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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-third Meeting
Montreal, 4-8 April 2011

PROJECT PROPOSAL: PARAGUAY

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)

UNDP/UNEP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Paraguay

(I) PROJECT TITLE	AGENCY
HCFC phase-out management plan (stage I, first tranche)	UNDP, UNEP (lead)

(II) LATEST ARTICLE 7 DATA	Year: 2009	15.1 (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					
HCFC123					0.2				0.2	
HCFC124					0.2				0.2	
HCFC141b										
HCFC142b					1.5				1.5	
HCFC22					13.2				13.2	

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline (estimate):	17.95	Starting point for sustained aggregate reductions:	19.31
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	12.91

(V) BUSINESS PLAN		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
UNDP	ODS phase-out (ODP tonnes)	0.9	0.0	0.9	0.0	1.6	0.9	0.0	0.0	0.3	0.0	4.5
	Funding (US \$)	94,489	0	94,489	0	141,393	94,489	0	0	31,496	0	456,355
UNEP	ODS phase-out (ODP tonnes)	0.8		0.8			0.8			0.3		2.7
	Funding (US \$)	90,517		90,517			90,517			30,172		301,724

(VI) PROJECT DATA		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits (estimate)		n/a	n/a	18.0	18.0	16.2	16.2	16.2	16.2	16.2	11.7	
Maximum allowable consumption (ODP tonnes)		n/a	n/a	18.0	18.0	16.2	16.2	16.2	16.2	16.2	11.7	
Project Costs in principle(US\$)	UNDP	Project costs	168,500				131,500				0	300,000
		Support costs	12,638				9,862				0	22,500
	UNEP	Project costs	146,500				120,500				63,000	330,000
		Support costs	19,045				15,665				8,190	42,900
Total project costs requested in principle (US \$)			315,000	0	0	0	252,000	0	0	0	63,000	630,000
Total support costs requested in principle (US \$)			31,683	0	0	0	25,527	0	0	0	8,190	65,400
Total funds requested in principle (US \$)			346,683	0	0	0	277,527	0	0	0	71,190	695,400

(VII) Request for funding for the first tranche (2011)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNDP	168,500	12,638
UNEP	146,500	19,045

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

PROJECT DESCRIPTION

1. On behalf of the Government of Paraguay UNEP, as the lead implementing agency, has submitted to the 63rd Meeting of the Executive Committee stage I of the HCFC phase-out management plan (HPMP) at a total cost of US \$733,000 plus agency support costs of US \$74,198 (i.e., US \$349,500 and agency support costs of US \$45,435 for UNEP, and US \$383,500 and agency support costs of US \$28,763 for UNDP), as originally submitted. Implementation of the activities included in stage I of the HPMP will allow the Government to meet all the Montreal Protocol's compliance targets up to the 35 per cent reduction in HCFC consumption by 2020.

2. The first tranche for stage I being requested at this meeting amounts to US \$118,200 plus agency support costs of US \$15,366 for UNEP and US \$99,000 plus agency support costs of US \$7,425 for UNDP, as originally submitted.

Background

3. Paraguay, with a total population of about 7 million inhabitants, has ratified all the amendments to the Montreal Protocol.

ODS regulations

4. The decree on ODS control and use of alternative technologies issued by the Government of Paraguay is operational and includes an ODS licensing system. HCFCs are covered under the licensing system (since mid-2010, an electronic licensing system controlling imports of ODS and ODS-based equipment has been in operation). An import quota system for HCFCs is expected to be completed in 2011.

5. The Ministry of the Environment is responsible for implementing the ODS legislation and issuing related regulations. The Directorate of Customs is in charge of enforcing customs laws and preventing illegal trade in ODS. The association of refrigeration technicians (established in 2009) assists in training and raising awareness on ODS issues among technicians and supports relevant authorities in meeting the Montreal Protocol phase-out targets.

HCFC consumption and sector distribution

6. The two main HCFCs imported into Paraguay are HCFC-22, representing almost 90 per cent of the total HCFCs imported in 2010 (in ODP tonnes), followed by HCFC-142b (8 per cent of total consumption). Small amounts of HCFC-141b (as a pure substance), HCFC-123 and HCFC-124 were also imported (Table 1). The increase in HCFC consumption is partially attributed to: data-reporting issues in 2008; the drastic phase-out of CFC consumption experienced from 2007 on; the relatively low prices of HCFC-22 and residential air conditioning equipment resulting in a yearly increase in the units imported into the country (22,571 units in 2004 to 158,511 units in 2010); and the increase in quality of life linked to the country's economic growth. The 2011-2020 forecast for HCFC consumption (based on the data gathered during the preparation of the HPMP) is shown in Table 2.

Table 1. HCFCs imported into Paraguay (2008-2010)*

HCFC	2008		2009		2010	
	mt	ODP tonnes	mt	ODP tonnes	mt	ODP tonnes
HCFC-22	163.3	9.0	239.2	13.2	339.1	18.7
HCFC-142b	26.3	1.7	23.2	1.5	26.9	1.7
HCFC-141b	2.5	0.3	-	-	1.1	0.1
HCFC-123	35.6	0.7	9.6	0.2	7.6	0.2
HCFC-124	-	-	10.4	0.2	3.8	0.1
Total	227.7	11.7	282.4	15.1	378.5	20.8

(* Article 7 data for 2008 and 2009. Data for 2010 is estimated.

Table 2. 2011-2020 forecasted HCFC consumption

Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Metric tonnes										
Unconstrained	400.4	424.0	449.5	476.8	505.9	535.0	567.8	602.4	636.9	675.2
Constrained	400.4	424.0	326.7	326.7	294.1	294.1	294.1	294.1	294.1	212.4
ODP tonnes										
Unconstrained	22.0	23.3	24.7	26.2	27.8	29.4	31.2	33.1	35.0	37.1
Constrained	22.0	23.3	18.0	18.0	16.2	16.2	16.2	16.2	16.2	11.7

7. The majority of the HCFCs imported are used for servicing refrigeration and air conditioning systems (more than 764,000 HCFC-based refrigeration and air-conditioning systems were imported into the country between 2004 and 2010). Small amounts of HCFC-123 are also used in the manufacturing of fire extinguishers by two enterprises. In addition, HCFC-141b contained in imported pre-blended polyols (and not reported under Article 7 of the Protocol) was also imported as follows: 9.8 metric tonnes (mt) (1.1 ODP tonnes) in 2007; 12.3 mt (1.4 ODP tonnes) in 2008; and 15.1 mt (1.7 ODP tonnes) in 2009 (with an average consumption of 12.40 mt or 1.36 ODP tonnes). The main uses of HCFCs by sector in Paraguay are listed in Table 3.

Table 3. Sector distribution of HCFCs in Paraguay (2009)

Sector	HCFC-22	HCFC-123	HCFC-124	HCFC-142b	HCFC-141b*	Total
Metric tonnes						
Refrigeration servicing	239.2		10.4	23.2		272.8
Rigid foam					15.1	15.1
Fire extinguishers		9.6				9.6
Total (mt)	239.2	9.6	10.4	23.2	15.1	297.5
ODP tonnes						
Refrigeration servicing	13.2		0.2	1.5		14.9
Rigid foam					1.7	1.7
Fire extinguishers		0.2				0.2
Total (ODP tonnes)	13.2	0.2	0.2	1.5	1.7	16.8

(*) Contained in imported pre-blended polyol systems

8. Technical service and maintenance for refrigeration and air conditioning systems is performed by some 2,000 technicians, 60 per cent of whom are associated with maintenance companies, while the remaining 40 per cent exercise their trade informally.

9. There are nine foam enterprises using imported pre-blended polyol systems manufacturing mainly discontinuous sandwich panels and spray foams. Based on the level of polyol systems used, all of these enterprises can be categorized as very small enterprises (the amount of HCFC-141b contained in the polyol system of the largest enterprise was below 5 mt tonnes in 2009).

10. The average price per kg of HCFCs and alternative refrigerants is as follows: US \$6.70 for HCFC-22; US \$18.28 for HCFC-123; US \$16.00 for HFC-134a; US \$7.05 for HCFC-141b; US \$16.26 for R-404A; US \$13.57 for R-410A; US \$16.08 for R-409A; and US \$16.29 for R-414A.

HCFC phase-out strategy

11. The objective of the HPMP for Paraguay is to meet all of the Montreal Protocol's HCFC control targets on time. The Government's overarching strategy for HCFCs is based on market characterization and analysis, and on the experience acquired in implementing the projects approved under the Multilateral Fund. The four strategic guidelines that have been defined involve: limiting HCFC supply; reducing existing demand for HCFCs; preventing new demand for HCFCs; and monitoring and implementation of the HPMP.

12. The Government of Paraguay is proposing specific actions to be implemented during the 2011 to 2020 period as listed in Table 4.

Table 4. Specific HCFC phase-out actions proposed and their cost

Description	Cost (US\$)			
	2011-2012	2013-2014	2015-2020	Total
Development of the regulatory framework, and technical and institutional assistance				
Establishment of an import quota for HCFCs	-	-	-	-
Development of regulations to restrict import of HCFC-based equipment	-	-	-	-
Development of regulations to control HCFC-141b and HCFC-123	-	-	-	-
Subtotal cost	-	-	-	-
Import controls and prevention of illegal trade in HCFC, HCFC-based equipment and HCFC-141b in imported pre-blended polyols				
Training of environmental auditors and customs officers in the control of HCFCs, HCFC-based equipment and HCFCs in pre-blended polyols	15,000	-	-	15,000
Coordination for control and prevention of illegal trade of HCFCs, HCFC-based equipment and HCFCs in pre-blended polyols	7,000	7,000	1,000	15,000
Subtotal cost	22,000	7,000	1,000	30,000
Development and implementation of a refrigerant management system				
Development and implementation of regulations for operations with refrigerants	10,000	-	-	10,000
Development and implementation of a system to control HCFC uses	10,000	-	-	10,000
Strengthening national capacities for management of natural refrigerants	-	54,000	29,500	83,500
Implementation of a technicians' certification system	50,000	10,000	-	60,000
Subtotal cost	70,000	64,000	29,500	163,500
Public awareness and consumer orientation programme				
Consumption orientation towards products and technology that are not based on the application of HCFCs		5,000	5,000	10,000
Refrigerant workshops and end-user awareness campaign	5,000	5,000	5,000	15,000
Media orientation to create popular awareness of technologies that do not affect the ozone layer and have low impact on the climate	5,000			5,000
Subtotal cost	10,000	10,000	10,000	30,000
Technical assistance and incentive programmes for refrigeration servicing sector and end-users of HCFCs				
Training on best service practices and handling of alternatives	20,000	40,000	15,000	75,000
Recovery, recycling, regeneration and refrigerants collection centers	45,000	10,000	30,000	85,000
Incentives for technicians and servicing shops	34,000	30,000	56,500	120,500
Subtotal cost	99,000	80,000	101,500	280,500
Industrial programme				
Assistance in the foam sector		103,000		103,000
Technical assistance for HFC-123 phase-out in the fire extinguisher sector				-
Subtotal cost	-	103,000		103,000
Monitoring of the HPMP				
Project monitoring unit	16,200	33,800	76,000	126,000
Total cost	217,200	297,800	218,000	733,000

13. HCFC phase-out activities will be implemented in such a way as to maintain the momentum gained during the implementation of the terminal phase-out management plan (TPMP), with outstanding activities planned for completion during the first semester of 2011. Noting time considerations linked to the funding of activities through the Global Environment Facility (GEF), the Government's efforts towards finding alternative sources for co-financing HCFC phase-out initiatives will focus on bilateral assistance programmes.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

14. The Secretariat reviewed the HPMP for Paraguay 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), subsequent decisions on HPMPs made at the 62nd Meeting and the 2011-2014 business plan of the Multilateral Fund.

Implementation of activities under the TPMP

15. The HPMP document reported that CFC phase-out activities approved under the 2nd to 4th tranches of the TPMP (approved at the 58th and 60th Meetings) were under implementation, and were to be completed in 2011 (a progress report on the implementation of the TPMP for Paraguay has been included in document UNEP/OzL.Pro/ExCom/63/15 on "Report on implementation of approved projects with specific reporting requirements"). These activities include a training and certification programme for additional refrigeration servicing technicians, monitoring activities for the recovery/recycling network already in place, and a demonstration of retrofitting CFC-based equipment used in public buildings. Considering that the current level of CFC consumption should be zero, clarification was sought on whether some of the activities of the TPMP under implementation could be re-focussed to assist in the phase-out of HCFCs. UNEP explained that awareness and information activities on alternative technologies are geared toward maintaining zero consumption of CFCs as well as preventing the continuous increase in the use of HCFC-22. These activities are considered to be complementary to those planned for development with the resources of the HPMP for Paraguay.

16. In response to the suggestion that the majority of funding under the first tranche of the HPMP be used to implement a more robust technical assistance programme to reduce HCFC-22 demand in the servicing sector instead, UNEP indicated that it was feasible to continue implementing awareness and information dissemination activities with the resources available through the TPMP and the Government's in-kind contribution. Regarding the potential redistribution of the funding available under the HPMP, given the aggressive import quota control programme that must be established, it was decided to strengthen the component for the prevention of illegal trade, seeing as an attempt to introduce HCFC-blends as HFC-134a has already been detected.

Starting point for aggregate reduction in HCFC consumption

17. The Government of Paraguay has agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the average level of actual reported consumption in 2009 and estimated consumption in 2010, which has been estimated at 17.95 ODP tonnes, plus 1.36 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems, resulting in a total consumption of 19.31 ODP tonnes. This is higher than the business plan figure which indicated a baseline of 15.7 ODP tonnes. The difference is due to the fact that the HCFC consumption estimated for 2010 in the HPMP was based on the 2008-2010 growth rate in HCFCs, of 25 per cent, which is greater than that used in the business plan of 8 per cent. Furthermore the HPMP also included the amount of HCFC-141b contained in imported pre-blended polyols in the calculation of the starting point.

Technical and cost-related issues associated with the servicing sector

18. Noting that training of customs officers and refrigeration service technicians, as well as support for recovery/recycling of refrigerants is among the main activities to be implemented during stage I of the HPMP, an explanation was sought on how these activities could be made sustainable in the long term. UNEP explained that sustainability would be ensured through the development of training modules for customs officers, the adaptation of curricula and job descriptions for the planned legal system for certifying refrigeration technicians, and the ongoing development of a process to track and monitor recovery and recycling equipment (developed during the TPMP). Additional activities that will be implemented to sustain recovery/recycling operations include: proper monitoring by the Ministry of the Environment; providing technical assistance to technicians; involving refrigerant distributors and sector associations in the project; approving legislation to operate using alternative refrigerants; and establishing the HCFC quota system. Furthermore, the project will take advantage of the existing recovery/recycling equipment rather than purchasing new equipment.

19. The HPMP includes a retrofit programme to convert some HCFC-22-based refrigeration systems to hydrocarbon-based refrigerants. On this issue, an explanation was sought on whether the Government of Paraguay, in consultation with major stakeholders, had undertaken a cost/benefit analysis of the conversion of such equipment. UNEP was also asked whether there had been an analysis on the introduction of high energy-efficiency refrigeration equipment under the local climatic conditions, and a review of alternative technologies in the refrigeration sector in order to select the most cost-effective and sustainable technologies. UNEP indicated that the commercial availability of hydrocarbon-based refrigerants in Paraguay was imminent given that manufacturers in Argentina and Brazil were already producing refrigeration equipment based on hydrocarbon technology. The analysis on the introduction of high energy-efficiency equipment and the review of alternate technologies in the refrigeration sector is among the tasks foreseen to determine which new refrigeration equipment can be imported into the country.

20. In regard to the phase-out of HCFC-141b in imported pre-blended polyols, UNDP explained that the foam enterprises that imported polyols in 2009 sought advice from their suppliers in Argentina and Brazil on the non-HCFC-based formulations that could be supplied to them, and on the resulting necessary modifications to their baseline equipment. In view of the low level of foam production (with one company consuming about 50 per cent of the total polyols imported into the country), and given that HCFC-141b is not reported under Article 7 of the Protocol, and that a final technology has not yet been selected by any of the enterprises (or the systems houses have not yet provided a non-HCFC alternative polyol system), it was suggested that funding for the conversion of these enterprises be requested at a future stage. UNEP and UNDP indicated that the Government of Paraguay would like to explore the possibility of submitting an umbrella project covering all the foam enterprises, during the implementation of stage I of the HPMP, when technology options are commercially available and supplied by the relevant system houses. However, if submission of the umbrella project is not possible, the Government would submit an umbrella project covering all the foam enterprises as part of stage II of the HPMP.

21. The maximum level of funding for the implementation of stage I of the HPMP for Paraguay (as a low-volume consuming country) to meet the Protocol's allowable level of consumption in 2020 would be US \$630,000 (decision 60/44). Subsequently, UNEP adjusted the funding available under the HPMP according to the following distribution among the agencies:

- (a) US \$60,000 for training and coordination between institutions for the control of imports and the prevention of illegal trade (UNEP);
- (b) US \$144,000 for the development of a management system for the use of refrigerants (UNEP);

- (c) US \$94,500 for training on best practices and handling of alternatives (UNDP);
- (d) US \$85,000 for recovery, recycling, regeneration and refrigerant collection centres (UNDP);
- (e) US \$120,500 for incentives programme for technicians and service shops (UNDP); and
- (f) US \$126,000 for HPMP monitoring programme (UNEP).

Impact on the climate

22. 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 CO₂-equivalent tonnes saved. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Paraguay, in particular its efforts to improve servicing practices and reduce refrigerant emissions indicate that it is likely that the country will achieve the reduction of 8,507 CO₂-equivalent tonnes in emissions into the atmosphere as estimated in the 2011-2014 business plan. 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

23. 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 will provide in-kind contributions such as the time of government officers in charge of implementing policy measures and supervision of HPMP implementation. Furthermore, the Government's efforts towards finding alternative sources for co-financing HCFC phase-out initiatives will be through bilateral assistance programmes oriented towards energy efficiency in the refrigeration sector. Nevertheless, at this stage no specific co-financing project has yet been identified.

2011-2014 business plan of the Multilateral Fund

24. UNEP and UNDP are requesting US\$630,000 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2011-2014 of US \$346,683 including support cost is within the total amount in the business plan for the period. Furthermore, based on the estimated HCFC baseline consumption in the servicing sector of 326.4 mt (17.95 ODP tonnes), Paraguay's allocation up to the 2020 phase-out should be US \$630,000 in line with decision 60/44.

Draft Agreement

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

RECOMMENDATION

26. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Paraguay for the period 2011 to 2020, at the amount of US \$695,400, comprising of US \$330,000 and agency support costs of US \$42,900 for UNEP, and US \$300,000 and agency support costs of US \$22,500 for UNDP.
- (b) Noting that the Government of Paraguay had agreed at the 63rd Meeting to establish as its starting point for sustained aggregate reduction in HCFC consumption the estimated baseline (17.95 ODP) tonnes calculated using actual consumption reported in 2009 and estimated 2010 consumption, plus 1.36 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems, resulting in 19.31 ODP tonnes;
- (c) Approving the draft Agreement between the Government of Paraguay 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 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 Paraguay, and the corresponding implementation plan, at the amount of US \$346,683, comprising US \$146,500 plus agency support costs of US \$19,045 for UNEP and of US \$168,500 plus agency support costs of US \$12,638 for UNDP.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF PARAGUAY 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 Paraguay (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 11.67 ODP tonnes prior to 1 January 2020 in compliance with Montreal Protocol schedules, with the understanding that this figure is to be revised one single time in 2011, when the baseline consumption for compliance would be 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”; the Target) 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 rows 4.1.3, 4.2.3, 4.3.3, 4.4.3 and 4.5.3 (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 (“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. The Country will accept independent verification, to be commissioned by the relevant bilateral or implementing agency, of 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 as described in sub-paragraph 5(b) of this Agreement.
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 tranche implementation reports in the form of Appendix 4-A (“Format of Tranche 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 and received approval from the Executive Committee for a tranche implementation plan in the form of Appendix 4-A (“Format of Tranche 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.

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 tranche implementation plan 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 sub-paragraph 5(b).

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 phase-down and phase-out of the Substances specified in Appendix 1-A. Reallocations categorized as major changes must be documented in advance in a Tranche Implementation Plan and approved by the Executive Committee as described in sub-paragraph 5(d). Major changes would relate to reallocations affecting in total 30 per cent or more of the funding of the last approved tranche, issues potentially concerning the rules and policies of the Multilateral Fund, or changes which would modify any clause of this Agreement. Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the Tranche Implementation Report. 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 UNDP has agreed to be 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 plan as detailed in the first submission of the HPMP with the changes approved as part of the subsequent tranche 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 entered into a formal agreement regarding 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 amounts set out in Appendix 7-A in respect of each ODP tonne 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.

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 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 Appendix 4-A (a), (b), (d) and (e) continue until the time of the completion if not specified by the Executive Committee otherwise.

15. All of the agreements 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	15.95
HCFC-141b	C	I	1.41
HCFC-142b	C	I	1.60
HCFC-123	C	I	0.20
HCFC-124	C	I	0.15

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2011-2012	2013-2014	2015-2019	2020	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	17.95	16.16	11.67	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	17.95	16.16	11.67	n/a
2.1	Lead IA UNEP agreed funding(US \$)	146,500	0	120,500	63,000	330,000
2.2	Support costs for Lead IA (US \$)	19,045	0	15,665	8,190	42,900
2.3	Cooperating IA UNDP agreed funding (US \$)	168,500	0	131,500	0	300,000
2.4	Support costs for Cooperating IA (US \$)	12,638	0	9,862	0	22,500
3.1	Total agreed funding (US \$)	315,000	0	252,000	63,000	630,000
3.2	Total support cost (US \$)	31,683	0	25,527	8,190	65,400
3.3	Total agreed costs (US \$)	346,683	0	277,527	71,190	695,400
4.1.1	Total phase-out of HCF-22 agreed to be achieved under this agreement (ODP tonnes)					5.32
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)					0.00
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)					10.63
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)					0.45
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)					0.00
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)					0.96
4.3.1	Total phase-out of HCFC-142b agreed to be achieved under this agreement (ODP tonnes)					0.46
4.3.2	Phase-out of HCFC-142b to be achieved in previously approved projects (ODP tonnes)					0.00
4.3.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)					1.14
4.4.1	Total phase-out of HCFC-123 agreed to be achieved under this agreement (ODP tonnes)					0.00
4.4.2	Phase-out of HCFC-123 to be achieved in previously approved projects (ODP tonnes)					0.00
4.4.3	Remaining eligible consumption for HCFC-123 (ODP tonnes)					0.20
4.5.1	Total phase-out of HCFC-124 agreed to be achieved under this agreement (ODP tonnes)					0.05
4.5.2	Phase-out of HCFC-124 to be achieved in previously approved projects (ODP tonnes)					0.00
4.5.3	Remaining eligible consumption for HCFC-124 (ODP tonnes)					0.10

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 TRANCHE IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Tranche Implementation Report and Plan will consist of five parts:
 - (a) A narrative report regarding the progress in 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 in the next tranche, 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. The monitoring component includes: timely implementation of all the HPMP activities; monitoring of project results and objectives; monitoring of market developments and trends at the national and international levels; technical guidance to the project beneficiaries on a regular basis;

periodic reports on project activities and results, and market developments and trends, in order to facilitate corrective actions; and timely progress reports to the Executive Committee.

2. The component will provide a consistent and regular programme of implementation, follow up and monitoring visits to the project beneficiaries, coupled with technical assistance, in order to keep project momentum, ensure early detection of problems, apply corrective measures when needed, and ensure the accountability of stakeholders. A special effort will need to be made concerning the monitoring of actual HCFC imports and HCFC consumption in the country.

3. The project will be instrumental in:

- (a) Preparing operational and purchasing annual plans of the HPMP, including detailed design of the project activities, engagement of stakeholders, identification and selection of beneficiaries, local contracting of goods and services;
- (b) Regular analysis of market trends and developments at the national and international levels in order to incorporate into the relevant activities and inform stakeholders;
- (c) Designing, organization and implementation of specific activities for monitoring of the project results, and the country's compliance with the Montreal Protocol obligations;
- (d) Analysis of monitoring results, production of detailed periodic results reports, organization of review meetings, and design and implementation of corrective measures, and providing continuous technical assistance to project beneficiaries, and partner institutions;
- (e) Production of: Annual Progress Reports for internal use, "HPMP Annual Implementation Report", and "HPMP Annual Implementation Plan" for the Executive Committee. It will also produce any other reports that may prove necessary for the proper functioning of the HPMP projects.

Special considerations

4. The monitoring function should provide information on the results of the different projects within the HPMP, the remaining projects from the TPMP, and on the actual HCFC consumption.

5. The monitoring visits or surveys should cover all the beneficiaries of the HPMP projects, and should include cross-reference data. The monitoring visits should also include a regular survey of refrigerant points of sales in order to verify that CFCs are effectively out of the market; as well as measures to overview the network of recovery and recycling established amongst the servicing workshops and refrigerant suppliers.

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 phase-out plan;
- (b) Assisting the Country in preparation of the Tranche 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 Tranche 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 Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
- (e) Fulfilling the reporting requirements for the tranches and the overall Plan as specified in Appendix 4-A as well as project completion reports 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 Tranche 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 COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities can be specified in the respective project document 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.
