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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-third Meeting
Montreal, 15-19 December 2023
Item 9(d) of the of the provisional agenda¹

PROJECT PROPOSAL: MOZAMBIQUE

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

Phase-out

- HCFC phase-out management plan (stage II, first tranche) UNEP and UNDP

¹ UNEP/OzL.Pro/ExCom/93/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Mozambique

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2022	2.18 ODP tonnes
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2022	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					2.18				2.18

(IV) CONSUMPTION DATA (ODP tonnes)			
2009-2010 baseline:	8.69	Starting point for sustained aggregate reductions:	8.69
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	3.04	Remaining:	5.65

(V) ENDORSED BUSINESS PLAN		2023	2024	2025	Total
UNEP	ODS phase-out (ODP tonnes)	0.30	0	0	0.30
	Funding (US \$)	61,750	0	0	61,750
UNDP	ODS phase-out (ODP tonnes)	0	0	0	0
	Funding (US \$)	0	0	0	0

(VI) PROJECT DATA			2023	2024	2025	2026	2027-2029	2030	Total
Montreal Protocol consumption limits (ODP tonnes)			5.65	5.65	2.82	2.82	2.82	0	n/a
Maximum allowable consumption (ODP tonnes)			2.30	2.30	1.60	1.60	1.60	0	n/a
Project costs requested in principle (US \$)	UNEP	Project costs	315,000	0	0	160,000	0	106,250	581,250
		Support costs	40,069	0	0	20,353	0	13,516	73,938
	UNDP	Project costs	55,000	0	0	101,250	0	0	156,250
		Support costs	4,950	0	0	9,113	0	0	14,063
Total project costs recommended in principle (US \$)			370,000	0	0	261,250	0	106,250	737,500
Total support costs recommended in principle (US \$)			45,019	0	0	29,466	0	13,516	88,001
Total funds recommended in principle (US \$)			415,019	0	0	290,716	0	119,766	825,501

(VII) Request for approval of funding for the first tranche (2023)		
Implementing agency	Funds recommended (US \$)	Support costs (US \$)
UNEP	315,000	40,069
UNDP	55,000	4,950
Total	370,000	45,019

Secretariat's recommendation:	Individual consideration – all technical and cost issues resolved
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Mozambique, 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 \$825,501, consisting of US \$581,250, plus agency support costs of US \$73,938 for UNEP and US \$156,250, plus agency support costs of US \$14,063 for UNDP, 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 \$415,019, consisting of US \$315,000, plus agency support costs of US \$40,069 for UNEP and US \$55,000, plus agency support costs of US \$4,950 for UNDP, as originally submitted.

Status of implementation of stage I of the HCFC phase-out management plan

3. Stage I of the HPMP for Mozambique was originally approved at the 66th meeting³ and revised at the 83rd meeting⁴ to phase out 3.04 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$332,500, plus agency support costs.

4. The fifth and final tranche of stage I was approved at the 90th meeting, and the duration of stage I was extended to 30 June 2023⁵, on an exceptional basis, given the implementation delays caused by the COVID-19 pandemic, on the understanding that no further extension would be requested. At the 92nd meeting, the Executive Committee noted the progress report on the implementation of activities, including progress in the implementation of the verification report.

Report on HCFC consumption

5. The Government of Mozambique reported a consumption of 2.18 ODP tonnes of HCFC in 2022, which is 75 per cent below the HCFC baseline for compliance. The 2018-2022 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in Mozambique (2018-2022 Article 7 data)

HCFC-22	2018	2019	2020	2021	2022	Baseline
Metric tonnes (mt)	73.0	65.10	40.20	40.20	39.70	158.00
ODP tonnes	4.02	3.58	2.21	2.21	2.18	8.69

6. Mozambique has made progress in the phase-out of HCFCs, which are exclusively used in the RAC servicing sector. The significant consumption decrease is to be attributed to the enforcement of the licensing and quota system, the training of customs officers and refrigeration technicians, and public awareness campaigns, in addition to the introduction of non-HCFC technology. The significant reduction in consumption from 2019 to 2020 was due to the effects of the COVID-19 pandemic and associated uncertainty and restriction in the movement of goods. After that period, the HCFC consumption remained constant due to the closure of small stores that were replaced by facilities with alternative technologies.

² As per the letter of 19 September 2023 from the Ministry of Land and Environment of Mozambique to the Secretariat.

³ Decision 66/37

⁴ Annex VII of UNEP/OzL.Pro/ExCom/83/48

⁵ Decision 90/32(a)

Country programme implementation report

7. The Government of Mozambique reported HCFC sector consumption data under the 2022 country programme (CP) implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

Status of progress and disbursement

8. During stage I, the following was achieved:

- (a) Customs and law enforcement officers were trained and provided with necessary toolkits to enable them to control and monitor imports and exports of HCFCs and HCFC-based equipment. A total of 521 customs officers, 15 environmental inspectors, 30 economic activity inspectors, 85 municipal police, 13 customs brokers and 52 administration and finance executives were trained, their capacities were enhanced in the monitoring of illegal trade on ODS and ODS-based equipment. The project further strengthened the capacity of customs training schools in the country through the provision of training materials on the phase-out of ODS;
- (b) The capacity of refrigeration technicians was strengthened through training and the provision of necessary servicing toolkits to ensure a smooth phase-out of HCFCs in the country. A total of 528 refrigeration technicians from both the formal and informal sectors were trained on good servicing practices including the safe use of new generation of refrigerants such as hydrocarbon (HC) technologies. Regular communication, information sharing and collaboration between the National Ozone Unit (NOU) and the refrigeration technicians was established. The NOU procured 30 toolkits, including recovery units and recovery cylinders to help technicians prevent venting of refrigerants, and distributed them among 40 technicians. Four meetings of the RAC association were held, focusing on details of the RAC certification scheme, how to support technicians in the informal sector, the update of the database of RAC technicians, among others; and
- (c) The strengthening of the centres of excellence, delayed due to the COVID-19 pandemic, was redefined by the government, who requested to conduct three further training sessions, i.e., one virtual training of trainers, where an international expert trained a selected group of local trainers and a senior technician with supervisory functions; and two training sessions for technicians, where a representative group of all technicians in the country, big enough to effect a change in the current servicing practices, was trained. Training focused on the supplied tools and equipment; safe handling of refrigerants including flammable refrigerants, ammonia, hydrofluoro-olefins and HCs; techniques for removing HC from a sealed unit, for making cuts, flanges, flooding, countersinking, bending and cleaning of tubes used in RAC systems, techniques for performing cold joining using metal joints and bonding processes, techniques for maintenance in commercial and industrial RAC, among others. Seventy-three RAC technicians (17 women and 56 men) participated in the training.

9. To ensure effective implementation of the HPMP stage I activities, continuous monitoring of project implementation and regular collection of data to measure progress against performance criteria were conducted. Three compliance monitoring visits were conducted to ascertain the actual usage of the approved import quotas by registered importers.

10. UNEP continued to assist the country in implementing the recommendations of the verification report.

Level of fund disbursement

11. As of October 2023, of the US \$332,500 approved so far, US \$267,500 had been disbursed (US \$172,500 for UNEP and US \$95,000 for UNIDO). The balance of US \$65,000 will be disbursed in December 2023.⁶

Stage II of the HCFC phase-out management plan

Remaining consumption eligible for funding

12. After deducting 3.04 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding in current stage II amounts to 5.65 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

13. There are approximately 2,400 technicians⁷ in the servicing sector, consuming HCFC-22 to service RAC as shown in table 2. HFCs are predominant refrigerants used in the country (representing 90 per cent) and HCFC-22 (10 per cent). HFC-134a is the refrigerant more expanded in the country, followed by R-410A, R-407C and HCFC-22. Consumption of HCFC-22 continues to dominate in the commercial/industrial refrigeration servicing sector, followed by residential and commercial air-conditioning (AC), and refrigerated transport sectors.

Table 2. Consumption of refrigerants in 2022 by RAC subsectors

Refrigeration and AC servicing subsectors		Estimation of refrigerant use in servicing (mt)							
		HCFC-22	HFC-32	HFC-134a	R-404A	R-407C	R-410A	R-507A	Total
Domestic refrigeration		0	0	50.70	0	0	0	0	50.7
Commercial refrigeration	Stand-alone units	5.3	0	34.70	2.50	0	0	10.3	52.8
	Condenser units	7.38	0	20.50	1.50	0	0	3.	32.44
	Centralized systems	5.86	0	15.40	1.30	0	0		22.56
Residential AC		11.26	6.00	0	0	5.49	20.23	0	42.98
Commercial AC		5.35	8.00	0	0	70.00	78.50	0	161.85
Mobile AC		0	0	15.50	0	0	0	0	15.5
Transport refrigeration		4.55	0	0	0.70	0	0	0	5.25
Total (mt)		39.70	14.00	136.80	6.00	75.49	98.73	13.36	384.08
Percentage		10%	4%	36%	2%	20%	26%	3%	100

Phase-out strategy

14. Stage II of the HPMP, consisting of three tranches (i.e., 2024-2025, 2026-2029 and 2030) will focus on further understanding the profiles of the various HCFC consuming subsectors, their current consumption, and the country's needs. Stage II will build upon the lessons learned from the implementation of stage I and the functioning of the institutional and regulatory frameworks in place. Stage II will also focus on promoting the adoption of low-global warming potential (GWP) technologies consistent with the Kigali Amendment, strengthening capacities in the servicing sector by providing training on the maintenance and servicing of equipment using new generation of refrigerants, and designing and implementing a certification scheme of refrigeration servicing technicians.

⁶ US \$65,000 are obligated by UNIDO to complete the payment of equipment in December 2023.

⁷ It seems there is another 3,000 in the informal sector.

Proposed activities

15. The following activities are proposed for stage II:

- (a) *Strengthen the enforcement of ODS regulations including capacity enhancement of customs, consumer protection and other law enforcement officers:* This will be done through the training of trainers; holding border dialogues; reviewing the customs training curriculum; organizing eight training sessions for 160 enforcement officers on identification of controlled substances under the Montreal Protocol, legal frameworks in place, procedures for trade in controlled substances, the role of enforcement agencies, and the informal Prior Informed Consent (iPIC) mechanism (UNEP) (US \$91,250);
- (b) *Facilitate the development and implementation of national technical standards in the RAC sector:* The standards will focus on the safe handling of energy efficient low-GWP technologies in the RAC sector, and consider provisions for the certification process as one way of ensuring safety in handling flammable and toxic refrigerants. Activities of this component include: Hiring a consultant to develop the standards; organizing a meeting for stakeholders to review the draft standards; publishing and printing documentation on the standards; organizing five training sessions to build the capacity of the NOU, environmental inspectors and other key stakeholders; organizing eight workshops as part of a sensitization campaign for RAC technicians, importers, industries and the public; conducting monitoring inspections on imported RAC equipment and refrigerants to ensure compliance with the standards; facilitating the development of policies that support green procurement in public institutions; organizing four workshops to train procurement officers on procurement of “green” RAC systems and sensitizing the general public on benefits of adopting and using green RAC systems by preparing and disseminating brochures and airing publicity spots on the radio on the benefits of using low-GWP technologies (UNEP) (US \$130,000);
- (c) *Strengthen the capacity of RAC technicians and the RAC association, and prepare for the implementation of a certification scheme:* This will be done through updating the national codes for RAC servicing technicians and revising the national RAC training curriculum; conducting 10 training sessions for RAC technicians on good servicing practices; conducting targeted-awareness for 200 RAC experts, importers and end users about the need for the introduction of new low GWP technologies; holding meetings with the RAC association and RAC training institutes on good refrigeration practices and procuring service tools for them⁸; developing standards and design a process for establishing a certification scheme by 2025 and then certify 200 technicians per year, and building the capacity of key stakeholders involved in the certification scheme (UNEP) (US \$190,000);
- (d) *Strengthen the centres of excellence and technical assistance:* This is to be done through preparing a business model for refrigerant recovery and re-use infrastructure, and establishing two recovery and re-use centres⁹; and procuring and distributing tools and equipment to centres of excellence¹⁰ (UNDP) (US \$156,250); and

⁸ Recovery units, identifiers, leak detectors for flammable refrigerants and vacuum pumps.

⁹ The centres will be provided with recovery units, refrigerant identifiers and necessary equipment.

¹⁰ Portable charging stations, electronic leak detectors, brazing units and compression fitting tools.

- (e) *Activities to maintain energy efficiency:* Activities are described in detail in the following section (UNEP) (US \$120,000).

Activities to maintain energy efficiency in the refrigeration servicing sector

16. The project related to energy efficiency, submitted in line with decision 89/6, is designed to enhance coordination in promoting low-GWP alternatives and energy-efficient RAC equipment among key national stakeholders. It is expected to help the country sustain its HCFC phase-out and strengthen the RAC servicing sector. The description and proposed cost breakdown of activities to maintain energy efficiency in the sector are presented in table 3.

Table 3. Additional activities proposed to maintain energy efficiency in the servicing sector

Activity	Performance indicators	Cost (US \$)
Domestication and implementation of minimum energy performance standards (MEPS), and adoption and implementation of labelling for refrigerating appliances		
Hiring a National MEPS expert (30 days of consultancy work) on the domestication of MEPS (MEPS were developed by the Southern African Development Community (SADC) Secretariat at the regional level and need to be adopted at the national level) and development/implementation of a labelling system	Provision of technical support and guidance on the steps required to complete the process of domestication of MEPS, and to enforce them; and on the development and implementation of a labelling system.	10,000
Organizing two workshops with 20 stakeholders each to validate the MEPS	A report on the steps required to domesticate and enforce the MEPS	15,000
Organizing two coordination meetings with 20 key stakeholders each on MEPS domestication, implementation and enforcement	Agreement on the designated authorities to: - implement MEPS, - monitor MEPS, - assess the equipment as per MEPS requirements, and - keep the registers of equipment meeting the MEPS requirements up to date	15,000
Organizing three training sessions targeting 20 enforcement officers each, on MEPS	Government officers acquired knowledge on rules and procedures, can implement/enforce regulatory measures, and manage information tools to perform their duties	30,000
Organizing two information sessions targeting 20 stakeholders in the distribution chain of RCA equipment (i.e., importers, distributors, installers) each	Main stakeholders acquainted with MEPS, labelling, and relevant regulatory measures and procedures	10,000
Subtotal		80,000
Outreach and impact assessment		
Developing and distributing of outreach and awareness-raising material	Brochures, publicity spots and posters with information on MEPS and the benefits of adopting energy-efficient technologies	10,000
Conducting a national-wide survey among the general public before implementing the campaign	Report on consumer behaviour related to the purchase of residential RAC appliances	10,000

Activity	Performance indicators	Cost (US \$)
Conducting one public awareness and educational campaign for consumers per month over a period of five months via the Government website, preparation and distribution of brochures, reporting by media, and awareness messages announced on local television and radio stations	-Report on the impact of the campaign -Increased knowledge and understanding of consumers on the benefits of low-GWP and energy-efficiency technologies	20,000
Subtotal		40,000
Total		120,000

Project implementation and monitoring

17. The mechanism for project implementation and monitoring, established under stage I of the HPMP, will continue into stage II, with the NOU and UNEP monitoring activities, reporting on progress, and working with stakeholders to phase out HCFCs. The cost of those activities for UNEP amounts to US \$50,000, and includes consultants (US \$15,000), monitoring visits (US \$10,000), travel (US \$5,000), meetings (US \$20,000).

Gender policy implementation

18. In line with the Multilateral Fund gender mainstreaming policy, and the UNEP and UNDP gender policies, gender equality and women's empowerment will be mainstreamed throughout the implementation of the stage II activities. Equal and meaningful participation of women in the project activities will be encouraged and gender disaggregated data will be used for monitoring project performance and for the evaluation of impact. Stakeholders' inputs on how to integrate gender specific indicators in planning, implementation, and reporting processes of each component will be sought. A focus will be encouraged to support gender-balanced participation in training and capacity building activities. Outreach activities, including public forums and information sessions, will target a balanced outreach audience. The current ratio of female and male technicians is very low, about 10 per cent, but the NOU is deploying efforts to encourage female technicians to join the profession, the planned awareness activities aim at attracting more women to the field.

Total cost of stage II of the HCFC phase-out management plan

19. The total cost of stage II of the HPMP for Mozambique has been estimated at US \$737,500 (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. The proposed activities and cost breakdown are summarized in paragraphs 15 and 16 above.

Implementation plan for the first tranche of stage II of the HCFC phase-out management plan

20. The first funding tranche of stage II of the HPMP, in the total amount of US \$370,000, will be implemented between December 2023 and December 2025 and will include the following activities:

- (a) *Strengthening the enforcement of ODS regulations and related policies:* Ten trainers will be trained by a national expert; 100 customs and law enforcement officers will be trained on HCFC control measures and the iPIC; one border dialogue will be organized, and the customs training manual will be reviewed (UNEP) (US \$40,000);
- (b) *Development of national technical standards and promotion of green procurement of RAC systems:* A national expert will be engaged to develop national technical standards on the safe handling of energy efficient low-GWP technologies in the RAC sector including low- or zero-GWP refrigerants, and consider provisions for a certification scheme. The

draft standards will be reviewed in stakeholders' meetings, and 100 copies of the standards will be published and printed. Two training sessions to build the capacity of the NOU and 40 standards officers, environmental inspectors and other key stakeholders for the development and enforcement of the technical standards will be organized. A sensitization campaign will be organized for RAC technicians, importers, industries and the public, to enhance compliance with the standards and to facilitate the development of policies that support green procurement in public institutions; procurement officers will be trained on green procurement of RAC systems (UNEP) (US \$70,000);

- (c) *Strengthening the capacity of RAC technicians and upgrade of national codes of practice for servicing RAC systems:* Two sessions will be conducted to build the capacities of key stakeholders that will be involved in the certification process; a national expert will update the national codes of practice for RAC servicing technicians; two training sessions will be held for RAC technicians on good servicing practices; one meeting will be organized targeting importers and end-users on the benefits of using low-GWP technologies; and the training manual for the RAC association and training colleges will be updated (UNEP) (US \$65,000);
- (d) *Strengthening the centres of excellence and technical assistance:* A business model for refrigerant recovery and re-use infrastructure, including the terms of reference for recovery and re-use host centres, will be developed; equipment for three centres of excellence will be procured and distributed UNDP) (US \$55,000);
- (e) *Activities to maintain energy efficiency* (UNEP) (US \$120,000); and
- (f) *Project monitoring* (UNEP) (US \$20,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

21. 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 2023-2025 business plan of the Multilateral Fund.

Overarching strategy

22. The Government of Mozambique submitted a letter indicating its commitment to achieve a 100 per cent reduction of its HCFC baseline consumption and attain compliance with the Montreal Protocol measures by 2030, and that the country will not require any HCFCs for its servicing needs after 2030.

Legal framework

23. The Government of Mozambique issued HCFC import quotas for 2023 which are lower than the Montreal Protocol control targets.

Requirements in the decision approving the last tranche of stage I

24. The fifth and final tranche of stage I of the HPMP for Mozambique, and the corresponding 2022-2023 tranche implementation plan was approved at the 90th meeting¹¹ on the understanding that UNEP, UNIDO and the Government would intensify efforts to implement the remaining activities in stage I of the HPMP; that UNEP would submit a progress report to the first meeting of 2023 on the implementation of activities, including progress in the implementation of the verification recommendations; and that stage II would only be considered once the Secretariat received confirmation that the equipment from the UNIDO component had been distributed to the beneficiaries and relevant training had taken place.

25. Efforts were intensified by the agencies aiming at the finalization of the stage I activities, and UNEP submitted a progress report to the 92nd meeting confirming that the recommendations from the verification report would be implemented throughout 2023. According to the information provided by UNEP, (i) a new regulation, revising the quota system to ensure that registered importers are allocated annual import quotas rather than approving quotas on a first come first serve basis, had been drafted, had passed through the processes of various endorsements, and after some delays, was expected to be approved by the end of 2023. At the moment, however, the quota allocation was already valid for 12 months and was issued at the beginning of the year and not on a first come basis; (ii) the online application system, to be introduced by the NOU as a way to improve the overall system, was expected to be finalized and operational by the by first quarter of 2024. The system would include an online registry of controlled substances and a registry of importers. UNEP also informed that a sensitization campaign was carried out in preparation for the online system. UNEP confirmed that completion of the implementation of the recommendations would be part of the action plan for the first tranche of stage II, and consequently, UNEP would report on their implementation when requesting the second tranche.

26. Regarding the UNIDO component, an update was requested. UNIDO shared the list of equipment and informed the Secretariat that due to a few of the pieces of equipment not being in stock from the supplier and manufacturer side, the arrival of the equipment in the country, planned for October 2023 at the request of the Government, had to be postponed to December 2023. The training on the supplied equipment would take place after such arrival. UNIDO communicated that the Government of Mozambique was taking care of the necessary verifications of conformity and other import procedures.

27. The Secretariat considered the status of implementation of this component and Executive Committee decision 90/32(a), while considering at the same time the delays in the finalisation of stage I and relevant consequences for the country. Not to further delay the implementation of the HPMP, the Secretariat reviewed the submission on the understanding that in the case that stage II and the first tranche would be recommended for approval, the Treasurer would be requested to transfer the approved funds to UNEP and UNDP only after the Secretariat received confirmation that the equipment to be procured under the UNIDO component had been distributed to the beneficiaries and relevant training had taken place.

Technical and cost-related issues

Technician certification scheme

28. Regarding a technician certification scheme, UNEP explained that, after assessing the situation and necessary details of the certification scheme to be established, including the institutional setup to ensure that the scheme is sustainable beyond the end of stage II, standards will first be finalized and a process designed for establishing a certification scheme by 2025. The ODS regulations are under review and the certification process will be included to make sure that it is implemented effectively and supported by legislation. A technical college will be selected to implement the certification process in collaboration with the RAC association. To make the process sustainable, a fee will be introduced so that those administering

¹¹ Decision 90/32

the certification are remunerated and materials for the process are procured. Initiatives will be implemented to ensure that technicians are motivated to undergo the certification process.

Activities to maintain energy efficiency in the refrigeration servicing sector

29. In line with decision 89/6(d), UNEP has included in the tranche implementation plan the specific actions, performance indicators and funding associated with additional activities to maintain energy efficiency.

30. In submitting the proposal, UNEP and the Government stated that while the activities related to preparing the Kigali HFC implementation plan (KIP) are underway, this proposal will enhance those activities and set the foundation for awareness and collaboration with the energy sector by bridging the gap between the implementation of the HPMP and the KIP.

31. It is expected that the project will enhance the adoption of low-GWP and energy efficient technologies in the country and further increase the knowledge and understanding of, as well as coordination among, key stakeholders on benefits of using such technologies, including their climate and environmental benefits. The project would also help Mozambique to continue meeting the HCFC reduction phase-out targets and achieve the objectives of the Kigali Amendment.

Total project cost

32. The total cost for stage II of the HPMP amounts to US \$737,500, US \$617,500 based on decision 74/50(c)(xii) on the eligible funding level for a low-volume consuming country and US \$120,000 based on decision 89/6.

Impact on the climate

33. The activities proposed 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 the 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 Mozambique, including its efforts to promote low-GWP alternatives, 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.

Sustainability of the HCFC phase-out and assessment of risks

34. Deliberate efforts will be undertaken to ensure that risks that might affect the successful implementation of the project (i.e., capacity of implementing agencies to timely disburse funds; availability and participation of relevant stakeholders in project activities, availability of enabling legal instruments) are properly managed to ensure the effective implementation of the activities to achieve the project's objectives. Periodic monitoring implementation of the project activities will be undertaken to ensure that unforeseen risks are addressed at an early stage. Reporting will be encouraged at all stages of project implementation, so as to maximize positive best practices.

35. UNEP confirmed that monitoring systems to control HCFC imports post-2030 are already in place and will be strengthened during the implementation of the project. In accordance with the regulations, all enforcement officers will be trained, and joint monitoring activities will be undertaken to ensure proper control of illegal trade on HCFCs. Furthermore, the implementation of the licensing and quota system will be enhanced to ensure that HCFCs imports are kept under controlled, and boarder controls will be strengthened to ensure that the phase-out of HCFCs is sustained beyond 2030. The Government of Mozambique affirmed that the Montreal Protocol matters have been mainstreamed in the relevant

Government's strategies, including the Ministry of Environment's strategic planning, and that funds will be provided to continue sustaining the phase-out of all controlled substances.

Co-financing

36. The Government's contribution to the project activities remains in kind, with logistics and personnel support as and when required for the implementation of the project. The Government is also working with the private sector to implement co-financed projects that will bring ozone and climate benefits.

2023-2025 draft business plan of the Multilateral Fund

37. UNEP and UNDP are requesting US \$737,500, plus agency support costs, for the implementation of stage II of the HPMP for Mozambique. The total requested value of US \$705,735, including agency support costs for the period of 2023–2025, is US \$643,985 above the amount in the business plan.

Draft Agreement

38. A draft Agreement between the Government of Mozambique and the Executive Committee for stage II of the HPMP, that includes funding for additional activities to maintain energy efficiency in the refrigeration servicing sector, is contained in annex I to the present document.

RECOMMENDATION

39. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Mozambique for the period from 2023 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$825,501, consisting of US \$581,250, plus agency support costs of US \$73,938 for UNEP and US \$156,250, plus agency support costs of US \$14,063 for UNDP, on the understanding that no more funding from the Multilateral Fund would be provided for the phase-out of HCFCs and no servicing tail would be needed;
- (b) Noting the commitment of the Government of Mozambique to reduce HCFC consumption by 81.6 per cent of the country's baseline by 1 January 2025 and to completely phase out HCFCs by 1 January 2030 and that HCFCs will not be imported after that date;
- (c) Further noting that stage II of the HPMP includes funding for additional activities to maintain energy efficiency in the refrigeration servicing sector in the amount of US \$120,000, plus agency support costs of US \$15,265 for UNEP;
- (d) Deducting 5.65 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (e) Approving the draft Agreement between the Government of Mozambique 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;
- (f) Approving the first tranche of stage II of the HPMP for Mozambique, and the corresponding tranche implementation plan, in the amount of US \$415,019, consisting of US \$315,000, plus agency support costs of US \$40,069 for UNEP, and US \$55,000, plus agency support costs of US \$4,950 for UNDP, on the understanding that the Treasurer would be requested to transfer the approved funds to UNEP and UNDP only after the

Secretariat has received confirmation that the equipment to be procured under the UNIDO stage I component has been distributed to the beneficiaries and relevant training has taken place.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF MOZAMBIQUE 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 Mozambique (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 approved (“the Plan”). In accordance with subparagraph 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 CP 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 subparagraph 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;
 - (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 Plan, 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. UNEP has agreed to be the lead implementing agency (the “Lead IA”) and UNDP has agreed to be the cooperating implementing agency (the “Cooperating IA”) under the lead of the Lead IA in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA and/or Cooperating IA taking part in this Agreement.

10. The Lead IA will be responsible for ensuring coordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per subparagraph 5(b). The Cooperating IA will support the Lead IA by implementing the Plan under the overall coordination 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 subparagraph 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 subparagraphs 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 between the Government 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	8.69

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2023	2024	2025	2026	2027-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	5.65	5.65	2.82	2.82	2.82	0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	2.30	2.30	1.60	1.60	1.60	0	n/a

Row	Particulars	2023	2024	2025	2026	2027-2029	2030	Total
2.1	Lead IA (UNEP) agreed funding (US \$)	315,000	0	0	160,000	0	106,250	581,250
2.2	Support costs for Lead IA (US \$)	45,069	0	0	20,353	0	13,516	73,938
2.3	Cooperating IA (UNDP) agreed funding (US \$)	55,000	0	0	101,250	0	0	156,250
2.4	Support costs for Cooperating IA (US \$)	4,950	0	0	9,113	0	0	14,063
3.1	Total agreed funding (US \$)	370,000	0	0	261,250	0	106,250	737,500
3.2	Total support costs (US \$)	45,019	0	0	29,466	0	13,516	88,001
3.3	Total agreed costs (US \$)	415,019	0	0	290,716	0	119,766	825,501
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)							5.65
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)							3.04
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)							0

*Date of completion of stage I as per decision 90/32(a)

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 subparagraph 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 subparagraph 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 subparagraph (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 subparagraphs 1(a) to 1(d).

2. In the event that in a particular year two stages of the Plan 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. The National Ozone Unit will submit annual progress reports of the status of implementation of the Plan to the Lead IA.

2. Monitoring of the development of the Plan and verification of the achievement of the performance targets, specified in the Plan, will be assigned to an independent local company or to independent local consultants 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 Plan;
- (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 subparagraphs 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) Coordinating 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 each 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, coordination 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 Plan's results and the consumption of the Substances mentioned in Appendix 1-A, as per subparagraph 5(b) of the Agreement and subparagraph 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 coordinated 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, coordination 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 Plan 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.
