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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: MAURITIUS**

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) Germany

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS  
Mauritius**

<b>(I) PROJECT TITLE</b>	<b>AGENCY</b>
HCFC phase-out management plan (first tranche)	Germany (lead)

<b>(II) LATEST ARTICLE 7 DATA</b>	Year: 2009	10.7 (ODP tonnes)
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<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP)</b>							<b>Year: 2009</b>			
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption	
				Manufacturing	Servicing					
HCFC-123					0.0					0.0
HCFC-124										
HCFC-141b					0.1					0.1
HCFC-142b										
HCFC-22					14.1					14.1

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009 - 2010 baseline:	To be determined	Starting point for sustained aggregate reductions:	10.2
<b>CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)</b>			
Already approved:	0.0	Remaining:	0

<b>(V) BUSINESS PLAN</b>		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Germany	ODS phase-out (ODP tonnes)	1.9		3.0						0.5		5.4
	Funding (US \$)	175,500	0	278,000	0					50,000		503,500

<b>(VI) PROJECT DATA</b>			2011	2012	2013	2014	2015-2016	2017	2018-2019	2020	2021	2022	2023	2024	2025	2030	Total
Montreal Protocol consumption limits (estimate)			n/a	n/a	10.2	10.2	9.1	9.1	9.1	6.6	6.6	6.6	6.6	6.6	3.3	0.2	
Maximum allowable consumption (ODP tonnes)			n/a	n/a	10.2	10.2	9.1	9.1	6.6	5.1	4.0	3.0	2.0	1.0	0.2	0	
Project Costs requested in principle(US\$)	Germany	Project costs	157,050			131,400		357,750		186,300			67,500			100,000	1,000,000
		Support costs	18,846			15,768		42,930		22,356			8,100			12,000	120,000
Total project costs requested in principle (US \$)			157,050			131,400		357,750	0	186,300			67,500			100,000	1,000,000
Total support costs requested in principle (US \$)			18,846			15,768		42,930	0	22,356			8,100			12,000	120,000
Total funds requested in principle (US \$)			175,896			147,168		400,680	0	208,656			75,600			112,000	1,120,000

<b>(VII) Request for funding for the first tranche (2011)</b>		
<b>Agency</b>	<b>Funds requested (US \$)</b>	<b>Support costs (US \$)</b>
Germany	157,050	18,846

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

## PROJECT DESCRIPTION

1. On behalf of the Government of Mauritius, the Government of Germany has submitted to the 63<sup>rd</sup> Meeting of the Executive Committee an HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$1,427,000 plus agency support costs of US \$166,970 for 97.5 per cent phase-out by 2025 and 100 per cent phase-out by 2030. The HPMP will be implemented solely by the Government of Germany. It is proposing a one-time funding and an accelerated phase-out of HCFC consumption by 2030.

2. As originally submitted, the Government of Germany is requesting US \$225,500 plus agency support costs of US \$29,315 for the first tranche of the HPMP.

### Background

#### ODS regulations

3. The Government of Mauritius has a legislative, regulatory and quota system controlling the importation and distribution of HCFCs in its territory. The current ODS regulations control the import of all CFCs, halons, HCFC-22, R-502 and methyl chloroform and banned the import of all CFCs-based equipment and aerosols using CFCs as propellant except pharmaceutical products.

4. The main body responsible for implementing, monitoring and evaluating the activities related to the Montreal Protocol including the HPMP is the National Ozone Unit (NOU), under the Ministry of Environment and Sustainable Development. It also coordinates activities with Government agencies and consultations with key stakeholders involved in the implementation of the HPMP.

#### HCFC consumption

5. The survey shows that Mauritius uses mostly HCFC-22 in the refrigeration servicing sector (mainly imported from China), and minor quantities of HCFC-141b and HCFC-123. The country exported 21.8 per cent and 25.2 per cent of the total amount of HCFCs imported in 2008 and 2009 respectively. The HCFC net consumption increased from 123.4 metric tonnes (mt) (6.9 ODP tonnes) in 2008 to 193.9 mt (10.7 ODP tonnes) in 2009 resulting from the development of infrastructure facilities in the country.

6. The 2010 HCFC consumption in Mauritius was estimated using a 10 percent growth rate from its 2009 consumption and reaches the level of 213.3 mt (11.7 ODP tonnes). The forecast demand is based on growth in the air-conditioning and refrigeration sector. Table 1 presents the data on HCFC consumption reported under Article 7 of the Montreal Protocol.

Table 1: HCFC consumption from 2006 to 2009

Year	HCFC consumption (ODP tonnes)				HCFC consumption (metric tonnes)			
	All HCFCs	HCFC-22	HCFC-141b	HCFC-123	All HCFCs	HCFC-22	HCFC-141b	HCFC-123
2006	7.6	7.5	0.1	0	137.9	136.7	0.4	0.8
2007	8.6	8.5	0.1	0	156.6	155.6	0.7	0.3
2008	6.9	6.7	0.2	0	123.4	121.0	2.2	0.2
2009	10.7	10.6	0.1	0	193.9	192.1	1.4	0.4

Sectoral distribution of HCFCs

7. HCFCs are used predominantly for servicing the domestic air-conditioning, commercial and industrial refrigeration sectors. The amount of HCFC-22 needed for servicing the equipment has been estimated at 158 mt as shown in Table 2. It appears that part of the 2009 imports could be stockpiles. The air-conditioning and refrigeration sector is expected to grow by 10 to 15 per cent during the coming years if uncontrolled. The HCFC survey results showed that there were nearly 350,000 split air-conditioning units, 30 chillers, 400 chill cabinet units, 340 freezers and 400 cold rooms in operation in 2009.

Table 2: Distribution of HCFC-22 used in refrigeration systems

<b>Sector</b>	<b>HCFC-22 (mt)</b>	<b>HCFC-22 (ODP tonnes)</b>	<b>Distribution</b>
Domestic air conditioning	50	2.750	32%
Chillers	3	0.165	2%
Freezers	10	0.550	6%
Cold rooms	15	0.825	9%
Chill cabinets	10	0.550	6%
Food processing	10	0.550	6%
Ship demurrage	60	3.300	38%
<b>TOTAL</b>	<b>158</b>	<b>8.690</b>	<b>100%</b>

8. Thirty-eight per cent of the annual need for servicing is used for ship demurrage. Upon the approval of the HPMP, the Ministry of Environment and Sustainable Development the Government of Mauritius will communicate with the International Maritime Organization (IMO) on how to handle the phase-out of HCFCs used for ship demurrage.

9. HCFC-22 prices are relatively low as compared with alternative refrigerants such as HCFC-123, HCFC-408A, HCFC-409A, HFC-134a, HFC-404A and HFC-407A. R-408A and R-409A are used in insignificant amounts. Due to the fact that HCFC-22 is cheaper than the rest of the alternative refrigerants, it is used extensively in almost all servicing requirements.

10. There are approximately 7 trainers, 150 refrigeration technicians and 60 customs officers trained and certified in Mauritius.

Calculation of estimated baseline

11. The estimated HCFC baseline for compliance was calculated as the average of the 2009 actual consumption reported under Article 7 of 193.9 mt (10.7 ODP tonnes) and the 2010 estimated consumption of 213.3 mt (11.7 ODP tonnes) based on 10 per cent growth, which results in an estimated baseline of 203.6 mt (11.2 ODP tonnes).

HCFC phase-out strategy

12. The Government of Mauritius declared climate change as the most important challenge for the environment protection. Furthermore, climate change is a priority to the government considering that Mauritius is a small island exposed to harsh climatic conditions. Mauritius has demonstrated its capacity to take appropriate measures to phase out ozone depleting substances well in advance of the compliance dates, as it was the case for CFCs where the country achieved the complete phase-out ahead of the schedule of the Montreal Protocol.

13. The Government of Mauritius has adopted a single stage approach for the implementation of the HPMP as shown in Table 3.

Table 3: Proposed HCFC phase-out schedule

Schedule	MP Targets	HPMP reduction targets
Average 2009-2010	Baseline	Baseline level
1 January, 2013	Freeze at baseline	Freeze at baseline
1 January 2015	10 per cent reduction from baseline	10 per cent reduction from baseline
1 January 2018		35 per cent reduction from baseline
1 January 2020	35 per cent reduction from baseline	50 per cent reduction from baseline
1 January 2021		60 per cent reduction from baseline
1 January 2022		70 per cent reduction from baseline
1 January 2023		80 per cent reduction from baseline
1 January 2024		90 per cent reduction from baseline
1 January 2025	67.5 per cent reduction from baseline	97.5 per cent reduction from baseline
1 January 2030	2.5% service tail up to 2040	100 per cent phase-out (by 1 January 2030)

14. The Government of Mauritius is proposing to meet its compliance targets by implementing both investment and non-investment activities from 2011 to 2025. These activities include public awareness on ozone-depleting substances and the HCFC phase-out management plan; strengthening of the recovery and recycling network and procurement of 30 recovery units, 3 recycling units and 50 cylinders; training programmes for the trainers and refrigerant technicians on retrofitting techniques and good practices in refrigeration; procurement of required equipment for the training (retrofit kits and tools); training of customs officers on the future changes in the legal framework governing the imports of ODS and ODS-based equipment; review of the curriculum for customs officers training; and the implementation of an incentive programme for end-users. The Government also plans a demonstration project consisting of replacing existing HCFC-based refrigerators and chillers in one supermarket by carbon dioxide refrigerant. The HPMP considers that carbon dioxide is an inexpensive refrigerant, widely available and not subject to restrictions. Moreover, there is no obligation to recover, reclaim or recycle carbon dioxide which makes it an attractive solution.

#### Cost of the HPMP

15. The total cost for the implementation of the HPMP as submitted is US \$1,427,000 plus agency support costs of US \$166,970 to achieve the complete phase-out of HCFCs by 2030. Table 4 presents the allocated funds for each activity in the HPMP.

Table 4: Total cost of the HPMP (US\$)

Project title	2011	2014	2017	2020	2023	Total
Awareness on outreach	20,000	21,000	54,000	26,000	18,000	139,000
Recovery and recycling	40,000	71,000	24,000			135,000
Training of trainers	87,500		32,500			120,000
Technician training	31,000	53,000	68,000	24,000	14,000	190,000
Customs training	17,000	35,500	30,500	15,000	12,000	110,000
Incentive programme		60,000	157,000	131,000	30,000	378,000
Demonstration project for supermarket			200,000			200,000
Project coordination and management	30,000	37,000	37,000	32,000	19,000	155,000
<b>TOTAL</b>	<b>225,500</b>	<b>277,500</b>	<b>603,000</b>	<b>228,000</b>	<b>93,000</b>	<b>1,427,000</b>

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

16. The Secretariat reviewed the HPMP for Mauritius in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60<sup>th</sup> Meeting (decision 60/44), subsequent decisions on HPMPs made at the 62<sup>nd</sup> Meeting and the 2011-2014 business plan of the Multilateral Fund.

#### HCFC consumption

17. The Secretariat raised concerns on the HCFC consumption increase of 55.6 per cent between 2008 and 2009. Germany advised that during this period the infrastructure facilities grew by 9 per cent of the Gross Domestic Product (GDP) and the tourism sector by 6 per cent resulting in a significant increase in the importation of HCFC-based equipment. However, the growth in HCFC consumption for 2010 has been estimated at 10 per cent only.

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

18. The HPMP indicated an HCFC consumption of 193.9 mt in 2009 while the servicing demands were estimated at 158 mt during the same period. It was assumed that about 50 per cent of the difference between the consumption and the servicing demands in 2009 (18 mt) was stockpiled. For the calculation of the starting point for aggregated reduction in HCFC consumption the Secretariat and Germany agreed to exclude the amount of HCFC in stockpiles. Consequently, 176 mt (2009) and 193.6 mt (2010) were used to calculate the starting point for aggregated reduction in HCFC consumption, which resulted in 184.8 mt (10.2 ODP tonnes).

#### Accelerated phase-out of HCFCs

19. The Secretariat assessed the accelerated phase-out strategy for Mauritius and drew Germany's attention to decision 60/15, through which the Executive Committee decided that projects which accelerated the phase-out of consumption of HCFCs could be considered on a case-by-case basis for low-volume-consuming (LVC) countries that had a strong national level of commitment in place to support accelerated phase-out.

20. The Secretariat was of the opinion that the HPMP as originally submitted did not demonstrate the strong national commitment to phase out earlier than the Protocol's schedule. Consequently, the Secretariat suggested to Germany that the country adopt a staged approach through which the Government of Mauritius commits itself to reducing the level of HCFC consumption by 35 per cent in 2020. It was expected that during the implementation of stage I of the HPMP, the Government of Mauritius would be in a better position to reconsider whether it would pursue the acceleration of HCFC phase-out. In the meantime the Government in consultation with major stakeholders could, among other things, undertake a cost/benefit analysis on the introduction of high-energy efficiency refrigeration equipment; review alternative technologies in the refrigeration sector; strengthen the curriculum of the training schools for refrigeration technicians and customs officers; and enhance the technical capabilities of the technicians in the country.

21. The Secretariat's proposal was reviewed by Germany, which explained that Mauritius has proven its strong commitment through the prompt ratification of the amendments to the Montreal Protocol. Mauritius is among the countries that took the lead in the adjustment of the Montreal Protocol in 2006-2007 and is leading negotiation for HFC control under the Protocol. The HPMP also adheres to the Government programme of "Mauritius Sustainable Island", which is the long term policy to convert the island into a sustainable one. Germany also advised that due to climate change challenges, the Government is more committed than it was in 2000 to gear its development with environmentally friendly alternatives. The country has recently been experiencing more harsh climatic conditions namely torrential rainfalls, colder winter, hotter late summer and severe drought periods. The Government of Mauritius declared climate change challenges as a priority for the country. It has developed strategies and plans to promote a green economy and sustainable development towards a sustainable island. In addition, stakeholders have shown their willingness to collaborate fully in the process. According to Germany, the commitment of all the stakeholders has been the key to the successful early phase-out of CFCs. In the frame of the HPMP, the Government of Mauritius is proposing a 50 per cent reduction by 2020 with a 97.5 per cent reduction by 2025 and a complete phase-out by 2030, ten years ahead of the schedule (see Table 3 above). The Government of Mauritius indeed showed a strong commitment to discourage the imports of HCFC-based air-conditioners.

#### Technical and costs issues

22. The Secretariat considered to what extent refrigerant systems running on carbon dioxide refrigerants could be installed in supermarkets and what would be the benefit of the retrofitting programme. Germany explained that the Government's strategy is to promote natural refrigerants including carbon dioxide and hydrocarbons in supermarkets. The Government of Mauritius considers that by 2025, almost all the refrigeration equipment in supermarkets (estimated at around 100 units) would have converted to natural refrigerants. It is expected that incentives through tax relief for instance will encourage the supermarket owners to invest in environmentally friendly technologies. Germany also advised that the retrofit will be partly demonstrative of natural refrigerant technologies both in the commercial refrigeration and air-conditioning sectors. The direct impact of the incentive programme was estimated at 2 to 5 mt of HCFC-22 phased out.

23. In line with decision 60/44 and the starting point for aggregate reduction in HCFC consumption in the servicing sector of 184.8 mt (as calculated in paragraph 18), the revised funding level up to 2030 is US \$1,000,000 plus support costs for the complete phase-out of HCFCs in Mauritius.

Table 5: Revised level of funding for total phase-out (US\$)

Project title	Germany
Awareness and outreach	25,000
Recovery and recycling	94,000
Training of trainers	85,000
Technician training	120,000
Customs training	90,000
Incentive programme	261,000
Demonstration project for supermarket	200,000
Project coordination and management	125,000
<b>TOTAL</b>	<b>1,000,000</b>

#### Impact on the climate

24. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogram (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO<sub>2</sub>-equivalent tonnes saved. A preliminary estimation of the impact on the climate as calculated by Mauritius in its HPMP indicates that 44,330 CO<sub>2</sub>-equivalent tonnes would not be emitted into the atmosphere if HCFC-based equipment is converted to carbon dioxide refrigerant. This figure is higher than the potential climate impact of the HPMP indicated in the 2011-2014 business plans of 17,917 CO<sub>2</sub>-equivalent tonnes.

25. A more precise forecast of the impact on the climate of the activities in the servicing sector is presently not available. The impact might be established through an assessment of implementation reports by, *inter alia*, comparing the levels of refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22-based equipment being retrofitted.

#### Co-financing

26. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties, the Government of Mauritius has pledged US \$1,577,500 towards the implementation of the activities in the HPMP. The Government contribution breakdown is presented in Table 6:



Table 6: Government contribution to the HPMP implementation

<b>Description</b>	<b>Government co-financing</b>
HCFC phase out policies	10,000
Awareness and outreach	43,500
Recovery and recycling	2,000
Training of trainers	50,000
Technician training	30,000
Customs training	20,000
Incentive programme	1,002,000
Demonstration project for supermarket	350,000
Project coordination and management	70,000
<b>Total</b>	<b>1,577,500</b>

2011-2014 business plan of the Multilateral Fund

27. The revised funding level up to 2030 is US \$1,000,000 plus support costs for implementation of the HPMP. The total value requested for the period 2011-2014 of US \$323,064 including support cost is within the total amount in the business plan for the period.

28. Based on the estimated HCFC baseline consumption in the servicing sector of 184.8 mt, Mauritius's allocation up to the 2020 phase-out should be US \$350,000 in line with decision 60/44. The business plan indicated a tonnage of 11.1 ODP tonnes.

Draft agreement

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

**RECOMMENDATION**

30. The HPMP for Mauritius is submitted for individual consideration. The Executive Committee may wish to consider:

- (a) Whether to approve, in principle, the HCFC phase-out management plan (HPMP) for Mauritius for the period 2011 to 2030, at the amount of US \$1,000,000 and agency support costs of US \$120,000 for the Government of Germany on the understanding that this would be the total funding available from the Multilateral Fund to achieve the complete phase-out of HCFCs by 1 January 2030.
- (b) Noting that the Government of Mauritius had agreed at the 63<sup>rd</sup> Meeting to establish as its starting point for sustained aggregate reduction in HCFC consumption the estimated baseline of 10.2 ODP tonnes, calculated using consumption forecast for 2009 of 176 mt (9.7 ODP tonnes) and estimated consumption for 2010 of 193.6 mt (10.6 ODP tonnes);
- (c) Whether to approve the draft Agreement between the Government of Mauritius and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex II to the present document;
- (d) Requesting the Fund Secretariat, once the baseline data were known, to update draft Appendix 2-A to the Agreement to include the figures for maximum allowable consumption, and to notify the Executive Committee of the resulting change in the levels

of maximum allowable consumption and of any potential related impact on the eligible funding level, with any adjustments needed to being made when the next tranche was submitted; and

- (e) Whether to approve the first tranche of the HPMP for Mauritius, and the corresponding implementation plan, at the amount of US \$175,896 comprising of US \$157,050 and agency support costs of US \$18,846 for the Government of Germany.

## Annex I

### **DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF MAURITIUS 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 Mauritius (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 0.2 ODP tonne prior to 1 January 2025 and 0 ODP tonne prior to January 2030 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 and 4.2.3 (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. Government of Germany has agreed to be the lead implementing agency (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). The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 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 to facilitate implementation of this Agreement. In particular, it will provide the Lead 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	10.1
HCFC-141b	C	I	0.1

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

		2011	2013	2014	2015	2017	2020	2023	2025	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)		10.2	10.2	9.1	9.1	6.6	6.6	3.3	0.2	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)		10.2	10.2	9.1	9.1	5.1	2	0.2	0	n/a
2.1	Lead IA Govt of Germany agreed funding(US \$)	157,050		131,400		357,750	186,300	67,500		100,000	1,000,000
2.2	Support costs for Lead IA(US \$)	18,846		15,768		42,930	22,356	8,100		12,000	120,000
3.1	Total agreed funding (US \$)	157,050		131,400		357,750	186,300	67,500		100,000	1,000,000
3.2	Total support cost (US \$)	18,846		15,768		42,930	22,356	8,100		12,000	120,000
3.3	Total agreed costs (US \$)	175,896		147,168		400,680	208,656	75,600		112,000	1,120,000
4.1.1	Total phase-out of HCFC 22 agreed to be achieved under this agreement (ODP tonnes)										10.1
4.1.2	Phase-out of HCFC 22 to be achieved in previously approved projects (ODP tonnes)										0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)										0
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)										0.1
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)										0
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)										0

## APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval not earlier than the last 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. As under the TPMP the NOU conducted the monitoring of the TPMP activities with assistance from Germany. The NOU will continue in a similar way with respect to monitoring of the HPMP activities. If there is a need for special assistance with monitoring then a suitable consultant will be hired to undertake the task. There are several persons who work at the ozone office of Mauritius and therefore the NOU is confident that the country will be able to undertake the monitoring activities as required by the HPMP.

#### **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 ensuring that appropriate independent technical experts carry out the technical reviews;

- (f) Carrying out required supervision missions;
- (g) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (h) 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, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;
- (i) Ensuring that disbursements made to the Country are based on the use of the indicators; and
- (j) 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 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY**

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

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