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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninetieth Meeting
Montreal, 20-23 June 2022
Items 9(a) and (d) of the provisional agenda¹

PROJECT PROPOSAL: BENIN

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 UNEP/OzL.Pro/ExCom/90/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Benin

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2021	12.93 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2021	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Serviceing				
HCFC-22					12.93				12.93

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	23.80	Starting point for sustained aggregate reductions:	23.80
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	8.33	Remaining:	15.47

(V) BUSINESS PLAN		2022	2023	2024	Total
UNEP	ODS phase-out (ODP tonnes)	1.9	0.0	0.0	1.9
	Funding (US \$)	50,000	0	0	50,000
UNIDO	ODS phase-out (ODP tonnes)	1.3	0.0	1.8	3.1
	Funding (US \$)	125,000	0	164,000	289,000

(VI) PROJECT DATA		2022	2023-2024	2025	2026	2027	2028-2029	2030	Total	
Montreal Protocol consumption limits		15.47	15.47	7.73	7.73	7.73	7.73	0	n/a	
Maximum allowable consumption (ODP tonnes)		15.47	15.47	7.73	7.73	7.73	7.73	0	n/a	
Project costs requested in principle (US \$)	UNEP	Project costs	125,000	0	210,000	0	180,000	0	185,000	700,000
		Support costs	15,536	0	26,100	0	22,371	0	22,993	87,000
	UNIDO	Project costs	200,000	0	0	0	270,000	0	0	470,000
		Support costs	14,000	0	0	0	18,900	0	0	32,900
Total project costs requested in principle (US \$)		325,000	0	210,000	0	450,000	0	185,000	1,170,000	
Total support costs requested in principle (US \$)		29,536	0	26,100	0	41,271	0	22,993	119,900	
Total funds requested in principle (US \$)		354,536	0	236,100	0	491,271	0	207,993	1,289,900	

(VII) Request for approval of funding for the first tranche (2022)		
Implementing agency	Funds requested (US \$)	Support costs (US \$)
UNEP	125,000	15,536
UNIDO	200,000	14,000
Total	325,000	29,536

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Benin, 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 \$1,289,900, consisting of US \$700,000, plus agency support costs of US \$87,000 for UNEP and US \$470,000, plus agency support costs of US \$32,900 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 \$354,536, consisting of US \$125,000, plus agency support costs of US \$15,536 for UNEP and US \$200,000, plus agency support costs of US \$14,000 for UNIDO, as originally submitted.

Status of implementation of stage I of the HPMP

3. Stage I of the HPMP for Benin was originally approved at the 63rd meeting³ and revised at the 70th and 76th meetings⁴ to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$630,000, plus agency support costs, to phase out 8.33 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 87th meeting in July 2021. Stage I of the HPMP will be completed by 31 December 2022.

HCFC consumption

4. The Government of Benin reported a consumption of 12.93 ODP tonnes of HCFC in 2021, which is 46 per cent below the HCFC baseline for compliance. The 2017-2021 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Benin (2017-2021 Article 7 data)

HCFC	2017	2018	2019	2020	2021	Baseline
Metric tonnes (mt)						
HCFC-22	290.26	282.56	267.73	245.23	235.00	432.5
HCFC-142b	0.0	0.0	6.69	0.0	0.0	n/a
Total (mt)	290.26	282.56	274.42	245.23	235.00	432.5
ODP tonnes						
HCFC-22	15.96	15.54	14.72	13.49	12.93	23.8
HCFC-142b	0.0	0.0	0.44	0.0	0.00	n/a
Total (ODP tonnes)	15.96	15.54	15.16	13.49	12.93	23.8

5. Consumption of HCFC-22, which is used only in the servicing and maintenance of RAC equipment, has been decreasing since 2013. The reductions have been attributed mainly to the implementation of the HPMP activities including enforcement of a licensing and quota system and improving servicing and maintenance practices of technicians, and to the increased use of HCFC alternatives, primarily HFCs. UNEP reported that due to new energy efficiency standards for air-conditioning (AC) equipment in the country effective in June 2020, only 30 per cent of the RAC equipment imported in 2020 were HCFC-based; however, the import of HFC-based equipment (e.g., R-410A, R-407C, HFC-134a, HFC-32 and R-404A) increased and some HFC-32-based and R-290-based

² As per the letter of 23 February 2022 from the Ministry of Sustainable Development of Benin to UNEP.

³ Document UNEP/OzL.Pro/ExCom/63/23; and Annex XII of document UNEP/OzL.Pro/ExCom/63/60.

⁴ Annex X of document UNEP/OzL.Pro/ExCom/70/59 and Annex XIV of document UNEP/OzL.Pro/ExCom/76/66.

equipment were also imported. A small amount of HCFC-142b was imported in 2019 as a component of a blend (R-409A) which was used to service some refrigeration applications (i.e., vending machines).

Country programme (CP) implementation report

6. The Government of Benin reported HCFC sector consumption data under the 2021 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

Status of progress and disbursement

Legal framework

7. Benin has an effective legislative, regulatory and legal framework that controls the import of refrigerants and RAC equipment into the country. Inter-ministerial Order No. 064 (November 2011) regulates the import, marketing and distribution of HCFCs, HFCs and other refrigerants, and appliances and equipment which use these substances. The National Ozone Unit (NOU), located in the Ministry of Environment and Sustainable Development, works with the Ministry of Trade to set annual quotas for the import of refrigerants.

8. In 2018, the Government of Benin issued Decree No. 2018-563, which entered into force in June 2020 and sets minimum energy performance standards and energy labelling criteria for lamps and room AC units in the country. While this does not constitute a ban on the import of HCFC-based equipment *per se*, it encouraged the transition to more energy-efficient equipment thus the uptake of HFC-based inverter technology equipment (i.e., mostly R-410A), and importers subsequently reduced their import of HCFC-based equipment.

9. The Government of Benin ratified the Kigali Amendment on 19 March 2018, and from January 2020, the import/export of HFCs in Benin are subject to authorization, in line with the Kigali Amendment.

10. During the implementation of the first four tranches of stage I of the HPMP, 383 customs and enforcement officers, 50 law enforcement personnel and 15 environmental inspectors were trained on the licensing and quota system and on control and identification of ODS and ODS-based equipment, including HCFCs and HCFC-based equipment; and three refrigerant identifiers were received by customs. A national workshop was conducted for key stakeholders including government officials, refrigerant importers, RAC servicing workshops and the general public. Each year, the NOU organizes at least two meetings with importers of refrigerants on the application of the quota system and various timetables. Numerous other awareness raising activities have been conducted to inform the stakeholders and the general public about the HPMP and related challenges.

Refrigeration servicing sector

11. Under the first four tranches of stage I, 658 RAC technicians have been trained on good servicing practices and the safe handling of hydrocarbon (HC) refrigerants (i.e., R-290 and R-600a). Nineteen refrigerant identifiers were procured and delivered to centres of excellence (five units), refrigeration associations (eight units), trade controllers (four units) and the NOU (two units). Servicing equipment (such as recovery units, cylinders, brazing equipment, recycling and spare parts for existing tools) has been delivered to larger RAC service workshops which are servicing the largest installations. Basic servicing equipment (e.g., manifold pressure gauges, portable recovery units, brazing units, vacuum pumps, recycling tools, hermetic compressor tester) and three R-290 AC units have been delivered to vocational training centres and refrigeration association for training purposes.

Project implementation and monitoring

12. The NOU was responsible for project monitoring and implementation. A total of US \$85,000 was disbursed to hire staff and national consultants to support the HPMP implementation and for travel to monitor activities of the HPMP.

Level of fund disbursement

13. As of February 2022, of the total funds of US \$630,000 approved (US \$370,000 for UNEP and US \$260,000 for UNIDO), US \$594,463 had been disbursed (US \$335,000 for UNEP and US \$259,463 for UNIDO). UNEP confirmed that the balance of US \$35,537, will be disbursed by December 2022.

Stage II of the HPMP

Remaining consumption eligible for funding

14. After deducting 8.33 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding in stage II amounts to 15.47 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

15. There are approximately 3,300 technicians (1.5 per cent of which are women) and 3,000 workshops in the servicing sector, consuming HCFC-22 to service RAC equipment, as shown in Table 2.

Table 2. Estimation of demand for HCFC-22 in the RAC servicing sector in Benin in 2020

Sector/Application		(a)	(b)	(c)	(a*b*c)
		Number of units	Average charge size (kg)	Leakage rate (%)	Servicing demand (mt)
Air-conditioning	Air-conditioning (2.6 kW)	75,596	1.2	35	31.75
	Air-conditioning (3.5 kW)	241,348	1.2	35	101.36
	Air-conditioning (5.25 kW)	278,317	1.2	35	116.89
	Air-conditioning (7 kW)	12,129	1.2	35	5.09
	Central air-conditioning	1,066	12	65	8.31
Refrigeration	Cold rooms and ice machines	507	25	65	8.23
	Total	608,963	n/a	n/a	271.63*

* The difference between this and the Article 7 data may be on account of stockpile and difference resulting from estimates.

16. Based on imports in 2020, HCFC 22 represents 22 per cent of the refrigerants used in the servicing sector, the rest was attributed to HFC and HFC-blends (77 per cent), and R-290 (1 per cent).

Phase-out strategy in stage II of the HPMP

17. Stage II of the HPMP proposes to phase out the remaining consumption of HCFCs by 2030, on the understanding that Benin’s consumption between 2030 and 2040 will be consistent with the servicing tail as provided under the Montreal Protocol. It has been designed based on the experience gained during the implementation of stage I and will continue to focus on enhancing the control of HCFC imports and building the capacity of customs and enforcement officers; reducing the demand of HCFCs through training and certification of technicians in good servicing practices and the provision of tools and equipment to the centres of excellence; as well as developing codes and standards for the safe handling of flammable/toxic refrigerants. The Government of Benin has not established a ban to prohibit the entry of HCFC-based equipment into the country; however, the import of such equipment has drastically reduced because of the minimum energy performance standards and energy labelling criteria for lamps and room AC units established in June 2020.

Proposed activities in stage II of the HPMP

18. Stage II proposes the following activities:

- (a) *Strengthening and enforcement of legislation and regulations*: further consultations with stakeholders including importers on the implementation of the 2018 Decree on energy labelling to support the import of non-HCFC-based equipment; development of the regulatory and policy framework required to ensure sustained compliance with the HCFC phase-out after 2030; meetings and trainings on new regulations; development of regulatory standards on the use of flammable and toxic substances (R-290, R-600a, HFC-32) in RAC equipment (UNEP) (US \$40,000);
- (b) *Training of customs and enforcement officers*: forty training sessions to train 800 customs and enforcement officers, environmental inspectors and trade controllers on control of HCFCs and HCFC-based equipment, combatting illegal HCFC trade, identification of refrigerants and related laws and regulations; 15 workshops for importers on the procedures for issuing import licenses and granting annual quotas and the potential safety risks of certain refrigerant substances; four meetings on trans-border collaboration between customs and enforcement officers in the Economic Community of West African States (ECOWAS) sub-region with the aim of curbing illegal trade (UNEP) (US \$230,000);
- (c) *Training of RAC technicians*: awareness-raising campaign and 40 training sessions for 1,000 RAC technicians on good servicing practices, recovery, recycling and reuse of refrigerants and safe handling of refrigerants and equipment; update training manuals to include recent technology; design and implementation of a technician certification programme for the RAC sector including stakeholder consultation, awareness raising, capacity building and pilot certification of 25 technicians, and nationwide implementation and certification of 400 technicians; targeted gender-based activities to encourage female students to enter the RAC field; development and implementation of technical standards on the use of flammable and toxic substances (R-290, R-600a, HFC-32) in RAC equipment (UNEP) (US \$370,000); and
- (d) *Strengthening centres of excellence*: purchase and distribution of training equipment (e.g., ATEX recovery machines, HCFC recovery machines, contamination test kits, ATEX air blowers, recovery cylinders, charging stations for HC, and RAC servicing tools) and associated installation and training in two training centres; a survey of recovery and recycling (R&R) in servicing workshops and provision of 30 sets of R&R equipment; training of 200 RAC technicians servicing large scale RAC and industrial equipment and 30 trainers on the safe handling of low-GWP alternative refrigerants (R-290, R-600a, HFC-32) (UNIDO) (US \$470,000).

Project monitoring

19. As in stage I, the NOU and UNEP will monitor activities, report on progress, and work with stakeholders to phase out HCFCs. The cost of those activities for UNEP amounts to US \$60,000, which includes project staff and consultants (US \$40,000), domestic travel (US \$20,000).

Gender policy implementation

20. In line with decision 84/92(d)⁵ and the gender policies of UNEP, UNIDO, and the Government of Benin, the NOU will continue to consult with stakeholders to develop strategies to track and encourage the participation of women in HPMP activities. Activities undertaken during stage I will continue to be implemented such as encouraging women to enroll in RAC vocational training through raising awareness; supplying tools kits to women who have completed the training; awarding recognition for women engineers and RAC technicians; encouraging women's participation in HPMP training workshops and tracking gender participation.

Total cost of stage II of the HPMP

21. The total cost of stage II of the HPMP for Benin has been estimated at US \$1,170,000 (plus agency support costs), as originally submitted, for achieving a 67.5 per cent reduction from its HCFC baseline consumption by 2025 and a 100 per cent reduction by 2030, which is in accordance with decision 74/50(c)(xiii).

Activities planned for the first tranche of stage II

22. The first funding tranche of stage II of the HPMP in the total amount of US \$325,000 will be implemented between October 2022 and June 2025 and will include the following activities:

- (a) *Strengthening and enforcement of legislation and regulations*: consultations with stakeholders including importers on the implementation of the 2018 Decree on energy labelling to support the import of non-HCFC-based equipment; development of the regulatory and policy framework required to ensure sustained compliance with the HCFC phase-out after 2030 (UNEP) (US \$5,000);
- (b) *Training of customs and enforcement officers*: eight training workshops to train 160 customs and enforcement officers, environmental inspectors and trade controllers on control of HCFCs and HCFCs-based equipment, combatting illegal HCFC trade, identification of refrigerants and related laws and regulations; three workshops for importers on the procedures for issuing import licenses and granting annual quotas and the potential risks and dangers of certain refrigerant substances; one trans-border meeting in the ECOWAS region on prevention of illegal trade (UNEP) (US \$45,000);
- (c) *Training of RAC technicians*: awareness-raising campaigns and eight training sessions for 200 RAC technicians on good servicing practices, recovery, recycling and reuse of refrigerants and safe handling of refrigerants and equipment; study on the development of a certification scheme in the RAC sector and initial work to establish the certification programme; a study on the development of standards and protocols on the use of flammable and toxic substances in RAC equipment (UNEP) (US \$60,000);
- (d) *Strengthening centres of excellence*: purchase and distribution of training equipment (e.g., ATEX recovery machines, HCFC recovery machines, contamination test kits, ATEX air blowers, recovery cylinders, charging stations for HC, and RAC servicing tools) and associated installation and training at two training centres; training of 200 RAC technicians associated with the identified centres of excellence in servicing large scale RAC and industrial equipment and 30 trainers on the safe handling of low-GWP alternative refrigerants (R-290, R-600a, HFC-32) (UNIDO) (US \$200,000); and

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

- (e) *Project implementation and monitoring:* (UNEP) (US \$15,000) for project staff and consultants (US \$10,000) and domestic travel (US \$5,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

23. 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 2022-2024 business plan of the Multilateral Fund.

Overarching strategy

24. The Government of Benin proposed to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, on the understanding that Benin's consumption between 2030 and 2040 (i.e., the servicing tail) will follow the Montreal Protocol provisions.⁶ The Government further commits to ensure that where consumption for the servicing tail may be required, it will do its utmost to establish strict criteria within its existing licensing system to limit and monitor the amounts used to those allowed by the Protocol.

25. The Government of Benin has already issued HCFC import quotas for 2022 at 12.1 ODP tonnes, which is lower than the Montreal Protocol targets.

Technical and cost-related issues

26. In clarifying the component related to the strengthening and enforcement of legislation, UNEP explained that the development of regulatory standards and protocols on the use of flammable and toxic substances in RAC equipment were included in the component for training service technicians as these are technical standards that will be fully integrated into the training programme to ensure that the equipment will be installed and serviced safely and efficiently. UNEP does recognize that the full implementation of these standards would have to be supported by regulation and adjusted the activities accordingly.

27. With regard to the certification scheme for technicians, UNEP clarified that at the 87th meeting it was indicated that the main barriers for introducing a certification scheme for trained technicians during stage I were the lack of expertise and supporting infrastructure in Benin. In stage II, an expert will be engaged to fully design the certification system including the institutional setup and the selection of the responsible government authority. It is expected that after this initial feasibility study, an approach for technician certification through the centres of excellence and vocational centres can be established in the country. A pilot for the certification of 25 technicians is planned, after which the system will be gradually integrated with the existing training programme for service technicians. UNEP is encouraged by the Government's commitment to ensuring the success of this initiative.

28. In clarifying the difference between the training for technicians to be conducted by UNEP and the training of technicians to be implemented under the component for UNIDO, it was explained that the training to be completed for the centres of excellence will focus specifically on the use of the equipment delivered for these centres, and on low-GWP alternatives, unlike the other training which will focus on good refrigeration practices.

⁶ 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.

29. UNEP also confirmed that stage II of the HPMP will implement those recommendations from the verification report submitted to the 81st meeting which were partially completed, such as increasing centres of excellence to provide refrigeration training.

Sustainability of the activities proposed under stage II

30. Activities proposed under stage II of the HPMP will ensure that all HCFCs are phased out in Benin, and that the supporting regulatory framework for sustaining this phase out will be in place (i.e., minimum energy efficiency standards support the demand for less HCFC-based equipment; import controls will be strengthened; technicians will be able to work with alternative and flammable refrigerants). The Government of Benin has committed to the sustainability of the activities to be implemented in stage II beyond their completion to sustain the complete phase-out of HCFCs beyond 2030.

Total project cost

31. The total cost for stage II of the HPMP (US \$1,170,000) and the funding for the first tranche (US \$325,000) was agreed as submitted.

Impact on the climate

32. The proposed activities in the servicing sector, which include better containment of refrigerants through training and the 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 Benin, including its efforts to promote low-GWP alternative technologies, as well as refrigerant recovery and recycling, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

33. The Government of Benin will provide in-kind contribution of approximately US \$100,000, covering office space and other logistical and personnel support whenever required during the implementation of stage II of the HPMP.

2022-2024 draft business plan of the Multilateral Fund

34. UNEP and UNIDO are requesting US \$1,170,000, plus agency support costs, for the implementation of stage II of the HPMP for Benin. The total requested value of US \$354,536, including agency support costs for the period of 2022–2024, is US \$15,536 above the amount in the business plan.

Draft Agreement

35. A draft Agreement between the Government of Benin and the Executive Committee for stage II of the HPMP is contained in Annex I to the present document.

RECOMMENDATION

36. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Benin for the period from 2022 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$1,289,900, consisting of US \$700,000, plus agency support costs of US \$87,000 for UNEP and US \$470,000, plus agency support costs of US \$32,900 for UNIDO, on the understanding that no more funding from the Multilateral Fund would be

provided for the phase-out of HCFCs;

- (b) Noting the commitment of the Government of Benin to completely phase out HCFCs by 1 January 2030 and that HCFCs would not be imported after that date, except for those allowed for a servicing tail between 2030 and 2040, where required, consistent with the provisions of the Montreal Protocol;
- (c) Deducting 15.47 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Approving the draft Agreement between the Government of Benin 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;
- (e) That, to allow for consideration of the final tranche of its HPMP, the Government of Benin should submit:
 - (i) A detailed description of the regulatory and policy framework in place to implement measures to ensure that HCFC consumption was in compliance with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol for the 2030-2040 period;
 - (ii) The expected annual HCFC consumption in Benin for the 2030-2040 period; and
- (f) Approving the first tranche of stage II of the HPMP for Benin, and the corresponding tranche implementation plan, in the amount of US \$354,536, consisting of US \$125,000, plus agency support costs of US \$15,536 for UNEP, and US \$200,000, plus agency support costs of US \$14,000 for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF BENIN 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 Benin (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 row 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.

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; and

- (c) 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. UNEP has agreed to be the lead implementing agency (the “Lead IA”) and 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 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 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, and the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to 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	23.8

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2022	2023-2024	2025	2026	2027	2028	2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	15.47	15.47	7.73	7.73	7.73	7.73	7.73	0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	15.47	15.47	7.73	7.73	7.73	7.73	7.73	0	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	125,000	0	210,000	0	180,000	0	0	185,000	700,000
2.2	Support costs for Lead IA (US \$)	15,536	0	26,100	0	22,371	0	0	22,993	87,000
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	200,000	0	0	0	270,000	0	0	0	470,000

Row	Particulars	2022	2023-2024	2025	2026	2027	2028	2029	2030	Total
2.4	Support costs for Cooperating IA (US \$)	14,000	0	0	0	18,900	0	0	0	32,900
3.1	Total agreed funding (US \$)	325,000	0	210,000	0	450,000	0	0	185,000	1,170,000
3.2	Total support costs (US \$)	29,536	0	26,100	0	41,271	0	0	22,993	119,900
3.3	Total agreed costs (US \$)	354,536	0	236,100	0	491,271	0	0	207,993	1,289,900
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)									15.47
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)									8.33
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)									0

* Date of completion of stage I as per stage I Agreement: 31 December 2022

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the first 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. Overall monitoring will be provided by the Government, through the National Ozone Unit (NOU), with assistance from the Lead IA. The NOU will submit annual progress reports on the status of implementation of the Plan to the Lead IA.
2. Consumption will be monitored and determined from official data of the import and export of substances as registered by the relevant Government departments. The NOU will compile and report on the following data and information each year on or before the relevant deadlines:
- (a) Reports on the consumption of the substances to be submitted to the Ozone Secretariat in line with Article 7 of the Montreal Protocol; and
 - (b) Reports on country programme data to be submitted to the Secretariat of the Multilateral Fund.
3. Monitoring the development of the Plan and verification of the achievement of the performance targets will be assigned to an independent local company or to independent local consultant(s) by the Lead IA. The company or consultant(s) responsible for verification will have full access to relevant technical and financial information related to the implementation of the Plan.

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 the 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.