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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Sixty-eighth Meeting  
Montreal, 3-7 December 2012

**PROJECT PROPOSAL: ETHIOPIA**

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Phase-out

- HCFC phase-out management plan (stage I, first tranche)

UNEP/UNIDO

## PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

### Ethiopia

<b>(I) PROJECT TITLE</b>	<b>AGENCY</b>
HCFC phase out plan (Stage I)	UNEP (lead), UNIDO

<b>(II) LATEST ARTICLE 7 DATA (Annex C Group I)</b>	Year: 2011	11.28 (ODP tonnes)
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<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)</b>								<b>Year: 2011</b>	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b									
HCFC-142b									
HCFC-22					11				11

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009 - 2010 baseline:	5.5	Starting point for sustained aggregate reductions:	5.5
<b>CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)</b>			
Already approved:	0.0	Remaining:	3.58

<b>(V) BUSINESS PLAN</b>		2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)		0.0			0.0		0.0		0.0	0.0
	Funding (US \$)		79,763			94,921		94,921		47,458	317,063
UNIDO	ODS phase-out (ODP tonnes)										
	Funding (US \$)										

<b>(VI) PROJECT DATA</b>			2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	5.5	5.5	4.95	4.95	4.95	4.95	4.95	3.58	n/a
Maximum allowable consumption (ODP tonnes)			n/a	5.5	5.5	4.95	4.95	4.95	4.95	4.95	3.58	n/a
Project Costs requested in principle(US\$)	UNEP	Project costs	85,000	0	0	0	55,000	0	0	0	35,000	175,000
		Support costs	11,050	0	0	0	7,150	0	0	0	4,550	22,750
	UNIDO	Project costs	70,000	0	0	0	70,000	0	0	0	0	140,000
		Support costs	6,300	0	0	0	6,300	0	0	0	0	12,600
Total project costs requested in principle (US \$)			155,000	0	0	0	125,000	0	0	0	35,000	315,000
Total support costs requested in principle (US \$)			17,350	0	0	0	13,450	0	0	0	4,550	35,350
Total funds requested in principle (US \$)			172,350	0	0	0	138,450	0	0	0	39,550	350,350

<b>(VII) Request for funding for the first tranche (2012)</b>		
Agency	Funds requested (US \$)	Support costs (US \$)
UNEP	85,000	11,050
UNIDO	70,000	6,300

<b>Funding request:</b>	Approval of funding for the first tranche (2012) as indicated above
<b>Secretariat's recommendation:</b>	Individual consideration

## PROJECT DESCRIPTION

1. On behalf of the Government of Ethiopia UNEP, as the lead implementing agency, has submitted to the 68<sup>th</sup> Meeting of the Executive Committee stage I of an HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$389,900, consisting of US \$210,000 plus agency support costs of US \$27,300 for UNEP and US \$140,000 plus agency support costs of US \$12,600 for UNIDO. The HPMP covers strategies and activities to achieve a 35 per cent reduction in HCFC consumption by 2020.
2. The first tranche for stage I being requested at this meeting amounts to US \$189,300, consisting of US \$100,000 plus agency support costs of US \$13,000 for UNEP and US \$70,000 plus agency support costs of US \$6,300 for UNIDO, as originally submitted.

### Background

#### ODS regulations

3. Ethiopia's ozone depleting substances (ODS) regulations were gazetted in 2011. These regulations cover the imports and exports of ODS and ODS-using equipment and also provide for a licensing system for all ODS controlled by the Montreal Protocol including HCFCs. The current ODS regulations also include provisions for a future ban on the imports and exports of HCFC-using equipment, as well as for a quota system in line with Montreal Protocol control measures. The Environmental Protection Agency (EPA) has been the focal point for the Montreal Protocol since 2012 and coordinates all national activities to meet compliance. It is responsible for the logistical and enforcement mechanisms for the ODS regulations and raising awareness of the importers and the general public on ozone issues. The EPA works very closely with the Ethiopian Customs and Revenue Authority (ECRA) in the enforcement of the ODS regulations especially in controlling and monitoring the imports and exports of ODS.

4. The Government of Ethiopia has ratified all of the amendments to the Montreal Protocol.

#### HCFC consumption

5. The survey revealed that a significant amount of HCFCs, mostly HCFC-22, was being used in the country in the domestic, commercial and industrial air-conditioning sectors, mainly for servicing equipment. It also indicated that the consumption of HCFCs had been increasing since 2008. The best estimate of historic consumption of HCFC-22 is indicated in table 1 below:

Table 1: Level of HCFC-22 consumption from 2008 to 2010 in Ethiopia

Year	Article 7 data		Survey data	
	mt	ODP tonnes	mt	ODP tonnes
2008	0	0	98	5.39
2009	0	0	130	7.15
2010	200	11	200	11

6. The survey figures above show that the consumption of HCFCs had risen significantly from 98 metric tonnes (mt) in 2008 to 200 mt in 2010. This was attributed to the rapid growth in infrastructure development, with newly-constructed modern buildings being fitted with refrigeration and air-conditioning facilities thereby increasing servicing needs. The HPMP also indicated that HCFC consumption grew due to minimal control over imports in the absence of the ODS regulations during this period, as well as the replacement of CFC with HCFC use. It further noted that this increase in consumption based on the survey done for the HPMP preparation had not been taken into account when reporting Article 7 data for the past years. A request to revise the Article 7 data to reflect the actual consumption in the country is being prepared.

#### Sectoral distribution of HCFCs

7. In Ethiopia HCFCs are used in servicing equipment for the domestic, commercial and industrial air-conditioning sectors. The domestic air-conditioning sector in the country includes mainly air-conditioners, comprising over 2 million pieces of split and window type equipment, which used HCFC-22 in 2010. The survey results showed that this sub-sector accounts for the largest consumption at the level of 73 per cent of the country's total consumption.

8. The commercial sector comprises mainly central air conditioning plants. These are large cooling facilities with a large refrigerant charge capacity. This sub-sector contributed 17 per cent of total HCFC-22 consumption in 2010. The industrial refrigeration sub sector accounted for 10 per cent of the total HCFC-22 consumed in 2010. The bulk of the available HCFCs were used for servicing old equipment. The HCFC consumption by sector is summarized in Table 2 below:

Table 2: HCFC consumption by sector for 2010

Refrigeration equipment	Total units	Charge (tonnes)		Servicing		Leakage rate
				(Consumption /year) (tonnes)		
		Metric	ODP	Metric	ODP	
Air conditioning (unitary/split systems)	2,755,908	389	21.4	56	3.08	14%
Commercial refrigeration and food processing	630,267	890	48.95	132	7.26	15%
Industrial and other equipment	402,492	25	1.38	12	0.66	48%
<b>Total</b>	<b>3,788,667</b>	<b>1,304</b>	<b>71.7</b>	<b>200</b>	<b>11.00</b>	

#### Estimated baseline for HCFC consumption

9. The estimated baseline for compliance was calculated as 165 mt (9.1 ODP) tonnes by Ethiopia using the average of consumption of 130 mt (7.15 ODP tonnes) in 2009 and 200 mt (11 ODP tonnes) in 2010 based on the survey data. However, based on the official Article 7 data reported for 2009 and 2010, the baseline would be 100 mt (5.5 ODP tonnes).

Forecast of future HCFC consumption

10. Ethiopia estimated its future demand to increase by an average of 7 per cent annually. The calculation of unconstrained demand used the country’s growth rate for 2011 which was estimated at 7.5 percent as a basis. Table 3 below provides a summary of the forecast of HCFC consumption in Ethiopia, showing the difference between constrained growth and unconstrained growth.

Table 3: Forecast consumption of HCFCs

Year	units	2010*	2011*	2012	2013	2014	2015	2016	2017	2018	2019	2020
Constrained HCFC consumption	mt	200	205	205	165	165	149	149	149	149	149	107
	ODP t	11.0	11.3	11.3	9.1	9.1	8.2	8.2	8.2	8.2	8.2	5.91
Unconstrained HCFC consumption	mt	200	205	216	233	253	273	295	318	344	371	400
	ODP t	11.0	11.3	11.9	12.9	13.9	15.0	16.2	17.5	18.9	20.4	22.0

\*Article 7 data

HCFC phase-out strategy

11. The Government of Ethiopia is proposing to meet the Montreal Protocol’s HCFC control targets, i.e. freeze in 2013, 10 per cent reduction by 2015 and 35 per cent reduction by 2020. Stage I of the HPMP overarching strategy will be achieved through training of customs and law enforcement officers; incentive programme and strengthening capacity of recovery, recycling and retrofitting centres; training of refrigeration service technicians and strengthening of the refrigeration association; coordination, monitoring and reporting of HPMP activities. Table 4 provides a description of the specific activities and implementation time frame for stage I of the HPMP.

Table 4: Specific activities of stage I of the HPMP, proposed period of implementation, and cost stages

<b>PROJECT COMPONENT</b>	<b>Period of implementation</b>
Further training of customs and other law enforcement officers and strengthening the customs training schools. Dissemination of the amended ODS regulations.	2012 -2020
Strengthening of the regional retrofitting centres through provision of technical assistance, equipment and incentive programme for access of tool kits, spare parts, alternative refrigerants and conversions, and maintaining activities geared towards reduction of HCFC emissions emanating from the refrigeration and air-conditioning sector	2012 -2020
Strengthening of the technicians’ association, collaboration with training colleges and including vocational institutes which offer courses in refrigeration and air-conditioning, to strengthen existing training curricula; and promoting good practices in refrigeration and air-conditioning.	2012 -2020
Coordination, monitoring and reporting of HPMP activities	2012 -2020

12. The total cost of stage I of the HPMP for Ethiopia has been estimated at US \$350,000 to achieve a 35 per cent reduction in HCFC consumption by 2020. The detailed cost breakdown for activities is listed in Table 5. This is submitted in line with the country's potential eligible funding under decision 60/44, based on a calculated baseline using survey data collected during HPMP preparation.

Table 5: Proposed activities and cost of stage I of the HPMP

Description of Activities	Total (US \$)
Training of customs and other law enforcement officers	75,000
Technical assistance and equipment programme for four regional retrofitting centres	140,000
Training of refrigeration technicians in good refrigeration practices	105,000
Coordination, monitoring and evaluation	30,000
<b>Total</b>	<b>350,000</b>

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

13. The Secretariat reviewed the HPMP for Ethiopia in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60<sup>th</sup> Meeting (decision 60/44), subsequent decisions on HPMPs and the 2012-2014 business plan of the Multilateral Fund. The Secretariat discussed with UNEP technical and cost related issues, which were satisfactorily addressed as summarized below.

#### HCFC licensing and quota system

14. In line with decision 63/17, the Secretariat requested the Government of Ethiopia through UNEP to confirm that there was an enforceable national system of licensing and quotas for HCFC imports in place, and that this system was capable of ensuring the country's compliance with the Montreal Protocol HCFC phase-out schedule during the implementation of the HPMP. UNEP replied that there were existing ODS regulations to control imports and exports, including HCFCs (see paragraph 3 above). A copy of these regulations had been submitted to the Ozone Secretariat in compliance with Article 4B of the Montreal Protocol. UNEP also confirmed that this licensing system would allow the country to comply with the HCFC control measures under the Montreal Protocol.

#### Issues related to consumption

15. The Secretariat noted that the consumption data provided in the HPMP was not consistent with that initially reported under Article 7 by the Government of Ethiopia, and sought clarification from UNEP on reasons for this discrepancy. UNEP explained that reporting under Article 7 for previous years was based only on estimates and not actual imports, as the country did not have an operational licensing system at that time. UNEP also added that the survey conducted during project preparation allowed for a much better understanding of HCFC use in the country. It revealed HCFC-22 was used for servicing for the years in which Article 7 data showed zero consumption. Because of this, the Government of Ethiopia had filed an official request to the Ozone Secretariat to change its Article 7 data for 2008 and 2009. This revision will still require a decision of Parties to the Montreal Protocol.

### Starting point for aggregate reduction in HCFC consumption

16. The Government of Ethiopia initially established an estimated baseline for compliance of 165 mt (9.1 ODP tonnes) calculated using the average of consumption of 130 mt (7.15 ODP tonnes) in 2009 and 200 mt (11 ODP tonnes) in 2010 based on the survey data (see paragraph 9). As indicated in paragraph 15 above, this change in data still needs consideration of the Implementation Committee and subsequent approval of the Parties to the Montreal Protocol. Therefore for the purposes of this HPMP and in order to establish a starting point for aggregate reduction in HCFC consumption, the Government of Ethiopia agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 100 mt (5.5 ODP tonnes) calculated using the average of reported consumption of 0 mt (0 ODP tonne) in 2009 and 200 mt (11 ODP tonnes) in 2010 under Article 7. This baseline would have an associated funding of US \$315,000 in line with decision 60/44(f)(xii). However, if the Parties of the Montreal Protocol approve the request for modification of the HCFC consumption previously reported for 2009, an adjustment to the funding will be made according to the revised baseline, when the second tranche is requested.

### Technical and cost issues

17. The Secretariat raised queries on some of the activities included in the HPMP as they related to those already implemented in the refrigerant management plan (RMP) update for CFCs. Activities under the RMP update had been carried out in Ethiopia despite the project cancellation at the 61<sup>st</sup> meeting. The Secretariat drew particular attention to what had been identified as accomplishments under the RMP update which included retrofitting of equipment, implementation of the recovery and recycling project as well as the approval of the ODS regulations and licensing system. UNEP clarified that the licensing system was published in the official gazette in 2011, and the implementation is quite new. It reiterated however that there is a strong relationship between the Ozone Unit (NOU) and the ECRA which will help in the control and monitoring of HCFC imports and exports. With regards to the recovery and recycling project, UNEP clarified that there is currently inadequate data in terms of the quantity and type of refrigerant received; however, a system has been set up for this purpose with the assistance of the refrigeration association. This will form the basis of similar activities in the HPMP.

18. UNEP also indicated that the equipment provided to the reclaim centres is still in good working condition. It also mentioned that the equipment units are of limited number, it is important that the HPMP consider additional equipment for technicians to enable better distribution and wider dissemination of good servicing practice. Information was also provided regarding the type and number of equipment that was retrofitted during this time, mostly to HFC-134a and to HCFC-22.

19. The Secretariat sought an explanation on the incentive programme for retrofitting, taking into account the lack of low-global warming potential (GWP) alternatives for retrofitting equipment in Ethiopia, and on what improvements were to be carried out under the HPMP compared to previous customs/servicing training programmes implemented during the CFC phase-out; list of equipment to be provided and a justification for the need for additional equipment. It also considered discussions at the 66<sup>th</sup> and 67<sup>th</sup> meeting of the Executive Committee with regard to activities in the servicing sector and whether retrofitting is the best option for stage I or if it can be postponed to a later stage. The Secretariat also asked what approach was being taken to ensure sustainability for the retrofitting component taking into account the fact that HCFC-22 is still cheaper than other alternatives.

20. UNEP explained that the pilot retrofit programme, while included in stage I of the HPMP, will commence only as part of the activities for the second tranche of the project, in 2016. It agreed that the pilot retrofit scheme should be implemented once more alternatives become available, and immediate activities will thus focus on strengthening the capacity of technicians for good servicing of equipment that use HCFCs, while at the same time increasing the technicians' knowledge about alternative refrigerants to

make them ready for the future implementation of the retrofit programme. Currently, HFC-404a and hydrocarbons are being used in the country, to some varied degree.

21. UNEP also provided additional information and justification for some budget items in these training programmes as well as a list of the tools to be provided to the service technicians and training centres with the corresponding cost breakdown and a justification for the need of new equipment. In explaining the approach for the pilot retrofit programme to be implemented by UNIDO, UNEP described this to include the provision of grants for eligible beneficiaries to cover a percentage of costs for spare parts and alternative refrigerants. This scheme will be implemented through the refrigeration association with close monitoring and control of the NOU and UNIDO. The Secretariat also requested UNEP to ensure that provisions are included in this scheme to ensure its sustainability after funds for HPMP implementation run out.

22. The Secretariat informed UNEP that the HPMP was reviewed on the basis of the data reported under Article 7 on which compliance with the Montreal Protocol is assessed and not the data reported in the HPMP. Accordingly, the eligible funding would be US \$315,000 for a low-volume-consuming (LVC) country with baseline consumption between 80 to 120 mt in the refrigeration servicing sector to achieve a 35 per cent reduction by 2020. The funding could be adjusted if the HCFC consumption baseline is revised (see paragraph 16 above).

23. The adjusted funding is reflected in the table below:

Description of Activities	Total (US \$)
Training of customs and other law enforcement officers	60,000
Technical assistance and equipment programme for four regional retrofitting centres	140,000
Training of refrigeration technicians in good refrigeration practices	85,000
Coordination, monitoring and evaluation	30,000
<b>Total</b>	<b>315,000</b>

#### Impact on the climate

24. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogram (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO<sub>2</sub>-equivalent tonnes saved. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Ethiopia, in particular training for technicians on improved servicing practices, and refrigerant recovery and reuse, indicate that the implementation of the HPMP will reduce the emission of refrigerants into atmosphere therefore resulting in benefits in climate. However, at this time, the Secretariat is not in a position to quantitatively estimate the impact on the climate. The impact might be established through an assessment of implementation reports by, *inter alia*, comparing the levels of refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22 based equipment being retrofitted.

Co-financing

25. In response to decision 54/39(h) on 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, UNEP explained that the Government of Ethiopia will provide personnel and other resources as an in-kind contribution, which could be considered as the Government's share of co-financing for the HPMP. The Secretariat proposed that UNEP should encourage Ethiopia to explore other co-financing opportunities especially for stage II of the HPMP.

2012-2014 business plan of the Multilateral Fund

26. UNEP and UNIDO are requesting US \$315,000 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2012-2014 of US \$172,350 including support cost is above the total amount in the business plan. Based on the HCFC baseline consumption in the servicing sector of 100 mt, Ethiopia's allocation up to the 2020 phase-out should be US \$315,000 in line with decision 60/44.

Draft Agreement

27. A draft Agreement between the Government of Ethiopia and the Executive Committee for HCFC phase-out is contained in Annex I to the present document.

**RECOMMENDATION**

28. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Ethiopia for the period 2012 to 2020 to reduce HCFC consumption by 35 per cent of the baseline, at the amount of US \$350,350, consisting of US \$175,000, plus agency support costs of US \$22,750 for UNEP, and US \$140,000, plus agency support costs of US \$12,600 for UNIDO;
- (b) Noting that the Government of Ethiopia had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 5.5 ODP tonnes, calculated using consumption of 0 ODP tonnes and 11 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol;
- (c) Deducting 1.92 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption;
- (d) Approving the draft Agreement between the Government of Ethiopia and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
- (e) Requesting the Fund Secretariat, in the event that the baseline consumption for compliance for Ethiopia was amended based on revised Article 7 data, to update Appendix 2-A to the Agreement to include the revised figures for maximum allowable consumption, and to notify the Executive Committee of the resulting change in the levels of maximum allowable consumption and of any potential related impact on the eligible funding level, with any adjustments needed being made when the next tranche was submitted; and

- (f) Approving the first tranche of stage I of the HPMP for Ethiopia, and the corresponding implementation plan, at the amount of US \$172,350, consisting of US \$85,000, plus agency support costs of US \$11,050 for UNEP, and US \$70,000 plus agency support costs of US \$6,300 for UNIDO.

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## Annex I

### **DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF ETHIOPIA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS**

1. This Agreement represents the understanding of the Government of Ethiopia (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of 3.58 ODP tonnes by 1 January 2020 in compliance with Montreal Protocol schedules, with the understanding that this figure is to be revised one single time, in the event that the baseline consumption for compliance is amended based on the revised Article 7 data , with the funding to be adjusted accordingly, as per decision 60/44.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in row 4.1.3 (remaining eligible consumption).
3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (“Funding Approval Schedule”).
4. The Country agrees to implement this Agreement in accordance with the HCFC phase-out sector plans submitted. In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.
5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
  - (a) That the Country had met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which no obligation for reporting of country programme data exists at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
  - (b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;
  - (c) That the Country had submitted annual implementation reports in the form of Appendix 4-A (“Format of Implementation Reports and Plans”) covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the

previously approved tranche was more than 20 per cent; and

- (d) That the Country has submitted an annual implementation plan in the form of Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A (“Monitoring Institutions and Roles”) will monitor and report on implementation of the activities in the previous annual implementation plans in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in paragraph 4 above.

7. The Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

- (a) Reallocations categorized as major changes must be documented in advance either in an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual implementation plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
  - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
  - (ii) Changes which would modify any clause of this Agreement;
  - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and
  - (iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
- (b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and
- (c) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sub-sector, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the plan.

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNEP has agreed to be the lead implementing agency (the “Lead IA”) and UNIDO has agreed

to be the cooperating implementing agency (the “Cooperating IA”) under the lead of the Lead IA in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of any of the agencies taking part in this Agreement.

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have reached consensus on the arrangements regarding inter-agency planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A (“Reductions in Funding for Failure to Comply”) in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once these decisions are taken, this specific case will not be an impediment for future tranches as per paragraph 5 above.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee, the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to the information necessary to verify compliance with this Agreement.

14. The completion of stage I of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee.

15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

## APPENDICES

### APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	5.5

### APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	5.5	5.5	4.95	4.95	4.95	4.95	4.95	3.58	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	5.5	5.5	4.95	4.95	4.95	4.95	4.95	3.58	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	85,000	0	0	0	55,000	0	0	0	35,000	175,000
2.2	Support costs for Lead IA (US \$)	11,050	0	0	0	7,150	0	0	0	4,550	22,750
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	70,000	0	0	0	70,000	0	0	0	0	140,000
2.4	Support costs for Cooperating IA (US \$)	6,300	0	0	0	6,300	0	0	0	0	12,600
3.1	Total agreed funding (US \$)	155,000	0	0	0	125,000	0	0	0	35,000	315,000
3.2	Total support costs (US \$)	17,350	0	0	0	13,450	0	0	0	4,550	35,350
3.3	Total agreed costs (US \$)	172,350	0	0	0	138,450	0	0	0	39,550	350,350
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)										1.92
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)										0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)										3.58

### APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the first meeting of the year specified in Appendix 2-A.

#### **APPENDIX 4-A: FORMAT OF IMPLEMENTATION REPORTS AND PLANS**

1. The submission of the Implementation Report and Plan for each tranche request will consist of five parts:
  - (a) A narrative report, with data provided by calendar year, regarding the progress since the year prior to the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include ODS phase-out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Annual Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information on activities in the current year;
  - (b) A verification report of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
  - (c) A written description of the activities to be undertaken until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
  - (d) A set of quantitative information for all annual implementation reports and annual implementation plans, submitted through an online database. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and
  - (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

## **APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES**

1. The national ozone unit (NOU) will be monitoring the implementation of the project activities and will prepare quarterly progress reports for the project. The monitoring program will ensure effectiveness of all the proposed projects within the HPMP through constant monitoring and periodic review of the performance of individual projects. Independent verification will be conducted by consultant arranged by the Lead IA.

2. The Lead IA will have a particularly prominent role in the monitoring arrangements because of its mandate to monitor ODS imports, whose records will be used as a crosschecking reference in all the monitoring programmes for the different projects within the HPMP. The Lead IA, along with the Cooperating IA will also undertake the challenging task of monitoring illegal ODS imports and exports, and advise the appropriate national agencies through the NOU.

## **APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY**

1. The Lead IA will be responsible for a range of activities, including at least the following:
  - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
  - (b) Assisting the Country in preparation of the Implementation Plans and subsequent reports as per Appendix 4-A;
  - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Implementation Plan consistent with Appendix 4-A;
  - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
  - (e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;
  - (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
  - (g) Carrying out required supervision missions;
  - (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Implementation Plan and accurate data reporting;
  - (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
  - (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;

- (k) Ensuring that disbursements made to the Country are based on the use of the indicators; and
- (l) Providing assistance with policy, management and technical support when required.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

#### **APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY**

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the overall plan, including at least the following:

- (a) Providing assistance for policy development when required;
- (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
- (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

#### **APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY**

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$180 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met.

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