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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-fourth Meeting
Montreal, 25-29 July 2011

PROJECT PROPOSAL: ZAMBIA

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

Zambia

(I) PROJECT TITLE	AGENCY
HPMP	UNEP (lead), UNIDO

(II) LATEST ARTICLE 7 DATA	Year: 2009	0.7 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2009			
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					0.7				0.7		

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline (estimate):	4.95	Starting point for sustained aggregate reductions:	4.95
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	3.22

(V) BUSINESS PLAN		2011	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	0.1
	Funding (US \$)	26,596	0	26,596	0	0	21,971	0	21,335	0	10,985	107,484
UNIDO	ODS phase-out (ODP tonnes)	0.0				0.0	0.0					0.1
	Funding (US \$)	25,209	0	0	0	25,209	25,209	0	0	0	0	75,626

(VI) PROJECT DATA		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
Montreal Protocol consumption limits (estimate)		n/a	n/a	5.0	5.0	4.5	4.5	4.5	4.5	4.5	3.2	n/a	
Maximum allowable consumption (ODP tonnes)		n/a	n/a	4.95	4.95	4.45	4.45	4.45	4.45	4.45	3.22	n/a	
Project Costs requested in principle (US\$)	UNEP	Project costs	40,000	0	40,000	0	0	35,000	0	30,000	0	30,000	175,000
		Support costs	5,200	0	5,200	0	0	4,550	0	3,900	0	3,900	22,750
	UNIDO	Project costs	70,000	0	0	0	0	70,000	0	0	0	0	140,000
		Support costs	6,300	0	0	0	0	6,300	0	0	0	0	12,600
Total project costs requested in principle (US \$)		110,000	0	40,000	0	0	105,000	0	30,000	0	30,000	315,000	
Total support costs requested in principle (US \$)		11,500	0	5,200	0	0	10,850	0	3,900	0	3,900	35,350	
Total funds requested in principle (US \$)		121,500	0	45,200	0	0	115,850	0	33,900	0	33,900	350,350	

(VII) Request for funding for the first tranche (2011)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNEP	40,000	5,200
UNIDO	70,000	6,300

Funding request:	Approval of funding for the first tranche (2011) as indicated above
Secretariat's recommendation:	Individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of Zambia UNEP, as the lead implementing agency, has submitted to the 64th Meeting of the Executive Committee stage I of an HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$350,000 plus agency support costs of US \$26,000 for UNEP and US \$13,500 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 \$55,000 plus agency support cost of US \$7,150 for UNEP, and US \$75,000 plus agency support cost of US \$6,750 for UNIDO, as originally submitted.

Background

ODS regulations

3. The Environmental Council is the national body responsible for providing policy and strategic direction for the implementation of the Montreal Protocol in Zambia. The National Ozone Unit (NOU) was established within the Council to carry out operational activities of the ODS phase-out and to meet reporting requirements. The Government of Zambia passed the ozone-depleting substances (ODS) regulations statutory instrument No. 27 of 2001 under the Environmental Protection and Pollution Control Act chapter 204. The regulations control the import and export of all ODS including HCFCs and HCFC-containing equipment. They stipulate that all importers of ODS and ODS-containing equipment must be registered and also control the imports of ODS through import permits, within the national quota that is set according to the Montreal Protocol phase-out schedule.

HCFC consumption

4. All HCFCs used in Zambia are imported as the country does not produce these substances. The survey undertaken during the HPMP preparation showed that HCFC-22 is the only HCFC identified in Zambia and is predominantly used in the refrigeration and air-conditioning servicing sector. Table 1 shows the level of HCFC consumption.

Table 1. HCFC level of consumption in Zambia

Year	Article 7 data		Survey data	
	Metric tonnes	ODP tonnes	Metric tonnes	ODP tonnes
2005	15.0	0.8	115.4	6.35
2006	13.5	0.7	123.4	6.79
2007	12.5	0.7	133.4	7.34
2008	12.0	0.7	143.5	7.89
2009	12.0	0.7	155.6	8.56

5. The survey data showed a significant increase in HCFC consumption for all the years from 2005 to 2009 as compared with Article 7 data. It was explained in the HPMP that there had been no accurate data on HCFC consumption until the HPMP survey was conducted. This was attributed to inaccuracies in the licensing system which did not cover all imports of HCFCs due to the wrong classification of refrigerants, the porous border and the fact that HCFC reporting was not compulsory. During the HPMP survey, HCFC consumption data was collected from service workshops and technicians, and is thus considered to be more accurate. Zambia is considering sending a request to the Ozone Secretariat to revise the 2009 consumption data.

6. HCFC-22 is the least expensive refrigerant available in Zambia. The non-HCFC refrigerants including ammonia, HFC-134a, HFC blends R-404 and R-407 are also available in the market. Hydrocarbon refrigerants are not readily available although there is an increase in the importation of the hydrocarbon-based equipment. In 2009, the total refrigerant consumption in Zambia amounted to 211.4 mt, of which HCFC-22 accounted for 155.6 mt, or 73.6 per cent.

Sectoral distribution of HCFCs

7. The installed capacity of refrigeration and air-conditioning units using HCFC-22 was estimated at 90,000 units in 2009. The average charge for different types of equipment was estimated and used to calculate the total installed capacity. The average leakage rate is approximately 54 per cent. A summary of HCFC consumption by sector is shown in Table 2.

Table 2: HCFC consumption by sector for 2009

Type	Total number of units	Installed capacity (tonnes)		Service demand (tonnes)	
		Metric	ODP	Metric	ODP
Split/Window air-conditioners	65,000	84.5	4.65	21.1	1.16
Commercial cold rooms and freezers	20,000	200.0*	11.00	134.0	7.37
Refrigerated transport units	5,000	6.5	0.36	0.5	0.03
Total	90,000	291.0	16.01	155.6	8.56

*The estimated average charge of 10 kg was used to calculate the installed capacity.

Estimated baseline for HCFC consumption

8. The estimated baseline is calculated as 161.8 mt (8.90 ODP tonnes) by Zambia using the average of 2009 consumption of 155.6 mt (8.56 ODP tonnes) and 2010 consumption of 167.9 mt (9.23 ODP tonnes) obtained from the survey. The estimated baseline will be adjusted accordingly when the 2010 consumption is officially reported to the Ozone Secretariat.

Forecast of future HCFC consumption

9. Zambia estimated its future demand for HCFCs at an 8 per cent growth rate based on the economic development and the needs for charging new equipment. Table 3 below provides a summary of the forecast of HCFC consumption in Zambia, showing the difference between constrained growth (i.e. in line with the Protocol) and unconstrained growth.

Table 3: Forecast consumption of HCFCs

Year		2009*	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Constrained HCFC consumption	mt	12.00	167.90	167.90	167.90	89.95	89.95	80.96	80.96	80.96	80.96	80.96	58.47
	ODP t	0.66	9.23	9.23	9.23	4.95	4.95	4.45	4.45	4.45	4.45	4.45	3.22
Unconstrained HCFC consumption	mt	12.00	167.90	181.33	195.84	211.51	228.43	246.70	266.44	287.75	310.77	335.63	362.48
	ODP t	0.66	9.23	9.97	10.77	11.63	12.56	13.57	14.65	15.83	17.09	18.46	19.94

*actual reported A7 data

HCFC phase-out strategy

10. The Government of Zambia is proposing to follow the Montreal Protocol schedule and adopt a staged approach to achieve the complete phase-out of HCFCs by 2030. The current submission only contains stage I of the HPMP to achieve a 35 per cent reduction by 2020 and focuses on activities for the servicing sector using HCFC-22.

11. Zambia will reduce the demand for HCFC-22 for servicing of existing equipment through HCFC recovery and recycling, strengthening training of technicians and building their capacity for better service practices. Hydrocarbon technologies using low-global-warming-potential (GWP) refrigerants will be introduced through a demonstration project. Zambia will also ensure that imports of both bulk HCFC-22 and HCFC-containing equipment are reduced by applying the established quota following the reduction schedule of the Montreal Protocol. In addition, the Government will strengthen the enforcement of the licensing system in order to closely monitor imports of both HCFCs and HCFC-using equipment to ensure that these are within the limits set. Table 4 provides a description of the specific activities and implementation time frame of stage I of the HPMP.

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

Description of Activities	Time frame
Promoting awareness on HCFC phase-out, strengthening the customs training school, training of customs officers	2011-2020
Strengthening refrigeration association, training of technicians on good practice, recovery and reuse, provision of tool kits	2011-2020
Provision of tools and equipment for recovery, reuse and retrofit, refrigerant identifier, and refrigerant stock for demonstration of retrofit	2011-2015
Support to retrofit centres and big end-users, demonstration and incentive programme for retrofit	2015-2020
Project monitoring, coordination and reporting	2011-2020

Cost of the HPMP

12. The total cost of stage I of the HPMP for Zambia 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.

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

Description of Activities	UNEP	UNIDO	Total
Promoting awareness on HCFC phase out, strengthening the customs training school, training of customs officers	65,000	-	65,000
Strengthening refrigeration association, training of technicians on good practice, recovery and reuse, provision of tool kits	75,000	-	75,000
Provision of tools and equipment for recovery, reuse and retrofit, refrigerant identifier, and refrigerant stock for demonstration of retrofit	-	80,000	80,000

Description of Activities	UNEP	UNIDO	Total
Support to retrofit centres and big end-users, demonstration and incentive programme for retrofit	-	70,000	70,000
Project monitoring, coordination and reporting	60,000	-	60,000
Total	200,000	150,000	350,000

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

13. The Secretariat reviewed the HPMP for Zambia 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 60th Meeting (decision 60/44), and subsequent decisions on HPMPs and the 2011-2014 business plan of the Multilateral Fund.

Issue related to consumption

14. The Secretariat raised concerns about the significant increase in HCFC consumption show in the survey as compared with that reported under Article 7. It queried why such large inaccuracy exists in the data collected through the licensing system even though Zambia had a reasonable licensing and monitoring system since 2005 that included HCFCs.

15. UNEP responded that, although the regulations and licensing system were in place since 2005, the en/forcement of the licensing system to control HCFC imports was weak for various reasons. Firstly, the reporting of HCFC imports was not compulsory, and the customs officers trained before 2009 were informed that there were no restrictions on HCFCs. HCFC imports recorded at customs level were classified as other substances. Secondly, only bulk imports of refrigerants were controlled at the entry points, and many small imports of HCFC refrigerants were often not recorded. Thirdly, the country was mainly focusing on CFC phase-out before 2009, thus HCFC data collection was neglected. Until the survey for the HPMP preparation was conducted, there had been no accurate data reporting on HCFC consumption. The HPMP survey involved a more rigorous data collection process. The consumption data was collected from service workshops and through interviews of technicians. The survey team especially verified the consumption data for 2009 with available records, while this verification was not conducted for the previous years as records are not retrievable. Therefore the Government has more confidence regarding the 2009 consumption data from the survey.

16. The Secretariat advised the country that, although the 2009 consumption data from the survey is considered as more accurate, based on decision 63/14 calculation of the baseline/starting point for compliance should be based on the latest accepted HCFC consumption data reported under Article 7. Based on this decision, the Secretariat calculated the estimated baseline at the average of the reported 2009 consumption of 12 mt (0.7 ODP tonnes) and the estimated consumption of 167.9 mt (9.23 ODP tonnes) for 2010 resulting in 89.95 mt (4.95 ODP tonnes)

17. UNEP informed the Secretariat that after the discussion with the Government of Zambia, the baseline of 89.95 mt calculated by the Secretariat in line with decision 63/14 was accepted. However, the Government is considering sending a request to the Ozone Secretariat to revise the Article 7 data for 2009.

18. The Secretariat further advised the country that, in line with decision 60/44(e), the estimated baseline could be adjusted when the Article 7 data is formally reported and revised. If the adjustment of the baseline places the country into another funding category specified in 60/44(f)(xii), then the funding level would be adjusted in future tranches accordingly.

Starting point for aggregate reduction in HCFC consumption

19. The Government of Zambia agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the average of actual reported consumption of 12 mt (0.7 ODP tonnes) in 2009 and the estimated consumption of 167.9 mt (9.23 ODP tonnes) for 2010, which results in 89.95 mt (4.95 ODP tonnes). The business plan indicated a baseline of 0.69 ODP tonnes.

Technical and cost issues

20. The Secretariat raised concerns on the cost-effectiveness and sustainability of the consumption capacity to be phased out through the retrofit demonstration project, since the price gap between HCFCs and hydrocarbon refrigerants is still big, only a limited number of units could be retrofitted through demonstration, and the supply of hydrocarbon R-290 to be used for replacing HCFC-22 is not readily available in the country.

21. UNEP explained that, the retrofit demonstration project is designed to initiate the process for retrofitting to hydrocarbon technology and will focus on large commercial equipment, which accounts for 67 per cent of the country's total HCFC consumption. It is likely to be implemented at a later stage when technology options are more economically viable. The demonstration project is planned to provide training and equipment support to technicians to build their capacity in performing retrofit and servicing equipment using hydrocarbon refrigerants to support wider retrofit in the future. It is expected that the cost invested by equipment owners in retrofitting could be recovered from reduced electricity consumption due to the energy efficiency gained in the newly retrofitted units. It is further considered that the owners of HCFC-consuming equipment could realize the economic benefit of retrofit through the demonstration project and start to accept the new refrigerants.

22. The Secretariat queried the proposed cost of purchasing refrigerant stock. UNEP explained that this was planned for use in the demonstration project. Since the hydrocarbon refrigerant R-290 is not readily available in the country and the market for the hydrocarbon refrigerants is uncertain at this moment, the importers are not willing to import these refrigerants for stockpiling. Therefore, hydrocarbon refrigerants are often not available on the market. The HPMP includes a plan to purchase a small amount of refrigerant stock for the demonstration project. It is expected that the demonstration project would promote the retrofit to hydrocarbon refrigerants and increase the installation capacity and service demand for hydrocarbon refrigerants. Once the demand is established, the importers would be willing to supply hydrocarbon refrigerants to the market. UNEP also stressed that although hydrocarbon technology is to be promoted during the retrofit process for climate benefit, it is likely that all types of alternative refrigerants will be adopted in the country during the implementation of the HPMP.

23. The Secretariat raised a concern on the total funding of US \$350,000 requested for the implementation of the stage I of the HPMP, that has exceeded the maximum eligible funding of US \$315,000 for a low-volume-consuming country (LVC) with a baseline of 89.95 mt stipulated in 60/44. UNEP explained that this funding level was proposed based on the estimated baseline of 161.8 mt calculated using the average of 2009 and 2010 HCFC consumptions obtained from the survey. The country agreed to adjust the funding requested in line with the established guidelines.

24. In line with decision 60/44, the total cost of stage I of the HPMP for Zambia was agreed at US \$315,000 to achieve 35 per cent reduction in HCFC consumption by 2020. The detailed cost breakdown is shown in Table 6. This would result in a phase-out of 31.48 mt (1.73 ODP tonnes) by 2020.

Table 6: Total agreed cost of the HPMP

Description of Activities	UNEP	UNIDO	Total
Promoting awareness on HCFC phase-out, strengthening the customs training school, training of customs officers	60,000	-	60,000
Strengthening refrigeration association, training of technicians on good practice, recovery and reuse, provision of tool kits	65,000	-	65,000
Provision of tools and equipment for recovery, reuse and retrofit, refrigerant identifier, and refrigerant stock for demonstration of retrofit	-	70,000	70,000
Support to retrofit centres and big end-users, demonstration and incentive programme for retrofit	-	70,000	70,000
Project monitoring, coordination and reporting	50,000	-	50,000
Total	175,000	140,000	315,000

Impact on the climate

25. 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 kilogramme of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-equivalent tonnes. A preliminary estimation of the impact on the climate as calculated by Zambia in its HPMP indicates that 55,252 CO₂-equivalent tonnes would not be emitted into the atmosphere annually after completion of stage I of the HPMP if all the consumption capacity is converted to hydrocarbon technology. This was calculated by multiplying the phase-out tonnage of 31.48 mt by the difference between GWP value of HCFC-22 and the hydrocarbon-based refrigerants. This figure is equal to 15,112 CO₂-equivalent tonnes if HFC-134a is used in all applications. In reality it is likely that both technologies will be used. This figure is higher than the potential climate impact of the HPMP indicated in the 2011-2014 business plan of 691 CO₂-equivalent tonnes. 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

26. 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 advised that Zambia 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 Zambia to explore other co-financing opportunities especially for stage II of the HPMP.

2010-2014 business plan of the Multilateral Fund

27. UNEP and UNIDO are requesting US \$315,000 plus support costs for implementation of the HPMP. The total value requested for the period of 2011-2014 of US \$166,700 including support cost is above the total amount in the business plan. This is because the baseline of 89.95 mt estimated in the HPMP is much higher than that of 12.48 mt estimated in the business plan. The baseline in the business plan is calculated using an 8 per cent growth rate of accepted reported data for the previous year.

Therefore, on the estimated HCFC baseline consumption in the servicing sector of 89.95 mt, Zambia's allocation up to the 2020 35 per cent reduction should be US \$315,000 in line with decision 60/44.

Monitoring and coordination

28. Project monitoring and coordination of activities are planned to take place throughout the implementation period. All the monitoring activities will be coordinated and managed by the NOU. Reporting on the progress made during the implementation period will also be carried out by the NOU with support from UNEP.

Draft Agreement

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

RECOMMENDATION

30. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Zambia for the period 2011 to 2020, 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 Zambia had agreed to establish an estimated baseline of 4.95 ODP tonnes as its starting point for sustained aggregate reduction in HCFC consumption, calculated using actual consumption of 0.7 ODP tonnes reported for 2009 and consumption of 9.23 ODP tonnes estimated for 2010;
- (c) Approving the draft Agreement between the Government of Zambia and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
- (d) Requesting the Fund Secretariat, once the baseline data were known, to update Appendix 2-A to the draft Agreement to include the 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
- (e) Approving the first tranche of stage I of the HPMP for Zambia, and the corresponding implementation plan, at the amount of US \$121,500, consisting of US \$40,000, plus agency support costs of US \$5,200 for UNEP, and US \$70,000, plus agency support costs of US \$6,300 for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF ZAMBIA 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 Zambia (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 3.22 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, once the baseline consumption for compliance has been established based on 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 which exceeds the level defined in row 1.2 of Appendix 2-A (“Maximum allowable total consumption of Annex C, Group I Substances”) 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 which 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 (“The Targets, and Funding”) 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. 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 (“The Targets, and Funding”) 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 60 days prior to the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country has met the Targets for all relevant years. Relevant years are all years since the year in which the hydrochlorofluorocarbons phase-out management plan (HPMP) was approved. Exempt are 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;
 - (b) That the meeting of these Targets has been independently verified, except if 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;
- (d) That the Country has submitted and received approval from the Executive Committee for an annual implementation plan in the form of Appendix 4-A (“Format of Implementation Reports and Plans”) 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; and
- (e) 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.

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 in an annual implementation plan and approved by the Executive Committee as described in sub-paragraph 5(d) above. Major changes would relate to issues potentially concerning the rules and policies of the Multilateral Fund; changes which would modify any clause of this Agreement; changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and 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 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 annual implementation report; and
- (c) Any remaining funds will be returned to the Multilateral Fund upon closure of the last tranche of the plan.

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 carrying out the activities of the overall plan with the changes approved as part of the subsequent submissions, 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 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, and 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 information necessary to verify compliance with this Agreement.

14. The completion 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 has been specified in Appendix 2-A. Should at that time activities be still outstanding 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 continue until the time of the completion if not specified by the Executive Committee otherwise.

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	4.95
TOTAL			4.95

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2011	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	n/a	5.0	5.0	4.5	4.5	4.5	4.5	4.5	3.2	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	5.0	5.0	4.5	4.5	4.5	4.5	4.5	3.2	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	40,000	0	40,000	0	0	35,000	0	30,000	0	30,000	175,000
2.2	Support costs for Lead IA (US \$)	5,200	0	5,200	0	0	4,550	0	3,900	0	3,900	22,750
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	70,000	0	0	0	0	70,000	0	0	0	0	140,000
2.4	Support costs for Cooperating IA (US \$)	6,300	0	0	0	0	6,300	0	0	0	0	12,600
3.1	Total agreed funding (US \$)	110,000	0	40,000	0	0	105,000	0	30,000	0	30,000	315,000
3.2	Total support costs (US \$)	11,500	0	5,200	0	0	10,850	0	3,900	0	3,900	35,350
3.3	Total agreed costs (US \$)	121,500	0	45,200	0	0	115,850	0	33,900	0	33,900	350,350
4.1.1	Total phase-out of HCFC-22 and under this agreement (ODP tonnes)											1.73
4.1.2	Phase-out of HCFC-22 in previously approved projects (ODP tonnes)											0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)											3.22

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval not earlier than the second 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 regarding the progress since the approval of the previous tranche, reflecting on 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 further highlight successes, experiences and challenges related to the different activities included in the Plan, reflecting on changes in the circumstances in the Country, and providing other relevant information. The report should also include information about and justification for any changes vis-à-vis the previously submitted tranche plan, 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 about 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 the planned submission of the next tranche request, highlighting their interdependence, and taking into account experiences made and progress achieved in the implementation of earlier tranches. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain any revisions to the overall plan which were found to be necessary;
 - (d) A set of quantitative information for the report and plan, submitted into a database. As per the relevant decisions of the Executive Committee in respect to the format required, the data should be submitted online. 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), and will cover the same time periods and activities; it will also capture the quantitative information regarding any necessary revisions of the overall plan as per sub-paragraph 1(c) above. While the quantitative information is required only for previous and future years, the format will include the option to submit in addition information regarding the current year if desired by the Country and the Lead IA; and
 - (e) An Executive Summary of about five paragraphs, summarizing the information of above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. All the monitoring activities will be coordinated and managed through the National Ozone Unit, which is included within this HPMP.
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. This organization, along with the cooperating IA will also undertake the challenging task of monitoring illegal ODS imports and exports with advising the appropriate national agencies through the National Ozone Office as relevant.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities. These can be specified in the project document further, but include 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 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 organization 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 further, but include at least the following:

- (a) Providing policy development assistance 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. .