|  |  |
| --- | --- |
| **UNITEDNATIONS** | **EP** |
| UNEP | **United Nations****Environment****Programme** | Distr.GENERALUNEP/OzL.Pro/ExCom/84/6615 November 2019ORIGINAL: ENGLISH |

EXECUTIVE COMMITTEE OF
 THE MULTILATERAL FUND FOR THE
 IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-fourth Meeting

Montreal, 16 – 20 December 2019

**DEVELOPMENT OF THE COST GUIDELINES FOR THE PHASE-DOWN OF HFCs IN ARTICLE 5 COUNTRIES: DRAFT CRITERIA FOR FUNDING**

**(DECISION 83/65)**

**Background**

# The Twenty-eighth Meeting of the Parties adopted decision XXVIII/2 requesting the Executive Committee to develop within two years guidelines for financing the phase-down of hydrofluorocarbon (HFC) consumption and production, including cost-effectiveness thresholds, and to present those guidelines to the Meeting of the Parties for the parties’ views and input before their finalization.[[1]](#footnote-1)

# At their Thirtieth Meeting, the Parties requested the Executive Committee to continue its work on developing guidelines for financing the phase-down of HFC consumption and production; to provide an update on progress on the elements as part of the annual report of the Executive Committee to the Meeting of the Parties; and to present the draft guidelines developed to the Meeting of the Parties for the parties’ views and input before their finalization by the Executive Committee (decision XXX/4).

# Since its 77th meeting, the Executive Committee has been discussing matters related to the phase‑down of HFCs in Article 5 countries, including the development of cost guidelines.[[2]](#footnote-2) As of the 83rdmeeting, the Executive Committee adopted a draft template, which included text agreed by the Committee for some of the elements of decision XXVIII/2. Additional elements to the cost guidelines could be added to the draft template, as required, in line with decisions 80/76(b), 81/67(f) and 83/65(d). The draft template is contained in Annex I to the present document.

# At the 83rd meeting, the Executive Committee also updated the working document on outstanding issues (contained in Annex XIV of the report of the 83rd meeting)[[3]](#footnote-3) by removing the text related to energy efficiency as it would be discussed separately.

# A summary of the status of the Executive Committee’s discussions on the elements of the cost guidelines is presented in Table 1. In line with decisions 80/76(b), 81/67(f) and 83/65(d), Annex II of the present document contains the list of outstanding issues for further discussion. To facilitate the discussion by Executive Committee members, the Secretariat has updated Annex II by adding text in brackets and highlighted, in light of the document providing an analysis of the level and modalities of funding for the HFC phase-down for the refrigeration servicing sector to be submitted at the 85th meeting in line with decision 83/65(b), and the discussions that will be held on energy efficiency at the 84th meeting.

**Table 1. Status of elements of the cost guidelines for the phase-down of HFCs in Article 5 parties**

| **Element of decision XXVIII/2** | **Paragraph** | **Status** | **Expected additional action** |
| --- | --- | --- | --- |
| ***Discussed*** |  |  |  |
| Flexibility in implementation that enabled parties to select their own strategies and priorities in sectors and technologies | 13  | Text included in the draft template | None |
| Cut-off dates for eligible capacity | 17 | Text included in the draft template | None |
| Second and third conversions | 18 | Text included in the draft template | None |
| Other costsa | 25 | Text not included in the draft template | None |
| Eligibility of Annex F substances subject to high‑ambient‑temperature exemptions | 35 | Text included in the draft template | None |
| ***Under discussion*** |  |  |  |
| Sustained aggregate reductions in consumption and production | 19 | Text included in the draft template, but a methodology for establishing the starting point for sustained aggregate reductions has not been developedb | To continue discussions at the 84th meeting, and to propose and agree on methodology(-ies) for establishing the starting point.Members may wish to refer to Annex II to the present document, and to document UNEP/OzL.Pro/ExCom/82/66 |
| Eligible incremental costs | 15 |  |  |
| Consumption manufacturing sector | 15(a)  | Text on categories of eligible costs included in the draft template. Cost-effectiveness thresholds to be established, based on data from approved HFC phase‑out investment projectsc | To consider establishing cost‑effectiveness thresholds once the results of HFC stand-alone investment projects are available.Members may wish to refer to Annex II to the present document |
|  Production sector | 15(b) | Text on categories of eligible costs included in the draft template | To consider, on a case‑by‑case basis, compensation for compliance related to control obligations for the production sector |
|  Refrigeration servicing sector | 15(c) | Text on categories of eligible costs included in the draft template. Additional policy documents on the servicing sector have been considered at the 82nd and 83rd meetingsd | To consider establishing cost‑effectiveness thresholds at the 85th meeting based on the document submitted to the 82nd meeting and to be submitted to the 85th meeting |
| Energy efficiency | 22  | The following documents were submitted to the 83rd meeting and are under discussion:* Ways to operationalize paragraph 16 of decision XXVIII/2 and paragraph 2 of decision XXX/5e
* Information on funds and financial institutions mobilizing resources for energy efficiency that may be utilized when phasing down HFCsf
* Summary of the report by the Technology and Economic Assessment Panel (TEAP) on matters related to energy efficiency with regard to the issues identified in decision 82/83(e)g
 | To continue discussions at the 84th meeting under agenda item 13(b) on Matters related to the Kigali Amendment to the Montreal Protocol: Energy efficiency.To consider whether to include in the cost guidelines for phasing down HFCs in Article 5 countries any decision it adopts on energy efficiency under agenda item 13(b) |
| Capacity building to address safety | 23 | Text included in the draft template. Details to be discussed | To be discussed at the 85th meeting together with the refrigeration servicing sector based on the document submitted to the 82nd meetingh and to be submitted to the 85th meeting |
| Disposal | 24 | Discussion started at the 82nd meeting based on the synthesis report on the ODS disposal projects in response to decision 79/18(e)i. Final report on the evaluation of ODS disposal projects will be submitted to the 84th meetingj | To continue discussions at the 84th meeting, in light of the documents on ODS disposal submitted to the 82nd meeting and to be submitted to the 84th meeting. |

a. “Parties may identify other cost items to be added to the indicative list of incremental costs emanating as a result of the conversion to low‑GWP alternatives.”

b. UNEP/OzL.Pro/ExCom/82/66 on Key considerations for developing a methodology for establishing the starting point for sustained aggregate reductions for the consumption and production sectors under the Kigali Amendment, was considered at the 82nd meeting.

c. Investment projects could be approved up to the 84th meeting in line with decision 81/53(b).

d. Preliminary document on all aspects related to the refrigeration servicing sector that support the HFC phase‑down was considered at the 82nd meeting (UNEP/OzL.Pro/ExCom/82/64). The Secretariat was requested to prepare a document for the 85th meeting providing an analysis on the level and modalities of funding for the HFC phase-down for the sector (decision 83/65(b)).

e. UNEP/OzL.Pro/ExCom/83/40 and UNEP/OzL.Pro/ExCom/84/67

f. UNEP/OzL.Pro/ExCom/83/41 and UNEP/OzL.Pro/ExCom/84/68

g. UNEP/OzL.Pro/ExCom/83/42 and UNEP/OzL.Pro/ExCom/84/69

h. UNEP/OzL.Pro/ExCom/82/64

i. UNEP/OzL.Pro/ExCom/82/21 requested by decision 81/67(d).

j. UNEP/OzL.Pro/ExCom/84/11 requested by decision 83/65(c).

# The Executive Committee may wish to note that at their Thirty-First Meeting, the Parties to the Montreal Protocol agreed on the terms of reference for the study on the 2021-2023 replenishment of the Multilateral Fund for the implementation of the Montreal Protocol.[[4]](#footnote-4) The Parties requested the TEAP to prepare a report for submission to the Forty-Second Meeting of the Open-Ended Working Group to enable the Thirty-Second Meeting of the Parties to adopt a decision on the appropriate level of the 2021–2023 replenishment of the Multilateral Fund. In preparing the report, the TEAP should take into account, among others: the decisions, rules and guidelines agreed by the Executive Committee at its meetings, up to and including its 85th meeting; the cost of supporting a limited number of stand-alone projects transitioning out of HFCs in accordance with paragraph 4 of decision XXX/5;[[5]](#footnote-5) and the need to allocate resources for Article 5 parties to comply with the Kigali Amendment, including the preparation and, if needed, the implementation of phase-down plans for HFCs that could include early activities in the servicing/end‑users sector in order to comply with the Kigali Amendment by addressing the high growth rate in HFC consumption. Consequently, progress on the development of the cost guidelines for the phase-down of HFCs that would be achieved at the 84th and 85th meetings would be considered by the TEAP.

**Outstanding issues on the cost guidelines for the phase-down of HFCs**

# A summary of the progress so far achieved on outstanding elements of the cost guidelines and suggestions on how to continue discussions at the 84th meeting, are presented below.

Methodology for determining the starting point for sustained aggregate reductions

# At the 81st meeting, issues related to the starting point for sustained aggregate reduction in consumption and production were discussed in the contact group on the cost guidelines. Some members suggested that the HFC starting point be determined by the “HFC component” of the baseline, while others suggested the HFC baseline established by the parties under the Kigali Amendment (i.e., the “HFC component” plus the “HCFC component”).[[6]](#footnote-6) Subsequently, the Secretariat was requested to prepare a preliminary information document containing key considerations that could assist the Committee in developing a methodology for establishing the starting point for sustained aggregate reductions, taking into account the discussions that had taken place at the meeting (decision 81/67(e)).

# In response to decision 81/67(e), the Secretariat submitted to the 82nd meeting document UNEP/OzL.Pro/ExCom/82/66. Based on the document, the Executive Committee discussed *inter alia* the units to be used to measure the reductions and the methodology for setting the starting point. Some members proposed to use metric tonnes (mt), as that unit of measurement reflected the actual production of the converted plants. Other members proposed CO2-equivalent tonnes in order to measure the environmental impact of the conversions. Some other members suggested using both units of measurement at first and making a definitive decision about which to use once the pros and cons of each approach had been ascertained. Members also made suggestions on: including pre-blended polyols in the starting point, on the understanding that such consumption would be monitored and controlled by Article 5 countries; and excluding the phase-down tail (20 per cent for Article 5 group 1 countries and 15 per cent for Article 5 group 2 countries) from the starting point because the reduction of that part of the total tonnage was not mandated by the Montreal Protocol.

# Discussions on the matter by the contact group continued in the margins of the 83rd meeting where, *inter alia*:

## Members proposed possible options for determining the starting point, including the HFC baseline (including its HFC and the HCFC components), the HFC component of the baseline, or an intermediate value between the two. It was also proposed that Article 5 countries could choose as the starting point the HFC consumption from a number of previous years (e.g., last year or the average of the last three years) or the year when the first HFC investment project had been approved by the Committee;

## The inclusion in the starting point of HFC contained in imported pre-blended polyols, and the exclusion of HFC contained in exported pre-blended polyols, on the understanding that such consumption would be monitored and controlled by Article 5 countries. Members agreed to include text to reflect this proposal in the working document of the contact group, contained in Annex XIV of the report of the 83rd meeting and Annex II of the present document;

## The exclusion of the HFC phase‑down tail from the starting point as the phase-out of that consumption was not mandated by the Montreal Protocol. While there was no consensus, some members indicated that deducting the consumption associated with the tail would imply that the starting point would be based on the HFC baseline for compliance which would include the totality of the HFC and HCFC components; and

## Whether sustained reductions from the starting point should be accounted on a substance‑by‑substance basis. Different views were expressed, including that the starting point should be one unique number, and that reductions should be made by substance, but only for the most commonly used HFCs.

# At the 84th meeting, the Executive Committee may wish to continue discussions on this matter, taking into account the considerations contained in document UNEP/OzL.Pro/ExCom/82/66 and the discussion at the 83rd meeting.

# Eligible incremental costs for the consumption manufacturing sector

# Since the 77th meeting, the Executive Committee has had several discussions on cost-effectiveness thresholds for the phase-out of HFCs. It has been noted that the cost-effectiveness thresholds for the phase‑out of CFCs and HCFCs were not necessarily applicable for HFCs; that there was limited experience at the Fund in phasing out HFCs in certain sectors; and that the associated incremental costs might differ from the costs associated with phasing out other controlled substances. Accordingly, the Committee considered that additional information was required to reach a decision on eligible incremental costs, and agreed to consider approving a limited number of stand-alone HFC investment projects, on a case-by-case basis in terms of maturity of technology, replicability and geographic distribution (decisions 78/3 and 79/45).[[7]](#footnote-7)

# As of the 83rd meeting, 10 stand-alone investment projects[[8]](#footnote-8) had been approved at a total cost of US $13,397,249 (plus agency support costs) to phase down 1,090 mt (1.63 million mt CO2-eq) of HFCs in the air‑conditioning, domestic and commercial refrigeration manufacturing sectors in nine countries. At the 84th meeting, one additional project to phase out 2.24 mt (3,200 mt CO2-eq) of HFCs in the air‑conditioning manufacturing sector at a total cost of US $175,300 is being considered for funding[[9]](#footnote-9). The first project approved at the 81st meeting is expected to be completed by the end of 2019 and the relevant information on incremental costs incurred to be submitted to the 85th meeting.

# At the 83rd meeting, one member proposed that the cost-effectiveness thresholds should be established with appropriate methodology, taking into account relevant information, decisions of the Executive Committee and results of the implementation of stand-alone HFC investment projects. A draft text to reflect this proposal was included in the working document of the contact group, contained in Annex XIV of the report of the 83rd meeting and Annex II of the present document.

# The Executive Committee may wish to consider establishing cost-effectiveness thresholds through an appropriate methodology once the results of projects are available, taking into account relevant information and decisions of the Executive Committee.

Eligible incremental costs for the refrigeration servicing sector

# At the 80th meeting, the Secretariat was requested to prepare, in cooperation with bilateral and implementing agencies, a preliminary document on all aspects relating to the refrigeration servicing sector that supported HFC phase-down, for submission to the 82nd meeting[[10]](#footnote-10) (decision 80/76(c)). At its 81st meeting, the Committee decided to consider, at the 82nd meeting, the matter of prioritization of technical assistance and capacity building to address safety issues associated with alternatives with low- and zero‑global‑warming potential (GWP) for all sectors,[[11]](#footnote-11) in light of the above-mentioned document on the refrigeration servicing sector (decision 81/67(c)).

# In response to decisions 80/76(c) and 81/67(c), at its 82nd meeting, the Executive Committee considered document UNEP/OzL.Pro/ExCom/82/64. During the discussions members identified additional activities in the refrigeration servicing sector that would be required under HFC phase-down and were beyond those already being implemented under HCFC phase-out, including: building capacity on risk assessment and management of flammable refrigerants; activities in the assembly and installation sub‑sector; enhancing and/or maintaining energy efficiency during installation and servicing; and ensuring reclamation of a wider variety of refrigerants, given the possibility of larger quantities of blends for disposal. With regard to the increase in funding for low-volume-consuming (LVC) countries when replacing HCFCs in servicing in line with paragraph 16 of decision XXVIII/2, the Committee agreed to discuss this matter under energy efficiency as related to decision XXX/5.

# At its 83rd meeting, the Executive Committee continued discussing issues related to the refrigeration servicing sector, including opportunities and synergies between implementing activities that will concurrently phase out HCFCs and phase down HFCs; challenges in the introduction of low-GWP alternatives; and the flexibility required by Article 5 countries to allocate funding to strategic priorities based on their consumption and national circumstances. As a result of those discussions, the Secretariat was requested to prepare a document for the 85th meeting providing an analysis of the level and modalities of funding for HFC phase-down in the refrigeration servicing sector, in light of the information provided in document UNEP/OzL.Pro/ExCom/82/64 and guidance provided by the Executive Committee, including the flexibility Article 5 countries have in implementing their servicing sector activities in line with their national circumstances and the implementation of planned and ongoing activities in their HPMPs (decision 83/65(b)).

# While the Executive Committee may wish to consider establishing cost-effectiveness thresholds for the refrigerant servicing sector once this document is submitted to the 85th meeting, it may also wish to note that currently, 59 LVC countries are preparing or will start preparing stage II of their HPMPs, and that as of 31 October 2019, 50 of those countries have ratified the Kigali Amendment and would be able to submit requests for preparatory funding for HFC phase-down plans, in line with decision 79/46(b)(iii). The possible consideration of a starting point for sustained reductions in HFC consumption for the refrigeration servicing sector separately from a starting point in the manufacturing sector[[12]](#footnote-12) may also be beneficial as the majority of LVC countries and many non-LVC countries may only have HFC consumption in this sector.

Energy efficiency

# At its 81st meeting, the Executive Committee discussed matters related to energy efficiency, and requested the Secretariat to provide to the 82nd meeting the summary of the parties’ deliberations at the 40th Meeting of the Open-Ended Working Group (OEWG) of the parties and at the Thirtieth Meeting of the Parties in relation to the report by the TEAP on issues related to energy efficiency, in response to decision XXIX/10 (decision 81/67(b)).

# In response to decision 81/67(b), the Secretariat submitted to the 82nd meeting documents UNEP/OzL.Pro/ExCom/82/65 and Add.1. At the same meeting, the Committee agreed to discuss energy efficiency separately from the HFC phase-down cost guidelines, and to discuss the increase in funding for LVC countries when replacing HCFCs in the servicing sector in line with paragraph 16 of decision XXVIII/2 under energy efficiency as related to paragraph 2 of decision XXX/5.[[13]](#footnote-13)

# Further to its deliberations, the Executive Committee decided *inter alia* to discuss at its 83rd meeting (decision 82/83):

## A document on ways to operationalize paragraph 16 of decision XXVIII/2, and paragraph 2 of decision XXX/5;

## A document providing information on relevant funds and financial institutions mobilizing resources for energy efficiency that might be utilized when phasing down HFCs under the Multilateral Fund;

## Ways to operationalize paragraph 22 of decision XXVIII/2, and paragraphs 5 and 6 of decision XXX/5; and

## A summary of the report by the TEAP on matters related to energy efficiency with regard to the issues identified in sub-paragraph (e) of decision 82/83.[[14]](#footnote-14)

# At the 83rd meeting, the Executive Committee considered documents[[15]](#footnote-15) prepared by the Secretariat in response to decision 82/83 under agenda item 12(a), Matters related to the Kigali Amendment to the Montreal Protocol: Energy efficiency.[[16]](#footnote-16) Issues related to energy efficiency will continue to be discussed at the 84th meeting under agenda item 13(b).[[17]](#footnote-17)

# The Executive Committee may wish to consider whether to include in the cost guidelines for phasing down HFCs in Article 5 countries any decision it adopts on energy efficiency under agenda item 13(b).

Disposal

# At its 81st meeting, the Executive Committee decided to consider, at its 82nd meeting, issues related to funding the cost-effective management of stockpiles of used or unwanted controlled substances, including through destruction, in light of the paper on ODS disposal being prepared by the Secretariat in response to decision 79/18(e) (decision 81/67(d)).

# In response to decision 81/67(d), the Secretariat submitted to the 82nd meeting document UNEP/OzL.Pro/ExCom/82/21.[[18]](#footnote-18) During the discussions, some members, while cognizant that disposal was important and mandated by decision XXVIII/2, were of the view that, as disposal was not required for compliance and was not an incremental cost, it should not be discussed as part of the HFC phase-down cost guidelines. Other members considered disposal to be of fundamental importance, particularly for LVC countries, and saw it as an integral part of the cost guidelines.

# Discussions continued at the 83rd meeting, where some members reiterated the view that while disposal of unwanted ODS was important and mandated by decision XXVIII/2, it should not be discussed as part of the HFC phase-down cost guidelines, while other members reiterated the view that disposal was particularly important for LVC countries. It was agreed to further discuss this matter at the 84th meeting, in light of the final report on the evaluation of pilot demonstration projects on ODS disposal and destruction to be submitted by the Senior Monitoring and Evaluation Officer.[[19]](#footnote-19)

# The Executive Committee may wish to continue discussions on this matter during the 84th meeting, in light of decision 83/65(c).

Other general matters related to HFC phase-down

# The document on the cost guidelines for the phase-down of HFCs submitted to the 80th meeting included overarching aspects[[20]](#footnote-20) that were already being applied in the context of enabling activities and stand-alone HFC investment projects currently under implementation (these aspects are contained in Part III of Annex II to the present document). However, the Executive Committee has not reached an agreement on those overarching aspects.

# Noting that the overarching aspects are being applied, the Executive Committee may wish to consider whether to incorporate the text contained in Part III of Annex II to the present document into the Draft template of the cost guidelines for the phase-down of HFCs contained in Annex I to the present document.

**Recommendation**

# The Executive Committee may wish:

## To note document UNEP/OzL.Pro/ExCom/84/66 on the development of the cost guidelines for the phase-down of HFCs in Article 5 countries: Draft criteria for funding; and

## To continue its deliberation of the cost guidelines for the phase-down of HFCs in Article 5 countries using as reference Annex II of the present document, noting the highlighted blue text in brackets added by the Secretariat to facilitate discussion.

**Annex I**

**DRAFT TEMPLATE OF THE COST GUIDELINES FOR THE PHASE-DOWN OF HFCs**

**(As of the 83rd meeting)**

Background

1. The present Annex contains the draft cost guidelines for the phase-down of HFCs based on the relevant elements of decision XXVIII/2 agreed by the Parties at their Twenty-Eighth Meeting. These draft cost guidelines contain elements agreed at the 78th and 80th meetings of the Executive Committee, and will be updated pursuant to further discussions at future meetings of the Executive Committee.

Draft cost guidelines for the phase-down of HFCs

**Flexibility in implementation that enables Parties to select their own strategies and priorities in sectors and technologies**

1. Article 5 countries will have flexibility to prioritize HFCs, define sectors, select technologies and alternatives and elaborate and implement their strategies to meet agreed HFC obligations, based on their specific needs and national circumstances, following a country-driven approach.

**Cut-off date for eligible capacity**

1. The cut-off date for eligible capacity is 1 January 2020 for those Parties with baseline years from 2020 to 2022, and 1 January 2024 for those Parties with baseline years from 2024 to 2026.

**Second and third conversions**

1. To apply the following principles for second and third conversion projects:
	1. First conversions, in the context of a phase-down of HFCs, are defined as conversions to low-global-warming potential (GWP) or zero-GWP alternatives of enterprises that have never received any direct or indirect support, in part or in full, from the Multilateral Fund, including enterprises that converted to HFCs with their own resources;
	2. Enterprises that have already converted to HFCs in phasing out CFCs and/or HCFCs will be eligible to receive funding from the Multilateral Fund to meet agreed incremental costs in the same manner as enterprises eligible for first conversions;
	3. Enterprises that convert from HCFCs to high-GWP HFCs, after the date of adoption of the Amendment, under HCFC phase-out management plans already approved by the Executive Committee will be eligible to receive funding from the Multilateral Fund for a subsequent conversion to low-GWP or zero-GWP alternatives to meet agreed incremental costs in the same manner as enterprises eligible for first conversions;
	4. Enterprises that convert from HCFCs to high-GWP HFCs with their own resources before 2025 under the Amendment will be eligible to receive funding from the Multilateral Fund to meet agreed incremental costs in the same manner as enterprises eligible for first conversions; and
	5. Enterprises that convert from HFCs to lower-GWP HFCs with Multilateral Fund support when no other alternatives are available will be eligible to receive funding from the Multilateral Fund for a subsequent conversion to low-GWP or zero-GWP alternatives if necessary to meet the final HFC phase-down step.

**Sustained aggregate reductions**

1. The remaining eligible consumption for funding in tonnage will be determined on the basis of the starting point of national aggregate consumption less the amount funded by previously approved projects in future multi-year agreement templates for HFC phase-down plans.

**Eligible incremental costs**

*Consumption manufacturing sector*

1. To make the following categories of costs eligible and to include them in the cost calculation associated with the phase-down of HFCs in the consumption manufacturing sector:
	1. Incremental capital costs;
	2. Incremental operating costs for a duration to be determined by the Executive Committee;
	3. Technical assistance activities;
	4. Research and development, when required to adapt and optimize alternatives to HFCs with low or zero GWP;
	5. Costs of patents and designs, and incremental costs of royalties, when necessary and cost‑effective; and
	6. Costs of the safe introduction of flammable and toxic alternatives.

*Production sector*

1. To make the following categories of costs eligible and to include them in the cost calculation associated with the phase-down of HFCs in the production sector:
	1. Lost profit due to the shutdown/closure of production facilities, as well as production reduction;
	2. Compensation for displaced workers;
	3. Dismantling of production facilities;
	4. Technical assistance activities;
	5. Research and development related to the production of low-GWP or zero-GWP alternatives to HFCs with a view to lowering the costs of alternatives;
	6. Costs of patents and designs or incremental costs of royalties;
	7. Costs of converting facilities to produce low-GWP or zero-GWP alternatives to HFCs when technically feasible and cost-effective; and
	8. Costs of reducing emissions of HFC-23, a by-product from the production process of HCFC-22, by reducing its emission rate in the process, destroying it from the off-gas, or by collecting and converting it to other environmentally safe chemicals; such costs should be funded by the Multilateral Fund to meet the obligations of Article 5 Parties specified under the Amendment.

*Refrigeration servicing sector*

1. To make the following categories of costs eligible and to include them in the cost calculation associated with the phase-down of HFCs in the refrigeration servicing sector:
	1. Public awareness activities;
	2. Policy development and implementation;
	3. Certification programmes and training of technicians on safe handling, good practices and safety in respect of alternatives, including training equipment;
	4. Training of customs officers;
	5. Prevention of illegal trade of HFCs;
	6. Servicing tools;
	7. Refrigerant testing equipment for the refrigeration and air-conditioning sector; and
	8. Recycling and recovery of HFCs.

**Energy efficiency**

**Capacity building to address safety**

**Disposal**

**Eligibility of Annex F substances subject to high-ambient-temperature exemption**

1. That amounts of Annex F substances that are subject to the high-ambient-temperature exemption are not eligible for funding under the Multilateral Fund while they are exempted for that Party.

**Annex II**

**Outstanding issues for further discussion by the Executive Committee ON THE COST GUIDELINES FOR THE PHASE-DOWN OF HFCs**

**(As of the 83rd meeting)**

Note by the Secretariat: The Executive Committee may wish to note that to facilitate its discussion on the outstanding issues on the cost guidelines for the phase-down of HFCs, the Secretariat has added some text in brackets and highlighted [in blue] in light of the document providing an analysis of the level and modalities of funding for the HFC phase-down for the refrigeration servicing sector, and the discussions that will be held on energy efficiency at the 84th meeting.

The outstanding issues for further discussion are presented in the following three parts:

I. In relation to the cost guidelines

II. Additional work to be requested from the Secretariat

III. Other general matters related to HFC phase-down

1. **IN RELATION TO THE COST GUIDELINES**

**Sustained aggregate reductions**

* 1. To use the following methodology [to be proposed by the Executive Committee] for determining the starting point for sustained aggregate reduction in HFC consumption and production, noting that the starting point should be expressed in [[CO2-equivalent] and/or [metric tonnes]];
	2. [add text for production];

## [When determining the starting point for aggregate reduction in HFC consumption, the following approach will be followed with regard to the import and export of HFCs contained in pre-blended polyols, which had not been counted as consumption under Article 7 of the Montreal Protocol:

### [Paragraph about internal production of pre-blended polyols];

### To request Article 5 countries to report under the country programme implementation report imports and exports of HFCs contained in pre-blended polyols;

### To request Article 5 countries that wished to seek assistance for the phase-out of imports of HFCs contained in pre-blended polyols to include in the starting point for aggregate reduction in HFC consumption the amount of HFC imported contained in polyol systems during the years used as reference to determine the starting point; and

### To request Article 5 countries that export HFC contained in pre-blended polyols to deduct from the starting point for aggregate reduction in HFC consumption the amount of HFC exported contained in polyol systems during the years used as reference to determine the starting point.]

**Eligible incremental costs**

*Consumption manufacturing sector*

## [To continue discussing the cost guidelines for the phase‑down of HFCs in Article 5 Parties, *inter alia* including establishment of cost-effectiveness thresholds, through an appropriate methodology in relation to consumption manufacturing sector, taking into account relevant information, decisions of the Executive Committee and results from the implementation of stand-alone HFC investment projects in all sectors of HFCs;]

*Refrigeration servicing sector*

## Note by the Secretariat: [At the 83rd meeting, the Executive Committee requested the Secretariat to prepare a document for the 85th meeting providing an analysis of the level and modalities of funding for the HFC phase-down for the refrigeration servicing sector, in light of the information provided in document UNEP/OzL.Pro/ExCom/82/64 and guidance provided by the Committee, including the flexibility Article 5 countries have in implementing their servicing sector activities in line with their national circumstances and the implementation of planned and ongoing activities in their HPMP (decision 83/65(b)). The Executive Committee may wish to consider establishing cost-effectiveness thresholds for the refrigeration servicing sector once this document is presented by the Secretariat at the 85th meeting.]

## [Consideration of paragraph 16 of decision XXVIII/2, [including consideration of maintaining energy efficiency in the servicing/end-user sector]]; [It is proposed to delete this paragraph as this issue is already being discussed separately under agenda item 13(b) on Matters related to the Kigali Amendment to the Montreal Protocol: Energy efficiency]

## **Energy efficiency**

Note by the Secretariat: [Issues related to energy efficiency will continue to be discussed at the 84th meeting under agenda item 13(b) on Matters related to the Kigali Amendment to the Montreal Protocol: Energy efficiency. The Executive Committee may wish to consider whether to include in the cost guidelines for phasing down HFCs in Article 5 countries any decision it adopts on energy efficiency under agenda item 13(b).]

**Capacity building to address safety**

Note by the Secretariat: [The Committee decided that this matter should be discussed along with matters related to the refrigeration servicing sector in light of the document on all aspects of the refrigeration servicing sector that support HFC phase-down.[[21]](#footnote-21) Noting that a document providing an analysis of the level and modalities of funding for HFC phase-down in the refrigeration servicing sector will be submitted to the 85th meeting, the Committee may wish to consider this element once the document is submitted for its consideration.]

**Disposal**

## To consider, at the 84th meeting, the matter of disposal of controlled substances, in light of the final report on the evaluation of pilot demonstration projects on ODS disposal and destruction to be submitted by the Senior Monitoring and Evaluation Officer;

1. **ADDITIONAL WORK TO BE REQUESTED FROM THE SECRETARIAT [[22]](#footnote-22)**

In relation to the consumption manufacturing sector

* 1. [The Executive Committee decided to consider at a future meeting to request the Secretariat to undertake additional work, including to determine cost-effectiveness thresholds and thresholds for incremental operational costs for HFC-phase-down activities in the consumption manufacturing sector once progress in the implementation of HFC investment projects has been made;]
1. **OTHER GENERAL MATTERS RELATED TO HFC PHASE-DOWN [[23]](#footnote-23)**
	1. To agree on the following prerequisites for an Article 5 country to access Multilateral Fund funding other than for enabling activities for the phase-down of HFC consumption and production:
		1. Ratification, acceptance, or accession to the Kigali Amendment;
		2. Establishment of an agreed starting point for a sustained aggregate reduction in HFC consumption and production, on the understanding that any phase-down of HFCs resulting from any project that might be approved by the Executive Committee would be deducted from the country’s starting point;
	2. [To agree that institutions and capacities in Article 5 countries developed with Multilateral Fund assistance for the phase-out of ODS should be used to the extent possible for the phase‑down of HFCs]; and
	3. [To agree that the existing policies and guidelines of the Multilateral Fund [where applicable] for funding the phase‑out of ODS would be applicable to the funding of HFC phase-down [unless decided otherwise] [as long as agreed upon] by the Executive Committee [taking into account in particular decision XXVIII/2].]
1. Paragraph 10 of decision XXVIII/2. [↑](#footnote-ref-1)
2. UNEP/OzL.Pro/ExCom/77/70, UNEP/OzL.Pro/ExCom/78/5 and Corr.1, UNEP/OzL.Pro/ExCom/79/46, UNEP/OzL.Pro/ExCom/80/55, UNEP/OzL.Pro/ExCom/81/53, UNEP/OzL.Pro/ExCom/82/67, and UNEP/OzL.Pro/ExCom/83/43 [↑](#footnote-ref-2)
3. UNEP/OzL.Pro/ExCom/83/48 [↑](#footnote-ref-3)
4. UNEP/OzL.Pro.31/L.2/Add.2 [↑](#footnote-ref-4)
5. To continue supporting stand-alone projects in Article 5 countries in accordance with decision 79/45. [↑](#footnote-ref-5)
6. Discussion on the “HFC component” and the “HCFC component” is presented in paragraphs 28 to 32 of document UNEP/OzL.Pro/ExCom/82/66. [↑](#footnote-ref-6)
7. Projects could be submitted up to and including the 84th meeting, especially in sectors and regions that were not covered by projects approved up to and including the 81st meeting (decision 81/53(b)). [↑](#footnote-ref-7)
8. HFC investment projects have been approved for Argentina, Bangladesh, China, the Dominican Republic, Jordan, Lebanon, Mexico (two), Thailand and Zimbabwe. [↑](#footnote-ref-8)
9. A request of preparatory funding for the phase out of HFC-227a in fire-fighting equipment assembly sector in Egypt was submitted to the 84th meeting. [↑](#footnote-ref-9)
10. The document needed to take into account previous policy documents, case studies, monitoring and evaluation reviews, and the work undertaken in developing and implementing training and technical assistance programmes; an analysis of the existing capacities in Article 5 countries funded under the refrigeration servicing sector and how those capacities could be utilized for HFC phase-down; and information needed for the development of training and competency-based certification programmes and modules for service technicians and customs officers for the transition to alternatives. [↑](#footnote-ref-10)
11. Paragraph 23 of decision XXVIII/2 [↑](#footnote-ref-11)
12. This issue is discussed in paragraphs 67 to 71 of document UNEP/OzL.Pro/ExCom/82/66. [↑](#footnote-ref-12)
13. Paragraph 2 of decision XXX/5 requested the Executive Committee to consider, within the context of paragraph 16 of decision XXVIII/2, increasing the funding provided to LVC countries to assist them in implementing the activities outlined in paragraph 1 of this decision (i.e., developing and enforcing policies and regulations to avoid the market penetration of energy-inefficient refrigeration, air-conditioning and heat-pump equipment; promoting access to energy-efficient technologies in these sectors; and targeted training on certification, safety and standards, raising awareness and building capacity aimed at maintaining and enhancing energy efficiency). [↑](#footnote-ref-13)
14. To discuss, at its 83rd meeting, ways to operationalize paragraph 22 of decision XXVIII/2, and paragraphs 5 and 6 of decision XXX/5, including: (i) Initiatives associated with maintaining and/or enhancing the energy efficiency of replacement technologies with low- or zero-GWP in the refrigeration, air-conditioning and heat-pump sector, such as: a. Methodologies to quantify changes in energy efficiency; and b. Technical interventions associated with maintaining and/or enhancing energy efficiency; (ii) Cost-related issues such as associated incremental costs, payback opportunities and costs of monitoring and verification; (iii) Possible environmental benefits, particularly those associated with climate. [↑](#footnote-ref-14)
15. UNEP/OzL.Pro/ExCom/83/40, UNEP/OzL.Pro/ExCom/83/41, and UNEP/OzL.Pro/ExCom/83/42 [↑](#footnote-ref-15)
16. The discussion at the 83rd meeting is reflected in paragraphs 233 to 254 of document UNEP/OzL.Pro/ExCom/83/48. [↑](#footnote-ref-16)
17. UNEP/OzL.Pro/ExCom/84/67, UNEP/OzL.Pro/ExCom/84/68, and UNEP/OzL.Pro/ExCom/84/69 [↑](#footnote-ref-17)
18. The document is based on the implementation of 11 projects, and includes issues related to project design, synergy with other projects, opportunities for resource mobilization, cost-effectiveness and lessons learned. [↑](#footnote-ref-18)
19. Decision 83/65(c) [↑](#footnote-ref-19)
20. Paragraph 43 of document UNEP/OzL.Pro/ExCom/80/55 [↑](#footnote-ref-20)
21. Decision 81/67(c) [↑](#footnote-ref-21)
22. As contained in paragraph 46 of document UNEP/OzL.Pro/ExCom/80/55 [↑](#footnote-ref-22)
23. As contained in paragraph 43 of document UNEP/OzL.Pro/ExCom/80/55 [↑](#footnote-ref-23)