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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-sixth Meeting
Montreal, 2-6 November 2020
Postponed to 8-12 March 2021¹

PROJECT PROPOSAL: RWANDA

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 UNIDO

¹ Due to coronavirus disease (COVID-19)

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Rwanda

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2019	1.89 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2019	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					1.89				1.89

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:		4.10	Starting point for sustained aggregate reductions:
			4.10
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:		1.44	Remaining:
			2.66

(V) BUSINESS PLAN		2020	2021	2022	Total
UNEP	ODS phase-out (ODP tonnes)	0.15	0.00	0.00	0.15
	Funding (US \$)	52,000	0	0	52,000
UNIDO	ODS phase-out (ODP tonnes)	0.60	0.00	0.60	1.20
	Funding (US \$)	56,680	0	57,000	113,680

(VI) PROJECT DATA			2020	2021-2023	2024	2025-2026	2027	2028-2029	2030	Total
Montreal Protocol consumption limits			2.67	2.67	2.67	1.33	1.33	1.33	0.0	n/a
Maximum allowable consumption (ODP tonnes)			2.67	2.00	2.00	1.33	1.33	1.33	0.0	n/a
Projects costs requested in principle (US \$)	UNEP	Project costs	90,000	0	117,000	0	83,000	0	60,000	350,000
		Support costs	11,700	0	15,210	0	10,790	0	7,800	45,500
	UNIDO	Project costs	70,000	0	83,000	0	17,000	0	0	170,000
		Support costs	6,300	0	7,470	0	1,530	0	0	15,300
Total project costs requested in principle (US \$)			160,000	0	200,000	0	100,000	0	60,000	520,000
Total support costs requested in principle (US \$)			18,000	0	22,680	0	12,320	0	7,800	60,800
Total funds requested in principle (US \$)			178,000	0	222,680	0	112,320	0	67,800	580,800

(VII) Request for approval of funding for the first tranche (2020)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNEP	90,000	11,700
UNIDO	70,000	6,300
Total	160,000	18,000

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Rwanda, UNEP as the lead implementing agency, has submitted a request for stage II of the HCFC phase-out management plan (HPMP), at a total cost of US \$580,800, consisting of US \$350,000, plus agency support costs of US \$45,500 for UNEP, and US \$170,000, plus agency support costs of US \$15,300 for UNIDO, as originally submitted.² The implementation of stage II of the HPMP will phase out the remaining consumption of HCFCs by 2030.

2. The first tranche of stage II of the HPMP being requested at this meeting amounts to US \$245,800, consisting of US \$150,000, plus agency support costs of US \$19,500 for UNEP, and US \$70,000, plus agency support costs of US \$6,300 for UNIDO, as originally submitted.

Status of implementation of stage I of the HPMP

3. Stage I of the HPMP for Rwanda was originally approved at the 64th meeting³ and revised at the 70th meeting⁴ to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$280,000, plus agency support costs, to phase out 1.44 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector. The fifth and final tranche of stage I of the HPMP was approved under the intersessional approval process for the 85th meeting in May 2020; stage I will be completed by 31 December 2021.

HCFC consumption

4. The Government of Rwanda reported a consumption of 1.89 ODP tonnes of HCFC in 2019, which is 54 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Rwanda (2015-2019 Article 7 data)

HCFC	2015	2016	2017	2018	2019	Baseline
Metric tonnes						
HCFC-22	57.00	32.90	30.85	37.86	34.40	68.32
HCFC-123	5.80	0.00	0.00	0.00	0.00	3.00
HCFC-141b	2.00	7.20	5.70	0.07	0.00	1.47
HCFC-142b	2.20	2.50	2.10	0.10	0.00	1.98
Total (mt)	67.00	42.60	38.65	38.03	34.40	74.77
ODP tonnes						
HCFC-22	3.13	1.81	1.70	2.08	1.89	3.75
HCFC-123	0.12	0.00	0.00	0.00	0.00	0.06
HCFC-141b	0.22	0.79	0.63	0.01	0.00	0.16
HCFC-142b	0.14	0.16	0.13	0.01	0.00	0.13
Total (ODP tonnes)	3.61	2.76	2.46	2.10	1.89	4.10

5. The overall HCFC consumption continued to decrease in the period between 2015 and 2019, due to the effective implementation of the import/export licensing and quota system, which has been operational since 1 July 2013; the ban on the import of HCFC-based equipment since 1 January 2015; continued implementation of the training programmes and technical assistance activities under the HPMP; and the

² As per the letter of 15 July 2020 from the Rwanda Environment Management Authority (REMA) of Rwanda to the Secretariat.

³ UNEP/OzL.Pro/ExCom/64/41.

⁴ Annex XIX of UNEP/OzL.Pro/ExCom/70/59.

introduction of HCFC-free alternatives in RAC applications, mainly based on HFC-based refrigerants (e.g., R-410A, R-407C, HFC-134a, R-404A).

Country programme (CP) implementation report

6. The Government of Rwanda reported HCFC sector consumption data under the 2019 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol.

Status of progress and disbursement

Legal framework

7. The Government of Rwanda has established a licensing and quota system, and has banned since 1 January 2015, the import of HCFC-based equipment. An electronic monitoring system for import of controlled substances is being developed and will be added to the new legislation on substances controlled under the Montreal Protocol that will be adopted by the end of 2020. With funds approved under enabling activities for phase-down of HFCs, the Government is undertaking steps to facilitate implementation of the ratified Kigali Amendment including support for developing a regulatory framework for the import/export licensing system for HFCs and HFC alternatives. During the implementation of the first four tranches of stage I of the HPMP, 272 customs officers were trained on implementation of controls, monitoring and reporting of HCFC consumption; and five identifiers were procured and distributed to the border control points.

Refrigeration servicing sector

8. Under the first four tranches of stage I, a total of 11 trainers and 489 service technicians were trained on good service practices for HCFC-based RAC equipment and on adoption of low-global-warming potential (GWP) alternatives; periodic consultations were held with the Refrigeration Association of Rwanda on HPMP implementation, resulting in their active involvement in HPMP servicing sector activities. Support was provided to three centres of excellence through provision of technical assistance and equipment and service tools (e.g. recovery/recycling unit, recovery cylinder, electronic charging scale, electronic leak detector, vacuum pump, vacuum gauge, 4-way manifold and general servicing tools) for ongoing training of service technicians.

Level of fund disbursement

9. As of July 2020, of the total funds of US \$280,000 approved (US \$170,000 for UNEP and US \$110,000 for UNIDO), US \$242,000 had been disbursed (US \$132,000 for UNEP and US \$110,000 for UNIDO). The balance of US \$38,000 (including US \$28,000 approved for the fifth and final tranche), will be disbursed in 2020 and 2021.

Stage II of the HPMP

Remaining consumption eligible for funding

10. After deducting 1.44 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding amounts to 2.66 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

11. There are 1,100 RAC technicians working in 47 workshops servicing unitary, split and central air-conditioning systems; commercial refrigeration equipment including cold stores; and chillers as shown in Table 2. Currently, HCFC-22 represents 6.6 per cent of the refrigerants used in the servicing sector; other

refrigerants consumed in RAC sector are HFC-134a, R-404A, R-407C, R-410A, R-290, R-600a and ammonia.

Table 2. Demand in 2019 for HCFC-22 in the RAC servicing sector in Rwanda

Sector/Applications	Number of units	Average charge/ unit (kg)	Leakage rate (%)	Consumption (mt)*	Sectoral consumption (%)
Room AC (unitary and split)	25,200	1.2	15	4.54	13
Commercial AC (roof top, multi-split, chillers)	2,600	10	15	3.90	11
Commercial refrigeration (medium condensing units)	3,200	15	25	12.00	35
Industrial refrigeration (medium to large condensing units, centralized systems)	800	70	25	14.00	41
Total	31,800	n/a	n/a	34.44	100

*Estimated consumption based on available information on end-user sectors/applications and industry inputs; slightly above the 2019 HCFC-22 consumption of 34.40 mt.

Phase-out strategy in stage II of the HPMP

12. Stage II of the HPMP will build upon the experience gained during implementation of stage I. It will focus on capacity building of customs and other enforcement officers on controlling and monitoring HCFC trade; the development and implementation of national technical standards in the RAC sector that will promote safe use of RAC equipment that are energy efficient and using low- or zero-GWP refrigerants; establishment and implementation of a robust certification scheme for RAC technicians; capacity building of RAC technicians on safe handling of equipment based on flammable refrigerants; strengthening the Refrigeration Association of Rwanda and technical training institutes; and consumer outreach on low-GWP alternative technologies in RAC applications.

Proposed activities in stage II of the HPMP

13. Stage II proposes the following activities:

- (a) *Strengthening the enforcement of ODS regulations:* Training of 20 trainers and implementation of training workshops for 100 customs and enforcement officers and 30 district environmental officers on monitoring and reporting of HCFC consumption and implementation of ODS regulations; review and update of customs training curriculum; and facilitation of border dialogues to prevent illegal trade (UNEP) (US \$50,000);
- (b) *Development and implementation of technical standards for safe use of low-GWP refrigerants:* Engagement of a technical expert to develop and consultations with stakeholders to finalise technical standards for the safe use of energy efficient RAC equipment based on low-GWP refrigerants; conducting two training sessions to the national ozone unit (NOU) staff, standards officers, environmental inspectors and other key stakeholders on the implementation and enforcement of the standards; conducting three awareness workshops to enhance compliance with the standards for RAC technicians, importers, industry representatives, and the public; and conducting inspections on imported RAC equipment to ensure compliance with the standards (UNEP) (US \$50,000);
- (c) *Updating of customs training curriculum and polytechnic college's curriculum:* Integrating into the curricula of training institutions the safe use of energy efficient RAC equipment based on low- or zero-GWP refrigerants through engaging experts to review and update

the training curricula and providing training to trainers on the updated curricula (UNEP) (US \$50,000);

- (d) *Strengthening capacity of RAC technicians and establishment of a certification scheme:* Engagement of an expert and consultations with stakeholders for the establishment of a RAC certification scheme; capacity building of key stakeholders involved in the certification process; recruitment of an expert to update national codes of practice for RAC servicing technicians and to review the RAC training curriculum; implementation of six training workshops for 180 RAC technicians on good servicing practices; implementation of awareness workshops for end-users on the introduction of new technologies in place of HCFCs in different RAC applications; and strengthening of the Refrigeration Association of Rwanda and RAC training institutes to maximise training, promote certification and facilitate adopting good and safe service practices (UNEP) (US \$80,000);
- (e) *Strengthening RAC training centres including the establishment of four additional centres of excellence and a recovery and reuse scheme:* Procurement of equipment and tools (e.g., vacuum pumps, leak detection equipment, safety tools and accessories, personal protection equipment) for four additional centres and one main centre; upgrading one centre of excellence by providing complementary tools (e.g., charging systems for flammable refrigerants, leak detectors, safety tools and gadgets while handling flammable refrigerants) for training technicians on handling flammable refrigerants; technical assistance for the installation and operation of the tools and equipment; and establishment of a refrigerant recovery and reuse scheme (e.g., recovery and reclaim units, refrigerant cylinders, vacuum pump, leak detector) (UNIDO) (US \$150,000);
- (f) *Development of the National Product Registration (NPR) system and capacity building for green procurement:* Development of the NPR that would include standards of energy efficient RAC equipment based on low-GWP refrigerants for imports and sales; implementation of three training workshops on the NPR system for technology providers and enforcement agencies of the system; implementation of two awareness workshops for the adoption of products using RAC equipment based on low-GWP refrigerants (green technology); and awareness campaign for the general public (UNEP) (US \$50,000); and
- (g) *Technology promotion for end-users for adoption of low-GWP HCFC alternative technologies:* Identifying end-users in different RAC applications; and conducting targeted capacity building programmes for the beneficiaries on good servicing and maintenance and its impact on better cooling and energy efficient performance of the RAC equipment (UNIDO) (US \$20,000).

Project implementation and monitoring

14. The monitoring mechanism established under stage I of the HPMP will continue into stage II, where the NOU will monitor activities, report progress, and work with stakeholders to phase out HCFCs. The cost of those activities amounts to US \$70,000 for stage II.

Gender policy implementation

15. The Government of Rwanda is committed to working with UNEP and UNIDO on implementing gender policy in line with decision 84/92(d).⁵ During the implementation of stage II, the Government would

⁵ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

obtain stakeholders' inputs on how to integrate gender specific indicators in planning, implementation and reporting for each of the project components; the Government also proposes to work with non-governmental organisations, community-based organisations, women's associations; during the training programmes, sensitisation of gender issues would also be undertaken. The Government proposes to have approximately 20 per cent women in the training sessions and 30 per cent female consultants under stage II activities.

Total cost of stage II of the HPMP

16. The total cost of stage II of the HPMP for Rwanda amounts to US \$520,000, as originally submitted for achieving 67.5 per cent reduction from its HCFC baseline consumption by 2025 and 100 per cent reduction by 2030, which is in accordance with decision 74/50(c)(xii). The proposed activities and cost breakdown are summarized in Table 3.

Table 3. Total cost of stage II of the HPMP for Rwanda as submitted

Activity	Agency	Cost (US \$)
Strengthening the enforcement of ODS regulations	UNEP	50,000
Development and implementation of technical standards for safe use of low-GWP refrigerants	UNEP	50,000
Updating of customs training curriculum and polytechnic college's curriculum	UNEP	50,000
Strengthening capacity of RAC technicians and establishment of a certification scheme	UNEP	80,000
Strengthening RAC training centres including establishment of four additional centres of excellence and a recovery and reuse scheme	UNIDO	150,000
Development and implementation of the NPR system and capacity building for green procurement	UNEP	50,000
Technology promotion for end-users for adoption of low-GWP HCFC alternative technologies	UNIDO	20,000
Monitoring and reporting	UNEP	70,000
Total		520,000

Activities planned for the first tranche of stage II

17. The first tranche of stage II of the HPMP, at the total amount of US \$220,000, will be implemented between January 2021 and June 2024 and will include the following activities:

- (a) *Strengthening enforcement of ODS regulations and capacity enhancement of enforcement officers:* Implementation of two training programmes for 30 trainers, and two training workshops for 60 customs officers and enforcement agencies on enforcement of national regulations for controlling and monitoring illegal trade; implementation of a joint workshop including enforcement officers and customs clearing agents in the neighbouring countries to collaborate for preventing illegal trade; and review of customs training curriculum; (UNEP) (US \$30,000);
- (b) *Development and implementation of technical standards for safe use of energy efficient low-GWP RAC equipment:* Engagement of a consultant; and implementation of a stakeholder consultation workshop (UNEP) (US \$20,000);
- (c) *Updating of customs training curriculum and polytechnic college's curriculum:* Engagement of national experts to review the training curricula; assessment of the gaps of the existing curricula; and development and integration of missing parts in the curricula (UNEP) (US \$30,000);

- (d) *Strengthening capacity of RAC technicians and establishment of a certification scheme:* Updating national codes of conduct for RAC servicing technicians and revision of the RAC training curriculum; implementation of six training sessions for 150 RAC technicians on good servicing practice; conducting targeted awareness to end-users on introduction of new HCFC-free technologies; and strengthening the Refrigeration Association of Rwanda and RAC training institutions through consultations on HPMP implementation and technical support (UNEP) (US \$30,000);
- (e) *Strengthening the centres of excellence and technical assistance:* Engagement of national experts to facilitate planning for equipment support, installation and operation of equipment and tools; complementary support for providing tools for training technicians on safe handling of flammable refrigerants to the centres of excellence; and procurement of equipment and tools (e.g., recovery machines, vacuum pump, leak detection equipment, recovery cylinder, and safety tools) to establish four new provincial centres (UNIDO) (US \$60,000);
- (f) *Implementation of the National Cooling Strategy⁶ and promotion of the green technology, energy efficiency and reduction of CO₂ emissions:* Development of the NPR system; implementation of two training workshops on the NPR system for technology providers and enforcement agencies of the system; implementation of an awareness campaign for the general public to promote green technology, energy efficiency and reduction of CO₂ emissions (UNEP) (US \$20,000);
- (g) *Establishment of a large end-user programme for the implementation of the national cooling strategy and phasing out HCFCs by adopting good servicing practices:* identifying the beneficiaries of the proposed end-user programme for the efficient operations of their existing HCFC-based equipment; and conducting trainings of the identified beneficiaries on proper maintenance and refrigerant leakage prevention (UNIDO) (US \$10,000); and
- (h) *Monitoring and evaluation* (UNEP) (US \$20,000): Design of monitoring and evaluation tool (US \$5,000); and monitoring and follow-up of HPMP activities (including operation cost for the meetings with stakeholders) (US \$15,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

18. The Secretariat reviewed stage II of the HPMP in light of stage I, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decision 74/50), and the 2020-2022 business plan of the Multilateral Fund.

Overarching strategy for stage II

19. The Government of Rwanda proposed to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, on the understanding that Rwanda's consumption between 2030 and 2040 (i.e., the servicing tail) may exceed zero in any year so long as the sum of its calculated levels of consumption over the ten-year period from 1 January 2030 to 1 January 2040 divided by 10, does not exceed 2.5 per cent of Rwanda's baseline, and provided that such consumption is restricted to the servicing of RAC equipment

⁶ This was developed with the Ministry of Environment with support from national stakeholders, international institutions and experts; this strategy will complement existing efforts in environmental protection and climate change mitigation through the development of Minimum Energy Efficiency Performance Standards, which will guide cooling technology suppliers and consumers on how to access the most energy efficient equipment.

existing on 1 January 2030, as provided by the Montreal Protocol.⁷ UNEP also confirmed that after 2025, the Government would implement regulations to prohibit import of HCFCs by 1 January 2030 except for service tail-related consumption allowed by the Montreal Protocol.

Legal framework

20. The Government of Rwanda has already issued HCFC import quotas for 2020 at 1.76 ODP tonnes, which is 64 per cent below allowable level of consumption under the Montreal Protocol for that year.

21. The Secretariat had discussions on implementation of key regulations for achieving HCFC phase-out by 2030, except for service tail consumption and ensuring safe adoption of low-GWP alternative technologies while phasing-out HCFCs. UNEP confirmed that the Government proposes to implement regulations requiring certification of technicians and NPR by 1 January 2024; while it will take time to fully institutionalize the certification programme for technicians in the country, the immediate priority will be to operationalize the legal framework that will support the process and maximise certification of technicians.

Reduction targets for stage II

22. The Secretariat discussed with UNEP the targets for stage II for the period 2021 to 2024 keeping in view that the 2019 consumption of 1.89 ODP tonnes was already 29 per cent lower than the Montreal Protocol target for 2020 of 2.67 ODP tonnes. After a review of the consumption trends, the Government of Rwanda agreed to revise its targets for the period 2021 to 2024 from 2.67 ODP tonnes to 2.00 ODP tonnes.

Technical and cost-related issues

23. The Secretariat sought additional information on the recovery and reuse component. UNIDO indicated that the quantities of HCFCs to be recovered cannot be determined at this stage; the main targeted participants in this programme would be users with large commercial and industrial RAC equipment. The Government is currently considering regulations to implement mandatory recovery and reclamation starting on 1 January 2024 after consultations with different stakeholders; based on the consultations, requirements would be reassessed and if necessary, the project component would be restructured to provide more equipment support to service technicians, training and infrastructure for training institutions.

24. The Secretariat had detailed discussions with UNEP on costs allocated for the different components of stage II with a view to adjust some of the activities and costs to maximise the impact of stage II activities. Subsequently, it was agreed to undertake a review and update of the regulations to implement any additional measures to strengthen achievement of HCFC phase-out; increase the number of enforcement officers to be trained from 130 to 200 and RAC technicians from 480 to 630; review and update training curriculum for RAC service technicians to include new technical developments/technologies in different RAC applications; and remove the component on updating of customs training and polytechnic college's curricula. Table 4 presents the revised cost allocation for the different components.

Table 4. Revised cost allocation by activity of stage II of the HPMP for Rwanda

Activity	Agency	Original (US \$)	Revised (US \$)
Strengthening the enforcement of ODS regulations	UNEP	50,000	70,000
Development and implementation of technical standards for safe use of low-GWP refrigerants	UNEP	50,000	50,000
Updating of customs training curriculum and polytechnic college's curriculum	UNEP	50,000	-

⁷ Article 5, paragraph 8 ter(e)(i) of the Montreal Protocol. Other applications where HCFCs can be used include the servicing of fire suppression and fire protection equipment existing on 1 January 2030; solvent applications in rocket engine manufacturing; and topical medical aerosol applications for the specialized treatment of burns.

Activity	Agency	Original (US \$)	Revised (US \$)
Strengthening capacity of RAC technicians and establishment of a certification scheme	UNEP	80,000	110,000
Strengthening RAC training centres including establishment of four additional centres of excellence and a recovery and reuse scheme	UNIDO	150,000	150,000
Development and implementation of the NPR system and capacity building for green procurement	UNEP	50,000	50,000
Technology promotion for end-users for adoption of low-GWP HCFC alternative technologies	UNIDO	20,000	20,000
Monitoring and reporting	UNEP	70,000	70,000
Total		520,000	520,000

25. Keeping in view the activity revisions and expected timelines for the implementation of the project components, the tranche distribution for stage II of the HPMP was adjusted as shown in Table 5 below.

Table 5. Original and revised tranche distribution for stage II of the HPMP for Rwanda (US \$)

Funding by agency	2020	2021- 2023	2024	2025- 2026	2027	2028	2029	2030	Total
As submitted									
Lead IA UNEP	150,000	0	117,000	0	0	83,000	0	0	350,000
Cooperating IA UNIDO	70,000	0	83,000	0	0	17,000	0	0	170,000
Total as submitted	220,000	0	200,000	0	0	100,000	0	0	520,000
Revised									
Lead IA UNEP	90,000	0	117,000	0	83,000	0	0	60,000	350,000
Cooperating IA UNIDO	70,000	0	83,000	0	17,000	0	0	0	170,000
Total as revised	160,000	0	200,000	0	100,000	0	0	60,000	520,000

Activities planned for the first tranche

26. The funding for the first tranche was revised as per Table 5 above. The funding for the different components was revised as follows: development of national technical standards and development of NPR (US \$20,000) and capacity building of officials on enforcement, training of customs and enforcement officers (US \$15,000), training of technicians, establishment of certification system including identification of technical training institutions and regulatory processes (US \$30,000), technical support and complementary equipment support to four technical institutions (US\$ 70,000), consultations on end-user support programme with potential beneficiaries and identification of beneficiaries (US \$10,000) and project management and monitoring activities (US \$15,000).

Impact of the COVID-19 pandemic on HPMP implementation

27. In 2020, the COVID-19 pandemic has affected the overall pace of implementation of business and economic activities, including HPMP activities, in Rwanda. The Government of Rwanda proposes to initiate implementation of stage II after its approval, as part of post-COVID-19 recovery measures, in a phased manner taking into consideration constraints on implementation of activities that involve higher levels of personal contacts and interaction, noting that the situation is expected to improve by the second quarter/middle of 2021. The Government proposes to initiate HPMP activities for stage II (e.g., overall project planning for stage II, finalisation of quotas for HCFC imports for 2021, engaging consultants for preparing technical documents relating to NPR and green procurement, equipment specifications for training equipment, formal consultations with select Government authorities), while maintaining minimum levels of personal contacts following the guidelines of national health authorities. The plan for the first tranche of stage II has already taken into account the constraints for implementation of activities in a timely manner.

Impact on the climate

28. 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 RAC servicing. Each kilogram of HCFC-22 not emitted due to better refrigeration practices results in 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 Rwanda, including its efforts to promote low-GWP alternative technologies, as well as refrigerant recovery and reuse, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

29. The Government of Rwanda is working with the private sector to identify opportunities and implement co-financing projects that will bring ozone and climate benefits. Furthermore, for operational aspects and maintenance of equipment in the training centres, personnel costs and costs of some consumables would be borne by the institutions where the centres are located.

2020-2022 draft business plan of the Multilateral Fund

30. UNEP and UNIDO are requesting US \$520,000, plus agency support costs, for the implementation of stage II of the HPMP for Rwanda. The total requested value of US \$178,000, including agency support costs for the period of 2020–2022, is US \$12,320 above the amount in the business plan.

Draft Agreement

31. A draft Agreement between the Government of Rwanda 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

32. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Rwanda for the period from 2020 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$580,800, consisting of US \$350,000, plus agency support costs of US \$45,500 for UNEP, and US \$170,000, plus agency support costs of US \$15,300 for UNIDO, on the understanding that no more funding would be provided from the Multilateral Fund for the phase-out of HCFCs;
- (b) Noting the commitment of the Government of Rwanda to reduce HCFC consumption by 51 per cent of the country's baseline by 1 January 2021, 67.5 per cent by 1 January 2025 and completely phase out HCFCs by 1 January 2030, and that HCFCs would not be imported after that date, except for the allowance for a servicing tail between 2030-2040 where required, and consistent with the provisions of the Montreal Protocol;
- (c) Further noting the commitment of the Government of Rwanda to implement regulations for the national product registration and certification of refrigeration service technicians by 1 January 2024;
- (d) Deducting 2.66 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;

- (e) Approving the draft Agreement between the Government of Rwanda 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
- (f) Approving the first tranche of stage II of the HPMP for Rwanda, and the corresponding tranche implementation plans, in the amount of US \$178,000, consisting of US \$90,000, plus agency support costs of US \$11,700 for UNEP, and US \$70,000, plus agency support costs of US \$6,300 for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF RWANDA 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

Purpose

1. This Agreement represents the understanding of the Government of Rwanda (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 zero ODP tonnes by 1 January 2030 in compliance with Montreal Protocol schedule.
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 rows 4.1.3, 4.2.3, 4.3.3 and 4.4.3 (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.

Conditions for funding release

5. The Executive Committee will only provide the Funding in accordance with the Funding Approval Schedule when 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 for all relevant years, unless the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted a Tranche Implementation Report 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.

Monitoring

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 the same appendix.

Flexibility in the reallocation of funds

7. The Executive Committee agrees that the Country may have the flexibility to reallocate part or all of the approved 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 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;
 - (iv) Provision of funding for 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; and
 - (v) Changes in alternative technologies, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;
- (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;
- (c) The Country agrees, in cases where HFC technologies have been chosen as an alternative to HCFCs, and taking into account national circumstances related to health and safety: to monitor the availability of substitutes and alternatives that further minimize impacts on the climate; to consider, in the review of regulations standards and incentives adequate

provisions that encourage introduction of such alternatives; and to consider the potential for adoption of cost-effective alternatives that minimize the climate impact in the implementation of the HPMP, as appropriate, and inform the Executive Committee on the progress accordingly in tranche implementation reports; and

- (d) Any remaining funds held by the bilateral or implementing agencies or the Country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

Considerations for the refrigeration servicing sector

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing 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 relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

Bilateral and implementing agencies

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. United Nations Environment Programme (UNEP) has agreed to be the lead implementing agency (the “Lead IA”) and United Nations Industrial Development Organization (UNIDO) 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 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 sub-paragraph 5(b). The Cooperating IA will support the Lead IA by implementing the Plan under the overall co-ordination of the Lead IA. The roles of the Lead IA and Cooperating IA are contained in Appendix 6-A and Appendix 6-B, respectively. 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.

Non-compliance with the Agreement

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 decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding 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 decisions 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.

Date of completion

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.

Validity

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.

16. This Agreement may be modified or terminated only by mutual written agreement of the Country and the Executive Committee of the Multilateral Fund.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	3.75
HCFC-123	C	I	0.06
HCFC-141b	C	I	0.16
HCFC-142b	C	I	0.13
Total	C	I	4.10

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025-2026	2027	2028-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	2.67	2.67	2.67	1.33	1.33	1.33	0.0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	2.67	2.00	2.00	1.33	1.33	1.33	0.0	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	90,000	0	117,000	0	83,000	0	60,000	350,000
2.2	Support costs for Lead IA (US \$)	11,700	0	15,210	0	10,790	0	7,800	45,500

Row	Particulars	2020	2021-2023	2024	2025-2026	2027	2028-2029	2030	Total
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	70,000	0	83,000	0	17,000	0	0	170,000
2.4	Support costs for Cooperating IA (US \$)	6,300	0	7,470	0	1,530	0	0	15,300
3.1	Total agreed funding (US \$)	160,000	0	200,000	0	100,000	0	60,000	520,000
3.2	Total support costs (US \$)	18,000	0	22,680	0	12,320	0	7,800	60,800
3.3	Total agreed costs (US \$)	178,000	0	222,680	0	112,320	0	67,800	580,800
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)								2.66
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)								1.09
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)								0.00
4.2.1	Total phase-out of HCFC-123 agreed to be achieved under this Agreement (ODP tonnes)								0.00
4.2.2	Phase-out of HCFC-123 to be achieved in the previous stage (ODP tonnes)								0.06
4.2.3	Remaining eligible consumption for HCFC-123 (ODP tonnes)								0.00
4.3.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)								0.00
4.3.2	Phase-out of HCFC-141b to be achieved in the previous stage (ODP tonnes)								0.16
4.3.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)								0.00
4.4.1	Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)								0.00
4.4.2	Phase-out of HCFC-142b to be achieved in the previous stage (ODP tonnes)								0.13
4.4.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)								0.00

*Date of completion of stage I as per stage I Agreement: 31 December 2021

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval no later 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 Plans for each tranche request will consist of five parts:

- (a) A narrative report, with data provided by tranche, describing the progress achieved since 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 the amount of ODS phased 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;
- (b) An independent verification report of the Plan results and the consumption of the Substances, 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 during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and 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 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; 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 two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:
- (a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and
 - (b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. All the monitoring activities will be coordinated and managed through the national ozone unit (NOU), which is included within this HPMP.
2. The NOU, with support from technical consultants for project management and monitoring component of HPMP and in coordination with the Lead IA and Cooperating IA, will monitor ODS licensing and quota system, manage and monitor HPMP activities including coordination with different projects and report on project implementation on a quarterly basis to the Lead IA. The NOU will also undertake tasks for coordinating with appropriate national agencies on project implementation and regulations enforcement for achieving HPMP targets. Independent verification, if needed, will be conducted by a consultant and will be arranged by the Lead IA.

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, and should include the activities implemented by the Cooperating IA;
- (f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;
- (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
- (h) Carrying out required supervision missions;
- (i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (j) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
- (k) 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 Cooperating IA;
- (l) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (m) Providing assistance with policy, management and technical support when required;
- (n) Reaching consensus with the Cooperating IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and
- (o) Timely releasing funds to the Country/participating enterprises for completing the activities related to the project.

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 AGENCIES

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;

- (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A; and
- (d) Reaching consensus with the Lead IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan.

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, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.

2. 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 that lead 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.
