



**United Nations
Environment
Programme**

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/94/57
8 May 2024

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-fourth Meeting
Montreal, 27-31 May 2024
Item 9(c) of the provisional agenda¹

PROJECT PROPOSAL: ZAMBIA

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 UNIDO

¹ UNEP/OzL.Pro/ExCom/94/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Zambia

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2023	2.07 ODP tonnes
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2023		
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					2.07				2.07

(IV) CONSUMPTION DATA (ODP tonnes)			
2009-2010 baseline:	5.00	Starting point for sustained aggregate reductions:	5.00
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	5.00	Remaining:	0

(V) ENDORSED BUSINESS PLAN		2024	2025	2026	Total
UNEP	ODS phase-out (ODP tonnes)	0.67			0.67
	Funding (US \$)	214,700*			214,700
UNIDO	ODS phase-out (ODP tonnes)	0.77			0.77
	Funding (US \$)	183,610*			183,610

*Including US \$79,100 for UNEP and US \$32,100 for UNIDO for additional activities to maintain energy efficiency (decision 89/6).

(VI) PROJECT DATA			2020	2021-2023	2024*	2025-2026	2027	2028-2029	2030	Total
Montreal Protocol consumption limits			3.25	3.25	3.25	1.63	1.63	1.63	0.00	n/a
Maximum allowable consumption (ODP tonnes)			3.25	2.50	2.50	1.63	1.63	1.63	0.00	n/a
Projects costs requested in principle (US \$)	UNEP	Project costs	100,000	0	220,000	0	116,000	0	60,000	496,000
		Support costs	13,000	0	28,600	0	15,080	0	7,800	64,480
	UNIDO	Project costs	50,000	0	139,000	0	0	0	0	189,000
		Support costs	4,500	0	12,510	0	0	0	0	17,010
Funds approved by ExCom (US \$)		Project costs	150,000	0	0	0	0	0	0	150,000
		Support costs	17,500	0	0	0	0	0	0	17,500
Total funds recommended for approval at this meeting (US \$)		Project costs	0	0	359,000	0	0	0	0	359,000
		Support costs	0	0	41,110	0	0	0	0	41,110

*Funding for 2024 includes US \$100,000, plus agency support costs of US \$13,000, for UNEP for additional activities to maintain energy efficiency (decision 89/6).

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Zambia, 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 \$400,110, consisting of US \$220,000, plus agency support costs of US \$28,600, for UNEP and US \$139,000, plus agency support costs of US \$12,510, for UNIDO.² The submission includes a progress report on the implementation of the first tranche, the verification report on HCFC consumption for 2019 to 2023, a request for funding additional activities to maintain energy efficiency in the refrigeration servicing sector,³ and the tranche implementation plan for 2024 to 2027.

Report on HCFC consumption

2. The Government of Zambia reported a consumption of 2.07 ODP tonnes of HCFCs in 2023, which is almost 59 per cent below the country's HCFC baseline for compliance. The 2019-2023 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in Zambia (2019-2023 Article 7 data)

HCFC-22	2019	2020	2021	2022	2023	Baseline
Metric tonnes (mt)	40.00	40.00	39.90	38.20	37.64	90.91
ODP tonnes	2.20	2.20	2.19	2.10	2.07	5.00

3. HCFC-22 was the only HCFC imported into the country from 2019 to 2023 and is used in the refrigeration servicing sector as follows: about 48 per cent for industrial refrigeration, 46 per cent for air-conditioning (AC), 3 per cent for commercial refrigeration and 3 per cent for chillers. HCFC-22 consumption decreased from 56 per cent of the baseline in 2019 to 59 per cent in 2024 due to the enforcement of the licensing and quota system, implementation of activities in the refrigeration servicing sector under the HPMP and the increasing use of ODS alternatives in the refrigeration sector.

Country programme implementation report

4. The Government of Zambia reported HCFC sector consumption data under the 2023 country programme (CP) implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

Verification report

5. The verification report confirmed that the Government was 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 2019 to 2023 was correct (as shown in table 1 above). The verification report concluded *inter alia* that Zambia was in compliance with the targets defined in the Agreement between the country and Executive Committee; and the legislative and regulatory framework was in place to ensure compliance with the Montreal Protocol. The recommendations from the verification report including finalization of the establishment of the online licensing system for ODS and HFCs, revision of the validity of licences from three years to one year, the procurement of refrigerant identifiers for customs entry points; and continued monitoring to combat illegal ODS trade, will be addressed as part of the implementation of the second tranche of stage II of the HPMP. The procurement and maintenance of refrigerant identifiers is discussed in paragraph 14.

² As per the letter of 22 March 2024 from the Zambia Environmental Management Agency (ZEMA) 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.

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

6. Stage I of the HPMP was completed on 30 June 2023, in line with the extension approved by the Executive Committee in decision 90/23. The project completion report was submitted on 29 February 2024.

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

Legal framework

7. Zambia's ODS regulation controls imports and exports of ODS and ODS-based equipment and provides for licensing and quota systems and a requirement for labelling HCFC containers. The registration of ODS importers, and the certification and registration of refrigeration servicing technicians have been mandatory since January 2015. Furthermore, the national ozone unit (NOU) ceased authorizing the import of HCFC-based equipment as of 1 January 2022 in anticipation of the finalization of the gazette process to publish the ban on the import of HCFC-based equipment. The Government of Zambia ratified the Kigali Amendment on 15 March 2021 and the Environmental Law on ODS was amended in 2023 to include HFCs in the licensing system.

8. Seventy customs inspectors (15 female) were trained in two workshops on ODS-related regulations, identification of refrigerants and HCFC-based equipment, application of the 2022 Harmonized System Custom Code to HCFC and HFC imports, and the use of refrigerant identifiers. One additional virtual training workshop on "Control of ODS import and export for Montreal Protocol enforcement" was carried out in December 2022 for customs officers and officers from the Standards Agency. Forty-five participants (11 female and 34 male), including representatives of Namibia and Zimbabwe, attended a regional border dialogue meeting in 2023 to discuss the cross-border movement of refrigerants and HCFC-based equipment.

Refrigeration servicing sector

9. The following activities were implemented in the servicing sector:

- (a) *Development and implementation of technical standards and sustainable public procurement for RAC systems:* Organized one stakeholder consultation workshop to review the draft standards on safe handling of HCFCs, HFCs and hydrocarbon refrigerants, the operation of equipment including refrigerant identifiers, and refrigeration recovery and recycling machines; submitted the aforementioned draft standards to the Standards Agency for finalization; organized training for 20 public procurement officers on the criteria to acquire the RAC equipment, and an awareness workshop for 30 stakeholders (importers, industry representatives and end users) to promote low-GWP refrigerant based equipment;
- (b) *Enhancement of the RAC technicians certification scheme:* Developed the training module on the safe use of hydrocarbons in collaboration with the Northern Technical College (NORTEC) to be included in the good servicing practices training programme; revised the certification scheme to include the hydrocarbons training module; trained 75 RAC technicians and other large end-users, including 20 women, in three workshops on good servicing practices including servicing cold storages and other large end-users; conducted two trainers training sessions on domestic and commercial hydrocarbon-based refrigeration for 28 RAC technicians, including three females; and

- (c) *Strengthening the centres of excellence and technical assistance:* Procured and delivered equipment⁴ and one refrigerant identifier to the NORTEC training centre in October 2022 to be utilized for training RAC technicians on good service practices; in collaboration with UNIDO, a training workshop was held to train eight trainers on hydrocarbon-based and other procured equipment; awareness materials were developed; and capacity building and trials on low-GWP and safe handling of refrigerants conducted; and trials were conducted on the performance of various alternative technologies.

Project implementation and monitoring

10. Of the US \$20,000 approved for project monitoring, US \$5,000 was disbursed to support monitoring and implementation of stage II including three field visits to ensure compliance with best practices in the RAC servicing sector and US \$15,000 redistributed to other activities.

Level of fund disbursement

11. As of April 2024, of the US \$150,000 approved so far (US \$100,000 for UNEP and US \$50,000 for UNIDO), US \$146,500 (97.7 per cent) had been disbursed (US \$100,000 for UNEP and US \$47,900 for UNIDO). The balance of US \$2,100 will be disbursed in 2024.

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

12. The following activities will be implemented between July 2024 and June 2027:

- (a) *Strengthening the enforcement of ODS regulations:* drafting standard operational procedures for revising the quota allocation approach, licensing application/approval, and data reporting process for various stakeholders including the RAC association and importers; launching an online Montreal Protocol controlled substances license application and quota allocations system; capacity-building for 20 customs trainers on the revised ODS legislation and procedures, and training workshops for 75 customs and enforcement officers on the Montreal Protocol, the revised national legal framework on ODS and the prevention of illegal HCFC trade; production of one training video for environmental inspectors on regulations for controlled substances; and procurement of five portable ODS identifiers for customs (UNEP) (US \$35,000) and (UNIDO) (US \$20,000);
- (b) *Development and implementation of technical standards for RAC systems:* conducting a needs assessment study with regards to the introduction of relevant international standards for flammable refrigerants in Zambia; developing technical standards to minimize the risk of using low-GWP technology systems during the installation, operation, maintenance, and decommissioning of RAC equipment; organizing at least two stakeholder consultation workshops to finalize the national RAC standards; printing and disseminating the RAC standards; conducting five capacity building workshops to train 100 participants (environmental inspectors, NOU staff and officers from the Zambia Bureau of Standards) on RAC standards (UNEP) (US \$45,000);
- (c) *Strengthening the RAC technician certification scheme:* training and certification of 225 refrigeration technicians to ensure best practices in handling flammable refrigerants and adoption of refrigerant leakage prevention measures; promoting the hiring of certified technicians through mass media and meetings with groups of end-users (e.g., hotels, restaurants, supermarkets); and providing technical support to the RAC Association of

⁴ Tube cutters, deburring tool (2), flare and swag kit, brazing handle with igniter, tube benders, open, pipe and socket wrench sets, screwdrivers, allen keys, pliers, flat spanner set, steel file sets (4), and a power drill.

Zambia to monitor the application of the association's codes of conduct (UNEP) (US \$35,000);

- (d) *Strengthening the three existing centres of excellence and creating two new centres:* delivery of two sets of equipment for good practices (e.g., refrigerant recovery units, refrigerant identifiers, vacuum pumps and service tools) for two new centres of excellence, and five sets of equipment and tools for the handling of hydrocarbons to all five centres; feasibility study and development of the business model for establishing a recovery and re-use scheme and the procurement of equipment for one reclaim centre (e.g. one reclaim unit for multiple non-flammable refrigerants, refrigerant identifier and laboratory items for simple quality check of reclaimed refrigerant; recovery units, cylinders of 100 lbs and 30 lbs, a storage tank for unintended mixtures, and scales); (UNIDO) (US \$139,000 and US \$2,100 remaining budget from the first tranche); and
- (e) *Activities to maintain energy efficiency:* described in detail in the following section (UNEP) (US \$100,000); and
- (f) *Project monitoring:* continue the coordination and monitoring of the HPMP action plan including a consultant to assist NOU in monitoring and collecting data, travel, and workshops/ meetings (UNEP) (US \$5,000).

Activities to maintain energy efficiency in the refrigeration servicing sector

13. The project related to energy efficiency, submitted in line with decision 89/6, has been designed to introduce alternatives to HCFCs with low or zero GWP and to maintain energy efficiency in the refrigeration sector as per paragraphs b(iii) and (v). The description and proposed cost of activities to maintain energy efficiency in the sector to be implemented by UNEP include:

- (a) *Cooperation and collaboration for policy enhancement:* developing the collaboration framework between the NOU and the Energy Regulatory Commission to facilitate coordination for policy enhancement and introduction of minimum energy performance standards (MEPS) and labelling for domestic refrigerators and freezers and potentially other appliances in the future; analysis of the existing national and international legislation on energy efficiency for the refrigeration, air-conditioning and heat pump (RACHP) sector, identification of existing gaps in the country legislation, and outlining ways to update the country regulatory framework on MEPS and labelling for energy efficiency and GWP, including a methodology for their application and monitoring the imports of labelled RAC equipment; and one information note for decision makers and main stakeholders highlighting the critical points of the programme (US \$25,000);
- (b) *Capacity building of decision makers:* five-day study tour for representatives from the Ministry of Environment, the NOU, the Energy Regulatory Authority, and the Zambia Bureau of Standards to China to learn about their latest development on low-GWP alternative technology and their experience on energy efficiency rating standards, labelling and testing (US \$20,000);
- (c) *Coordination meetings and workshops:* establish and operate a working group, including the Zambia Bureau of Standards, to develop MEPS, energy-efficiency and GWP labels and a plan for their application, and also to monitor equipment imports in coordination with the Customs General Administration and other enforcement trade agencies (US \$20,000);
- (d) *Development of economic analysis, report, and infographics:* financial analysis to compare the energy efficiency and lifetime costs of RACHP equipment currently available in the

Zambian market; and developing two infographics on energy-efficiency labels and the ODP and GWP values of refrigerants that demonstrate the economic and environmental benefits of low and zero GWP equipment; printing and distribution of 3,000 copies of infographics to industry, schools and law enforcement officers (US \$14,000);

- (e) *Workshops*: At least one awareness raising workshop for 25 equipment importers and end-users on MEPS and energy-efficiency; and at least one training workshop for 20 customs and trade officers on monitoring and inspection of labelled refrigerant-based products and their energy efficiency classification (US \$11,000); and
- (f) Awareness and outreach campaign targeting RAC technicians, retailers, and end-users on the benefits of low-GWP refrigerant energy efficient appliances (US \$10,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption and verification

14. The verification report noted that some refrigerant identifiers distributed to Customs officers were no longer functional and recommended the procurement of further identifiers. UNEP explained that modern refrigerant identifiers⁵ had been purchased including identifiers for CO₂ and ammonia. The NOU has two of the identifiers, which are maintained by the Zambia Environmental Management Agency (ZEMA) equipment officer, and the rest were distributed to the Customs department. Training on the use of identifiers was carried out in 2022 and 2023. UNEP noted the main challenge was the difficulty in obtaining spare parts for older refrigerant identifiers which is exacerbated by the limited number of identifiers in the country. UNEP will coordinate with UNIDO to resolve the matter of maintenance of refrigerant identifiers.

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

Legal framework

15. The Government of Zambia has already issued the HCFC import quota for 2024 as 2.5 ODP tonnes, which is in accordance with the maximum allowed consumption of the Agreement with the Executive Committee and lower than the Montreal Protocol control targets.

Refrigeration servicing sector

Development and implementation of technical standards and sustainable public procurement for RAC systems

16. A draft standard operation procedure (SOP) for quota allocation, licensing application, and data reporting processes was prepared in November 2023, which included recommendations from key stakeholders. UNEP explained that the NOU plans to start using the SOP in the third quarter of 2024. The Secretariat noted that the NOU had prepared proposed process flowchart for the development of the online licensing system, including a list of relevant documents to be included in the online licensing platform. UNEP advised that the online system, the Environmental Management System (EMS), should be operational by December 2024 noting that the system is separate from, but synchronised with, the ASYCUDA⁶ system. Government officers and the private sector will be trained on the use of the online

⁵ Refrigerant identifiers that can detect HCFC-22, R-134, R-600, R-410 and R400.

⁶ Automated System for Customs Data

platform under the second tranche of stage II of the HPMP. The online system will be used to receive applications from the importers for refrigerants (not equipment) including HFCs.

17. As ASYCUDA and the EMS will be synchronised, the online licence will be transmitted directly to the Custom department. However, the quota will be monitored from within the ASYCUDA system and once an import quota is exceeded, the import registration will not be authorised. UNEP advised that the online EMS will not contain data on price, country of origin or type of cylinders although this information will be available from the ASYCUDA system.

Enhancement of the RAC technician's certification scheme

18. The training module on the safe use of hydrocarbons was developed in collaboration with the Northern Technical College (NORTEC) and will be delivered as part of the training programme on good servicing practices under the HPMP. RAC lecturers from NORTEC are also involved in delivering the training courses including those on flammable refrigerants. To achieve certification, the technicians must obtain a technical college training certificate which includes training on the safe handling of refrigerants.

19. UNEP informed the Secretariat that the process to incorporate the revised good servicing practice training into the regular training courses offered by technical and vocational education and training (TVET) institutes will start by the end of 2024 for completion by December 2025. During the first tranche of stage II, the main topics included in good servicing practice training were: tools and equipment servicing and repair; best servicing practices; safe handling of hydrocarbon refrigerants; servicing hydrocarbon-based air-conditioners; and national laws governing refrigerant management.

Strengthening the centres of excellence and technical assistance

20. In response to a question on the feasibility assessment for establishing a refrigerant recovery and re-use scheme and developing the business model for operating a reclaim centre, UNEP explained that the results from the survey carried out indicated a need for the establishment of a recovery and re-use scheme in the country and identified challenges to make it functional. For instance, most small and medium-sized enterprises do not have recovery machines, and lack of trained technicians in the informal sector on recovery and re-use technology. Thus, UNIDO will support the country in developing the business model for establishing a recovery and re-use scheme before acquiring the reclaiming station.

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

Project monitoring

21. In response to a query from the Secretariat, UNEP explained that the HPMP coordinator is supported under the institutional strengthening (IS) project and thus US \$5,000 of funding would be sufficient to cover HPMP monitoring and coordination in the second tranche of stage II of the HPMP.

Activities to maintain energy efficiency in the refrigeration servicing sector

22. 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. UNEP informed the Secretariat that there is no non-Multilateral Fund funding supporting energy efficiency-activities in the RAC area in Zambia and that the country is yet to establish a National Cooling Action Plan. The Secretariat noted that Zambia is part of the Southern African Development Community (SADC) and that in February 2024 SADC formally approved harmonized regional MEPS for air conditioners and residential refrigeration appliances. The Secretariat understands that the regional MEPS

have been distributed to SADC member states to adopt the harmonized standards into national regulations⁷ and UNEP confirmed that Zambia will adapt the MEPS for the national RAC sector. Energy labelling in the context of MEPS is mandated with the Energy Regulation Act and the Environmental Management

23. The additional activities are designed to increase coordination among the key stakeholders in Zambia and to raise awareness of the benefits of adopting low-GWP and energy efficient technologies among consumers. The sustained adoption of low-GWP equipment will be achieved through training and changes in the law so that the MEPS and labelling system would be mandatory for imported new domestic refrigerators and freezers. UNEP indicated that Zambia would consider banning the import of certain types of RAC equipment, such as HFC-based equipment manufactured within ten years so that the Government can circumscribe the MEPS application to fewer types of equipment, which would lower the associated cost of MEPS implementation and monitoring. ZEMA would be responsible for management of the MEPS and labelling for refrigerator and freezer imports and the agency's environmental inspectors would monitor MEPS and labelling in the national market.

24. Regarding the study tour, UNEP explained that China is the region's largest country supplier of air conditioners and added that the study tour would allow the trainer to see modern equipment unavailable in Zambia. Furthermore, the direct learning of the Zambian government officers from the Chinese industry and government about implementing their MEPS and labelling systems will enrich their views on developing and implementing the Zambia MEPS and labelling systems.

25. UNEP informed the Secretariat that the additional activities would be completed within 18 months of approval based on the expected date of implementation of the sub-components as indicated in Table 2 below. The project budget, also indicated in table 2, had been adjusted for two sub-components following discussions with the Secretariat.

Table 2. Budget for Activities to maintain energy efficiency in the refrigeration servicing sector

Component/Activity	Proposed date implementation	Budget (US\$)
1: Cooperation and Collaboration for Policy Enhancement and Introduction of MEPS		
1.1: Development of analysis, report, and information note	Sept. 2024	25,000
1.2: Study tour to China with already established labelling system	Nov. 2024	20,000
1.3: Coordination meetings/workshops	Feb/Mar 2025	20,000
Total Component 1:		<i>65,000</i>
2: Awareness and Outreach Programmes		
2.1: Development of economic analysis, report, and printed infographics	May 2025	17,000
2.2: Workshops	July 2025	8,000
2.3: Awareness campaign and development of materials	August 2025	10,000
Total Component 2:		<i>35,000</i>
GRAND TOTAL		100,000

Gender policy implementation

26. In accordance with the Multilateral Fund's decisions on gender mainstreaming 84/92(d) and 90/48(c), the Government of Zambia has encouraged the involvement of women in training activities conducted under the first tranche of stage II. The NOU supported the collection of sex-disaggregated data and identified specific indicators and targets. As a result, 33 per cent of project staff, technical experts, and consultants were women. A database of women experts was developed for future contracts. With regard to

⁷ <https://united4efficiency.org/harmonized-regional-meps-for-cooling-products-approved-for-sadc-region/>

meetings and training, the level of women's participation was 49 per cent in stakeholder consultation meetings; 2 per cent in RAC technicians training (reflecting the small number of women working in this field in the country); 66 per cent of customs officers; and 76 per cent of import brokers. Eleven of the forty-five participants attending the regional border dialogue in 2023 were women.

Updated Agreement

27. In view of the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector, and the accordingly revised funding schedule, the Agreement between the Government of Zambia 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 94th meeting.

Sustainability of the HCFC phase-out and assessment of risks

28. The Secretariat discussed with UNEP the risks to successful HCFC total phase-out and the sustainability of HPMP achievements. UNEP expressed confidence that the HPMP targets will continue to be met due to the success of the activities implemented so far which have contributed to improving the servicing practices of RAC technicians and ensuring the effectiveness of the licensing and quota system to control ODS imports. Additionally, since 1 January 2022, the country has ceased to grant licences for the import of HCFC-based equipment which will contribute to the reduction of consumption of HCFCs in the country. The General Customs Administration is regularly training customs and enforcement officers on the controlled substances under the Montreal Protocol, employing customs trainers who were previously trained through HPMP trainer training. In the servicing sector, technical and vocational education institutes (TVET) have incorporated good practices and the safe use of alternative refrigerants into their training curriculum, and the equipment provided to training centres has enhanced their capacity to support the RAC technician training. The equipment acquired and distributed under the first tranche will ensure the long-term sustainability of training on natural refrigerant alternatives. Furthermore, to ensure the sustainability of the professionalization of the servicing sector, the country will launch the certification of technicians and a code of conduct on servicing in close cooperation with servicing associations as part of the second tranche of stage II. The additional activities on energy efficiency will result in positive impacts on environmental sustainability due to more energy efficient RACHP appliances and it will be sustained through the mandatory labeling regulation as well as capacity building of the government officers and main importers, and public awareness raising .

29. UNEP noted that the risks associated with the implementation of stage II of the HPMP could be controlled, for example the timely implementation of activities, the lack of trainers, and changes to government. Regarding the lack of availability of low-GWP alternative technology in the market, UNEP assessment was that the high prices of alternatives was the cause of this challenge, and that it could be mitigated through larger volume of imports. With regard to potential illegal imports, UNEP indicated that Zambia needs to improve borders monitoring

Conclusion

30. The Government of Zambia has been enforcing its HCFC import and export licensing and quota system and continues to be in compliance with the Montreal Protocol. HCFC-22 consumption has fallen to 2.07 ODP tonnes in 2023 which is 59 per cent below the HCFC baseline for compliance and 17 per cent below the maximum allowable consumption, and imports of HCFC-based equipment have not been authorized since 1 January 2022. The disbursement rate of funds from the first tranche has reached almost 98 per cent and activities in the servicing sector are progressing well including the development of the online licensing system, training of RAC trainers, the development of the RAC curriculum to include hydrocarbons, and its inclusion in the revised certification scheme. The second tranche includes additional

activities to maintain energy efficiency in the refrigeration servicing sector which aim to enhance coordination between the NOU and the Zambia Energy Regulatory Commission to promote the uptake of energy efficient low-GWP refrigeration equipment and to educate importers, retailers and end-users on the economic benefits of low-GWP energy-efficient appliances. The Secretariat recommends approval of the second tranche to ensure continued implementation of planned activities.

RECOMMENDATION

31. The Fund Secretariat recommends that the Executive Committee note:

- (a) The progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan (HPMP) for Zambia;
- (b) The submission of additional activities to maintain energy efficiency in the refrigeration servicing sector in the amount of US \$100,000, plus agency support costs of US \$13,000, for UNEP; and
- (c) That the Fund Secretariat has updated the Agreement between the Government of the Zambia and the Executive Committee, as contained in annex I to the present document, specifically Appendix 2-A, based on the revised funding level due to the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector referred to in subparagraph (b) above; and paragraph 17 that has been added to indicate that the updated Agreement supersedes that reached at the 86th meeting.

32. The Fund Secretariat further recommends blanket approval of the second tranche of stage II of the HPMP for Zambia, and the corresponding 2024-2027 tranche implementation plan, at the funding levels shown in the table below.

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage II, second tranche)	220,000	28,600	UNEP
(b)	HCFC phase-out management plan (stage II, second tranche)	139,000	12,510	UNIDO

Annex I

TEXT TO BE INCLUDED IN THE AGREEMENT BETWEEN THE GOVERNMENT OF ZAMBIA 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 Zambia and the Executive Committee at the 86th meeting of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025-2026	2027	2028-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	3.25	3.25	3.25	1.63	1.63	1.63	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	3.25	2.50	2.50	1.63	1.63	1.63	0.00	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	100,000	0	220,000	0	116,000	0	60,000	496,000
2.2	Support costs for Lead IA (US \$)	13,000	0	28,600	0	15,080	0	7,800	64,480
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	50,000	0	139,000	0	0	0	0	189,000
2.4	Support costs for Cooperating IA (US \$)	4,500	0	12,510	0	0	0	0	17,010
3.1	Total agreed funding (US \$)	150,000	0	359,000	0	116,000	0	60,000	685,000
3.2	Total support costs (US \$)	17,500	0	41,110	0	15,080	0	7,800	81,490
3.3	Total agreed costs (US \$)	167,500	0	400,110	0	131,080	0	67,800	766,490
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)								3.25
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)								1.75
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)								0.00

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