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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-second Meeting
Montreal, 29 May to 2 June 2023
Item 9(c) of the provisional agenda¹

PROJECT PROPOSAL: ZIMBABWE

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, second tranche)

UNEP and UNDP

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

¹ UNEP/OzL.Pro/ExCom/92/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Zimbabwe

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE		
HCFC phase-out plan (stage II)	UNEP (lead), UNDP	86 th	100% phase-out by 2030		

(II) LATEST ARTICLE-7 DATA (Annex C Group I)	Year: 2022	3.79 ODP tonnes
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2022		
Chemical	Aerosol	Foam	Fire-	Refrigeration		Solvent	Process	Lab	Total sector		
			fighting			agent	use	consumption			
				Manufacturing	Servicing						
HCFC-22					3.79				3.79		

(IV) CONSUMPTION DATA (ODP tonnes)									
2009-2010 baseline:	17.80	17.80 Starting point for sustained aggregate reductions:							
CONSUMPTION ELIC	CONSUMPTION ELIGIBLE FOR FUNDING								
Already approved:	23.91	Remaining:	0.00						

(V) ENDORSE	CD BUSINESS PLAN	2023*	2024	2025	Total
UNEP	ODS phase-out (ODP tonnes)	2.14	0	0	2.14
	Funding (US \$)	311,603	0	0	311,603
LINIDD	ODS phase-out (ODP tonnes)	1.67	0	0	1.67
UNDP	Funding (US \$)	199,740	0	0	199,740

^{*}Including US \$120,000, plus agency support costs for UNEP for additional activities to maintain energy efficiency

(VI) PROJECT DATA		2020	2021-	2023*	2024	2025-	2027	2028-	2030	Total	
				2022			2026		2029		
Montreal Protoco	l consumption	n limits (ODP	11.57	11.57	11.57	11.57	5.78	5.78	5.78	0	n/a
tonnes)											
Maximum allowa	ble consumpt	tion (ODP	11.57	11.57	11.57	11.57	5.78	5.78	5.78	0	n/a
tonnes)											
Funding agreed	INTER	Project costs	150,000	0	312,500	0	0	192,500	0	105,000	760,000
in principle	UNEP	Support costs	18,844	0	38,297	0	0	23,591	0	12,868	93,600
(US \$)	LINIDD	Project costs	100,000	0	150,000	0	0	150,000	0	0	400,000
	UNDP	Support costs	7,000	0	10,500	0	0	10,500	0	0	28,000
Funds approved b	y ExCom	Project costs	250,000	0							250,000
(US \$)	(US \$) Suppor		25,844	0							25,844
Total funds recommended for Project co		Project costs			462,500						462,500
approval at this m	approval at this meeting				48,797						48,797

^{*}Funding for 2023 includes US \$120,000 plus agency support cost of US \$14,706 for UNEP for energy efficiency activities (decision 89/6)

Secretariat's recommendation:	Blanket approval

PROJECT DESCRIPTION

1. On behalf of the Government of Zimbabwe, UNEP as the lead implementing agency has submitted a request for funding for the second tranche of stage II of the HCFC phase-out management plan (HPMP), at a total cost of US \$511,297, consisting of US \$312,500, plus agency support costs of US \$38,297 for UNEP, and US \$150,000, plus agency support costs of US \$10,500 for UNDP.² The submission includes a progress report on the implementation of the first tranche, the verification report on HCFC consumption for 2018 to 2022, the tranche implementation plan for 2023 to 2027, and a request for funding additional activities to maintain energy efficiency in the refrigeration servicing sector.³

Report on HCFC consumption

2. The Government of Zimbabwe reported a consumption of 3.79 ODP tonnes of HCFC in 2022, which is 78 per cent below the HCFC baseline for compliance. The 2018-2022 HCFC consumption is shown in table 1.

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

HCFC	2018	2019	2020	2021	2022	Baseline
Metric tonnes (mt)						
HCFC-22	176.75	177.18	113.87	74.57	68.98	306.55
HCFC-141b	0	0	0	0	0	8.54
HCFC-142b	5.30	1.63	0.278	0	0	0
(Total) (mt)	182.05	178.81	114.148	74.57	68.98	314.94
HCFC-141b in imported pre-blended	0	0	0	0	0	55.55*
polyols						
ODP tonnes						
HCFC-22	9.72	9.74	6.26	4.10	3.79	16.86
HCFC-141b	0	0	0	0	0	0.94
HCFC-142b	0.35	0.11	0.02	0	0	0
(Total) (ODP tonnes)	10.07	9.85	6.28	4.10	3.79	17.80
HCFC-141b in imported pre-blended	0	0	0	0	0	6.11*
polyols						

^{*}As per the Agreement with the Executive Committee.

3. HCFC consumption has been decreasing due to the implementation of activities in the HPMP, especially the ban on imports of HCFC-based equipment from 2016, and the market transformation from HCFCs to alternative technologies. Intensive public-awareness programmes have encouraged importers, retailers, and end-users to select equipment based on HCFC alternatives.

Country programme implementation report

4. The Government of Zimbabwe 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.

² As per the letter of 20 March 2023 from the Ministry of Environment, Climate, Tourism and Hospitality Industry of Zimbabwe to the Secretariat.

³ In line with decision 89/6, low-volume-consuming countries can include in their HPMPs additional activities for the introduction of alternatives to HCFCs with low or zero global-warming potential and for maintaining energy efficiency in the refrigeration servicing sector.

Verification report

5. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports and that the total consumption of HCFCs reported under Article 7 of the Montreal Protocol for 2018 to 2022 was correct (as shown in table 1 above). The verification concluded that Zimbabwe is in compliance with the targets in the Agreement with the Executive Committee and the Montreal Protocol and made several recommendations as discussed in paragraph 14 below.

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

6. The implementation of stage I of the HPMP was delayed by the COVID-19 pandemic. At the 91st meeting, the Executive Committee approved the extension of stage I of the HPMP for Zimbabwe to 30 June 2023 (decision 91/11(b)) to allow completion of the remaining training activities in the fourth and fifth tranches. The Government of Germany submitted a report on the implementation of stage I, indicating that the implementation of the remaining training-of-trainers activity is progressing and is almost complete. It is expected that all remaining activities from stage I will be completed by June 2023 and the project completion report (PCR) will be submitted to the 93rd meeting.

<u>Progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan</u>

Legal framework

- 7. The Government of Zimbabwe ratified the Kigali Amendment on 18 October 2022. The ODS regulations was reviewed and revised to include HFCs and HFC blends in the licensing system. The new regulations also contain provisions for, among other things, the certification of refrigeration and air-conditioning (RAC) technicians and the implementation of the minimum energy performance standards (MEPS) adopted by the Government. The Zimbabwe MEPS is in line with the MEPS of Southern Africa Developing Country Cooperation in Standardisation MEPS (SADCSTAN MEPS) and is expected to go into effect on 1 June 2023. The draft regulations have been approved by the Minister of Environment, Climate Tourism and Hospitality Industry and are with the Attorney General's Office awaiting endorsement for gazetting.
- 8. During the first tranche, the technical standards for the safe use of flammable and toxic refrigerants were developed. The curriculum for the training of customs officers was updated to include HFC controls and will be used for ongoing training of customs officers. A total of 26 trainers and 202 customs officers (99 women) were trained in the licensing and quota system, the use of identifiers to identify ODSs and the prevention of illegal trade.

Refrigeration servicing sector

- 9. The following activities were implemented:
 - (a) Development of a procedure for technician certification and holding two stakeholder consultation meetings to review the draft procedures; training 19 lecturers and five trainers in how to conduct the certification process; 135 technicians assessed and certified to work with flammable refrigerants;
 - (b) Adoption of the SADCSTAN standards on the energy performance of RAC appliances by the Standards Association of Zimbabwe (SAZ) following review by the RAC Technical Committee; MEPS expected to go into effect on 1 June 2023;

- (c) Development and adoption by RAC associations of a code of conduct for servicing technicians; review and adoption of training curriculum for tertiary RAC education programmes; organization of 17 workshops to train 529 technicians (182 women) in good servicing practices, refrigerant recovery and recycling and servicing with flammable refrigerants;
- (d) Based on needs assessments, procurement of servicing tools and equipment (15 sets of servicing tools, 15 scales, 30 vacuum pumps, eight recovery machines and recycling sets, 30 leak detectors, 25 identifiers); delivery expected by the end of May 2023;
- (e) Awareness-raising activities for end-users and the general public on HCFC phase-out and introduction of alternative technologies; work on the part of the National Ozone Unit (NOU) with the Procurement Regulatory Authority of Zimbabwe (PRAZ) to incorporate green procurement of RAC appliances; and
- (f) Project implementation, monitoring and reporting with a total cost of US \$20,000 with the following breakdown: staff and consultants US \$10,000; travel US \$3,000; meetings and workshops US \$5,000; and miscellaneous US \$2,000.

Level of fund disbursement

10. As of March 2023, of the US \$250,000 approved so far (US \$150,000 for UNEP and US \$100,000 for UNDP), US \$158,000 (63 per cent) had been disbursed (US \$150,000 for UNEP and US \$8,000 for UNDP).

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

- 11. The following activities will be implemented between July 2023 and December 2027:
 - (a) Conducting five workshops to train 20 trainers and 100 customs and other law enforcement officers in controlling and monitoring HCFC and HFC trade; conducting three joint border dialogues with neighbouring countries (Botswana, South Africa, and Zambia) to share experiences on enforcement mechanisms (UNEP) (US \$40,000);
 - (b) Training 75 key stakeholders on the new standards for the safe use of flammable and toxic refrigerants and on green procurement; printing 2,000 copies of the new standards and the MEPS and distributing them to stakeholders; conducting random inspections at ports of entry, servicing workshops, warehouses, and other storage facilities in collaboration with other stakeholders (SAZ, customs, the Environmental Management Agency and RAC associations) to ensure adherence to the technical standards (UNEP) (US \$30,000);
 - (c) Adopting a new training curriculum, organizing 15 workshops to train 500 technicians in good servicing practices and the safe use of flammable refrigerants (two will be organized only for female RAC technicians) to prepare them for certification; implementing the code of conduct for servicing technicians and conducting three workshops to sensitize 95 technicians on the code of conduct (UNEP) (US \$60,000);
 - (d) Continuing the delivery and distribution of tools and equipment procured in the first tranche to seven vocational training colleges and customs officers; purchasing additional tools for the informal sector in collaboration with the RAC training colleges and RAC associations; establishing six recovery and recycling centres across the country to reduce the demand for virgin refrigerants (UNDP) (US \$150,000);

- (e) Conducting three sensitization campaigns for RAC technicians on the certification process; and certifying 1,500 RAC technicians (UNEP) (US \$40,000);
- (f) Additional activities for the introduction of alternatives to HCFCs with low or zero-GWP refrigerants and for maintaining energy efficiency in the refrigeration servicing sector including three main components which are explained in paragraphs 14 below (UNEP) (US \$120,000); and
- (g) Project implementation, monitoring, coordination and reporting will be conducted by the NOU with the support from UNEP at a cost of US \$22,500 with the following breakdown: staff and consultants US \$10,000; travel US \$4,000; meetings and workshops US \$7,500; and miscellaneous US \$1,000.

Activities to maintain energy efficiency in the refrigeration servicing sector

- 12. The project related to energy efficiency, submitted in line with decision 89/6, is designed to strengthen and increase collaboration among various stakeholders to implement the MEPS and promote the adoption of zero-ODP and low-GWP refrigerants. The MEPS has been developed and reviewed by the technical committee, and is expected to go into effect on 1 June 2023. The activities maintaining energy efficiency will be implemented together with the HPMP and will complement the activities in the HPMP, leading to a wider adoption of low-GWP alternatives. The activities proposed are expected to be completed in 18 months.
- 13. The activities proposed to maintain energy efficiency in the servicing sector include:
 - (a) Strengthening coordination with stakeholders on the adoption and implementation of the MEPS; conducting two training workshops for 15 importers, two workshops for 30 customs officers, and one workshop for 50 stakeholders (utilities agencies, building designers, building developers, and/or construction companies) on the MEPS; one study tour abroad for key stakeholders to learn about MEPS adoption and implementation (UNEP) (US \$50,000);
 - (b) Developing awareness-raising materials (five videos and five infographics) to promote MEPS implementation; conducting an online survey to evaluate consumer behaviour through interviews (500 consumers with different socio-economic and education backgrounds) and to propose actions for changing consumer mindsets; and developing one targeted campaign to promote the purchase of energy-efficient appliances (UNEP) (US \$35,000); and
 - (c) Updating the national codes of conduct and training manuals for RAC technicians to include energy-efficiency considerations in the training manuals and the certification procedure; organizing three meetings with RAC associations to discuss energy-efficiency-related measures; conducting one meeting on energy efficiency with female members of industrial association; conducting one technical workshop for introducing energy-efficiency considerations into the technician training and certification process (UNEP) (US \$35,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption

14. Regarding the recommendations arising out of the verification, UNEP confirmed that new HS codes were adopted in 2022 and will be used for the classification of all controlled substances in coordination with customs. Based on the recommendation, the NOU has submitted a request to join the Informal Prior Informed Consent (iPIC) platform for import/export of ODSs.

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

15. The Secretariat noted that decision 81/29 requires that funding requests for the second tranche of stage II would not be considered if the PCR from stage I had not been submitted. The Secretariat also noted that the Executive Committee approved an extension of completion of stage I of the HPMP to 30 June 2023 at the 91st meeting. Further consultation indicated that the implementation of the remaining training-of-trainers activity in stage I is almost completed; stage I is expected to be completed by June 2023 and the PCR will be submitted to the 93rd meeting. The Secretariat further noted that the first tranche of stage II has been implemented well and the funds have been fully committed and 63 per cent disbursed. In this context, approval of the second tranche would enable continuous implementation of the HPMP and support the country in sustaining its compliance target. The Secretariat therefore recommends that the Executive Committee approve the second tranche, on the understanding that the Government will report on the completion of stage I when the third tranche of stage II is submitted.

<u>Progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan</u>

Legal framework

16. The Government of Zimbabwe has already issued HCFC import quotas for 2023 at 3.30 ODP tonnes, which is lower than the Montreal Protocol control targets.

Refrigeration servicing sector

17. The Secretariat discussed with UNEP several issues which were all satisfactorily addressed. Regarding the technician certification system, UNEP clarified that the technician certification system is mandatory and supported by regulations, and that uncertified technicians are not allowed to purchase refrigerants. Regarding the establishment of the six recovery and recycling centres, UNDP is in the process of recruiting a consultant to identify the types of tools required and areas where the centres will be located. The standard for the safe handling of flammable refrigerants went into effect in November 2022. It will be incorporated into the training curriculum for technicians and will become a part of the certification criteria for technicians.

Activities to maintain energy efficiency in the refrigeration servicing sector

18. In line with decision 89/6(d), UNEP has included in the tranche implementation plan the specific actions, performance indicators (targets) and funding associated with additional activities to maintain energy efficiency. In response to a query on the scope of the MEPS, its enforcement and the stakeholders involved, UNEP clarified that for now the MEPS will cover domestic refrigeration and air-conditioning appliances only. The MEPS may be extended to commercial and industrial equipment at a later stage taking into consideration lessons learned. The MEPS will be enforced by customs officers, the NOU under the guidance of the SAZ, the Department of Energy, environmental enforcement officers and the RAC

Associations. All RAC appliances imported into the country will require a conformity assessment report (CAR) endorsed by the exporting company stating the energy consumption levels and energy efficiency performance on the label. At the ports of entry, customs officers and energy inspectors will demand the CAR that must accompany each consignment, and will check whether the labels are in place. Random testing can also be done at the ports of entry. A surveillance programme will also be developed and implemented as part of the enforcement action by visiting wholesalers and distribution companies. Zimbabwe has a laboratory to carry out power usage and quality compliance tests. The Government plans to review the MEPS in five years' time.

Gender policy implementation⁴

19. In line with decisions 84/92(d) and 90/48(c), activities under the first tranche of stage II were carried out in a manner that mainstreamed gender issues. The NOU ensured that there was participation by both men and women and, wherever possible, that the planning, implementation and evaluation of project activities included gender aspects. At all meetings and workshops, the NOU captured gender-disaggregated data, which was included in all of the reports compiled after the meetings. A workshop for female RAC technicians was held on 17 September 2022 to discuss gender mainstreaming in HCFC phase-out projects and to inform them of activities in stage II of the HPMP. Thirty-three women participated in the workshop.

Updated Agreement

20. In view of the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector and the revised funding schedule, the Agreement between the Government of Zimbabwe and the Executive Committee has been updated. Specifically, Appendix 2-A has been revised and paragraph 17 has been added to indicate that the updated Agreement supersedes that reached at the 86th meeting, as contained in Annex I to the present document. The full updated Agreement will be appended to the final report of the 92nd meeting.

Sustainability of the HCFC phase-out and assessment of risks

21. The sustainability of the results has been taken into consideration in HPMP implementation. The customs officers are trained on a regular basis and the ozone issues have been included in the training manual for customs training. The code of conduct for technicians and the curriculum for RAC training have been updated to include components on low-GWP technologies, maintaining energy efficiency and the certification of technicians, and will be used by training institutions. The polytechnic colleges and training centres will continue to train technicians and provide advice on technological issues. Certification of technicians is being implemented to ensure that the technicians are trained and have the skills required to handle flammable and toxic refrigerants. The results achieved and infrastructure established in stage I will continue in stage II and beyond, which will contribute to the sustainable phase-out of HCFCs. A plan to monitor the consumption of HCFCs after the completion of the HPMP in 2030 will be submitted along with the final tranche.

Conclusion

22. Zimbabwe is in compliance with the targets in the Agreement with the Executive Committee and the Montreal Protocol. The Government is implementing a licensing and quota system for imports of HCFCs and has banned the import of HCFC-based equipment to ensure compliance. The standard for the safe handling of flammable and toxic refrigerants, and the MEPS have been developed and will be incorporated into the training curriculum for RAC technicians. Stage I has been extended and will be

⁴ In line with decision 84/92(d), decision 90/48(c) encouraged bilateral and implementing agencies to continue ensuring that the operational gender mainstreaming policy was applied to all projects, taking into consideration the specific activities presented in table 2 of document UNEP/OzL.Pro/ExCom/90/37.

completed by June 2023. The implementation of the first tranche progressed well and 63 per cent of the funds have been disbursed. The second tranche includes additional activities to maintain energy efficiency in the servicing sector submitted in line with decision 89/6. In view of the progress achieved and the funding disbursement of the first tranche, the Secretariat recommends approval of the second tranche.

RECOMMENDATION

- 23. The Fund Secretariat recommends that the Executive Committee:
 - (a) Note:
 - (i) The progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan (HPMP) for Zimbabwe;
 - (ii) The submission of additional activities to maintain energy efficiency in the refrigeration servicing sector in the amount of US \$120,000, plus agency support costs of US \$14,706 for UNEP; and
 - (iii) That the Fund Secretariat has updated the Agreement between the Government of Zimbabwe and the Executive Committee, as contained in Annex I to the present document, specifically: Appendix 2-A, based on inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector referred to in subparagraph (a)(ii) above; and paragraph 17 that has been added to indicate that the updated Agreement supersedes that reached at the 86th meeting.
- 24. The Fund Secretariat further recommends blanket approval of the second tranche of stage II of the HPMP for Zimbabwe, and the corresponding 2023–2027 tranche implementation plan, at the funding levels shown in the table below, on the understanding that a report on the completion of stage I will be included when the third tranche is submitted.

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage II, second tranche)	312,500	38,297	UNEP
(b)	HCFC phase-out management plan (stage II, second tranche)	150,000	10,500	UNDP

Annex I

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF ZIMBABWE 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

(Relevant changes are in bold font for ease of reference)

17. This updated Agreement supersedes the Agreement reached between the Government of Zimbabwe and the Executive Committee at the 86th meeting of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021- 2022	2023	2024	2025- 2026	2027	2028- 2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	11.57	11.57	11.57	11.57	5.78	5.78	5.78	0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	11.57	11.57	11.57	11.57	5.78	5.78	5.78	0	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	150,000	0	312,500	0	0	192,500	0	105,000	760,000
2.2	Support costs for Lead IA (US \$)	18,844	0	38,297	0	0	23,591	0	12,868	93,600
2.3	Cooperating IA (UNDP) agreed funding (US \$)	100,000	0	150,000	0	0	150,000	0	0	400,000
2.4	Support costs for Cooperating IA (US \$)	7,000	0	10,500	0		10,500	0		28,000
3.1	Total agreed funding (US \$)	250,000	0	462,500	0	0	342,500	0	105,000	1,160,000
3.2	Total support costs (US \$)	25,844	0	48,797	0	0	34,091	0	12,868	121,600
3.3	Total agreed costs (US \$)	275,844	0	511,297	0	0	376,591	0	117,868	1,281,600
4.1.1	Total phase-out of HCI							nnes)		11.57
4.1.2	Phase-out of HCFC-22					ODP tonn	es)			5.29
4.1.3	Remaining eligible con									0.00
4.2.1	Total phase-out of HCI							tonnes)		0.00
4.2.2	Phase-out of HCFC-14						nnes)			0.94
4.2.3	Remaining eligible con									0.00
4.3.1										0.00
4.3.2	Phase-out of HCFC-14 stage (ODP tonnes)									6.11
4.3.3	Remaining eligible con (ODP tonnes)						d pre-blend	ed polyols		0.00

^{*} Date of completion of stage I: 30 June 2023 as per decision 91/11(b).

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