provided by the nominating party during and after the forty-fifth meeting of the Open-ended Working Group. Its final report will be posted on the meeting portal in due course.

77. A summary of the Committee’s final recommendation and any other relevant information will be provided in the addendum to the present note.

### **2. Feedstock uses (item 14 (b) of the provisional agenda for the preparatory segment)**

78. At the forty-fifth meeting of the Open-ended Working Group, the parties discussed the issue of feedstock uses, having agreed to consider the matter under the agenda item on any other issues relating to the 2022 quadrennial assessment of the Montreal Protocol. The discussion was prompted by the findings of the Technology and Economic Assessment Panel and the Scientific Assessment Panel in their 2022 quadrennial assessment reports, according to which feedstock uses had increased by 75 per cent over the last 10 years. The parties discussed the matter at length during the meeting, details of which are summarized in the report of the meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 126–128). The Open-ended Working Group agreed to hold informal discussions on the matter in the margins of the meeting.

79. Subsequently, the representative of Australia introduced a draft decision on feedstock uses. The draft decision urged relevant parties to take steps to minimize emissions related to feedstocks; encouraged them to replace, where technically feasible, the use of ozone-depleting substances with non-controlled substances; and reminded them, when reporting feedstock production, to include unintentional production of isolated and non-isolated intermediates, where such production was measurable. Relevant parties were invited to provide the Secretariat with information on their domestic policies, practices and regulations relating to feedstock production and use, and the Ozone Secretariat was requested to collate and summarize that information for consideration by the Open-ended Working Group at its forty-sixth meeting. The Technology and Economic Assessment Panel was requested to prepare, for consideration by the Open-ended Working Group at the same meeting, a report that included information on alternative chemicals and processes and estimates of annual global emissions of ozone-depleting substances, by species, from feedstock production and by-product emissions.

80. A discussion took place on the proposal, as summarized in paragraphs 132–135 of the report of the meeting. The Working Group subsequently agreed to forward the draft decision proposed by Australia to the Thirty-Fifth Meeting of the Parties for further consideration and to encourage further consultations thereon in the margins of the forty-fifth meeting of the Open-ended Working Group and during the intersessional period. The draft decision is set out in section II of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[H].

81. The parties may wish to continue the discussions on the matter during the preparatory segment and make recommendations on the way forward, as appropriate, including proposing a draft decision for consideration and possible adoption during the high-level segment.

**3. Quarantine and pre-shipment uses of methyl bromide for which alternatives are available (decision XXXIV/10, para. 4) (item 14 (c) of the provisional agenda for the preparatory segment)**

82. Parties adopted decision XXXIV/10, on stocks and quarantine and pre-shipment uses of methyl bromide, at the Thirty-Fourth Meeting of the Parties, after extensive discussions in plenary sessions and informal group and contact group sessions during 2022 at both the forty-fourth meeting of the Open-ended Working Group and the Thirty-Fourth Meeting of the Parties. In paragraph 1 of the decision, the parties had been invited to submit to the Secretariat, on a voluntary basis, by 1 June 2023, a list of the pest and commodity combinations in which methyl bromide was needed or used in their respective countries. In accordance with paragraph 4 of the same decision, the Methyl Bromide Technical Options Committee, in consultation with the secretariat of the International Plant Protection Convention, provided, in section 4.2 of the Panel's progress report, updated information on current quarantine and pre-shipment uses for which alternatives were available. When presenting its report to the Open-ended Working Group at its forty-fifth meeting, the Committee noted that only one party had submitted its information at the time of finalization of the progress report, and two others thereafter.

83. During discussion on the matter at the forty-fifth meeting of the Open-ended Working Group, some representatives noted that the Committee's report indicated that the elimination of the emissions from quarantine and pre-shipment use was the single largest short-term gain that could be made to benefit the ozone layer, and that alternatives to methyl bromide were available for pre-shipment uses. Parties considered whether work on methyl bromide should continue, and if so, in what areas, and whether any requests for further work should be made to the Technology and Economic Assessment Panel and the Methyl Bromide Technical Options Committee, although concerns were also raised in relation to proposals for further work. Some parties were of the view that parties' adherence to their obligations had led to a significant decline in atmospheric emissions of methyl bromide and that natural emissions were not the main source of emissions. Concerns were expressed about the effectiveness of alternatives and the high global warming potential and high cost of key alternatives. Details of the discussions are summarized in the report of the meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 265–269).

84. The Working Group agreed to consider the matter further at the Thirty-Fifth Meeting of the Parties. Parties may wish to do so during the preparatory segment and recommend a way forward.

**O. Future availability of halons and their alternatives (item 15 of the provisional agenda for the preparatory segment)**

85. At the forty-fifth meeting of the Open-ended Working Group, the parties considered the report prepared by the Technology and Economic Assessment Panel, through its Fire Suppression Technical Options Committee, in response to decision XXX/7 on the future availability of halons and their alternatives. In that decision, the parties had requested the Panel to continue engaging with the International Maritime Organization and the International Civil Aviation Organization to better assess future amounts of halons available to support civil aviation. The Panel had also been requested to identify relevant alternatives already available or in development; ways to enhance the recovery of halons from the breaking of ships; and specific needs, other sources of recoverable halon and opportunities for recycling. The Fire Suppression Technical Options Committee had submitted a report on those issues in the Technology and Economic Assessment Panel 2020 progress report, with updates provided in the Panel's 2022 progress report and 2022 quadrennial assessment report. A summary of that information was provided in a note by the Secretariat (UNEP/OzL.Pro.WG.1/45/2/Add.1).

86. During the discussion, several representatives expressed concern at the possibility of shortages of halons, particularly halon-1301, for civil aviation, possibly as early as 2030. Halons and HFC used as alternatives to halons were impacted by, for example, the phase-down of HFCs; control of per- and polyfluoroalkyl substances; lack of awareness of availability of reclaimed halons; and restrictions on the transboundary movements of halons. Concerns were also expressed about the discrepancies between modelled and observed atmospheric concentrations of halons and about possible emissions from feedstock and servicing uses. Details of the discussions are summarized in the report of the meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 92–95).

87. Following additional, informal discussions in the margins of the meeting, the Open-ended Working Group agreed to resume discussions on the matter at the Thirty-Fifth Meeting of the Parties.

88. During the preparatory segment, parties may wish to discuss the issue of future availability of halons and their alternatives and recommend a way forward.

**P. Refrigerant life cycle management (item 16 of the provisional agenda for the preparatory segment)**

89. At the forty-fifth meeting of the Open-ended Working Group, the representative of the Federated States of Micronesia introduced the topic of life cycle refrigerant management for discussion. She stressed that leakage and venting of controlled substances contributed to climate change and that taking a systemic approach to managing refrigerants could both help parties comply with the Kigali Amendment and bring additional climate and economic benefits, pointing out that many aspects of refrigerant management offered benefits but were not being fully utilized, such as service measures to address leakage; reclamation, recycling and reuse of refrigerants; and destruction technologies. She further noted that even though destruction was not a compliance measure under the Protocol, establishing and financing end-of-life management capacity to prevent HFC emissions could have a significant impact. Without explicit action within the Protocol, those benefits would be lost.

90. In ensuing discussions, several representatives welcomed the opportunity to discuss refrigerant management, with some acknowledging the challenges their countries faced in recovery and destruction of refrigerants. One representative recalled, however, that the Multilateral Fund had been providing assistance for various stages of refrigerant management for the past 30 years and that the Executive Committee had recently established a funding window for the preparation of national inventories and development of plans for the collection, transportation and disposal of used or unwanted controlled substances, which represented a good first step in addressing life cycle management of refrigerants. The discussion that took place is summarized in the report of the meeting (UNEP/OzL.Pro.WG.1/45/8, paras. 138–139).

91. The Open-ended Working Group held informal discussions on the matter in the margins of the meeting and subsequently agreed to resume discussions on life cycle refrigerant management at the Thirty-Fifth Meeting of the Parties.

92. The parties may wish to continue the discussions on the matter during the preparatory segment and make recommendations on the way forward, as appropriate.

**Q. Strengthening Montreal Protocol institutions, including for combating illegal trade (decision XXXIV/8) (item 17 of the provisional agenda for the preparatory segment)**

93. At the forty-fifth meeting of the Open-ended Working Group, the parties considered the outcomes of the workshop on strengthening the effective implementation and enforcement of the Montreal Protocol that had been held on 2 July 2023, including a summary of the workshop outcomes set out in document UNEP/OzL.Pro/Workshop.11/3–UNEP/OzL.Pro.WG.1/45/6. The parties also considered the background documents prepared by the Secretariat for the workshop (UNEP/OzL.Pro/Workshop.11/2–UNEP/OzL.Pro.WG.1/45/5 and its addenda).

94. After an initial exchange of views on ways to take the outcomes of the workshop forward as well as other issues included in the background documents, the Open-ended Working Group established an informal group to discuss the matter further. The initial discussions are summarized in paragraphs 168–173 of the report of the forty-fifth meeting of the Open-ended Working Group (UNEP/OzL.Pro.WG.1/45/8).

95. The Working Group agreed that informal discussions on the matter would continue during the intersessional period with a view to one or several draft decisions being submitted to the Thirty-Fifth Meeting of the Parties for its consideration. The list of suggested elements for inclusion in draft decisions can be found in annex II to the present note.

96. During the preparatory segment, the parties may wish to consider the matter further and make recommendations on the way forward, as appropriate.

**R. Identification of gaps in the global coverage of atmospheric monitoring of controlled substances and options for enhancing such monitoring (decisions XXXIII/4 and XXXIV/5) (item 18 of the provisional agenda for the preparatory segment)**

97. At the forty-fifth meeting of the Open-ended Working Group, the parties considered the report of the Secretariat in response to decision XXXIII/4 on enhancing the global and regional atmospheric monitoring of substances controlled by the Montreal Protocol. In that decision, the Secretariat had been requested to provide, in consultation with relevant experts from the Scientific Assessment Panel,

the Technology and Economic Assessment Panel and the Ozone Research Managers, a report on options for the regional monitoring of atmospheric concentrations of controlled substances and operationalization challenges; the identification of suitable locations for possible high-frequency measurements and flask sampling for regions not, or not sufficiently, covered by existing atmospheric monitoring; and options for means of establishing new monitoring capacity and related costs, taking into account existing monitoring infrastructure. The report by the Secretariat, set out in document UNEP/OzL.Pro.WG.1/45/2/Add.2, was presented by a representative of the Secretariat and a co-chair of the Scientific Assessment Panel.

98. In the ensuing discussion, several representatives stressed the critical nature of an adequate global and regional network of monitoring stations to maintain the effectiveness of the Montreal Protocol, including in particular detecting unexpected emissions of controlled substances. Since the full recovery of the ozone layer would take several decades, long-term monitoring of controlled substances, ozone and ultraviolet radiation continued to be essential. They suggested that further discussions be held between parties and the scientific experts to find a practical way forward for the expansion of the monitoring network, including identifying priorities and criteria for the location of new stations. Finding additional sources of funding was of course critical, with one representative suggesting that the Trust Fund for the Vienna Convention could be a suitable mechanism. The discussions are summarized in paragraphs 218–223 of the report of the forty-fifth meeting of the Open-ended Working Group (UNEP/OzL.Pro.WG.1/45/8).

99. Following the discussion in plenary session, the Open-ended Working Group established an informal group to pursue the discussion. That discussion indicated clear willingness to continue exchanging views on the matter and to request the Secretariat to report on the outcomes of the European Union-funded pilot project after its finalization in 2024, as well as interest in continuing the discussion during the intersessional period. Some parties also indicated that they might develop a draft proposal for consideration by the Thirty-Fifth Meeting of the Parties. The Open-ended Working Group therefore agreed to resume discussions on the matter at that meeting.

100. The parties may wish to discuss the matter during the preparatory segment and propose a way forward, as appropriate.

**S. Existing challenges and potential options for the future configuration and function of the Technology and Economic Assessment Panel's technical options committees (decision XXXIV/11, para. 1) (item 19 of the provisional agenda for the preparatory segment)**

101. At the forty-fifth meeting of the Open-ended Working Group, the parties considered the report prepared by the Technology and Economic Assessment Panel in response to decision XXXIV/11 on the composition, balance and workload of the Technology and Economic Assessment Panel and its technical options committees. In that decision, the Panel was requested to provide more information on existing challenges and potential options for the future configuration and function of its technical options committees, for consideration at that meeting.

102. The Panel's proposal was to maintain the current structure of the five technical options committees. In the case of the Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee, however, the Panel proposed to establish two sub-groups: one on cold chains for the conservation of food and vaccines, and the other on space heating and cooling via heat pumps and air-conditioning equipment and systems. Cross-cutting issues such as refrigerants and energy efficiency, would be managed across the two sub-groups, and four co-chairs would be appointed for the committee as a whole.

103. During the ensuing discussion, while several parties supported the Panel's recommendations, some expressed interest in hearing more details and others suggested the possibility of establishing two technical options committees instead of having one Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee dealing with two different areas. The discussion is summarized in paragraphs 273–275.

104. Informal discussions were held in the margins of the meeting, after which the Open-ended Working Group agreed to resume discussions on the matter at the Thirty-Fifth Meeting of the Parties.

105. Parties may wish to discuss the matter during the preparatory segment and propose a way forward, as appropriate.

**T. Consideration of nominations by parties of experts to the Scientific Assessment Panel and the Technology and Economic Assessment Panel (item 20 of the provisional agenda for the preparatory segment)**

106. In annex 4 to its 2023 progress report, the Technology and Economic Assessment Panel provided information on the status of the membership of the Technology and Economic Assessment Panel and its technical options committees as at May 2023.

107. Table 2 lists the members of the Technology and Economic Assessment Panel whose membership expires at the end of 2023 and whose reappointment requires a decision by the Meeting of the Parties. For information and ease of reference, the members of the technical options committees whose membership expires at the end of 2023 and whose reappointment does not require a decision by the Meeting of the Parties are listed in annex III to the present note.

Table 2

**Members of the Technology and Economic Assessment Panel whose membership expires at the end of 2023 and whose reappointment requires a decision by the Meeting of the Parties**

<i>Name</i>	<i>Position</i>	<i>Country</i>
Omar Abdelaziz	RTOC co-chair	Egypt
Kei-ichi Ohnishi	MCTOC co-chair	Japan
Roberto Peixoto	RTOC co-chair	Brazil
Jianjun Zhang	MCTOC co-chair	China
Suely Machado Carvalho	TEAP senior expert	Brazil
Marco Gonzalez	TEAP senior expert	Costa Rica
Ray Gluckman	TEAP senior expert	United Kingdom of Great Britain and Northern Ireland
Shiqiu Zhang	TEAP senior expert	China

*Abbreviations:* MCTOC – Medical and Chemicals Technical Options Committee; RTOC – Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee; TEAP – Technology and Economic Assessment Panel.

108. Parties may wish to submit nominations for consideration by the Thirty-Fifth Meeting of the Parties, recalling that in accordance with paragraph 3 of decision XXXI/8 they are requested, “when nominating experts to the Panel, its technical options committees or its temporary subsidiary bodies, to use the Panel’s nomination form and associated guidelines so as to facilitate the submission of appropriate nominations, taking into account the matrix of needed expertise, and geographical and gender balance, in addition to the expertise needed to address new issues related to the Kigali Amendment, such as energy efficiency, safety standards and climate benefits”. In paragraph 5 of the same decision, parties are urged “to follow the terms of reference of the Panel, consult the Panel’s co-chairs and refer to the matrix of needed expertise<sup>10</sup> prior to making nominations for appointments to the Panel”.

109. In accordance with paragraph 4 of decision XXXI/8, the Secretariat will make all forms submitted by parties nominating members to the Panel available on the portal for the Thirty-Fifth Meeting of the Parties, to make it easier for parties to review and discuss the proposed nominations.

110. Nominations to the technical options committees other than for co-chair positions, as well as nominations to temporary subsidiary bodies, can be made at any time. Appointments are made by the co-chairs of the relevant committees in consultation with the Panel.

111. The terms of reference of the Panel are posted on the meeting portal for ease of reference to the procedures for nominating and appointing Panel members. In addition, the parties may wish to use the online primer on the operation of the Technology and Economic Assessment Panel.<sup>11</sup>

112. At the time of preparation of the present note, the Secretariat had received a submission from Egypt nominating Omar Abdelaziz, currently co-chair of the Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee, to continue serving in that role for an additional four years.

<sup>10</sup> <https://ozone.unep.org/science/assessment/teap/teap-expertise-required>.

<sup>11</sup> [ozone.unep.org/teap-primer](https://ozone.unep.org/teap-primer).



113. The Secretariat will provide any additional information that becomes available in the addendum to the present note.

**U. Compliance and data reporting issues: the work and recommendations of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol (item 21 of the provisional agenda for the preparatory segment)**

114. The President of the Implementation Committee will report on party compliance issues considered during the Committee's seventieth meeting, held on 1 July 2023, and its seventy-first meeting, to be convened on 20 October 2023, immediately prior to the Thirty-Fifth Meeting of the Parties.

115. Any recommendations and draft decisions emanating from those meetings of the Committee will be presented by the President for consideration and possible adoption by the Thirty-Fifth Meeting of the Parties.

**V. Reclassification of developing countries (item 22 of the provisional agenda for the preparatory segment)**

116. In accordance with rule 9 of the rules of procedure for meetings of the parties to the Montreal Protocol, the United States of America submitted an agenda item "Reclassification of developing countries" for inclusion in the provisional agenda. The associated draft decision that proposes reclassification of China is contained in annex IV to the present note.

117. Parties may wish to discuss the matter during the preparatory segment and propose a way forward, as appropriate.

**W. Status of ratification of the Kigali Amendment to the Montreal Protocol (item 23 of the provisional agenda for the preparatory segment)**

118. The Kigali Amendment to the Montreal Protocol was adopted on 15 October 2016 through decision XXVIII/1 and entered into force on 1 January 2019. At the time of preparation of the present note, 151 parties had ratified the amendment. Document UNEP/OzL.Pro.35/INF/4, to be issued closer to the start of the Thirty-Fifth Meeting of the Parties, will set out the status of ratification of the Kigali Amendment by the parties. Any further updates will be provided during the meeting.

119. During the preparatory segment, parties may wish to consider a draft decision recording the status of ratification at the time of the Thirty-Fifth Meeting of the Parties and urging further ratification of the Kigali Amendment, for possible adoption during the high-level segment. A placeholder draft decision on the matter is set out in section III of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[GG].

**X. Other matters (item 24 of the provisional agenda for the preparatory segment)**

120. Any additional issues that the parties agree to include on the agenda during the adoption of the agenda of the preparatory segment will be taken up under agenda item 24, "Other matters".

**III. Overview of items on the provisional agenda for the high-level segment (26 and 27 October 2023)**

**A. Opening of the high-level segment (item 1 of the provisional agenda for the high-level segment)**

121. The high-level segment is scheduled to be opened at 10 a.m. on Thursday, 26 October 2023.

122. Opening statements will be made by the President of the Thirty-Fourth Meeting of the Parties to the Montreal Protocol and representatives of UNEP and the Government of Kenya (item 1 (a), (b) and (c) of the provisional agenda for the high-level segment).

**B. Organizational matters (item 2 of the provisional agenda for the high-level segment)**

**1. Election of officers for the Thirty-Fifth Meeting of the Parties to the Montreal Protocol (item 2 (a) of the provisional agenda for the high-level segment)**

123. In accordance with rule 21 of the rules of procedure for meetings of the parties to the Montreal Protocol, the Thirty-Fifth Meeting of the Parties must elect a president, three vice-presidents and a rapporteur. A representative of a party from the Asia-Pacific States (Bahrain) presided over the Thirty-Fourth Meeting of the Parties, while a representative of a party from the African States (Kenya) served as rapporteur. On the basis of regional rotation agreed by the parties, the parties may wish to elect a party from the Eastern European States to preside over the Thirty-Fifth Meeting of the Parties and a party from the Asia-Pacific States to serve as rapporteur. The parties may also wish to elect three vice-presidents, one each from the African States, Latin American and Caribbean States, and Western European and other States.

**2. Adoption of the agenda of the high-level segment (item 2 (b) of the provisional agenda for the high-level segment)**

124. The provisional agenda for the high-level segment is set out in section II of document UNEP/OzL.Pro.35/1 and will be before the parties for adoption. The parties may wish to adopt the agenda, including agreeing any matters that they may wish to raise under item 8, "Other matters".

**3. Organization of work (item 2 (c) of the provisional agenda for the high-level segment)**

125. The President of the Thirty-Fifth Meeting of the Parties is expected to outline a plan of work for discussing the items on the agenda.

**4. Credentials of representatives (item 2 (d) of the provisional agenda for the high-level segment)**

126. In accordance with rule 18 of the rules of procedure, the credentials of representatives and the names of alternate representatives and advisers are to be submitted to the Executive Secretary of the meeting, if possible not later than 24 hours after the opening of the meeting. Representatives are urged to come to the meeting with credentials duly signed by the appropriate authority for submission and to submit them to the Secretariat as soon as possible after the start of the meeting. In accordance with rule 19 of the rules of procedure, the elected officers of the meeting will examine the credentials and submit their report thereon to the parties.

**C. Presentations by the assessment panels on their synthesis report on the 2022 quadrennial assessment (item 3 of the provisional agenda for the high-level segment)**

127. Under this agenda item, the co-chairs of the three assessment panels will present their synthesis report on the 2022 quadrennial assessment reports that were finalized at the end of 2022 and distributed to the parties in early 2023. The parties may wish to take note of their presentation and take action either at the current meeting or later, as they deem appropriate.

**D. 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 (item 4 of the provisional agenda for the high-level segment)**

128. Under this agenda item, the Chair of the Executive Committee of the Multilateral Fund will introduce a report by the Executive Committee to the parties, highlighting the key decisions made by the Committee and the work undertaken by the Multilateral Fund secretariat and the Fund's implementing agencies since the Thirty-Fourth Meeting of the Parties. The report of the Executive Committee to the Thirty-Fifth Meeting of the Parties can be found in document UNEP/OzL.Pro.35/9.

**E. Statements by heads of delegation and discussion of key topics (item 5 of the provisional agenda for the high-level segment)**

129. Under this agenda item, heads of delegation will be invited to make statements. The Secretariat will start to accept requests to speak from the first day of the preparatory segment of the meeting and will compile a list of speakers based on those requests. In the interest of fairness to all delegations and to ensure that all who wish to speak have an opportunity to do so, it will be important for heads of delegation to limit their statements to four or five minutes. Statements by heads of delegations of parties will be delivered in the order in which their requests to speak are received, subject to the understanding that ministers will be accorded priority.

**F. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Thirty-Fifth Meeting of the Parties (item 6 of the provisional agenda for the high-level segment)**

130. Under agenda item 6, the co-chairs of the preparatory segment will be invited to report to the parties on the progress made in reaching consensus on the substantive issues on the agenda, including on the draft decisions to be considered for adoption during the high-level segment.

**G. Dates and venue of the Thirty-Sixth Meeting of the Parties to the Montreal Protocol (item 7 of the provisional agenda for the high-level segment)**

131. It is expected that the Thirty-Fifth Meeting of the Parties will adopt a decision on the dates and venue of the Thirty-Sixth Meeting of the Parties. The relevant placeholder draft decision is set out in section III of document UNEP/OzL.Pro.35/3 as draft decision XXXV/[HH].

**H. Other matters (item 8 of the provisional agenda for the high-level segment)**

132. Any additional substantive issues agreed for inclusion during the adoption of the agenda of the high-level segment will be taken up under agenda item 8, "Other matters".

**I. Adoption of decisions by the Thirty-Fifth Meeting of the Parties to the Montreal Protocol (item 9 of the provisional agenda for the high-level segment)**

133. Under this agenda item, the Thirty-Fifth Meeting of the Parties will adopt decisions on the matters on the agenda.

**J. Adoption of the report of the meeting (item 10 of the provisional agenda for the high-level segment)**

134. Under this agenda item, the Thirty-Fifth Meeting of the Parties will adopt the report of the meeting.

**K. Closure of the meeting (item 11 of the provisional agenda for the high-level segment)**

135. The Thirty-Fifth Meeting of the Parties to the Montreal Protocol is expected to close by 6 p.m. Nairobi time (UTC + 3) on Friday, 27 October 2023.

**Annex I\*****Suggestions for additional analysis in a supplementary report on Multilateral Fund replenishment for the period 2024–2026****A. Overall suggestions / Methodological approach**

1. Where the RTF uses cost estimates for specific activities drawn from the MLF business plan, include a scenario with a discounting approach as applied by previous replenishment reports. It should reflect that the funding approvals in ExCom were on average found to be lower by 15 to 20% (at present 26% lower) compared to the original cost and expenditures estimated in the business plans;
2. Include two new scenarios for estimating the funding for the HCFC phase-out and HFC phase-down that are based on the actual consumption (or estimates of such consumption when not reported) to be reduced for countries to meet compliance targets including both the freeze target and the 10% reduction target for the HFC phase-down and ranges for the respective funding requirements to account for uncertainties;
3. Adjust the funding estimated for the HCFC phase-out and HFC phase-down by taking into account potential approvals of projects and project preparation requests at the 93rd meeting of the ExCom;

**B. ExCom92 decisions**

4. Adjust all elements of the funding requirements based on any relevant decisions taken at the 92nd meeting of the ExCom;
5. Include a scenario, wherein some Article 5 parties submit proposals to phase down HFCs in advance of applicable compliance targets in accordance with ExCom decisions 92/44 and 92/37;

**C. HCFC**

6. When estimating the funding requirement for new HPMPs, identify the sectors that would likely be addressed by these HPMPs, based on remaining HCFC consumption per sector, and apply cost effectiveness factors to calculate funding for these sectors that are based on historical experience under the Multilateral Fund;
7. Consider scenario removing the HCFC production phase-out plan for India that is not included in the consolidated Business Plan of the ExCom;
8. Review the funding requirement for HPMP preparation funding to account for all the countries identified to require new HPMPs in the 2024-2026 triennium;

**D. HFC**

9. Develop a scenario estimating funding for KIPs for Group I and Group II countries which have ratified the Kigali Amendment assuming that 90% of Group I and 30% of Group II countries request funding;
10. Add scenario for frontloading funding for KIPs during 2024-2026, taking into account the lessons learned from the implementation of HPMPs;
11. Reviewing funding requirement for KIPs preparation funding to account for all the countries identified to require KIPs in the 2024-2026 triennium;
12. A scenario prioritizing the manufacturing sectors for non-LVCs;
13. When estimating the funding requirement for KIPs, apply cost effectiveness factors for manufacturing sectors that are based on historical experience under the MLF and/or a technical assessment of the costs to transition to alternatives, taking into account any available information from MLF documents, previous TEAP reports and other sources and ExCom agreed cost guidelines;
14. Review the funding requirement for the phase-down HFC production and HFC-23 by-product mitigation, based on a technical assessment of the costs, to the extent possible, taking into account the

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\* The annex has not been formally edited.

experience with such projects under the MLF and the past funding practice in the production phase-out/down projects;

15. A scenario for funding 10 to 15 individual investment projects;
16. A scenario to address the challenges for SMEs including safety issues, including in the installation and assembly sectors in implementation of KIPs;
17. Evaluate the potential cost implications of leapfrogging and/or taking early action to phase down HFCs in advance of compliance targets;

#### **E. Energy efficiency**

18. A scenario for funding 10 to 15 energy efficiency pilot projects;
19. Include a scenario wherein an incentive is provided as part of the funding for KIPs to enhance energy efficiency while phasing down HFCs in accordance with ExCom decision 92/38;
20. Consider activities to support SMEs in design and development of energy efficient technology and their implementation;
21. Consider energy efficiency related policies and regulations capacity building;
22. Consider additional costs for energy efficient foam products;
23. Consider regional testing centers for monitoring and verification of energy efficiency;
24. Analyze additional costs for including energy efficiency as an incentive for enhancing ambitious HFC-phase down and leapfrogging HFCs in the frame of the HPMPs and KIPs;
25. Provide cost estimates of potential support for systemic approaches to EE in KIPS, beyond the pilot window;

#### **F. End of Life**

26. Provide estimates of costs of managing reclamation, recycling, and cost-effective destruction of banks, including collection, transport, and disposal activities;
27. Consider a scenario for end-of-life activities considered under ExCom decision 91/66 where only 30 % of countries request funding during this replenishment.

## Annex II

### **List of suggested elements to be included in draft decisions on strengthening Montreal Protocol institutions, including for combatting illegal trade, as developed in the informal group under item 5 of the agenda for the forty-fifth meeting of the Open-ended Working Group**

1. Preventing illegal trade:
  - (a) Common understanding of illegal trade/activities;
  - (b) Identification of information;
  - (c) Controlling;
  - (d) Monitoring;
  - (e) Reporting;
2. Licensing and quota systems:
  - (a) International level: institutions, mechanisms, recommendations;
  - (b) National level: practices for implementation, domestic measures, capacity strengthening, ensuring compliance of individual parties;
3. Implementation and enforcement systems:
  - (a) International level: institutions, mechanisms, recommendations:
    - (i) Role of the Implementation Committee: task the Committee with advisory functions, enabling parties to ask for opinions from the Committee in relation to general issues with the compliance mechanism;
    - (ii) National level: practices for implementation, domestic measures, capacity strengthening, ensuring compliance of individual parties;
4. Reporting system/practices under Article 7, and information needed outside the scope of Article 7:
  - (a) International level: institutions, mechanisms, recommendations:
    - (i) Authorize the Secretariat to follow up with parties as required to clarify article 7 data when needed;
    - (ii) Clarify data reporting requirements regarding import/export of controlled substances in free trade zones;
    - (iii) Indicate how to account for controlled substances used to service refrigeration systems on ships, particularly ships under foreign flags;
  - (b) National level: practices for implementation, domestic measures, capacity strengthening, ensuring compliance of individual parties;
5. Assessment of opportunities to strengthen the Montreal Protocol.

## Annex III

### Members of the Technology and Economic Assessment Panel technical options committees whose membership expires at the end of 2023 and whose reappointment does not require a decision by the Meeting of the Parties

<i>Name</i>	<i>Position</i>	<i>Country</i>
<b>Members of technical options committees</b>		
Paul Ashford	FTOC member	United Kingdom of Great Britain and Northern Ireland
Rick Duncan	FTOC member	United States of America
Shpresa Kotaji	FTOC member	Belgium
Simon Lee	FTOC member	United States of America
Dave Williams	FTOC member	United States of America
Youri Auroque	FSTOC member	France
Johan Åqvist	FSTOC member	Sweden
Tim Widmer	MBTOC member	United States of America
Christian Sekomo Birame	MCTOC member	Rwanda
Rabinder Kaul	MCTOC member	India
B. Narsaiah	MCTOC member	India
José Pons Pons	MCTOC member	Venezuela
David Sherry	MCTOC member	United Kingdom of Great Britain and Northern Ireland
Peter Sleight	MCTOC member	United Kingdom of Great Britain and Northern Ireland
Ashley Woodcock	MCTOC member	United Kingdom of Great Britain and Northern Ireland

*Abbreviations:* FSTOC – Fire Suppression Technical Options Committee; FTOC – Flexible and Rigid Foams Technical Options Committee; MBTOC – Methyl Bromide Technical Options Committee; MCTOC – Medical and Chemicals Technical Options Committee.



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**Annex IV\*****Draft decision proposed by the United States of America****Reclassification of developing-country status for China**

*Recalling* decisions XII/12, XVI/40, XVII/2, XIX/19 and XXV/16, which removed specified countries from the list of developing countries operating under paragraph 1 of Article 5 of the Montreal Protocol initially specified in Decision I/12E,

*Recalling* Decision IV/7, which notes the recommendation of the Open-Ended Working Group that the Parties should consider the classification of a Party as a developing country for purposes of the Protocol on a case-by-case basis,

*Noting* that since adoption of Decision I/12E, China has grown to become the second largest economy in the world, is the largest producer and consumer of controlled substances, and is no longer reliant on financial support to implement transitions from controlled substances,

*The Parties decide:*

To remove China from the list of developing countries operating under paragraph 1 of Article 5 of the Montreal Protocol, and note further that China shall assume the obligations of a Party not operating under paragraph 1 of Article 5 of the Montreal Protocol from 1 January 2025.

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\* The annex has not been formally edited.