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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Seventy-fifth Meeting Montreal, 16-20 November 2015

PROJECT PROPOSAL: GUYANA

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

Phase-out

• HCFC phase-out management plan (stage II, first tranche)

UNEP and UNDP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Guyana

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (stage II)	UNDP, UNEP (lead)	n/a	n/a

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2014	1.80 (ODP tonnes)
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(III) LATEST	COUNTR			Year: 2014					
Chemical	Aerosol	Foam	Fire fighting	Refrigera	tion	Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					0.8				0.8

(IV) CONSUMPTION DATA (ODP tonnes)												
2009 - 2010 baseline: 1.8 Starting point for sustained aggregate reductions:												
C	CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)											
Already approved: 0.2 Remaining:												

(V) BUSINES	SS PLAN	2015	2016	2017	Total
UNDP	ODS phase-out (ODP tonnes)	0.0	8,000	8,000	16,000
	Funding (US \$)	0.0	0.0	0.0	0.0
UNEP	ODS phase-out (ODP tonnes)	0.0	24,000	0.0	24,000
	Funding (US \$)	0.0	0.0	0.0	0.0

(VI) PROJ	ECT DAT	A	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027- 2029	203 0	Total
Montreal Protocol consumption limits		1.62	1.62	1.62	1.62	1.62	1.17	1.17	1.17	1.17	1.17	0.59	0.59	0.59	0.05	n/a	
Maximum a (ODP tonne		onsumption	1.62	1.52	1.42	1.32	1.22	1.12	0.91	0.69	0.48	0.26	0.05	0.05	0.05	0	n/a
Project costs		Project costs	55,500	0	0	65,500	0	0	45,500	0	45,500	0	0	30,500	0	0	242,500
requested in principle		Support	7,215	0	0	8,515	0	0	5,915	0	5,915	0	0	3,965	0	0	31,525
(US\$)		Project costs	159,750	0	0	66,750	0	0	125,000	0	35,000	0	0	55,000	0	0	441,500
		Support	11,183	0	0	4,673	0	0	8,750	0	2,450	0	0	3,850	0	0	30,905
	Total project costs requested in principl (US\$)		215,250	0	0	132,250	0	0	170,500	0	80,500	0	0	85,500	0	0	684,000
Total support costs requested in principle (US\$)		18,398	0	0	13,188	0	0	14,665	0	8,365	0	0	7,815	0	0	62,430	
Total funds at this meet		or approval	233,648	0	0	145,438	0	0	185,165	0	88,865	0	0	93,315	0	0	746,430

Secretariat's recommendation:	Individual consideration

PROJECT DESCRIPTION

- 1. On behalf of the Government of Guyana, UNEP, as the lead implementing agency, has submitted to the 75th meeting stage II of the HCFC phase-out management plan (HPMP) at a total cost of US \$746,430, consisting of US \$242,500, plus agency support costs of US \$31,525 for UNEP, and US \$441,500, plus agency support costs of US \$30,905, for UNDP as originally submitted. The implementation of stage II will phase out 1.57 ODP tonnes of HCFCs resulting in the 97.5 per cent phase-out of HCFCs by 2025, and the complete phase-out by 2030.
- 2. UNEP has also submitted a request for funding the first tranche of stage II at the amount of US \$233,648, consisting of US \$55,500, plus agency support costs of US \$7,215 for UNEP, and US \$159,750, plus agency support costs of US \$11,183 for UNDP as originally submitted, together with a progress report on the implementation of the second and final tranche of stage I of the HPMP¹.

HCFC consumption

3. The Government of Guyana reported an consumption of 0.80 ODP tonnes of HCFC-22 in 2014. The 2010-2014 HCFC consumption in Guyana is shown in Table 1.

Table 1. HCFC-22 consumption in Guyana (Article 7 data)

HCFC-22	2010	2011	2012	2013	2014	Baseline
Metric tonnes	42.8	43.90	24.69	17.42	14.5	31.0
ODP tonnes	2.40	2.41	1.36	0.96	0.80	1.80

4. The HCFC consumption in 2014 of 0.80 ODP tonnes 56 per cent lower than the baseline of 1.80 ODP tonnes. The reduction of HCFC consumption from 2012 onwards is due to the implementation of stage I of the HPMP including a ban on imports of HCFC-based equipment starting in 2010, quota controls on HCFC imports, and the training of refrigeration technicians on good servicing practices and awareness raising activities that were implemented during stage I of the HPMP. HCFCs are used exclusively for servicing HCFC-based equipment.

Legal framework

5. The Government has developed regulations to support the implementation of a licensing and quota system. All importers of HCFCs must register with the National Ozone Action Unit (NOAU) to obtain import quota license. The quotas are enforced by the Guyana Revenue Authority (customs department). The license is issued to importers by the Ministry of Tourist, Industry and Commerce according to the quotas set by the NOAU. The National Bureau of Standards (GNBS) is mandated to ensure that all imported ODSs, including HCFCs, are labeled. The Government has also banned the import of ODS-based equipment since 2010. Development of a national standard for handling, transport and storage of flammable refrigerants is currently being discussed by the GNBS and is expected to be fully implemented in stage II.

Progress report on the implementation of stage I of the HPMP

6. HCFC licensing and quota system has been effectively enforced. A component on the Montreal Protocol and ODS monitoring have been included in the regular training of customs officers. Ten refrigerant identifiers were provided and 30 customs officers were trained on regulations and HCFC import control.

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¹ Stage I of the HPMP was approved at the 63rd meeting to meet the 10 per cent reduction of HCFC consumption by 2015.

- 7. In total 99 technicians were trained on good refrigeration servicing practices, safe handling of natural refrigerants and retrofit of equipment. Three training modules were developed to support the introduction of the Caribbean Vocational Qualification (CVQ) Standard. An advisory committee on procedures and criteria for technician certification were established and the implementation of a technician certification programme is ongoing. Equipment and tools were purchased and distributed to technical schools and technicians.
- 8. As of August 2015, of the US \$66,000 so far approved (US \$48,000 for UNDP and US \$18,000 for UNEP), US \$56,680 (US \$48,000 for UNDP and US \$8,680 for UNEP) has been disbursed. The balance of US \$9,320 (UNEP) will be disbursed in 2015 or early 2016.

HCFC phase-out strategy and proposed activities in stage II

- 9. During stage II, the Government is proposing a 97.5 per cent reduction in HCFC consumption by 2025 and a complete phase-out by 2030. The lessons learned and infrastructure created during the implementation of the terminal phase-out management plan (TPMP) and stage I of the HPMP will be utilized for implementing stage II of the HPMP.
- 10. The Government is committed to mitigating climate change and pursuing a green economy. The industry and stakeholders feel that it is important to use low-global warming potential (GWP) and zero ODP refrigerants when servicing refrigeration and air-conditioning (RAC) equipment thus keeping in line with the national strategy to address climate change.
- 11. The Government is proposing to adopt the following HCFC phase-out schedule:
 - (a) 35 per cent reduction from the base line in 2020;
 - (b) 97.5 per cent reduction in 2025; and
 - (c) Complet phase-out in 2030.
- 12. Stage II foresees regulatory actions, technical assistance for the refrigeration servicing sector, public awareness programme, and project coordination and management.

Regulatory actions

- 13. The following regulatory actions will be implemented:
 - (a) Introduce import licenses for all refrigerants and RAC equipment;
 - (b) Provide economic incentives for the introduction of low-GWP technologies in the RAC sector;
 - (c) Implement a certification programme for refrigeration technicians;
 - (d) Support mandatory refrigerants recovery and recycling; and
 - (e) Develop standards and procedures for the use of flammable refrigerants.
- 14. Throughout stage II, the capacity of customs and enforcement officers will be enhanced through training. Refrigerant identifiers capable of identifying blends and a large range of refrigerants will be purchased to facilitate monitoring any potential illegal trade.

Activities in the refrigeration servicing sector

- 15. Stage II of the HPMP will continue to build the capacity of the servicing sector through training of technicians on good servicing practices, providing recovery units for refrigerant reuse and the basic equipment and tools to detect and reduce leakage of refrigerants, and to reduce servicing demands of HCFCs. It is anticipated that all 600 technicians in the formal sector and 400 technicians not registered (or with limited technical training) will be further trained; and certification for technicians will be implemented. Training institutions will be stringhtened to ensure institutionalisation and sustainability of training of technicians. Prototypes and a bespoke training board will be provided to establish three training laboratories. The Guyana Air-conditioning, Refrigeration and Ventilation Association (GARVA) will be strengthend to assist in HCFC phase-out and introduce low-GWP technologies when they are commercially available.
- 16. The activities planned for the first tranche include: developing regulations and safety standards for flammable refrigerants; training of 100 customs officers; training of 20 trainers and 120 technicians; implementing a technicians certification programme; purchasing of refrigerant identifiers, recovery and recycling machines and service tools; providing support to GARVA; implementing a public awareness programme; and continuing project monitoring and coordination.

Total cost of stage II of the HPMP

17. The total cost of the activities proposed for stage II of the HPMP amounts to US \$684,000 (excluding agency support costs) as shown in Table 2. These activities will result in the phase-out of all remaining eligible consumption of HCFCs in the country.

Table 2. Overall cost of stage II of the HPMP for Guyana

Activities	Implementing Agency	2015	2018	2021	2023	2026	Total funding (US \$)
Developing regulations and standards for safe use of flammable refrigerants; technician certification programme; and economic incentive for low GWP technologies	UNEP	10,000	0	0	0	0	10,000
Training of 400 customs officers on data collection and monitoring of imports	UNEP	4,000	4,000	4,000	4,000	4,000	20,000
Training of 560 technicians on good servicing practices, refrigerant recovery and reuse, safe handling flammable refrigerants	UNEP	22,000	42,000	22,000	22,000	12,000	120,000
Implementing certification of technicians	UNEP	2,000	2,000	3,000	3,000	0	10,000
Support to Guyana Air-conditioning, Refrigeration and Ventilation Association	UNEP	3,000	3,000	2,000	2,000	0	10,000
Purchase of refrigerant identifiers	UNDP	25,000	0	25,000	0	0	50,000
Purchase of recovery and recycling machines, cylinders, tools, spare parts and consumables	UNDP	76,750	66,750	100,000	35,000	55,000	333,500
Purchase of equipment for 7 training institutions and establishing training laboratories	UNDP	58,000	0	0	0	0	58,000
Public awareness programme	UNEP	5,000	5,000	5,000	5,000	5,000	25,000

Activities	Implementing Agency	2015	2018	2021	2023	2026	Total funding (US \$)
Project monitoring, coordination and management	UNEP	9,500	9,500	9,500	9,500	9,500	47,500
Total		215,250	132,250	170,500	80,500	85,500	684,000

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

18. The Secretariat reviewed stage II of the HPMP for Guyana in light of the existing guidelines of the Executive Committee, the criteria for funding HCFC phase-out in the consumption sector for stage II of the HPMP (decision 74/50), and the 2015-2017 business plan of the Multilateral Fund.

Accelerated phase-out of HCFC by 2025

- 19. In line with decision 60/15, the Government of Guyana had committed to accelerate the phase-out of HCFCs, and supported by the regulatory framework in place, including a licensing and quota system for the import of HCFCs, and the ban on the import of HCFC-based equipment established since 2010 that has been effectively enforced since 2013. Most of the smaller RAC equipment in operation will reach the end of their life-cycle by 2025; larger equipment could depend on refrigerant recovery and reuse before subsequently reaching the end of their life-cycle. Therefore the demand on HCFCs for servicing RAC equipment would be limited by 2025. Furthermore, it is expected that new technologies with zero ODP and low-GWP will become commercially and economically available around 2020. Transition to these new technologies will be implemented through training and technical assistance programme supported by the Multilateral Fund under stage II.
- 20. The Secretariat enquired about the necessity of a servicing tail since the remaining HCFC consumption will be very small (0.05 ODP tonnes). The Government explained that the servicing tail is required to facilitate servicing of residual HCFC-based equipment that may be in operation beyond 2025. It is to serve as a back up measure for the industry during the final phase-out stage.

The introduction of low-GWP alternatives in stage II

21. The Secretariat noted that Guyana has banned the import of HCFC-based equipment since 2010. The alternative technologies introduced have been mainly HFC-410A, HFC-404A, HFC-407C and R-717. A small number of HC-based refrigerators have been imported and a small quantity of HC-600a refrigerant is imported to service those refrigerators. The Secretariat questioned whether the accelerated phase-out of HCFCs would lead to more phase in of high-GWP HFC refrigerants if low-GWP technologies are not available. UNEP clarified that the Government has been and will continue to promote low-GWP alternatives when they are commercially available. The acceleration will only start from 2020 when the low-GWP alternatives are expected to be available for all applications. Training will be provided to technicians on the use of new technologies to ensure a smooth transition. If new low-GWP alternatives are not commercially available for long term use, hydrocarbon technology could be introduced through new equipment as well as through retrofitting of small air-conditioning systems with refrigerant charge less than one kg.

Retrofitting to hydrocarbons

22. Issues of potential retrofitting to hydrocarbons were discussed in the context of decisions 72/17², 72/41(c)³ and 73/34⁴. UNEP advised that retrofitting to HC is not practiced by technicians outside of training sessions since HC refrigerants are currently commercially unavailable in Guyana. During the training in stage I of the HPMP, 10 air-conditioning units were retrofitted to hydrocarbons following international safety guidelines for safe handling of refrigerants and national occupational health and safety regulations. The converted units are installed at training institutions and are monitored for performance analysis and demonstration purposes. The Government recognises that safety standards and procedures have to be in place before allowing the servicing of new HC-based equipment and retrofit of small air-conditioning equipment to flammable refrigerants. It will also implement a certification programme for handling flammable refrigerants; mandatory labeling of HC-based equipment; and require the availability of spark proof electrical components to ensure the safety of the process.

Sustainability of activities proposed in the servicing sector

23. To ensure the long-term sustainability of training of technicans, training centres will be strengthened and a certification programme for technicians will continue to be implemented in stage II. Training modules are being developed under stage I of the HPMP to introduce CVQ which allows for the free movement of certified technicians within the Caribbean community. Training modules will be reviewed and updated regularly to include new technologies.

Impact on the climate

24. The proposed activities in the servicing sector, which include better containment of refrigerants through training and provision of equipment, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogramme of HCFC-22 not emitted due to better refrigeration practices results in a savings of approximately 1.8 CO₂-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Guyana, in particular its efforts to promote low-GWP alternatives, refrigerant recovery and reuse, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere therefore resulting in benefits on the climate. However, at this time, a more accurate quantitative assessment on the impact on climate cannot be conducted. 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.

² To include in the approval of HCFC phase-out management plans, tranches, projects or activities that proposed the retrofit of HCFC-based refrigeration and air-conditioning equipment to flammable or toxic refrigerants that the Executive Committee notes that, if the country engages in retrofitting HCFC-based refrigeration and air-conditioning equipment to flammable or toxic refrigerants and associated servicing, it does so on the understanding that they assume all associated responsibilities and risks.

³ To encourage Article 5 countries, when implementing their HPMPs, to consider, as needed and feasible: (i) The development of regulations and codes of practice, and the adoption of standards for the safe introduction of flammable and toxic refrigerants given the potential risk of accidents and negative effects on health associated with their use; (ii) Measures to limit the import of HCFC-based equipment and to facilitate the introduction of energy-efficient and climate-friendly alternatives; and (iii) Focusing activities in the refrigeration servicing sector on training of technicians, good practices, the safe handling of refrigerants, containment, recovery and recycling and reuse of recovered refrigerants rather than retrofitting.

⁴ If a country were to decide, after taking into account decision 72/17, to proceed with retrofits that used flammable substances in equipment originally designed for non-flammable substances, it should be done only in accordance with the relevant standards and protocols.

2015-2020 business plan of the Multilateral Fund

- 25. UNEP and UNDP are requesting US \$684,000, plus agency support costs, for the implementation of stage II of the HPMP (2015-2025). Of this amount, US \$233,648 is requested for the 2015-2017 trienium which is US \$193,648 above the total amount in the business plan for UNDP and UNEP (US \$40,000) for these years.
- 26. Based on the HCFC baseline consumption of 31 metric tonnes (mt), Guyana's allocation for a total phase-out would be US \$750,000. The amount requested (US \$684,000) by the Government for the phase-out of the remaining 27.9 mt is in line with decision 74/50, noting that US \$66,000 had been approved for stage I of the HPMP.

Draft agreement

27. A draft Agreement between the Government of Guyana and the Executive Committee for the phase-out of HCFCs in stage II of the HPMP is contained in Annex I to the present document.

RECOMMENDATION

- 28. The Executive Committee may wish to consider:
 - (a) Noting:
 - (i) The progress report on the implementation of the second and final tranche of stage I of the HCFC phase-out management plan (HPMP) for Guyana;
 - (ii) With appreciation the commitment by the Government of Guyana to accelerate the reduction in HCFC consumption by 35 per cent reduction from the baseline in 2020, 97.5 per cent in 2025, with a service tail of 2.5 per cent per annum until 2030; and
 - (b) Approving:
 - (i) In principle, stage II of the HPMP for Guyana for the period 2015 to 2025 for a complete phase-out of HCFC consumption (with a remaining service tail of 2.5 per cent of the baseline per annum until 2030), in the amount of US \$746,430 consisting of US \$242,500, plus agency support costs of US \$31,525 for UNEP; and US \$441,500, plus agency support costs of US \$30,905 for UNDP;
 - (ii) The draft Agreement between the Government of Guyana and the Executive Committee for the reduction in consumption of HCFCs, in accordance with stage II of the HPMP, contained in Annex I to the present document; and
 - (iii) The first tranche of stage II of the HPMP for Guyana, and the corresponding 2015-2018 tranche implementation plans, in the amount of US \$233,648 consisting of US \$55,500, plus agency support costs of US \$7,215 for UNEP, and US \$159,750, plus agency support costs of US \$11,183 for UNDP, on the understanding that if Guyana were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and air-conditioning equipment originally designed for non-flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF THE REPUBLIC OF GUYANA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

- 1. This Agreement represents the understanding of the Government of The Republic of Guyana (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 0.05 ODP tonnes by 1 January 2025 and zero ODP tonnes by 2030 in compliance with Montreal Protocol schedules.
- 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 that exceeds the level defined in row 1.2 of Appendix 2-A 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 that exceeds the level defined in 4.1.3 (remaining consumption eligible for funding).
- 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 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 agrees to implement this Agreement in accordance with the stage II of the HCFC phase-out management plan (HPMP) approved ("the Plan"). In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.
- 5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country has met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which there are no due country programme implementation reports at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
 - (b) That the meeting of these Targets has been independently verified, unless 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 a Tranche Implementation Plan in the form of Appendix 4-A 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 Plans in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in paragraph 4 above.
- 7. The Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:
 - (a) Reallocations categorized as major changes must be documented in advance either in a Tranche Implementation Plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing Tranche Implementation Plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
 - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
 - (ii) Changes which would modify any clause of this Agreement;
 - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and
 - (iv) Provision of funding for programmes or activities not included in the current endorsed Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
 - (b) 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 subsequent Tranche Implementation Report; and
 - (c) Any remaining funds under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.
- 8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sub-sector included in the Plan, 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 relevant bilateral and/or implementing agencies will take into consideration decision 72/41 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 fulfill the obligations under this Agreement. UNEP has agreed to be the lead implementing agency (the "Lead IA") and UNDP has agreed to be the cooperating implementing agency (the "Cooperating IA) under the lead of the Lead IA in respect of the Country's activities under this Agreement. The Country agrees to evaluations, which might be

carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA and/or Cooperating IA taking part in this Agreement.

- 10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per subparagraph 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 will reach consensus on the arrangements regarding inter-agency planning, reporting and responsibilities under this Agreement in order to facilitate a coordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.
- 11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A ("Reductions in Funding for Failure to Comply") in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once these decisions are taken, this specific case will not be an impediment for future tranches as per paragraph 5 above.
- 12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other consumption sector projects or any other related activities in the Country.
- 13. The Country will comply with any reasonable request of the Executive Committee, 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 the information necessary to verify compliance with this Agreement.
- 14. The completion of the Plan and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion of the Plan will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion of the Plan unless otherwise specified by the Executive Committee.
- 15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	С	I	1.80

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027- 2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	1.62	1.62	1.62	1.62	1.62	1.17	1.17	1.17	1.17	1.17	0.59	0.59	0.59	0.05	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	1.62	1.52	1.42	1.32	1.22	1.12	0.91	0.69	0.48	0.26	0.05	0.05	0.05	0	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	55,500			65,500			45,500		45,500			30,500			242,500
2.2	Support costs for Lead IA (US \$)	7,215			8,515			5,915		5,915			3,965			31,525
2.3	Cooperating IA (UNDP)agreed funding (US \$)	159,750			66,750			125,000		35,000			55,000			441,500
2.4	Support costs for Cooperating IA (US \$)	11,183			4,673			8,750		2,450			3,850			30,905
3.1	Total agreed funding (US \$)	215,250			132,250			170,500		80,500			85,500			684,000
3.2	Total support costs (US \$)	18,398			13,188			14,665		8,365			7,815			62,430
3.3	Total agreed costs (US \$)	233,648			145,438			185,165		88,865			93,315			746,430
4.1.1	Total phase-out of HCFC-22 agreed to be	achieved und	ler this Ag	greement ((ODP tonnes)							·	•			1.62
4.1.2	Phase-out of HCFC-22 to be achieved in	oreviously ap	proved pro	ojects (OI	OP tonnes)											0.18
4.1.3	Remaining eligible consumption for HCF	C-22 (ODP t	onnes)		•			•		•		•				0

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at 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 Plans for each tranche request will consist of five parts:
 - A narrative report, with data provided by calendar year, regarding the progress since the (a) year prior to the previous report, reflecting 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 include ODS phase-out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), 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 on activities in the current year;
 - (b) An independent verification report of the Plan results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
 - (c) A written description of the activities to be undertaken until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
 - (d) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database. 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), the Tranche Implementation Plan and any changes to the overall plan, and will cover the same time periods and activities; and
 - (e) An Executive Summary of about five paragraphs, summarizing the information of the

above sub-paragraphs 1(a) to 1(d).

- 2. In the event that in a particular year more than one stage of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Implementation Report and Plans:
 - (a) The Implementation Report and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement;
 - (b) If the stages under implementation have different HCFC consumption targets in a particular year, the lower HCFC consumption target will be used as reference for compliance with the HPMP Agreements and for the independent verification.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

- 1. The National Ozone Action Unit (NOAU), operating under the direction of the Hydrometeorological Service of the Ministry of Agriculture will continue to act during stage II as the focal point for HPMP project co-ordination and management. This activity will be directly undertaken by experienced project managers acting under the direction of the Head of the Hydrometeorological Service who also acts as the national focal point on the Montreal Protocol. The work will be undertaken with a high level of stakeholder consultation with various Government agencies, external stakeholders and the general public.
- 2. Implementation will be undertaken under the continued supervision of the Ministry of Agriculture and Hydrpmeterological Service. It will involve the Lead IA throughout the HPMP and supervising the project's investment component. The Cooperating IA will act as a supporting implementing agency for investment activities associated provision of equipment and establishment of training centers. These agencies will utilize the established procedures governing procurement, financial management, reporting and monitoring of the relevant implementing agency and international funding facilities, specifically the Multilateral Fund. Implementation will be further supported by various administrative and service bodies within the Government, international and national consultants, suppliers of equipment and services, and beneficiary enterprises.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

- 1. The Lead IA will be responsible for a range of activities, including at least the following:
 - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
 - (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche 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 Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken

by the Cooperating IA;

- (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
- (g) Carrying out required supervision missions;
- (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
- (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of the Lead IA and each Cooperating IA;
- (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 entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY

- 1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the Plan, including at least the following:
 - (a) Providing assistance for policy development when required;
 - (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
 - (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$180 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met. In the event that the penalty needs to be applied for a year in which there are two Agreements in force (two stages of the HPMP being implemented in parallel) with different penalty levels, the application of the penalty will be determined on a case-by-case basis taking into consideration the specific sectors related to the non-compliance. If it is not possible to determine a sector, or both stages are addressing the same sector, the penalty level to be applied would be the largest.