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

#### PROJECT PROPOSAL: MADAGASCAR

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

#### Phase-out

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

UNEP/UNIDO

# PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

# Madagascar

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

(II) LATEST ARTICLE 7 DATA	Year: 2009	33 (ODP tonnes)
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(III) LATES	(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2009
Chemical	Aerosol	Foam	Fire fighting	Refrigera	Refrigeration		Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC123									
HCFC124									
HCFC141b									
HCFC142b									
HCFC22					16.5				16.5

(IV) CONSUMPTION DATA (ODP tonnes)								
2009 - 2010 baseline (estimate): 17.1 Starting point for sustained aggregate reductions:								
COI	CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)							
Already approved:	0.0	Remaining:	11.1					

(V) BUSINESS PLAN		2010	2011	2012	2013	2014	Total
UNEP	ODS phase-out (ODP tonnes)	0.107		0.107			0.214
	Funding (US \$)	40,821		40,821			81,642
UNIDO	ODS phase-out (ODP tonnes)	0.285					0.285
	Funding (US \$)	109,000					109,000

(VI) PRO	JECT DATA	<b>A</b>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
	Montreal Protocol consumption limits (estimate)		n/a	n/a	n/a	17.1	17.1	15.4	15.4	15.4	15.4	15.4	11.1	
Maximum allowable consumption (ODP tonnes)		consumption	n/a	n/a	n/a	17.1	17.1	15.4	15.4	15.4	15.4	15.4	11.1	
Project Costs	UNEP	Project costs	118,000			107,000				55,000		20,000		300,000
requeste d in principle	UNEF	Support costs	15,340			13,910				7,150		2,600		39,000
(US\$)	UNIDO	Project costs	210,000			50,000								260,000
	UNIDO	Support costs	15,750			3,750								19,500
Total proj principle (		equested in	328,000			157,000				55,000		20,000		560,000
Total sup		equested in	31,090			17,660				7,150		2,600		58,500
Total fund (US \$)	ls requested	in principle	359,090			174,660				62,150		22,600		618,500

(VII) Request for funding for the first tranche (2010)								
Agency	Funds requested (US \$)	Support costs (US \$)	ODS phase-out (ODP tonnes)					
UNEP	118,000	15,340						
UNIDO	210,000	15,750						

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 Madagascar UNEP, as the lead implementing agency, has submitted to the 62<sup>nd</sup> Meeting of the Executive Committee Stage I of the HCFC phase-out management plan (HPMP) as originally submitted, at a total cost of US \$630,000 (excluding agencies' support costs). The Government of Madagascar is requesting US \$320,000 plus agency support cost of US \$41,600 for UNEP and US \$310,000 plus agency support costs of US \$23,250 for UNIDO to meet the 35 per cent reduction by 2020. The first tranche for Stage I being requested at this meeting amounts to US \$118,000 plus agency support costs of US \$15,340 for UNEP and US \$210,000 plus agency support costs of US \$15,750 for UNIDO, as originally submitted.

## **Background**

#### **ODS** regulations

2. Madagascar ratified the Montreal Protocol on ODS and the Vienna Convention on ozone layer protection. The Government has adopted decrees to ban the import and use of CFCs, halons, methyl bromide, and to introduce a strict control of import, sale and use of these refrigerants and related equipment in the country. Madagascar has a licensing system including HCFC 2007 control measures. While the licensing system already bans CFC imports, the HCFC quota system is not in place, but will be by 2011.

## **HCFC** consumption

- 3. The survey's results showed that Madagascar imports HCFC refrigerants both in bulk or contained in new or second hand equipment. HCFCs are used in air conditioning, refrigeration, freezing equipment and ice making plants. HCFC use is not reported in industrial manufacturing foams. The survey reported also the dominance in use of HCFC-22 for servicing. It also revealed a general increasing trend in the consumption of the refrigerant since 2006 due to economic activity and growth in the country. HCFC consumption increased from 85.99 metric tons (mt) (4.72 ODP tonnes) in 2006 to 299.87 mt (16.49 ODP tonnes) in 2009 based on survey data.
- 4. The HCFC consumption in Madagascar is projected to increase by 27.52 per cent in 2010 and to reach the level of 382.4 mt (21.03 ODP tonnes). Table 1 presents data on HCFC consumption extracted from the survey and reported under Article 7 of the Montreal Protocol. It should be noted that the 2009 HCFC consumption reported under Article 7 is inaccurate, therefore the country has decided to submit a request to the Ozone Secretariat to adjust the amount reported to 299.87 mt (16.49 ODP tonnes), as indicated in the survey.

Table 1. HCFC-22 consumption from 2006 to 2009

	Art	icle 7	Survey results			
Year	HCFC-22 (in mt)	HCFC-22 (in ODP tonnes)	HCFC-22 (in mt)	HCFC-22 (in ODP tonnes)		
2006	30.90	1.7	85.99	4.72		
2007	38.18	2.1	129.43	7.11		
2008	40	2.2	237.23	13.04		
2009	600	33	299.87	16.49		

- 5. The HPMP showed that imported refrigeration equipment between 2002 and 2008 has significantly increased. Imported equipments in 2007 and 2008 amounted to 89,413 units and 145,031 units respectively. This increase in the import of equipment has resulted in a consequent increase in HCFC import.
- 6. The HPMP indicated that refrigeration technicians received training under the terminal phase-out management plan (TPMP) on conversion methods and on assembling recovery units that will allow them to be operational, as soon as additional training is provided on alternatives. It should be noted that the majority of refrigeration technicians have already been trained in the use of hydrocarbons such as isobutane and propane R290/R600a. Under the TPMP, 771 refrigeration technicians and 135 customs officers are being trained and certified and 22 trainers were trained.

#### Sectoral distribution of HCFCs

7. HCFC consumption in Madagascar is dominated by the fishing and industrial sector, and pure refrigerants are preferred by consumers for their refrigeration equipment. Table 2 provides information on the sectoral distribution of HCFC consumption.

Tyno	Total number	Total charge of refrigerant			demand
Туре	of units	mt	ODP tonnes	mt	ODP tonnes
Commercial	19,557	254.24	13.98	177.96	9.78
Residential	315,279	130.01	7.15	71.50	3.93
Total	334,836	384.25	21.13	249.46	13.71

Table 2: HCFC-22 consumption by sector

- 8. The average gas leakage rate for all equipment is around 55 per cent. The survey confirms that refrigeration installations on board fishing vessels consume the majority of this amount. This high leakage rate is attributed mostly to equipment used in the fishery sector as sea water causes leaks due to corrosion.
- 9. With regard to refrigerant prices, HCFC-22 remains the most competitive and available in the local market and its price has been constantly decreasing since 2006. This decrease is explained by the high volume of demand and very competitive price of Chinese products.

#### Calculation of consumption baseline

10. The estimated HCFC baseline for compliance is calculated using the 2009 actual consumption of 299.87 mt (33 ODP tonnes) based on the survey and 2010 estimated consumption of 382.4 mt (21.03 ODP tonnes) which corresponds to 341.1 mt (18.76 ODP tonnes) to cover Madagascar's servicing need. The 2010 estimated consumption used a growth rate of 27.52 per cent from 2009.

#### HCFC phase-out strategy

11. The Republic of Madagascar is proposing to freeze its HCFC consumption at the estimated baseline level of 341.1 mt (18.76 ODP tonnes) in 2013 and to gradually reduce its HCFCs consumption following the Montreal Protocol phase-out schedule.

- 12. The government of Madagascar is proposing to meet its compliance targets through the following activities:
  - (a) Awareness on legislation and regulations;
  - (b) Strengthening of the institutional framework;
  - (c) Training of trainers and refrigeration technicians;
  - (d) Strengthening of custom officers;
  - (e) Providing equipment such as recovery machines and cylinders, retrofit equipment and tool kits; and
  - (f) Coordination, monitoring and evaluation.

## Cost of the HPMP

13. The total cost for the implementation of Stage I of the HPMP as submitted is US \$630,000 plus agency support costs of US \$64,850 including US \$41,600 for UNEP and US \$23,250 for UNIDO. These resources will allow the country to implement activities to phase out 119.39 mt (6.56 ODP tonnes) of HCFCs by the end of 2020. Table 3 presents the allocated funds for each activity in the HPMP.

Table 3. Proposed activities and estimated budget

Proposed Projects	Agency	2011	2013	2017	2019	TOTAL
Conducting national public awareness on legislation and regulatory et strengthening institutional framework	UNEP	8,000	12,000	5,000		25,000
Training of trainers and refrigeration technicians	UNEP	40,000	40,000	20,000		100,000
Strengthening of Customs offices	UNEP	50,000	35,000	10,000		95,000
Investments Project	UNIDO	160,000	50,000	25,000	25,000	260,000
Co-financing: Development of a comprehensive programme that reduces both HCFC and carbon emissions in the refrigeration and A/C sector through the support of a variety of resources	UNIDO	50,000				50,000
Monitoring and evaluation of HPMP and its four components	UNEP	20,000	40,000	20,000	20,000	100,000
TOTAL		328,000	177,000	80,000	45,000	630,000

#### SECRETARIAT'S COMMENTS AND RECOMMENDATION

#### **COMMENTS**

14. The Secretariat reviewed the HPMP for Madagascar 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 60<sup>th</sup> Meeting (decision 60/44).

## **HCFC** consumption

- 15. The Secretariat sought justifications for the significant increase in the HCFC consumption as it appears that it by 26.4 per cent between 2008 and 2009 based on the survey data (see Table 1). It also estimated its 2010 consumption using an increase of 27.52 per cent from the 2009 consumption indicated in the survey. UNEP clarified that the data initially submitted under Article 7 was based mostly on estimated figures, and these have now been verified through the survey during the HPMP implementation using the HCFCs required for servicing based on the equipment population. The government has also acknowledged that some imports are for stockpiling but cannot provide specific figures to differentiate this except based on the annual servicing need indicated in Table 2.
- 16. The Secretariat noted that these increases were very high, and asked UNEP to consider using annual growth rate in HCFC consumption used for the preparation of the 2010-2014 business plans noted by the Executive Committee at the 61<sup>st</sup> Meeting, which is 8 per cent. Further to this discussion, UNEP agreed on an interim basis to use the same growth rate to estimate 2010 consumption based on the 2009 actual consumption from the survey in order to calculate an estimated baseline. This resulted in a revised 2010 estimated consumption of 323.8 mt (17.81 ODP tonnes). Using the revised figure, the estimated baseline is therefore established at 311.8 mt.

#### Starting point for aggregate reduction in HCFC consumption

- 17. The baseline selected by the country in the HPMP was the average between 2009 actual consumption of 299.87 mt (16.49 ODP tonnes) and the original 2010 estimated consumption of 382.4 mt (21.03 ODP tonnes) resulting in an estimated baseline of 341.1 mt (18.76 ODP tonnes). Given the agreement of Madagascar to revise its 2010 estimate, the baseline was adjusted to 311.8 mt (17.15 ODP tonnes). The maximum funding for this level of consumption under decision 60/44 up to 2020 is US \$560,000.
- 18. In line with decision 60/44, if the country uses an estimated baseline as its starting point, this may be adjusted to the actual baseline figures once these are known in 2011. The Secretariat drew UNEP's attention to the fact that should the calculation of the actual baseline for Madagascar be different to that currently used in the HPMP, the corresponding funds will be adjusted accordingly if this consumption places the country in a different funding category. These adjustments will be made for future tranches of the HPMP.

## Technical and cost issues

- 19. The Secretariat raised the issue related to HCFC policy and regulations. UNEP indicated that Madagascar had a legislation system but that the quota system will be set separately and on a yearly basis. In this regard, the Ministries of Environment and Trade will set the annual quota to be distributed to importers. The NOU is responsible for monitoring provision of quota.
- 20. The Secretariat was informed by UNEP that Madagascar had not received equipment for recovery and recycling of refrigerants under the TPMP and no provision was made for it. However, the HPMP will

allow the country to acquire, in addition to what was provided in the TPMP, equipment such as recovery machines, recovery tanks and tool kits, which will contribute to build capacity for HCFC phase-out.

- 21. The Secretariat assessed to what extent the training provided to trainers under the TPMP and established training centres could be used under the HPMP. UNEP explained that given the evolution of technologies during the recent years, new methods and training materials are necessary. UNEP also indicated that trainers trained during the TPMP have been registered and a meeting with associations of technicians, managers of training centres, stakeholders and national ozone unit will be convened in order to define the particular needs and the content of this training programme.
- 22. In line with decision 60/44 and the discussion above, the funding for the implementation of Stage I of the HPMP in Madagascar is requested at US \$560,000 (excluding agencies' support costs) and covers activities to reach a 35 per cent reduction by 2020. The total support costs are \$58,500 and include US \$39,000 for UNEP and US \$19,500 for UNIDO. The revised budget breakdown is presented in table 4.

**UNEP UNIDO** TOTAL **Proposed Projects** 25,000 Public awareness on legislation et regulatory et 25,000 strengthening institutional framework 100,000 Training of trainers and refrigeration technicians 100,000 95,000 Strengthening of Custom officers 95,000 260,000 **Investments Project** 260,000 Monitoring and evaluation of HPMP 80,000 80,000 And its four components 300,000 260,000 Sub-total 560,000 39,000 19,500 **Support costs** 58,500 339,000 279,500 Total 618,500

Table 4: Agreed level of funding of Stage I of the HPMP for Madagascar (US \$)

#### Impact on climate

- 23. 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 CO<sub>2</sub>-equivalent tonnes saved. Additional CO<sub>2</sub>-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 CO<sub>2</sub>-equivalent tonnes saved). If 10 per cent of the current service need of 249.46 mt of HCFC-22 (see table 2) is replaced with HFC-407C, the potential CO<sub>2</sub>-equivalent saved could be 2,744 tonnes.
- 24. It is important to note that these reductions are associated with the activities being proposed in the HPMP (which are known). However, it does 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 the 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.

## Adjusted 2010-2014 business plans and funding eligibility per Decision 60/44

25. UNEP and UNIDO are requesting US \$560,000 plus support costs for the implementation of Stage I of the HPMP. The total value requested for the period 2010-2014 of US \$533,750 including support costs, is US \$342,750 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 (40 metric tonnes) while that in the HPMP was based on the submitted estimated baseline using the average of actual 2009 reported consumption and estimated 2010 consumption and to account for the phase-out up to the 2020 control measures only.

### **Draft** agreement

26. A draft agreement between the Government of Madagascar and the Executive Committee for HCFCs phase-out is contained in Annex I of the present document.

#### RECOMMENDATION

- 27. The HPMP for Madagascar is submitted for individual consideration. The Executive Committee may wish to consider:
  - (a) Noting with appreciation the submission of Stage I of the HCFC management plan (HPMP) for Madagascar to achieve the 35 per cent reduction in HCFC consumption by 2020 at an estimated cost of US \$560,000 (excluding agency support costs);
  - (b) Noting that the Government of Madagascar agreed to establish as its baseline for sustained aggregate reduction in HCFC consumption the estimated baseline of 311.8 metric tons calculated using actual consumption reported in the survey in 2009 and revised estimated 2010 consumption;
  - (c) Whether to approve, in principle, the HPMP for Madagascar for the period 2010-2020, at the amount US \$300,000 plus agency support costs of US \$39,000 for UNEP and of US \$260,000 plus agency support costs of US \$19,500 for UNIDO;
  - (d) Whether to approve the Agreement between the Government of Madagascar and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
  - (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 to approve the first implementation plan for 2010-2011, and the first tranche of Stage I of the HPMP for Madagascar at the amount of US \$118,000 plus agency support costs of US \$15,340 for UNEP, and US \$210,000 plus agency support costs of US \$15,750 for UNIDO.

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#### Annex I

# DRAFT AGREEMENT BETWEEN MADAGASCAR AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUROCARBONS

- 1. This Agreement represents the understanding of the Government of Madagascar (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 11.1 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 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 hydrochloroflurocarbons 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 UNIDO 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 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 and the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to information necessary to verify compliance with this Agreement.
- 14. The completion of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption has been specified in Appendix 2-A. Should at that time activities be still outstanding which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per 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	С	I	17.1

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

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
1.1	Montreal Protocol reduction	n/a	n/a	n/a	17.1	17.1	15.4	15.4	15.4	15.4	15.4	11.1	n/a
	schedule of Annex C, Group I												
	substances (ODP tonnes)												
	Maximum allowable total	n/a	n/a	n/a	17.1	17.1	15.4	15.4	15.4	15.4	15.4	11.1	n/a
	consumption of Annex C,												
	Group I substances												
	(ODP tonnes)												
2.1	Lead IA (UNEP) agreed funding	118,000			107,000				55,000		20,000		300,000
	(US \$)												
2.2	Support costs for Lead IA	15,340			13,910				7,150		2,600		39,000
	(US \$)												
2.3	Cooperating IA (UNIDO) agreed	210,000			50,000								260,000
	funding (US \$)												
2.4	Support costs for Cooperating	15,750			3,750								19,500
	IA (US \$)												
3.1	Total agreed funding (US \$)	328,000			157,000				55,000		20,000		560,000
3.2	Total support costs (US \$)	31,090			17,660				7,150		2,600		58,500
3.3	Total agreed costs (US \$)	359,090			174,660				62,150		22,600		618,500
4.1.1	4.1.1 Total phase-out of HCFC-22 under this agreement (ODP tonnes)												6.00
4.1.2	4.1.2 Phase-out of HCFC-22 in previously approved projects (ODP tonnes)												0.0
4.1.3	4.1.3 Remaining eligible consumption for HCFC-22												11.1

## 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 NOU will submit annual progress reports of status of implementation of the HPMP to UNEP.
- 2. Monitoring of development of HPMP and verification of the achievement of the performance targets, specified in the Plan, will be assigned to independent local company or to independent local consultants by UNEP.

## 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
- (1) 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 metric 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.