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DRAFT GUIDELINES FOR FUNDING THE PREPARATION OF STAGE II OF HCFC PHASE-OUT MANAGEMENT PLANS (DECISION 66/5(c))

Introduction

- 1. This document contains draft guidelines to determine funding levels for the preparation of stage II of the HCFC phase-out management plans (HPMPs) for Article 5 countries. It was prepared by the Secretariat in line with decision 66/5(c) made by the Executive Committee at its 66th meeting. In this decision, the Committee agreed to "request the Fund Secretariat, in cooperation with the implementing agencies, to prepare guidelines for stage II of HCFC phase-out management plan preparation in the light of any comments raised during the meeting". The decision further instructed the Secretariat that in preparing the guidelines, it should "include options for phase-out up to the 2020 control target and for total phase-out in accordance with the Montreal Protocol schedule". The Secretariat was asked to present a first draft of such guidelines to the 69th meeting of the Executive Committee.
- 2. In preparing this document, the Secretariat took into account past decisions and guidance from the Executive Committee with regard to the phase-out of HCFCs and its corresponding costs, in particular, decision 56/16 which provided an outline for the funding levels for the preparation of HCFC investment and associated projects. In addition, similar projects funded by the Executive Committee in the past that dealt with national ODS phase-out plans and studied the issues relevant to the transition process from one stage to another (i.e. refrigerant management plans (RMPs) and RMP updates to terminal phase-out management plans (TPMPs), among others) were also considered. Annex I contains a list of all decisions referred to in this document.
- 3. The current document for consideration of the Executive Committee also benefitted from discussions and consultations with bilateral and implementing agencies in line with decision 66/5(c). The draft outline and approach for the preparation of this policy paper was discussed with the implementing agencies at the inter-agency coordination meeting held at the end of January 2013. This final document is a product of the Secretariat's analysis of the overall situation, taking into account comments and observations received from the agencies.
- 4. It was also noted that part of the Monitoring and Evaluation work programme for 2013 approved by the Executive Committee at the 68th meeting is a desk study on the project preparation phase for stage I of the HPMP, the terms of reference of which will be finalized at the 69th meeting. The results of the desk study may be relevant to the finalization of these guidelines for funding stage II HPMP project preparation.
- 5. This document consists of the following sections:

Section I Overview of project preparation funding for stage I HPMPs and results;

Section II Elements to be considered during stage II of the HPMPs;

Section III Criteria to determine eligibility for project preparation funding for stage II

HPMPs; and

Section IV Funding structure that may be used to determine the cost of stage II HPMP

preparation, including the complete phase-out of HCFCs.

Section I: Overview of project preparation funding for stage I HPMPs and results

6. The Executive Committee first approved advanced funding in principle for the preparation of HPMPs at the 54th meeting (April 2008), to meet the agencies' need to initiate development work in Article 5 countries resulting from the decision for an accelerated phase-out agreed at the Nineteenth Meeting of the Parties. The guidelines for the preparation of HPMPs were also approved at the same meeting under decision 54/39. At the 55th meeting (July 2008), individual project preparation funding was

provided for over 90 Article 5 countries, at an agreed level of funding based on the current HCFC consumption of each country at the time of approval.

- 7. At the 56th meeting (November 2008), the Executive Committee agreed in decision 56/16 on a cost structure for determining funding levels for preparation of HCFC investment and associated activities, and defined the elements for funding the preparation of an overall HPMP (except for one country, China) in line with decision 54/39. The activities included in the funding for project preparation for the HPMP were as follows:
 - (a) Assistance for policy and legislation, e.g. to develop new or extend existing legislation regarding HCFC, products containing HCFCs, quotas, and licences;
 - (b) Survey of HCFC use and analysis of data;
 - (c) Development and finalization of the HPMP including stage I to address the 2013 and 2015 control measures; and
 - (d) Development of investment activities for the HCFC-consuming manufacturing sectors for stage I of an HPMP, if such activities were necessary.
- 8. Between the 55th and the 61st meetings, the Executive Committee approved a total of US \$28 million to prepare HPMPs in 144 countries. These included funds for both investment and non-investment components of the HPMPs in line with the cost structure agreed in decision 56/16. Out of these approvals, US \$20.4 million was for the preparation of the overall HPMP strategy, while US \$8 million was for the preparation of investment projects for the five HCFC-using manufacturing subsectors identified in decision 56/16. Final guidelines for funding cost of HCFC phase-out were agreed and approved by the Executive Committee only at the 60th meeting. These cost guidelines formed the basis for the approval of the submitted HPMPs from the 61st meeting.
- 9. The consolidated business plan (UNEP/OzL.Pro/ExCom/69/6) submitted at the 69th meeting includes requests for project preparation funding for stage II HPMPs for many countries. The total cost in the business plan period of 2013-2015 for these activities is US \$15.3 million. Agencies also included projected requests for up to 2020, the total of which is US \$25.9 million (2013-2020).
- 10. The Executive Committee demonstrated its commitment and intent to provide assistance to Article 5 countries to expedite activities for HCFC phase-out by approving project preparation funds. At that time for a majority of the countries there was a high level of uncertainty characterized by the following:
 - (a) The HCFC baselines were unknown for any country at that time, as HCFC baselines were to be calculated based on the average consumption of 2009 and 2010;
 - (b) There was no up-to-date and reliable data on HCFC consumption per sector in these countries;
 - (c) While most countries had an ODS licensing system, it did not extend to control HCFC imports and exports; therefore, HCFC consumption and production (where applicable) data reported under Article 7 was based on best estimates, and often unreliable¹;
 - (d) The apparent lack of available mature, cost-effective and energy-efficient non-ODS

¹ This has been demonstrated by the fact that during the preparation of their HPMPs, a large number of Article 5 countries officially requested the Ozone Secretariat to change the levels of HCFC consumption data previously reported under Article 7.

- alternatives to replace HCFCs in some applications;
- (e) The lack of awareness and information on alternatives and engagement from HCFC-using sectors and stakeholders to phase out HCFCs on an accelerated schedule; and
- (f) The absence of guidelines for funding HCFC phase-out.
- 11. As a result of the project preparation funding, HPMPs were prepared for 137 countries and approved by the Executive Committee from the 60th to the 68th meeting (December 2012). Out of these, 85 were for low-volume consuming (LVC) countries and 52 for non-LVC countries with targets to meet at least the 2013 (freeze) and 2015 (10 per cent reduction) in HCFC consumption under the Montreal Protocol. However, a large majority of these countries are already addressing reduction of HCFC consumption beyond 10 per cent of their baselines, including the complete phase-out by nine countries. A detailed analysis of the project preparation for stage I HPMPs is attached as Annex II. Annex III lists all Article 5 countries with an approved HPMP indicating *inter alia* their HCFC baseline for compliance, their starting points, the amount of HCFCs approved for phase-out, the remaining eligible consumption and the total funding received for HPMP preparation and stage I HPMPs.
- 12. Based on the analysis of the content of already approved HPMPs, and taking into account the elements funded during the preparation of stage I HPMPs, the following aspects were noted:
 - (a) Funding for the overall strategy preparation and policy development had already been provided as part of the HPMP project preparation funds. As a result, all Article 5 countries with an approved HPMP had an enforceable national system of licensing and quotas in place for HCFC imports and, where applicable, production and exports that is capable of ensuring the country's compliance with the Montreal Protocol HCFC phase-out, in line with decision 63/17;
 - (b) All HPMPs provided an up-to-date analysis of the levels of consumption of HCFCs in the country as well as distribution among the consumption sectors based on comprehensive surveys undertaken in the country valid at least up to 2011. The surveys provided the basis for starting points for aggregate reduction in HCFC consumption agreed by relevant governments. In a number of cases, these surveys were used to adjust Article 7 data and subsequently countries' baselines;
 - (c) Based on the thorough survey conducted during the preparation of HPMPs, an overarching strategy for reducing HCFC consumption in line with the phase-out schedule of the Montreal Protocol as a minimum was prepared, describing main phase-out activities and cost considerations for stage I agreed by all stakeholders. However, some HPMPs provided an overall action plan beyond stage I, with the expectation of future funding for the implementation of activities in the subsequent stage(s); and
 - (d) Engagement from the HCFC-user sectors and other stakeholders to implement the agreed overarching strategy was ensured due to an extensive consultation process done during the HPMP preparation.

Section II: Elements to be considered during stage II of the HPMP

- 13. In line with the guidelines for HPMP preparation contained in decision 54/39 which promoted a staged approach for the phase-out of HCFCs, the expectation was that the HPMP would define a long-term strategy that provided an overall direction with a list of critical actions a country would undertake to achieve overall HCFC phase-out. It would also include a fully developed stage I that would identify activities/projects and funding needed to meet the first two controls in 2013 and 2015 for HCFC phase-out.
- 14. Upon completion of stage I, stage II was envisaged to address consumption/production of HCFC beyond the requirements of the freeze and 10 per cent reduction. In cases where countries have small amounts of HCFC consumption limited to the servicing sector only, and might wish to phase-out HCFC consumption earlier than required by the control measures in stage I, stage II could address all remaining eligible consumption in a cost-effective manner, subject to available technologies that may be applied to the refrigeration servicing sector.
- 15. For larger countries with HCFC consumption in both the servicing and manufacturing sectors, stage II would include activities that build upon those sectors already been addressed in stage I, based on current advances in technologies for alternatives to HCFCs. For some of these countries, these may consist of one or two remaining sector plans, in addition to developing a strategy for the refrigeration servicing sector where limited activities had been included in the first stage of the HPMP.

Additional information required for the preparation of stage II HPMPs in line with decision 54/39

- 16. Given the overarching strategy, plan of action and phase-out activities included in approved stage I HPMPs, it is expected that for approximately 95 Article 5 countries (80 LVC countries and 15 non-LVC countries), stage II HPMPs would address remaining HCFC consumption mainly in the refrigeration and air-conditioning servicing sector, and those remaining HCFC-based manufacturing sectors not addressed in stage I for countries with HCFC manufacturing.
- 17. It will also need to include some elements which had been identified in decision 54/39 but not fully covered in the first submission. These are addressed in the following paragraphs.

Development of a plan for the servicing sector for medium to large HCFC-consuming countries with consumption in both servicing and manufacturing

- 18. Project preparation funding for stage I HPMPs for non-LVC countries with HCFC consumption in both the manufacturing and servicing sectors did not include a specific provision for the development of an approach for the servicing sector due to the priority being given to the manufacturing sector, in line with decision 60/44(f)(xv) to meet the reduction steps in 2013 and 2015. At that time, there was also the understanding that in the transition from national CFC phase-out plans (NPP) to HPMPs, part of the servicing sector had already been included as the stakeholders remained the same if not closely related. In addition, countries were asked to introduce controls on import of HCFC-22 equipment at an early stage, in particular for air-conditioners, in order to reduce the growth in the demand for HCFC-22 in servicing.
- 19. While in a number of cases, the Executive Committee approved activities to address the servicing sector in stage I HPMPs for non-LVC countries where it was demonstrated that they were needed to maintain the momentum gained during the implementation of NPPs and to reduce the growth trend of HCFC consumption in the servicing sector, an overall strategy and plan of action for reducing HCFC consumption in the servicing sector was not fully developed during preparation of stage I of the HPMPs. This would need to be addressed in the preparation of stage II of the HPMP, taking into account that the sector is to a large degree linked to the import of HCFC-22 air-conditioning equipment into the countries.

While this approach would require some adjustments and updates to the initial data already collected in stage I, the project preparation exercise should take into account the fact that support has already been provided to establish the infrastructure linking the stakeholders in this sub-sector. A strong justification for the additional work to be done would need to be provided to demonstrate the need for additional funding for these activities.

Need for an overall strategy for stage II

- 20. In case an LVC country were to opt for an accelerated phase-out (up to 100 per cent after 2020), policies may need to be changed (including licensing systems), technologies assessed, and stakeholder meetings held.
- 21. All but four of the 52 non-LVC countries have remaining funding eligibility to address the 35 per cent baseline reduction, although 35 of them had agreements that accounted for more than the 10 per cent reduction. For larger countries with HCFC consumption in both the servicing and manufacturing sectors, stage II preparation may require some additional stakeholders meetings, technology assessment and a determination of the extent to which accelerated phase-out might be needed.

Remaining activities in the manufacturing sector

- 22. The main activities included in stage I HPMPs for several non-LVC countries consisted of investment projects to reduce the consumption of HCFCs used in the manufacturing sector. These largely focused on the foam sector, it being one application where there are technically acceptable alternatives, with low global warming potential (GWP); while fewer included some projects on the refrigeration and air-conditioning manufacturing sector. The Secretariat also noted that some HPMPs did not include phase-out activities in all the sectors for which project preparation funds had been approved, and it is therefore assumed that the initial data collection and project identification had already been completed. If any additional funding is required for preparation of phase-out activities in these sectors in stage II HPMPs, a strong justification demonstrating this need would have to be provided.
- 23. Many alternatives that may be used to replace HCFCs have gained a strong foothold in a number of countries, either through the HPMPs, private sector initiatives, new investments or as replacements for CFCs. A basic understanding of the current status (level of use, prevalence of knowledge) of different HCFC alternatives in each country is needed by both the government as well as the Multilateral Fund to assess the incremental activities necessary to transfer from HCFC to alternatives. Consequently, information could be collected, if required, about currently used HCFC alternative technologies for polyurethane (PU) and extruded polystyrene (XPS) foam conversions in those sectors. It may also be necessary to understand the alternatives used for conversions in either the air-conditioning or refrigeration sector, and the current use in refrigeration or air-conditioning equipment and the service sector. For instance, in a number of stage I HPMPs for the servicing sector, the refrigerants to be used for retrofitting activities were not identified. Stage II HPMPs may provide more concrete information on these alternatives and the extent to which they were used.
- 24. It is expected that project preparation funding for phase-out activities in any new sector that would be included in stage II would be provided using existing funding guidelines in decision 56/16.

Other information relevant to stage II

Sources of co-financing and potential financial incentives

25. The issue of co-financing contained in decision 54/39(h) asked that countries and agencies should explore potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth

Meeting of the Parties. While many HPMPs noted the need for co-financing, there were very few concrete proposals on how such co-financing may be further explored. In those HPMPs where the issue of co-financing was discussed, this was in the context of new and different financial instruments under development related to climate benefits. These mechanisms were found to be incompatible with the requirements of the Multilateral Fund, and therefore new approaches would need to be explored for stage II. This would be true for a large number of HPMPs where it is mentioned that specific proposals and approaches for leveraging funds and benefits beyond stage I would be developed in stage II.

26. Stage II HPMPs could ensure that sufficient information is provided on co-financing. It may also look at the extent to which the benefits beyond those associated with the ODP value of phasing out HCFCs may be addressed through financial incentives and opportunities for co-financing and how such programmes could be implemented. Funds allocated by the Executive Committee for resource mobilization and reports submitted by the agencies demonstrating experience gained in this exercise should be taken into account when this is described in the HPMPs.

Climate co-benefits of HCFC phase-out

- 27. At the 53rd and 54th meetings, the Executive Committee noted that HPMPs should capture the spirit of decision XIX/6 with respect to addressing the benefits for the climate when looking at alternatives. Some stage I HPMPs took into account decision XIX/6 to ensure that environmentally-safe substitutes and related technologies were to be used in the implementation of conversion projects, in consideration of the availability of technologies and cost. While information on the comparison of the climate benefits of alternatives as compared with HCFCs was included in some cases, this was done in a very preliminary manner.
- 28. The Secretariat was asked by the Executive Committee to prepare the Multilateral Fund Climate Impact Indicator (MCII) which is a tool to allow for the consideration of the impact on the climate of different alternative technologies to HCFCs. This tool could easily be adjusted as new alternative technologies/chemicals become available. At its 67th meeting, the Executive Committee decided that this tool should be finalised and used in the HPMP process; document UNEP/OzL.Pro/ExCom/69/34 contains further information. The MCII will be used to determine climate benefits during stage II of the HPMPs.
- 29. In addition to the above, the results of a number of demonstration projects looking at low-GWP alternatives approved by the Executive Committee have been disseminated. Article 5 countries as well as bilateral and implementing agencies have been encouraged to use these results in facilitating the choice of technology for HCFC phase-out.
- 30. If considered appropriate by the Executive Committee, some or all of the above activities may be included in stage II of the HPMPs.

Section III: Criteria to determine eligibility for project preparation funding for stage II HPMPs

31. In their agreements with the Executive Committee, the 137 Article 5 countries with an approved stage I HPMP committed to a reduction of their HCFC consumption baselines ranging from 10 per cent to complete phase-out as shown in Table 1.

Table 1. Level of reduction from HCFC baselines agreed by Article 5 countries with an approved HPMP

Deduction from HCEC bossline	Countries					
Reduction from HCFC baseline	LVC	Non-LVC	Total			
10 per cent by 2015	6	17	23			
Over 10 per cent and below 35 per cent*		17	17			
35 per cent by 2020	70	15	85			
Over 35 per cent*		2	2			
65 per cent by 2025						
Over 65 per cent*		1	1			
Complete phase-out	9		9			
Total	85	52	137			

^(*) Phase-out proposed after 2015 and before 2020.

- 32. Based on the levels of reduction of HCFC consumption agreed by Article 5 countries in their stage I HPMPs, it could be expected that funding for the preparation of stage II HPMPs be requested as follows:
 - (a) Prior to the compliance date of 1 January 2015 and no earlier than 12 months after the approval of their second to last tranche of the HPMP for the 23 countries with commitments to reduce their baseline consumption by 10 per cent, taking into account the following:
 - (i) The six LVC countries in this group could commit to reducing their HCFC baselines either to the levels required under the Montreal Protocol, or to higher levels (i.e., more than 35 per cent by 2020 or more than 67.5 per cent by 2025), or even reaching a complete phase-out between 2020 and 2025;
 - (ii) The other 17 non-LVC countries could commit to reducing their HCFC baselines by 35 per cent as a minimum in 2020, depending on the level of HCFCs being used and their sector distribution;
 - (b) Between 2013 and 2017 for the 17 non-LVC countries which committed to reduce HCFC consumption by more than 10 per cent of their baselines between 2015 and 2020. Through stage II of their HPMPs, several of these countries could completely phase out HCFC consumption in the manufacturing sector, and thus commit to reductions on their baseline consumption close to or above the 65.5 per cent prior to 2025. According to its overarching strategy described in its stage I HPMP, through implementation of stage II HPMP one country (Turkey) could completely phase-out its HCFC consumption;
 - (c) From 2018 for the 85 countries that had committed to reducing their HCFC baseline consumption by 35 per cent by 1 January 2020. However, during implementation of their stage I HPMPs, if some of these countries decide to accelerate phase-out at a date ahead of that required under the Montreal Protocol (i.e. 2025 instead of 2030), project preparation may be requested in 2014; and
 - (d) Any balances from project preparation funding provided for stage I HPMP preparation will be returned to the Multilateral Fund before a request for stage II project preparation funding may be considered.
- 33. It was noted that the timing for the requests for stage II HPMP project preparation funding is closely aligned with the completion or at least an advanced progress in the implementation of stage I.

Section IV: Proposed funding structure and criteria

- 34. The funding structure for HPMP preparation agreed by the Executive Committee in decision 56/16 was determined based on two main components of the HPMP:
 - (a) The development of an overall (overarching) strategy for the HPMP; and
 - (b) Preparation of investment projects required for conversion of the manufacturing sector in stage I.
- 35. The activities that were required to develop these components were defined and assigned costs with maximum limits established based on the countries' latest HCFC consumption at that time (i.e. 2007 Article 7 data). The funding for the preparation of the overall strategy also included the need to incorporate HCFCs under the existing ODS policy and legislation (i.e., import/export licenses and quotas, ban on HCFC-based equipment); to conduct national survey of HCFC consumption and its distribution among sectors; and the preparation and finalization of the HPMP overarching strategy in accordance with decision 54/39. The levels of funding agreed to undertake activities for project preparation for the overarching strategy are shown in Table 2^2 .

Table 2. Levels of funding agreed for the preparation of HPMPs in decision 56/16

Group of countries according to HCFC consumption in 2007	Funding (US \$)
Zero consumption	30,000
Consumption only of HCFC-22, or below 6 ODP tonnes/year	85,000
Consumption between 6 ODP and 100 ODP tonnes/year	150,000
Consumption higher than 100 ODP tonnes/year	195,000

- 36. Funding was also provided for the preparation of investment projects to phase-out HCFC consumption in the manufacturing sector under decision 56/16. This was approved according to the number of manufacturing enterprises to be converted (i.e., US \$30,000 for one; US \$60,000 for two; US \$80,000 for three to 14; and US \$150,000 for more than 14), up to maximum funding level based on the countries' HCFC consumption for 2007 (i.e., US \$100,000 for countries with a consumption below 100 ODP tonnes; US \$200,000, for consumption between 101 and 300 ODP tonnes; US \$250,000, for consumption between 301 and 500 ODP tonnes; US \$300,000, for consumption between 501 and 1,000 ODP tonnes; and US \$400,000, for consumption above 1,000 ODP tonnes). The overall HPMP submission included details of the elements of both components as well as their corresponding funding requirements.
- 37. The approvals of the final HPMPs for stage I clearly indicated the specific amounts of HCFCs that would be phased out by each country in its HPMP, thereby allowing for the calculation of the remaining eligible HCFC consumption of Article 5 countries, after these were deducted from their baselines. The number of countries and their remaining eligible consumption are summarized in the table below:

² A comprehensive analysis of the funding for preparation of HPMPs is contained in paragraphs 9 to 15 and Annex IV of document UNEP/OzL.Pro/ExCom/55/17, on the overview of issues identified during project review.

Table 3: Summary of countries and	l remaining eligible cons	sumption after stage I	HPMP approval

Remaining eligible HCFC consumption (ODP t)							
	0 to 5	>1,500	Total				
	ODP t	10 ODP t					
LVC	67	11	7	0	0	0	85
NON-LVC	1	2	18	11	19	1	52
Total	68	13	25	11	19	1	137

- 38. After stage I HPMP preparations were complete, Article 5 countries were better equipped with updated policy and legislation addressing HCFCs, had robust HCFC data distributed in the various consumption sectors, and were better informed about the technical and cost information on alternative technologies that were commercially available, elements of which provide a substantive basis for developing stage II HPMPs. These HPMPs also contained an overarching strategy that gave a direction for the HCFC phase-out in each country. Based on this information, it may be concluded that at least for the preparation of the overall HPMP strategy for stage II, no additional funding would be required as data continues to be gathered and compiled during the implementation of the activities in stage I.
- 39. There may be some activities carried out for the preparation of stage I HPMPs that might need to be updated and/or reviewed during stage II preparation. This takes into consideration the requirement in some cases to gather new data and information based on that outlined in Section II of this document, the necessity to verify currently available data to make it as up-to-date as possible, and to update the overall strategy for the HPMP taking into account the information gathered.
- 40. Consistent with the approach taken at the 55th meeting, consideration for funding project preparation for the strategy for stage II of the HPMP should be based on the activities required to meet the additional information. These should also take into consideration the remaining eligible HCFC consumption for the countries vis-à-vis stage I. Table 4 below proposes indicative costs for the preparation of the strategy for of stage II HPMPs, provided each submission is supported by a strong justification on the need for additional information, and the activities to be undertaken.

Table 4: Proposed costs for stage II HPMP strategy preparation

Activities	Maximum	funding (US\$) based or	remaining eligible	e HCFC consum	ption	
	0 to 5 ODP t in the refrigeration servicing sector only	< 5 to 10 ODP t of HCFC-22 only and in the servicing sector only	< 10 to 50 ODP t	<50 to 100 ODP t	<100 to 1,500 ODP t	>1,500 ODP t
Policy Assistance	0	0	0	0	0	0
Updating survey, data collection and analysis	5,000	10,000	20,000	30,000	40,000	
Stage II strategy update and finalization	15,000	20,000	30,000	40,000	50,000	
SUB-TOTAL	US\$20,000	US\$30,000	US\$50,000	US\$70,000	US\$90,000	Individual consideration
Investment project preparation in line with decision 56/16	*	*	*	*	*	

^{*}to be determined based on the criteria for investment project preparation set out in decision 56/16

41. The above table indicates that funding in addition to that listed above may be available to countries for the preparation of investment projects. Decision 56/16 also established limits for the maximum funding eligible for the development of investment activities for any country with a manufacturing sector using HCFCs based on the countries' HCFC consumption for 2007. These may need to be adjusted to take into account the remaining eligible consumption of countries rather than the overall HCFC consumption.

Recommendations

- 42. The Executive Committee may wish to consider:
 - (a) Noting document UNEP/OzL.Pro/ExCom/69/33 on the draft guidelines for funding the preparation of stage II of HCFC phase-out management plans (HPMP);
 - (b) Requesting Article 5 countries to include in the development and finalization of the strategic plan for stage II of the HPMPs as a minimum, the control target of the Montreal Protocol subsequent to that committed in stage I of their HPMPs, on the understanding that should countries decide on additional phase-out commitments including the complete phase-out (i.e. 100 per cent in stage II), that they should demonstrate a strong national level of commitment in place to support accelerated phase-out together with cost considerations for meeting those commitments;
 - (c) Noting that requests for stage II HPMP project preparation funding could be submitted:
 - (i) No earlier than one year after the approval of the second to the last tranche of stage I HPMPs for Article 5 countries which committed to reduce their HCFC baseline consumption by 10 per cent in 2015;
 - (ii) From 2014 for Article 5 countries which committed to reduce their HCFC baseline consumption by more than 10 per cent between 2015 and 2020, in accordance with the decision of the Executive Committee approving their respective stage I HPMPs;
 - (iii) From 2018 for Article 5 countries which committed to reduce their HCFC baseline consumption by 35 per cent in 2020;
 - (iv) From 2014 for Article 5 countries that decide to completely phase-out HCFC consumption ahead of the Montreal Protocol schedule in stage II;
 - (d) Requesting bilateral and implementing agencies when submitting requests for project preparation for stage II of the HPMPs to demonstrate that additional funding is required, and to provide:
 - (i) For the overall stage II strategy:
 - a. An indication of the activities that will need to be undertaken for project preparation, with specific costs clearly identified (i.e. surveys, consultation meetings, etc);
 - b. A description of the information that needs to be gathered and updated and why it was not included in stage I;

- (ii) For investment projects in line with decision 56/16:
 - a. Information on the number of enterprises where the request for funding is being sought;
 - b. Date of establishment of such enterprises, taking into account decision 60/44(a) on the starting point;
 - c. If the request is for a sector where project preparation was approved in stage I but had not been included in the HPMP submitted, an explanation why additional funding is required and a list of activities with corresponding costs to support this request.
- (e) Providing funding for stage II HPMP project preparation up to the following levels:
 - (i) US \$20,000 for Article 5 countries with a remaining HCFC consumption eligible for funding of 0 to 5 ODP tonnes used only in the refrigeration servicing sector;
 - (ii) US \$30,000 for Article 5 countries with a remaining HCFC consumption eligible for funding of 5.1 to 10 ODP tonnes;
 - (iii) US \$50,000 for Article 5 countries with a remaining HCFC consumption eligible for funding of 10.1 to 50 ODP tonnes;
 - (iv) US \$70,000 for Article 5 countries with a remaining HCFC consumption eligible for funding of 50.1 to 100 ODP tonnes;
 - (v) US \$90,000 for Article 5 countries with a remaining HCFC consumption eligible for funding of 100.1 to 1,500 ODP tonnes;
 - (vi) US \$[to be determined] for China;
- (f) Providing funding for any Article 5 country with a manufacturing sector using HCFCs that has not been addressed in stage I of their HPMPs, according to the number of manufacturing enterprises to be converted (i.e., US \$30,000 for one; US \$60,000 for two; US \$80,000 for three to 14; and US \$150,000 for more than 14), up to maximum funding level based on the countries' HCFC consumption for 2007 (i.e., US \$100,000 for countries with a consumption below 100 ODP tonnes; US \$200,000, for consumption between 101 and 300 ODP tonnes), in line with decision 56/16; and
- (g) Requesting the bilateral and implementing agencies to return any balances from project preparation funding provided for stage I HPMP to the Multilateral Fund before a request for stage II project preparation funding may be considered.

Annex I

LIST OF DECISIONS OF THE EXECUTIVE COMMITTEE REFERRED IN DOCUMENT UNEP/OzL.Pro/ExCom/69/33

Decision 66/5

Following the discussion, the Executive Committee decided:

(c) To request the Fund Secretariat, in cooperation with the implementing agencies, to prepare guidelines for stage II of HCFC phase-out management plan preparation in the light of any comments raised during the meeting, including options for phase-out up to the 2020 control target and for total phase-out in accordance with the Montreal Protocol schedule, and to present a first draft of such guidelines to the 69th meeting of the Executive Committee;

Decision 63/17

Amending agreements between the Executive Committee and countries on HCFC phase-out management plans to help ensure compliance with the 2013 control measure

Another concern raised was that some countries, in their submissions, appeared to be indicating that efforts to achieve compliance with the 2013 HCFC consumption freeze were limited to selected sectors. To ensure that adequate measures would be undertaken at the national level, the Executive Committee decided to add a paragraph both to the template for draft agreements approved in decision 61/46 and to the draft agreements between Article 5 countries and the Executive Committee submitted to the Committee for consideration at its 63rd meeting. The paragraph read as follows:

"That, for all submissions from the 68th Meeting onwards, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and, where applicable, production and exports is in place and that the system is capable of ensuring the country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this agreement."

Decision 62/11

Following the discussion, the Executive Committee <u>decided</u> to allow the submission of stage I of the HCFC phase-out management plans to assist former low-volume-consuming countries with HCFC consumption in the refrigeration servicing sector only, that was above 360 metric tonnes, to meet control measures up to 2020 on the understanding that the level of funding provided would be considered on a case-by-case basis until otherwise decided.

Decision 62/10

Following the discussion, the Executive Committee <u>decided</u> that, for the HCFC phase-out management plans which addressed phase-out of HCFCs ahead of the Montreal Protocol schedule and had been submitted in line with decision 60/15, the total funding available for achieving 100 per cent phase-out would be extrapolated from that available for meeting the 35 per cent reduction in consumption as prescribed in the table in subparagraph f(xii) of decision 60/44.

Decision 60/44

Following the description of the agreed criteria by the facilitator of the contact group on HCFCs, the Executive Committee <u>decided</u>:

In determining criteria for funding HCFC phase-out in the consumption sector in Article 5 countries:

Cut-off date

(a) Not to consider any projects to convert HCFC-based manufacturing capacity installed after 21 September 2007;

Second-stage conversion

- (b) To apply the following principles in regard to second-stage conversion projects for the first stage of HCFC phase-out management plan (HPMP) implementation to achieve the 2013 and 2015 HCFC phase-out compliance targets, to be reviewed by the Executive Committee no earlier than the last Meeting in 2013:
 - (i) Full funding of eligible incremental costs of second-stage conversion projects will be considered in those cases where an Article 5 Party clearly demonstrates in its HPMP that such projects are necessary to comply with the Montreal Protocol HCFC targets up to and including the 35 per cent reduction step by 1 January 2020 and/or are the most cost-effective projects measured in ODP tonnes that the Party concerned can undertake in the manufacturing sector in order to comply with these targets;
 - (ii) Funding for all other second-stage conversion projects not covered under paragraph (b)(i) above will be limited to funding for installation, trials, and training associated with those projects;

Starting points for aggregate reductions in HCFC consumption

- (c) To establish the starting points for aggregate reductions in HCFC consumption, for those Article 5 countries that submit projects in advance of their assessed baseline, at the time of submission of either the HCFC investment project or the HPMP, whichever is first submitted for the consideration of the Executive Committee;
- (d) To allow Article 5 countries to choose between the most recent reported HCFC consumption under Article 7 of the Montreal Protocol at the time of the submission of the HPMP and/or the investment project, and the average of consumption forecast for 2009 and 2010, in calculating starting points for aggregate reductions in HCFC consumption;
- (e) To adjust the agreed starting points for aggregate reductions in HCFC consumption in cases where calculated HCFC baselines based on reported Article 7 data are different from the calculated starting point based on the average consumption forecast for 2009-2010;

Eligible incremental costs of HCFC phase-out projects

- (f) To apply the following principles in regard to eligible incremental costs of HCFC phase-out projects for the first stage of HPMP implementation to achieve the 2013 and 2015 HCFC phase-out compliance targets, subject to a review in 2013:
 - (i) When preparing HCFC phase-out projects in the foam, refrigeration and air-conditioning sectors, bilateral and implementing agencies shall use the technical information contained in document UNEP/OzL.Pro/ExCom/55/47 as a guide;
 - (ii) The current cost-effectiveness threshold values used for CFC phase-out projects in paragraph 32 of the final report of the 16th Meeting of the Executive Committee (document UNEP/OzL.Pro/ExCom/16/20), to be measured in metric kilogrammes, shall be used as guidelines during the development and implementation of the first stage of HPMPs;
 - (iii) That countries will have the flexibility to allocate the approved funding from incremental operating costs to incremental capital costs and to allocate up to 20 per cent of the approved funding for incremental capital costs to incremental operating costs, as long as the use of the flexibility does not change the intent of the project. Any reallocation should be reported to the Executive Committee;
 - (iv) Funding of up to a maximum of 25 per cent above the cost effectiveness threshold will be provided for projects when needed for the introduction of low global warming potential (GWP) alternatives;

HCFC phase-out in the foam sector

- (v) Incremental operating costs for projects in the foam sector will be considered at US \$1.60/metric kg for HCFC-141b and US \$1.40/metric kg for HCFC-142b consumption to be phased out at the manufacturing enterprise;
- (vi) For group projects linked to systems houses, incremental operating costs will be calculated on the basis of the total HCFC consumption to be phased out for all downstream foam enterprises;
- (vii) The Executive Committee will consider, on a case-by-case basis, funding higher levels of incremental operating costs than indicated in paragraph (f)(v) above when required for the introduction of low-GWP water-blown technology;

HCFC phase-out in the refrigeration and air-conditioning manufacturing sector

- (viii) Incremental operating costs for projects in the air conditioning sub-sector will be considered at US \$6.30/metric kg of HCFC consumption to be phased out at the manufacturing enterprise;
- (ix) Incremental operating costs for projects in the commercial refrigeration sub-sector will be considered at US \$3.80/metric kg of HCFC consumption to be phased out at the manufacturing enterprise;
- (x) Consistent with decision 31/45 of the Executive Committee, incremental operating costs will not be considered for enterprises categorized under the refrigeration equipment assembly, installation and charging sub-sector;

HCFC phase-out in the refrigeration servicing sector

- (xi) Article 5 countries that have total HCFC consumption of up to 360 metric tonnes must include in their HPMP, as a minimum:
 - a. A commitment to meeting, without further requests for funding, at least the freeze in 2013 and the 10 per cent reduction step in 2015, and if the country so decides, the 35 per cent reduction step in 2020. This shall include a commitment by the country to restrict imports of HCFC-based equipment if necessary to achieve compliance with the reduction steps and to support relevant phase-out activities;
 - b. Mandatory reporting, by the time funding tranches for the HPMP are requested, on the implementation of activities undertaken in the refrigeration servicing sector and in the manufacturing sector when applicable, in the previous year, as well as a thorough and comprehensive annual work plan for the implementation of the following activities associated with the next tranche;
 - c. A description of the roles and responsibilities of major stakeholders, as well as the lead implementing agency and the cooperating agencies, where applicable;
- (xii) Article 5 countries that have total HCFC consumption of up to 360 metric tonnes will be provided funding consistent with the level of consumption in the refrigeration servicing sector as shown in the table below, on the understanding that project proposals will still need to demonstrate that the funding level is necessary to achieve the 2013 and 2015 phase-out targets, and if the country so decides, the 2020 phase-out targets:

Consumption tonnes)*	(metric	Funding up to 2015 (US\$)	Funding up to 2020 (US\$)
>0 <15		51,700	164,500
15 < 40		66,000	210,000
40 < 80		88,000	280,000
80 < 120		99,000	315,000
120 < 160		104,500	332,500
160 < 200		110,000	350,000
200 < 320		176,000	560,000
320 < 360		198,000	630,000

- (*) Level of baseline HCFC consumption in the refrigeration servicing sector
- (xiii) Article 5 countries that have total HCFC consumption of up to 360 metric tonnes and that receive funding consistent with the above table, will have flexibility in utilizing the resources available to address specific needs that might arise during project implementation to facilitate the smoothest possible phase-out of HCFCs;
- (xiv) Article 5 countries that have total HCFC consumption of up to 360 metric tonnes, used in both the manufacturing and refrigeration servicing sectors, could submit HCFC phase-out investment projects in accordance with prevailing policies and decisions of the Multilateral Fund, in addition to funding for addressing HCFC consumption in the servicing sector;

(xv) Article 5 countries that have total HCFC consumption above 360 metric tonnes should first address consumption in the manufacturing sector to meet the reduction steps in 2013 and 2015. However, if such countries clearly demonstrate that they require assistance in the refrigeration servicing sector to comply with these targets, funding for these activities, such as training, will be calculated at US\$4.50/metric kg, which will be deducted from their starting point for aggregate reductions in HCFC consumption.

HCFC phase-out in the aerosol, fire extinguisher and solvent sectors

(xvi) The eligibility of incremental capital and operating costs for HCFC phase-out projects in the aerosol, fire extinguisher and solvent sectors will be considered on a case-by-case basis.

Decision 60/15

Following the presentation, the Executive Committee <u>decided</u> that projects which accelerated the phaseout of consumption of HCFCs could be considered on a case-by-case basis for low-volume-consuming countries that had a strong national level of commitment in place to support accelerated phase-out.

Decision 56/16

On the basis of the text proposed by the contact group, the Executive Committee <u>decided</u>:

- (a) To note document UNEP/OzL.Pro/ExCom/56/13 regarding a cost structure for determining funding levels for preparation of HCFC investment and associated activities (decision 55/13(d));
- (b) To define the elements of a cost structure for funding the preparation of an overall HCFC phase-out management plan (HPMP) in line with decision 54/39 and comprising several components as follows:
 - (i) Assistance for policy and legislation, e.g. to develop new or extend existing legislation regarding HCFC, products containing HCFCs, quotas, and licences;
 - (ii) Survey of HCFC use and analysis of data;
 - (iii) Development and finalization of the HPMP including its stage one to address the 2013 and 2015 control measures, the latter being akin to a terminal phase-out management plan (TPMP) or a refrigeration service sector plan;
 - (iv) Development of investment activities for the HCFC-consuming manufacturing sectors for stage one of an HPMP, if such activities were necessary;
- (c) To provide funding for elements (b)(i) to (iii) above as specified in the table below, based on the countries' HCFC consumption for 2007, while applying decision 55/13(a), (b) and (c):

Group according to consumption pattern	Funding for above components (b)(i) to (iii)
Countries with zero consumption of HCFC	US \$30,000
Countries with consumption only of HCFC-22, or	US \$85,000
consumption below 6 ODP tonnes/year	
Countries with medium consumption, between 6	US \$150,000
ODP tonnes/year and 100 ODP tonnes/year	
Countries with consumption higher than 100 ODP	US \$195,000
tonnes/year	

(d) To limit the maximum funding provided for the element (b)(iv) of the HPMP for any country with a manufacturing sector using HCFCs as per the following table based on the countries' HCFC consumption for 2007, on the understanding that those limits represented maximum amounts and requests for project preparation would have to justify the level of funding up to that amount, and on the understanding that preparation costs for demonstration projects according to decision 55/43 paragraphs (b) to (f) were not taken into account when calculating that level of funding;

Consumption limit (ODP tonnes)	Investment preparation limit
Up to 100	\$100,000
101 –300	\$200,000
301-500	\$250,000
501 – 1,000	\$300,000
1,001 and above	\$400,000

- (e) To define five manufacturing sub-sectors as follows: air-to-air air conditioning systems; refrigeration (including all refrigeration, heat pumps and air conditioning sub-sectors except air-to-air air conditioning systems); polyurethane foam; extruded polyurethane (XPS) foam; and solvent uses in manufacturing;
- (f) To provide funding for the element (b)(iv) of the HPMP for countries with manufacturing capacity up to a maximum specified below, to be determined by the total number of enterprises to be converted under HPMP stage one in the relevant sub-sector as defined under paragraph (e) above, excluding those enterprises with demonstration projects that might be chosen by the Executive Committee according to decision 55/43, paragraphs (b) to (f):
 - (i) One enterprise to be converted in a manufacturing sector: US \$30,000;
 - (ii) Two enterprises to be converted in a manufacturing sector: US \$60,000;
 - (iii) Three to 14 enterprises to be converted in a manufacturing sector: US \$80,000;
 - (iv) Fifteen or more enterprises to be converted in a manufacturing sector: US \$150,000;
- (g) That in the case where Parties wish to submit requests for preparation of sub-sector plans in the approved sectors, the total funding available for all sub-sector plans in each sector should not exceed US \$150,000;
- (h) Not to apply the provisions in subparagraphs (c), (e) and (f) above to China;

- (i) To request that for demonstration projects, according to decision 55/43 paragraphs (b) to (f), the request for preparation funds should include specification of country, sector, brief description of the project, approximate ODP tonnes phase-out to be achieved, the enterprise(s) to be addressed, if relevant, and the date when they began operation, reference to the relevant sub-paragraph of decision 55/43, and a description of compelling reasons as to why the Executive Committee should choose this project as described in decision 55/43 (b). Funding could be provided up to the following levels:
 - (i) Stand-alone demonstration projects (55/43) in a manufacturing sector, per project: US \$30,000;
 - (ii) Umbrella demonstration projects (55/43) with three to 14 beneficiaries in one manufacturing sector, per umbrella project: US \$80,000;
 - (iii) Projects addressing 15 or more beneficiaries could not receive preparation funding for demonstration projects related to decision 55/43; and
- (j) To request the Secretariat to apply this cost structure when assessing the eligibility for funding of the different elements of the HPMP preparation, and to propose adjustments to the structure, in particular with regard to investment and associated activities, to the Executive Committee when necessary.

Decision 54/39

After having considered the revised text submitted by the contact group, the Executive Committee decided to adopt the following guidelines:

- (a) Countries should adopt a staged approach to the implementation of an HCFC phase-out management plan (HPMP), within the framework of their over-arching-strategy;
- (b) As soon as possible and depending on the availability of resources, countries should employ the guidelines herein to develop, in detail, stage one of the HPMPs, which would address how countries would meet the freeze in 2013 and the 10 per cent reduction in 2015, with an estimate of related cost considerations and applying cost guidelines as they were developed;
- (c) The elaboration of stage one of the HPMP and subsequent stages should be developed as follows:
 - (i) For countries with consumption in the servicing sector only:
 - a. To be consistent with existing guidelines for the preparation of RMPs/RMP updates pursuant to decisions 31/48 and 35/57; and, if applicable, with the preparation of TPMPs pursuant to decision 45/54;
 - b. To contain commitments to achieve the 2013 and 2015 HCFC control measures and include a performance-based system for HPMPs based on the completion of activities in the HPMP to enable the annual release of funding for the HPMP;
 - (ii) For countries with manufacturing sectors using HCFCs, HPMPs should contain a national performance-based phase-out plan (NPP) with one or several substance or sector-based phase-out plans (SPP) consistent with decision 38/65 addressing consumption reduction levels sufficient to achieve the 2013 and 2015 HCFC

control measures and provide starting points for aggregate reductions, together with annual reduction targets;

- (d) For countries that chose to implement investment projects in advance of completion of the HPMP:
 - (i) The approval of each project should result in a phase-out of HCFCs to count against the consumption identified in the HPMP and no such projects could be approved after 2010 unless they were part of the HPMP;
 - (ii) If the individual project approach was used, the submission of the first project should provide an indication of how the demonstration projects related to the HPMP and an indication of when the HPMP would be submitted:
- (e) Consideration should be given to providing funding for assistance to include HCFC control measures in legislation, regulations and licensing systems as part of the funding of HPMP preparation as necessary and confirmation of the implementation of the same should be required as a prerequisite for funding implementation of the HPMP;
- (f) In cases where there were multiple implementing agencies in one country, a lead agency should be designated to coordinate the overall development of stage one of the HPMP;
- (g) HPMPs should contain cost information at the time of their submission based on and addressing:
 - (i) The most current HCFC cost guidelines at the time of submission;
 - (ii) Alternative cost scenarios based on different potential cut-off dates for new capacity if a specific cut-off date had not yet been decided, for funding eligibility of manufacturing facilities as specified in decision 53/37(k), as well as the current policy for a 25 July 1995 cut-off date;
 - (iii) Alternative cost scenarios for the operational and capital costs for second conversions;
 - (iv) The incremental costs of regulating import and supply to the market of HCFC dependent equipment once proven alternatives were commercially available in the country and describing the benefits to the servicing sector of associated reduced demand:
 - (v) Cost and benefit information based on the full range of alternatives considered, and associated ODP and other impacts on the environment including on the climate, taking into account global-warming potential, energy use and other relevant factors;
- (h) Countries and agencies were encouraged to explore potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties;
- (i) HPMPs should address:
 - (i) The use of institutional arrangements mentioned in decision 53/37(e) and (f);

- (ii) The roles and responsibilities of associations of refrigeration technicians and other industry associations and how they could contribute to HCFC phase-out; and
- (j) HPMPs should, as a minimum, fulfil the data and information requirements, as applicable, listed in the indicative outline for the development of HPMPs, as set out in Annex XIX to the present report.

Annex II

ANALYSIS OF PROJECT PREPARATION FOR STAGE I HPMPS

- 1. The Nineteenth Meeting of the Parties (MOP) to the Montreal Protocol agreed on accelerated control measures for HCFC consumption in September 2007. Responding to this decision of the MOP contained in decision XIX/6, the Executive Committee decided at its 54th meeting in April 2008, the first meeting after the Nineteenth MOP, on guidelines for the preparation of HPMP's which would address how countries would meet the freeze in 2013 and the 10 per cent reduction in 2015. The approval of these guidelines contained in decision 54/39 allowed eligible countries to request and get approval for funds for the preparation of their respective HPMPs at the 55th meeting.
- 2. At the 56th meeting, in further discussing issues related to HCFC phase-out, the Executive Committee agreed on a cost structure for determining funding levels for preparation of HCFC investment and associated activities (decision 56/16). The same decision also defined the elements of a cost structure for funding the preparation of an overall HPMP in line with decision 54/39, which was the basis for the project preparation funds approved by the Executive Committee for the first time at the 55th meeting. This decision applied to all Article 5 countries except for China. The activities outlined in the decision included the following:
 - (a) Assistance for policy and legislation, e.g. to develop new or extend existing legislation regarding HCFC, products containing HCFCs, quotas, and licences;
 - (b) Survey of HCFC use and analysis of data;
 - (c) Development and finalization of the HPMP including its stage one to address the 2013 and 2015 control measures, the latter being akin to a terminal phase-out management plan (TPMP) or a refrigeration service sector plan; and
 - (d) Development of investment activities for the HCFC-consuming manufacturing sectors for stage one of an HPMP, if such activities were necessary.
- 3. The funding structure agreed by the Executive Committee in approving HPMP project preparation at the 55th meeting was based on the countries' most recent consumption of HCFC, in this case, 2007. The baselines for HCFC consumption were not yet known at this time as these would be calculated based on the average HCFC consumption for 2009 and 2010. Approvals for project preparation funds were nevertheless agreed according to consumption patterns and levels, and funding was provided on this basis.
- 4. Decision 56/16 also established limits for the maximum funding eligible for the development of investment activities for any country with a manufacturing sector using HCFCs based on the countries' HCFC consumption for 2007, excluding China. It also further defined five manufacturing sub-sectors and the associated funding levels for the preparation of investment projects that countries might receive based on the number of enterprises, or the sector.
- 5. Between the 55th and the 61st meetings, the Executive Committee, approved a total of US \$28 million to prepare HPMPs in 144 countries. These included funds for both investment and non-investment components of the HPMP in line with the cost structure agreed in decision 56/16. The progress reports of the implementing agencies submitted to the 67th meeting had shown that out of these funds approved for the HPMPs for Article 5 countries, a remaining US \$7 million was reported as balances held by the agencies countries as at the end of December 2011. This amount constituted 25 per

cent of the total approvals for project preparation funding. Updated balances would be available only by May 2013 when current progress reports by agencies will be due.

6. Subsequently, the Executive Committee continued its deliberations on other outstanding issues related to the cost implications for the implementation of these HPMPs that were currently in preparation. These negotiations resulted in decision 60/44 which outlined the criteria for funding HCFC phase-out in the consumption sector in Article 5 countries. This decision formed the basis for funding stage I HPMPs of Article 5 countries that had been submitted for the consideration of the Executive Committee from the 60th meeting onwards.

An analysis of HPMP approvals to date

- 7. The guidelines for the preparation of stage I of HPMPs adopted in decision 54/39 provided the fundamental reference for the development of the first stage of the HPMPs for Article 5 countries. These guidelines clearly outlined that initially, stage I would be to meet compliance with the freeze and 10 per cent reduction in HCFC consumption in 2013 and 2015 respectively. The Executive Committee however noted that several HPMPs proposed levels of HCFC phase-out greater than the 10 per cent reduction required by 2015. In order to provide further direction, the Executive Committee continued to deliberate on the various issues related to HCFC phase-out. The Committee also observed that there were some circumstances common to LVC countries with very similar patterns of consumption and therefore provided guidance through the following decisions:
 - (a) Stage I of HPMPs which accelerated the phase-out of consumption of HCFCs could be considered on a case-by-case basis for LVC countries that had a strong national level of commitment in place to support accelerated phase-out (decision 60/15);
 - (b) HPMPs for Article 5 countries that had a total HCFC consumption of up to 360 mt that would meet up to the 35 per cent reduction in 2020 could be submitted if the countries so decided (decision 60/44(f)(xi));
 - (c) HPMPs could be submitted for LVC countries which addressed the phase-out of HCFCs ahead of the Montreal Protocol schedule (even up to the complete phase-out of HCFCs) (decision 62/10); and
 - (d) HPMPs to assist former LVC countries with HCFC consumption above 360 mt and in the refrigeration servicing sector only, could be submitted to meet control measures up to 2020 (decision 62/11).
- 8. The Executive Committee further noted that there were also several stage I HPMPs for some non-LVC countries that proposed a phase-out that went beyond the 10 per cent reduction in 2015. In order to account for this additional phase-out, it was agreed at the 63rd meeting that the decision approving such HPMPs should include a clear reference that the concomitant amount was expected to bring the country closer to meeting the phase-out targets beyond 2015. With this extended commitment from the governments concerned, the Executive Committee also allowed these countries to submit stage II proposals at the time of the submission of the last tranche of stage I, without prejudice to the tonnage of HCFCs that would be phased out in stage II proposals¹. From the 64th meeting (July 2011) onwards, submitted HPMPs that addressed a phase-out over 10 per cent of the baseline by 2015 were approved with a commitment from the governments concerned for additional reductions from their HCFC consumption baselines.

¹ Paragraphs 73 and 74 of the final report of the 63rd meeting (UNEP/OzL.Pro/ExCom/63/60).

9. Thus far the Executive Committee has approved 137 HPMPs, 85 for LVC countries and 52 for non-LVC countries. A brief analysis of these HPMPs is presented below.

HPMPs approved for LVC countries

- 10. The 85 LVC countries with approved HPMPs have committed to reducing their HCFC consumption baselines as follows:
 - (a) 10 per cent by 2015 for six countries (Angola, Armenia, Guyana, Kyrgyzstan, the Republic of Moldova and Timor-Leste);
 - (b) 35 per cent by 2020 for 70 countries (Albania, Antigua and Barbuda, Bahamas, Belize, Bolivia (Plurinational State of), Bosnia and Herzegovina, Brunei Darussalam, Burundi, Cape Verde, the Central African Republic, Comoros, the Congo, the Cook Islands, Costa Rica, Cuba, Chad, Djibouti, Dominica, Ecuador, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Former Yugoslav Republic of Macedonia, the Gambia, Georgia, Grenada, Guatemala, Guinea-Bissau, Haiti, Honduras, Jamaica, Kiribati, Lesotho, Liberia, Malawi, Mali, the Marshall Islands, Micronesia (Federal States of), Mongolia, Montenegro, Mozambique, Myanmar, Nauru, Nepal, Nicaragua, Niue, Palau, Paraguay, the Lao People's Democratic Republic, Rwanda, Saint Kitts and Nevis, Saint Lucia, Samoa, Sao Tome and Principe, Serbia, Sierra Leone, Solomon Islands, Sri Lanka, Suriname, Swaziland, the United Republic of Tanzania, Tonga, Turkmenistan, Tuvalu, Uganda, Vanuatu, Zambia and Zimbabwe); and
 - (c) Complete phase-out in advance of the Montreal Protocol schedule by nine countries (Bhutan, Cambodia, Croatia, Maldives, Mauritius, Namibia, Papua New Guinea, Saint Vincent and the Grenadines, and Seychelles).
- 11. The main activities included in stage I of the HPMPs submitted by LVC countries are related to reducing the consumption of HCFCs used for servicing refrigeration and air-conditioning equipment. These included training for service technicians and customs/enforcement officers, public awareness activities, import and quota controls and other specific initiatives like recovery and recycling. While stage I of the HPMPs for LVCs aimed to reduce the level of consumption mainly of HCFC-22 which is predominantly used in these countries, several included activities to reduce consumption of other HCFCs, mainly HCFC-141b (used for flushing refrigeration circuits), HCFC-123, HCFC-124 and HCFC-142b as components of refrigerant blends. There were 14 LVC countries² that some included investment activities for the phase-out of HCFCs used in the manufacturing sector, mostly HCFC-141b used as a foam blowing agent, either imported in bulk or contained in imported pre-blended polyols.

HPMPs approved for non-LVC countries

12. The Executive Committee approved stage I HPMPs for 52 non-LVC countries. Under this category were some countries that had been previously classified as LVCs for the CFC phase-out but because their HCFC consumption was more than 360 mt, are currently classified as non-LVC. Among these approved HPMPs, countries have committed to reduce their HCFC consumption baselines as follows:

² Armenia, Bosnia and Herzegovina, Costa Rica, Croatia, Cuba, Ecuador, El Salvador, Fiji, Guatemala, Jamaica, Nicaragua, Sri Lanka, Swaziland and Zimbabwe.

- (a) Seventeen countries committed to a 10 per cent reduction by 2015 (Brazil, Chile, China, Colombia, Democratic Republic of Congo, Dominican Republic, India, Islamic Republic of Iran, Nigeria, Oman, Pakistan, Panama, Peru, Philippines, Uruguay, Venezuela (Bolivarian Republic of) and Viet Nam). Out of these, three countries (Chile; Islamic Republic of Iran and Viet Nam) were approved with the notion that the amount of HCFCs to be phased out should assist them in making progress toward meeting control measures beyond 2015; and
- (b) Thirty-five countries committed to reducing more than 10 per cent of their consumption baselines by a specific year beyond 2015, as shown in Table 1 below.

Table 1. HCFC consumption phase-out commitments by non-LVC Article 5 countries with an approved HPMP

Former L	Former LVC countries			Non-LVC countries			
Article 5 country	% reduction	Target year	Article 5 country	% reduction	Target year		
Bahrain	42.0	2020	Afghanistan	35.0	2020		
Benin	35.0	2020	Algeria	20.0	2017		
Burkina Faso	35.0	2020	Argentina	18.0	2017		
Cameroon	20.0	2015	Bangladesh	30.0	2018		
Cote d'Ivoire	35.0	2020	Egypt	25.0	2018		
Gabon	35.0	2020	Indonesia	20.0	2015		
Ghana	35.0	2020	Iraq	14.0	2015		
Guinea	35.0	2020	Jordan	20.0	2017		
Kenya	21.0	2017	Kuwait	39.0	2018		
Madagascar	35.0	2020	Lebanon	18.0	2015		
Niger	35.0	2020	Malaysia	15.0	2016		
Qatar	20.0	2015	Mexico	30.0	2015		
Senegal	35.0	2020	Morocco	20.0	2017		
Somalia	35.0	2020	Saudi Arabia	35.0	2020		
Togo	35.0	2020	South Africa	35.0	2020		
Trinidad and Tobago	35.0	2020	Sudan	30.0	2017		
			Thailand	15.0	2018		
			Turkey	86.4	2017		
			Yemen	15.0	2015		

- 13. The main activities included in the HPMPs for several non-LVC countries consisted of investment projects to reduce the consumption of HCFCs used in the manufacturing sector, mainly HCFC-141b used as a polyurethane foam blowing agent and, to a lesser extent, HCFC-22 used as a refrigerant in the manufacturing of refrigeration and air-conditioning equipment, and HCFC-22/HCFC-142b used in the production of extruded polystyrene foams. Generally, these countries with manufacturing facilities also included some activities that would contribute to reducing use of HCFC-22 in the refrigeration servicing sector albeit to a lesser degree of priority as compared to the investment projects. However, for two countries (i.e. Chile or Venezuela (Bolivarian Republic of)), their HPMPs consisted mostly of activities in the refrigeration servicing sector because they felt that there were no cost-effective and sustainable technologies to replace HCFCs used in the manufacturing sector. These have opted to consider activities for the manufacturing sector in stage II of their HPMP.
- 14. Some non-LVC countries that reported HCFC consumption largely in the servicing sector have included only activities for the refrigeration servicing sector, as (e.g., most of the former LVC countries). These activities included training, public awareness activities, import and quota controls and recovery, recycling activities.

Article 5 countries without an approved HPMP

15. Of the 145 Article 5 countries that are eligible for receiving assistance for phasing out HCFC consumption, eight do not yet have an approved HPMP. Three of these countries are categorized as LVCs, with an aggregated HCFC consumption baseline of 14.7 ODP tonnes; while the remaining five countries are non-LVC with an aggregated HCFC consumption baseline of 389.0 ODP tonnes as shown in Table 2.

Table 2. Article 5 countries without an approved HPMP (ODP tonnes)

Country	Baseline	Starting point	Approved	Remaining	% approved
LVC countries					
Barbados	3.7	3.7		3.7	
Botswana	11.0	11.0		11.0	
South Sudan					
Subtotal (LVC countries)	14.7	14.7		14.7	
Non-LVC countries					
Democratic People's Republic	78.0	78.0		78.0	
of Korea*	76.0	76.0		76.0	
Libya	114.7	114.7	0	114.7	
Mauritania	20.4	20.4	0	20.4	
Syrian Arab Republic*	135.2	138.3	12.9	125.4	9.3
Tunisia	40.7	40.7		40.7	
Subtotal (non-LVC countries)	389.0	392.1	12.9	379.2	3.3
Grand total	403.7	406.8	12.9	393.9	3.2

^(*) Submitted to the 68th meeting but deferred by the Executive Committee.

Annex III

LIST OF COUNTRIES AND THEIR CORRESPONDING HPMP APPROVALS

Country	Baseline	Starting Point	HCFC Approved	HCFC Remanining	Total Funding for PRP	Total funding for HPMP
Afghanistan	23.6	23.55	8.2	15.35	115,000	679,101
Albania	6.3	5.91	2.1	3.81	84,926	315,000
Algeria	30.2	35.56	14.48	21.08	248,021	1,993,331
Angola	16	15.95	1.59	14.36	85,000	176,000
Antigua and Barbuda	0.3	0.3	0.03	0.27	85,000	51,700
Argentina	400.7	377.51	83.53	293.98	403,745	10,775,154
Armenia	7	7.83	2.23	5.6	113,451	633,353
Bahamas (the)	4.8	4.81	1.68	3.13	85,000	308,320
Bahrain	52	62.01	23.21	38.8	180,000	2,808,985
Bangladesh	78.6	72.65	24.53	48.12	250,000	1,556,074
Barbados	3.7	3.7	-	3.7	85,000	-
Belize	2.9	2.8	1.03	1.77	85,000	280,000
Benin	23.8	23.81	8.25	15.56	85,000	630,000
Bhutan	0.3	0.3	0.3	-	85,000	470,000
Bolivia (Plurinational State of)	6.2	5.55	1.7	3.85	200,000	315,000
Bosnia and Herzegovina	6.2	8.17	6.58	1.59	180,000	953,284
Botswana	11.01	11.01	-	11.01	150,000	-
Brazil	1,327.40	1,327.23	220.3	1,106.93	573,750	19,597,166
Brunei Darussalam	6.1	6.1	2.14	3.96	85,000	315,000
Burkina Faso	28.9	28.88	9.7	19.18	85,000	796,068
Burundi	7.2	7.15	2.5	4.65	85,000	332,000
Cambodia	15	14.97	14.97	-	150,000	1,600,000
Cameroon	88.9	82.46	25.4	57.06	149,636	1,182,725
Cape Verde	1.1	0.25	0.09	0.16	85,000	160,000
Central African Republic (the)	12	11.99	4.2	7.79	85,000	560,000
Chad	16.1	16.1	9.5	6.6	85,000	630,000
Chile	87.9	87.51	22	65.51	250,000	1,786,455
China	19,269.20	18,865.44	3,445.60	15,419.84	4,330,937	270,000,000
Colombia	225.7	225.54	78.91	146.63	293,867	6,821,483
Comoros (the)	0.1	0.14	0.05	0.09	85,000	160,000
Cook Islands (the)	0.1	0.04	0.02	0.02	-	99,000
Costa Rica	14.1	32.19	17.6	14.59	210,000	1,153,523
Cote d'Ivoire	63.8	63.8	22.33	41.47	85,000	1,825,740
Croatia	3.9	7.5	7.5	-	189,530	1,081,150
Cuba	16.9	30.23	19.26	10.97	250,000	1,747,527
Democratic People's Republic						
of Korea (the)	78	78	-	78	230,000	-
Democratic Republic of the Congo (the)	47.8	58	5.8	52.2	85,000	475,000
Djibouti	0.7	0.7	0.24	0.46	85,000	164,500
Dominica	0.4	0.4	0.08	0.32	85,000	164,500
Dominican Republic (the)	51.8	70.71	27.14	43.57	210,000	1,696,225
Ecuador	17.7	38.16	21.08	17.08	210,000	1,961,440
Egypt	386.3	484.61	174	310.61	325,000	8,520,815
El Salvador	11.8	16.62	9.03	7.59	180,000	8,520,815
Equatorial Guinea	10.2	6.29	2.2	4.09	85,000	315,000
Eritrea	0.1	0.29	0.03	0.07	85,000	164,500
Ethiopia	5.5	5.5	1.92	3.58	85,000	315,000
Fiji	8.4	8.41	2.94	5.47	85,000	315,000
Gabon	30.2	29.74	10.4	19.34	85,000	540,000
Gambia (the)	0.9	0.92	0.32	0.6	76,061	·
Georgia	5.3	5.29	2.33	2.96	· ·	210,000
	57.3	57.3	20.05	37.25	114,999	500,900
Ghana		0.83		0.53	82,532	1,356,311
Grenada Guatemala	0.8	9.7	0.3		85,000	210,000
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Guinea-Bissau	2.9	1.43	0.5	0.93	85,000	210,000
Guyana	1.8	1.64	0.1	1.54	85,000	66,000
Haiti	3.6	3.6	1.26	2.34	85,000	280,000
Honduras	19.9	20.71	6.97	13.74	149,918	630,000
India	1,608.30	1,691.25	341.77	1,349.48	573,580	21,294,490
Indonesia	404	403.93	135	268.93	373,397	12,745,484
Iran (Islamic Republic of)	380.5	380.43	101.3	279.13	373,750	10,219,838
Iraq	108.3	108.38	14.98	93.4	195,000	1,180,000
Jamaica	16.3	16.31	8.13	8.18	115,000	655,450
Jordan	83	93.79	25.5	68.29	278,698	4,726,867
Kenya	52.2	52.2	11	41.2	85,000	900,000
Kiribati	0.1	0.05	0.03	0.02	-	109,000
Kuwait	418.7	429.34	239.15	190.19	255,000	9,904,677
Kyrgyzstan	4.2	4.06	0.44	3.62	95,271	88,000
Lao People's Democratic Republic (the)	2.3	5.08	0.62	4.46	150,000	210,000
Lebanon	73.6	73.53	20	53.53	237,250	2,495,109
Lesotho	3.5	3.9	1.4	2.5	85,000	280,000
Liberia	5.3	5.25	1.93	3.32	85,000	315,000
Libyan Arab Jamahiriya (the)	114.7	114.7	-	114.7	210,000	-
Madagascar	24.9	22.16	6	16.16	85,000	560,000
Malawi	10.8	10.8	3.11	7.69	85,000	350,000
Malaysia	517.7	515.76	103.02	412.74	423,750	9,587,471
Maldives	4.6	3.7	3.7	-	85,000	1,100,000
Mali	15	14.97	5.2	9.77	85,000	560,000
Marshall Islands (the)	0.2	0.11	0.08	0.03	-	113,000
Mauritania	20.4	20.4	-	20.4	85,000	-
Mauritius	8	8.02	8.02	=	75,000	1,000,000
Mexico	1,149.00	1,214.80	417.3	797.5	573,750	18,066,211
Micronesia (Federal States of)	0.2	0.14	0.04	0.1	-	112,000
Mongolia	1.4	1.3	1	0.3	145,000	366,000
Montenegro	0.8	0.9	0.33	0.57	83,466	450,000
Morocco	59.7	68	16.77	51.23	249,935	1,286,740
Mozambique	6.5	6.5	2.27	4.23	85,000	315,000
Myanmar	4.4	6.13	1.5	4.63	85,000	280,000
Namibia	8.4	8.36	8.36	-	85,000	900,000
Nauru		0.01	0.02	-0.01	-	74,000
Nepal	1.1	1.27	0.64	0.63	85,000	210,000
Nicaragua	6.8	7.05		4.36	84,870	330,000
Niger (the)	26.2	16		10.4	85,000	560,000
Nigeria	398.3	398.1	90.1	308	279,996	4,938,830
Niue		0.02		0.01	-	73,000
Oman	31.5	32.58		25.79	150,000	434,120
Pakistan	247.4	247.39		168.26	389,976	5,448,849
Palau	0.2	0.15		0.09	-	120,000
Panama	24.9	27.28		22.5	200,000	335,545
Papua New Guinea	3.2	3.23		12.72	85,000	1,250,000
Paraguay	18.01	19.31	5.58	13.73	210,000	630,000
Peru	26.88	26.88		23.14	230,000	282,671
Philippines (the)	208.5	162.87	45	117.87	324,249	2,318,000
Qatar Pagion ASD	86.8	86.07	57.86	28.21	165,000	2,036,600
Region ASP Republic of Moldova (the)	1	0.94	0.23	0.71	285,000	285,000
Rwanda (tne)	4.2	4.11	0.23	2.71	85,000	88,000
Saint Kitts and Nevis	0.5	0.49		0.31	85,000	280,000 164,500
Saint Kitts and Nevis Saint Lucia	0.5	0.49	0.18	0.31	85,000 85,000	164,500
Saint Vincent and the Grenadine	0.2	0.28		0.13	85,000 85,000	469,915
Samoa	0.3	0.25		0.18	٥٥,000	
San Tome and Principe	2.2	0.25		0.18	95,000	148,500
Sao rome and rimcipe	2.2	1,468.69		0.1	85,000	160,000

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Senegal	36.2	36.15	12.65	23.5	84,445	1,035,216
Serbia	8.4	8.35	3.3	5.05	209,612	990,760
Seychelles	1.4	1.38	1.38	-	85,000	600,000
Sierra Leone	1.7	1.67	0.58	1.09	85,000	210,000
Solomon Islands	2	1.91	0.67	1.24		195,000
Somalia	21.9	6.98	1.85	5.13	85,000	315,000
South Africa	369.8	369.7	176.72	192.98	345,000	6,533,556
South Sudan		-	-	-	-	-
Sri Lanka	13.9	14.09	4.93	9.16	237,250	647,866
Sudan (the)	52.8	50.7	16.18	34.52	250,000	1,456,341
Suriname	2.1	1.98	0.69	1.29	85,000	210,000
Swaziland	7.4	7.08	5.99	1.09	115,000	877,948
Syria	135.2	138.28	12.9	125.38	235,021	-
Thailand	929	943.2	234.73	708.47	495,000	23,052,037
The former Yugoslav Republic of Macedonia	1.8	3.35	2.18	1.17	84,366	1,166,955
Timor Leste	0.5	0.5	0.05	0.45	105,000	271,700
Togo	20	20.57	7	13.57	85,000	630,000
Tonga	0.1	0.07	0.03	0.04	-	127,000
Trinidad and Tobago	46.2	45.97	17.66	28.31	150,000	1,462,733
Tunisia	40.7	40.7	-	40.7	215,000	-
Turkey	493.12	641.35	507.87	133.48	471,530	14,223,540
Turkmenistan	6.8	6.81	2.55	4.26	83,181	652,050
Tuvalu	0.1	0.09	0.03	0.06	-	92,000
Uganda	0.2	0.2	0.07	0.13	30,000	164,500
United Republic of Tanzania (the)	1.7	1.69	0.59	1.1	85,000	210,000
Uruguay	23.4	28.66	4.18	24.48	260,000	380,004
Vanuatu	0.3	0.27	0.1	0.17	-	148,500
Venezuela (Bolivarian Republic	206.97	208.85	23.16	185.69	373,750	1,894,500
Vietnam	221.3	385.81	140.1	245.71	395,000	9,763,820
Yemen	158.2	175.75	63.28	112.47	255,000	790,000
Zambia	5	4.95	1.7	3.25	85,000	315,000
Zimbabwe	17.9	21.55	11.51	10.04	115,000	1,038,818
