



**United Nations
Environment
Programme**

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/62/22
4 November 2010

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-second Meeting
Montreal, 29 November - 3 December 2010

PROJECT PROPOSAL: BHUTAN

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

Phase-out

- HCFC phase-out management plan (first tranche)

UNEP/UNDP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Bhutan

(I) PROJECT TITLE	AGENCY
HCFC Phase Out Management Plan	UNDP, UNEP (lead)

(II) LATEST ARTICLE 7 DATA	Year: 2009	0.3 (ODP tonnes)
-----------------------------------	------------	------------------

(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										
HCFC124										
HCFC141b										
HCFC142b										
HCFC22					0.3				0.3	

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline (estimate):	0.31	Starting point for sustained aggregate reductions:	0.31
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	0

(V) BUSINESS PLAN		2010	2011	2012	2013	2014	Total
UNEP	ODS phase-out (ODP tonnes)	0		0			0
	Funding (US \$)	20,000		20,000			40,000

(VI) PROJECT DATA			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits (estimate)			n/a	n/a	0.31	0.31	0.31	0.28	0.28	0.28	0.28	0.28	0.2	
Maximum allowable consumption (ODP tonnes)			n/a	n/a	0.31	0.28	0.28	0.25	0.25	0.2	0.2	0.1	0.0	
Project Costs requested in principle (US\$)	UNDP	Project costs	100,000			50,000			38,000					188,000
		Support costs	9,000			4,500			3,420					16,920
	UNEP	Project costs	252,000			125,000			125,000				50,000	552,000
		Support costs	16,736			8,302			8,302				3,320	36,660
Total project costs requested in principle (US \$)			352,000			175,000			163,000			50,000	740,000	
Total support costs requested in principle (US \$)			25,736			12,802			11,722			3,320	53,580	
Total funds requested in principle (US \$)			377,736			187,802			174,722			53,320	793,580	

(VII) Request for funding for the first tranche (2010)			
Agency	Funds requested (US \$)	Support costs (US \$)	ODS phase-out (ODP tonnes)
UNDP	100,000	9,000	
UNEP	252,000	16,736	

Funding request:	Approval of funding for the first tranche (2010) as indicated above
Secretariat's recommendation:	Individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of Bhutan, UNEP as the lead implementing agency, has submitted to the 62nd Meeting of the Executive Committee an HCFC phase-out management plan (HPMP) at a total cost as originally submitted, of US \$832,285 (excluding agencies support costs) for the complete phase-out of its HCFC consumption by 2025 with a service tail until 2030. The HPMP will be implemented jointly with UNDP. The Government of Bhutan is requesting US \$607,371 plus agency support costs of US \$43,858 for UNEP and US \$224,914 plus agency support costs of US \$20,242 for UNDP. It is proposing a one-time funding and an accelerated phase-out of HCFC consumption by 2020. The cost of the institutional strengthening (IS) project for the period 2012-2020 of US \$270,000 is included in the total HPMP funding requested in line with decision 59/17.

2. As originally submitted, UNEP is requesting US \$303,685 plus agency support cost of US \$39,479 and US \$134,948 plus agency support cost of US \$12,145 for UNDP for the first tranche of the HPMP.

Background

ODS regulations

3. The National Environment Commission (NEC) has been appointed by the Royal Government of Bhutan as the focal agency responsible for implementing the provisions under the Vienna Convention and the Montreal Protocol on Substances that Deplete the Ozone Layer.

4. ODS regulations were first developed in 2005 and later revised in 2008 to include the HCFC accelerated phase-out schedule and strengthen penalties. The scope of the legislation extends to all ODS, products containing or made with ODS, and ODS-using equipment controlled by the Montreal Protocol. It clearly outlines the role of the National Ozone Unit and the National Ozone Committee in the management of the Ozone issues. These regulations also control the import and export of restricted HCFCs into and out of the country, ban the import and export of other ODS such as CFCs, and put in place monitoring requirements. No import bans on HCFC containing equipment are currently in place in the country.

HCFC consumption

5. All HCFCs imported into Bhutan are primarily from India, though equipment containing ODS are also imported from other countries such as Thailand, China and others in the region. Only HCFC-22 is used in the country predominantly in the air conditioning and refrigeration servicing sector. This is expected to grow due to the general economic growth resulting in more industries, increased handling of chilled and frozen food and increased demand from the growing number of international standard hotels and resorts, etc. for refrigeration systems. The use of HCFCs for domestic household purposes has also increased due to the warmer summers and availability of affordable equipment in the market.

6. The annual consumption of HCFCs during the 2005-2009 period was roughly estimated at an average of 3.8 metric tonnes (mt) (0.21 ODP tonnes)/year based on the survey undertaken for the HPMP preparation. Table 1 shows the 2005-2009 level of HCFC consumption in Bhutan, comparing the reported consumption under Article 7 and the results gathered from the HCFC survey.

Table 1: HCFC level of consumption in Bhutan

Year	Article 7		Survey results	
	HCFC-22 (in metric tonnes)	HCFC-22 (ODP tonnes)	HCFC-22 (in metric tonnes)	HCFC-22 (ODP tonnes)
2005	0	0	3.28	0.18
2006	0	0	2.75	0.151
2007	1.81	0.1	3.65	0.201
2008	1.81	0.1	3.67	0.202
2009	5.45	0.3	5.61	0.308

7. The installed capacity of refrigeration and air conditioning units in the country using HCFC-22 was estimated at 1,888 units in 2009 as shown in Table 2.

Table 2: Distribution of HCFC-22 in refrigeration systems

Type	Total units	Total charge (tonnes)		Servicing (tonnes)	
		Metric	ODP	Metric	ODP
Residential air conditioning	1,200	2.04	0.11	0.612	0.314
Commercial/air conditioning	688	17.03	0.93	4.9	0.27
Total	1,888	19.07	1.04	5.5	0.30

8. HCFC consumption in Bhutan is expected to grow until the freeze in 2013. The methodology used for determining the forecast growth was the linear trend using as a basis the data collected from the survey rather than Article 7. The government indicated that these figures more realistically reflected the actual consumption in the country as it takes into account the servicing requirements of currently installed equipment, and not just import data. The table below provides a summary of this forecast.

Table 3: Forecast consumption of HCFC in Bhutan

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Projected consumption	MT	2.67	3.23	3.75	4.35	4.91	5.47	6.03	6.58	7.14
	ODP	0.15	0.18	0.21	0.24	0.27	0.30	0.33	0.36	0.39
Actual consumption (survey)	MT	3.28	2.755	3.65	3.67	5.61				
	ODP	0.18	0.15	0.20	0.20	0.31				

HCFC phase-out strategy

9. The Government of Bhutan is proposing a single stage approach to achieve the complete phase-out of HCFCs by 2020, with a service tail of 2.5 per cent of the baseline annually until 2025. The plan will be to impose an import ban on HCFC based equipment by 2013. The decision to phase out HCFCs by 2020 is based on the country's commitment to meet challenges for both ozone protection and climate at the same time. The government had provided its commitment to this accelerated phase-out in a written communication to the Multilateral Fund Secretariat. The phase-out plan is presented in the table below:

Table 4: Proposed HCFC phase-out schedule of Bhutan

Schedule	Bhutan Reduction Targets
Average 2009-2010	Baseline level
1 January 2012	Freeze at baseline
1 January, 2013	10 % below baseline
1 January 2015	20% below baseline
1 January, 2017	35% below baseline
1 January, 2019	67.5% below baseline
1 January, 2020	97.5% below baseline
1 January, 2020-2025*	100% phase-out *average of 2.5% for service tail

10. To achieve the targets set in the above schedule, Bhutan will follow a three-pronged approach for HCFC phase-out addressing three strategic elements crucial to the successful phase-out of HCFCs in the country, namely, limit the supply of HCFCs, reduce the demand for HCFCs in servicing existing equipment, and limit new demand. This three-pronged approach aims to reduce the dependence on HCFCs until the final phase-out in 2020. The implementation plan includes measures using a combination of regulations and enforcement instruments, training and capacity building, information exchange and advocacy programmes, and project initiatives. The early HCFC phase-out targets of Bhutan will be a challenge that the country has committed itself to. Partnerships with industry and government and other relevant stakeholders have been put in place in order to meet these targets.

11. The HPMP also envisages a technical assistance component that will be provided to the servicing sector. Under this programme, 4 small reclaim centres for recovery and recycling of HCFCs will be established, and are proposed to be operated by trained service technicians. These centres would also record, track and report on incoming and outgoing refrigerants. Thirty sets of recovery tools will also be provided to technicians, and training will be conducted on the use of such equipment. The key concept underlying this mechanism is to acknowledge and harness market forces to ensure commercial viability and sustainability and also to ensure ownership of the servicing establishments.

12. The end-user retrofit pilot incentive programme will provide retrofit kits to 70 beneficiaries and include incentives for large end-users to retrofit their HCFC-based equipment to non-HCFC alternatives, on a pilot basis. Incentive funding would be provided to the servicing establishments upon submission of evidence that the retrofits were adequately and satisfactorily carried out. It is expected that upon completion of this activity, demonstration cases of successful retrofitting of HCFC-based refrigeration and air conditioning systems will build confidence among other end-users, so precipitating early retrofitting decisions and reducing demand for HCFCs.

13. The cost of the institutional strengthening project is also included in the HPMP. In the HPMP, the IS funds will be used for overall programme management and monitoring for which no funds have been allocated in the overall budget.

Table 5: Specific activities of the HPMP and proposed period of implementation

Activity	Implementation stage
HCFC phase-out policies and enforcement for Policy review and enforcement and training of customs officers	Overall plan (2011-2020)
Information exchange and advocacy programme	Overall plan (2011-2020)
Refrigeration service technician training and certification programme	Overall plan (2011-2016)
Promotion of ozone climate co-benefit activities* <ul style="list-style-type: none"> • Standards and Labelling Programme (SLP), • Framework for Efficient and Low HCFC Economic Development (FELHED) 	Overall plan* (2010-2020)
Technical assistance for the refrigeration servicing sector: <ul style="list-style-type: none"> • Reclaim programme • End-user retrofit/ replacement pilot incentive programme 	Overall plan (2011-2015)
Institutional strengthening	Overall plan (2012-2020)

*To be funded through sources outside the Multilateral Fund

14. The Government of Bhutan has developed an approach to integrate ozone and climate benefits by including project components for the development and implementation of energy efficiency standards and labelling programme, as well as promotion of market based instruments for the accelerated replacement of ODS equipment. These project components are fully integrated into the HPMP but will be implemented without the assistance from the Multilateral Fund showing an innovative way of using co-financing opportunities. The Government of Bhutan has also pledged some contribution for these components. UNEP indicated that out of the US \$97,000 allocated for these components, the Government of Bhutan will provide US \$7,000 while the rest is still to be sourced from other funding sources.

Cost of the HPMP

15. The total overall cost of the HPMP for Bhutan has been estimated at US \$832,285, as submitted, to achieve the complete phase-out of 5.6 mt (0.30 ODP tonnes) of HCFCs by 2020 with a 2.5 per cent service tail until 2025 including the cost of the IS project, as shown below.

Table 6: Total cost of the HPMP for Bhutan

Description of activities	UNEP	UNDP	Total (US \$)
HCFC phase-out policies and enforcement <ul style="list-style-type: none"> • Customs training • Border dialogues 	126,000		126,000
Information exchange and advocacy programme <ul style="list-style-type: none"> • Training for officers of customs and other law enforcement departments • Travel cost for trainees 	83,000		83,000
Servicing technician training and certification programme	128,371		128,371
Standards and labelling programme	37,000**		37,000**
Framework for Economic Efficient and Low HCFC Economic Development (FELHED)	53,000**		53,000**
Technical assistance for the refrigeration		224,914	224,914

Description of activities	UNEP	UNDP	Total (US \$)
servicing sector <ul style="list-style-type: none"> • Reclaim programme • End-user retrofit/ replacement pilot incentive programme 			
Institutional strengthening (2012-2020)	270,000		270,000
Sub-total	697,371	224,914	922,285
Total amount requested for funding	607,371	224,914	832,285

**no cost to the Multilateral Fund, to be co-financed

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

16. The Secretariat reviewed the HPMP for Bhutan in the context of the guidelines for the preparation of HPMPs (decision 54/39) and the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th Meeting (decision 60/44).

Issues related to HCFC consumption

17. UNEP provided an explanation for the increase in the consumption of HCFCs between 2008 and 2009. It indicated that previous reports did not correctly reflect the situation in the country as there were difficulties associated with data collection. The current methodology has allowed the determination of a better estimate of consumption using the population of installed equipment and comparing this with customs data, based on which the 2009 data showed quite an increase from 2008. UNEP also explained that recent economic development in the country has opened up a number of areas for tourist purposes thereby needing new hotels and facilities that required the use of HCFC-22 equipment.

Starting point for aggregate reduction in HCFC consumption

18. The starting point for sustained aggregate reduction in HCFC consumption selected by the Government in the HPMP proposal was the actual 2009 consumption of 5.6 mt (0.3 ODP tonnes) reported in Article 7. UNEP indicated that the Government selected this consumption as it believes it reflects a realistic amount of HCFCs required by the country to maintain its servicing sector.

Technical and cost issues

19. The Secretariat raised some issues regarding the changes in the legal framework for the management of HCFCs vis-à-vis funding already provided for policy development during HPMP preparation. UNEP indicated that the country already has an ODS licensing system, and during this implementation period will establish import quotas to monitor HCFC imports, ban imports of HCFC-containing equipment and increase the capacity of the enforcement authorities to facilitate the efficient implementation of these ODS policies. These will be effective in 2013.

20. The HPMP foresees activities in the servicing sector such as training, certification of technicians and enhanced awareness raising to be the main non-investment activities as well as the recovery and recycling programme that is required by the country to meet compliance with its targets. The investment components are designed to be sustainable by providing assistance that would allow recovery centres to operate for instance on a commercial basis as described in paragraph 11 and 12. The pilot retrofit programme builds upon lessons learned in the TPMP and will target the larger end-users in order to achieve a specific reduction in HCFCs once the end-user is converted. According to UNEP, it is important that these investment components be completed during the first years of implementation if they are to support the full phase-out, and foresees an implementation timeframe of 2010-2015.

21. The Secretariat raised concerns on the proposed plan of the country to accelerate phase-out by 10 years earlier than the Montreal Protocol schedule, its capacity to meet these strict deadlines, and the overall national commitment and framework to support this plan. It further indicated to UNEP that unlike the one case where accelerated phase-out approved by the Executive Committee was supported by a firm vision of carbon neutrality and therefore had a strong argument for phasing out HCFCs faster, this does not seem to be the case for Bhutan. From its submission, the Secretariat observes that while there is an intention to accelerate, the reasons for doing so are based more on ensuring advanced funding commitments rather than a fully supported national programme. UNEP indicated that this was the country's proposal, and that it has indicated in writing that it commits itself to meeting the accelerated phase-out deadlines that it has set out to do.

22. In discussing the individual activities and the corresponding total cost of the initial HPMP submission with UNEP and UNDP, the Secretariat emphasized that at its 60th Meeting the Executive Committee, in decision 60/44, set the funding levels for countries with an HCFC consumption of 360 mt (19.8 ODP tonnes) or less in the refrigeration servicing sector only. Concern was expressed on the total cost of the HPMP as submitted, and on the proposal to accelerate interim reductions vis-à-vis the ability of the country to meet more stringent control measures. In line with the country's consumption, Bhutan would be eligible under this decision for up to a maximum funding of US \$164,500 to comply with the 2020 reduction. Based on the calculations of the Secretariat presented in Annex II of document UNEP/OzL.Pro/ExCom/60/46 "Further analysis of HCFC phase-out in the refrigeration servicing sector", Bhutan may be entitled for up to a maximum funding level of US \$470,000 if the Executive Committee agrees to a one time funding as proposed, and to an accelerated phase-out. UNEP explained that the additional twenty per cent requested by the country on top of the possible eligible funding for a total phase-out was required by the country as there would be additional activities to enforce the accelerated phase-out proposal as compared to the current phase-out schedule. The Secretariat maintained that there are no guidelines for including additional funds beyond what is provided under decision 60/44 for accelerated phase-out in a country and therefore the additional amount cannot be recommended.

23. The Secretariat also noted that, following decision 59/47, the country is opting to integrate the funds for IS (US \$270,000 from 2012-2020) into the HPMP. The Secretariat reminded UNEP that if this option is exercised by the country, the IS will be subject to the targets of the HPMP as part of a performance-based evaluation for multi-year agreements and that, in the event that a country does not meet the targets for a specific tranche, there is a possibility that IS funding may be also delayed. UNEP argued that in the case of Bhutan, the country has not included an allocation for project monitoring and evaluation into the HPMP and the IS funding will be used instead. UNEP also disagreed with including the IS as part of the performance-based evaluation of the HPMP as it maintains that these funds are for capacity building in the country and will include responsibilities not limited to HPMP implementation. However, according to UNEP, the country would still like to include the IS in the HPMP but would like clarification on how these can be treated under the HPMP. The Secretariat noted this issue in document UNEP/OzL.Pro/ExCom/62/10 as one of the policy issues for the consideration of the Executive Committee.

24. After further discussion of the activities and how these would allow the country to comply with the phase-out measures of the Montreal Protocol, the total level of funding for the implementation of the HPMP has been agreed at US \$740,000 excluding agencies support costs (US \$470,000 for HPMP implementation and US \$270,000 for the IS funding) summarised in Table 7 below. The funding level for the HPMP implementation is based on a one time funding for accelerated HCFC phase-out and on the selected starting point using 2009 actual reported consumption of 5.6 mt (0.31 ODP tonnes). The agreed distribution of funds for the activities are shown in Table 7 below:

Table 7: Revised level of funding for the HPMP of Bhutan for accelerated phase-out (US \$)

Description	UNEP (US\$)	UNDP (US\$)	Total (US\$)
HCFC phase-out policies and enforcement	108,000		108,000
Capacity Building <ul style="list-style-type: none"> • Training for officers of customs and other law enforcement departments • Travel cost for trainees 	63,000		63,000
Servicing technician training and certification programme	111,000		
Technical assistance for the refrigeration servicing sector (investment component) <ul style="list-style-type: none"> • Reclaim programme • End-user retrofit/ replacement pilot incentive programme 		188,000	188,000
Institutional Strengthening (2012-2020)	270,000		270,000
Total	552,000	188,000	740,000

Impact on the climate

25. The technical assistance activities in the HPMP addressing the servicing sector, supported by the introduction of better service practices (through training of refrigeration technicians) will reduce the current amount of HCFC-22 to service refrigeration. Each kg of HCFC-22 not emitted due to better refrigeration practices, results in about 1.8 CO₂-equivalent tonnes saved. Additional CO₂-equivalent tonnes could be avoided through retrofitting HCFC-22 based equipment to HFC-407C refrigerant which represents the most technically viable option currently available (i.e., Each kg of HCFC-22 retrofitted to HFC-407C results in about 0.11 CO₂-equivalent tonnes saved). If 10 per cent of the current service need of 5.5 mt of HCFC-22 (see table 2) is replaced with HFC-407C, the potential CO₂ equivalent saved could be 60.5 tonnes.

26. It is important to note that these reductions are associated with the activities being proposed in the HPMP (which are known). Therefore, they do not take into consideration the new non-HCFC-based equipment that could be imported into the country (which is not known). In general, it can be assumed that new refrigeration systems have been designed using more up-to-date technology (i.e., lower refrigerant charge, more robust construction, and stricter brazing procedures) than those being replaced, substantially reducing leakage rates and servicing needs. However, it is not possible to assess the potential savings in CO₂ emissions since the type and volume of equipment that will be introduced to replace HCFC-22 systems is not known at this stage.

Adjusted 2010-2014 business plans

27. UNEP and UNDP are requesting US \$740,000 plus support costs for the full implementation of the HPMP to phase-out all consumption in 2020 including IS funds. The total value requested for the period 2010-2014 of US \$565,538 including support costs (excluding IS) is above the total amount in the adjusted business plan. The difference in the figures is because the HCFC baseline for compliance estimated for the business plan was based on the 2008 (latest reported) consumption data (1.8 metric tonnes) and to account for the phase-out up to the 2020 control measures only, while that in the HPMP was based on 2009 consumption reported under Article 7 and for a complete phase-out of HCFCs. UNDP did not provide any allocation in the adjusted business plan for Bhutan for the period. Based on the estimated baseline of Bhutan of 5.6 mt, the country's allocation up to the 2020 phase-out should be US \$164,500 in line with decision 60/44.

Draft agreement

28. A draft agreement between the Government of Bhutan and the Executive Committee for phase-out of consumption of HCFCs is contained in Annex I to the present document.

RECOMMENDATION

29. The HPMP for Bhutan is submitted for individual consideration. The Executive Committee may wish to consider:

- (a) Noting with appreciation the submission of the HCFC phase-out management plan (HPMP) for Bhutan to achieve the complete phase-out of HCFCs at an estimated total cost of US \$740,000 (excluding agency support costs) (US \$470,000 for HPMP and US \$270,000 for institutional strengthening) on the understanding that no more funds will be eligible for HCFC phase-out in the country after 2020;
- (b) Noting that the Government of Bhutan agreed at the 62nd Meeting to establish as its starting point for sustained aggregate reduction in HCFC consumption the consumption reported under Article 7 for 2009 (5.6 metric tonnes), and that this will remain as the starting point for funding for Bhutan in line with decision 60/44;
- (c) Whether to approve, in principle, the HPMP for Bhutan for the period 2010-2020, at the amount of US \$552,000 plus agency support cost (excluding IS) of US \$36,600 for UNEP and US \$188,000 plus agency support costs of US \$16,920 for UNDP, in line with the discussion under Agenda item 7(a) "Overview of issues indentified during project review";
- (d) Whether to approve the Agreement between the Government of Bhutan and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document in line with paragraph (c) above;
- (e) Requesting the Secretariat, once the baseline data is known, to update Appendix 2-A to the Agreement to include the figures for maximum allowable consumption, to notify the Executive Committee of the resulting levels of maximum allowable consumption, and of a potential related impact on the eligible funding level with any adjustments needed being made at the submission of the next tranche; and
- (f) Whether or not to approve the first implementation plan for 2011-2013, and the first tranche of the HPMP for Bhutan at the amount of US \$252,000 plus agency support costs of US \$16,736 for UNEP, and US \$100,000 plus agency support costs of US \$9,000 for UNDP, in line with paragraph (c) and (d) above.

Annex I

DRAFT AGREEMENT BETWEEN THE KINGDOM OF BHUTAN AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

1. This Agreement represents the understanding of the Royal Government of Bhutan (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 0.007 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) 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.
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 (the “Funding Approval Schedule”).
4. The Country will meet the consumption limits for each of the Substances as indicated in Appendix 2-A. It will also accept independent verification, to be commissioned by the relevant bilateral or implementing agency, of achievement of these consumption limits as described in subparagraph 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 (the “Format of Tranche Implementation Report and Plan”) 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 (the “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 (the “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/agencies (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 IA 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	0.31

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Parameter/Year	2010	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	0.31	0.31	0.31	0.28	0.28	0.28	0.28	0.28	0.2	
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	0.31	0.28	0.28	0.25	0.25	0.2	0.2	0.1	0	
2.1	Lead IA (UNEP) agreed funding (US\$)	252,000			125,000			125,000				50,000	552,000
2.2	Support costs for Lead IA (US\$)	16,736			8,302			8,302				3,320	36,660
2.3	Cooperating IA (UNDP) agreed funding (US\$)	100,000			50,000			38,000				0	188,000
2.4	Support costs for cooperating IA (US\$)	9,000			4,500			3,420				0	16,920
3.1	Total agreed funding (US\$)	352,000			175,000			163,000				50,000	740,000
3.2	Total support costs (US\$)	25,736			12,802			11,722				3,320	53,580
3.3	Total agreed costs (US\$)	377,736			187,802			174,722				53,320	793,580
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)												0.301
4.1.2	Phase-out of HCFC-22 to be achieved through previously approved projects (ODP tonnes)												-
4.1.3	Remaining eligible consumption of HCFC-22 (ODP tonnes)												0.007

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 lead implementing agency; 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 overall monitoring will be the responsibility of NOU, Ministry of Industries.
2. The consumption will be monitored based on data collected from relevant government departments and crosschecking it with data collected from the distributors and consumers.
3. The NOU will be responsible for reporting and shall submit the following reports in a timely manner:
 - (a) Annual reports on consumption of Substances to be submitted to the Ozone Secretariat;
 - (b) Annual reports on progress of implementation of this Agreement to be submitted to the Executive Committee of the Multilateral Fund; and
 - (c) Project-related reports to the Lead IA

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 co-ordinating implementing agencies, 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 \$2,500 per ODP tonne 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.
