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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-sixth Meeting
Montreal, 26-30 May 2025
Item 9(c) of the provisional agenda¹

PROJECT PROPOSAL: CAMEROON

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, third tranche) | UNIDO | Blanket approval |
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¹ UNEP/OzL.Pro/ExCom/96/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Cameroon

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (stage II)	UNIDO (lead)	82 nd	75% phase-out by 2025

(II) LATEST ARTICLE 7 DATA (Annex C, Group I)	Year: 2023	24.8 ODP tonnes
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2024	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					22.20				22.20

(IV) CONSUMPTION DATA (ODP tonnes)			
2009–2010 baseline:	88.80	Starting point for sustained aggregate reductions:	77.56
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	54.01	Remaining:	23.55

(V) ENDORSED BUSINESS PLAN		2025	2026	2027	Total
UNIDO	ODS phase-out (ODP tonnes)	0.80	0.00	0.00	0.80
	Funding (US \$)	84,530	0	0	84,530

(VI) PROJECT DATA			2018	2019	2020	2021	2022	2023	2024	2025	Total
Montreal Protocol consumption limits (ODP tonnes)			79.92	79.92	57.72	57.72	57.72	57.72	57.72	28.86	n/a
Maximum allowable consumption (ODP tonnes)			38.08	35.40	32.70	30.10	27.50	24.80	22.20	22.20	n/a
Funding agreed in principle (US \$)	UNIDO	Project costs	517,750	0	0	786,750	0	0	0	79,000	1,383,500
		Support costs	36,243	0	0	55,073	0	0	0	5,530	96,846
Funds approved by ExCom (US \$)		Project costs	517,750	0	0	786,750	0	0	0	0	1,304,500
		Support costs	36,243	0	0	55,073	0	0	0	0	91,316
Total funds recommended for approval at this meeting (US \$)		Project costs	0	0	0	0	0	0	0	79,000	79,000
		Support costs	0	0	0	0	0	0	0	5,530	5,530

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Cameroon, UNIDO as the designated implementing agency has submitted a request for funding for the third and final tranche of stage II of the HCFC phase-out management plan (HPMP), in the amount of US \$79,000, plus agency support costs of US \$5,530.² The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption for 2021 to 2024, and the tranche implementation plan for 2025 to 2026.

Report on HCFC consumption

2. The Government of Cameroon reported under the country programme (CP) implementation report a consumption of 22.20 ODP tonnes of HCFCs in 2024, which is 75 per cent below the country's HCFC baseline for compliance. The Article 7 data for 2024 has not been reported yet. The 2020-2024 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in Cameroon (2020-2024 Article 7 data)

HCFC-22	2020	2021	2022	2023	2024*	Baseline
Metric tonnes (mt)	591.50	536.40	460.00	450.90	403.70	1,614.50
ODP tonnes	32.53	29.50	25.30	24.80	22.20	88.80

* CP data

3. The consumption of HCFCs in Cameroon is decreasing due to the implementation of HPMP activities. These include the application of the import licensing and quota system, the adoption of alternative technologies in refrigeration and air-conditioning (RAC) equipment, including HFCs and those with low global warming potential (GWP) such as R-290, and the provision of training and technical assistance to refrigeration service technicians.

Country programme implementation report

4. The Government of Cameroon 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 2021 to 2023 and under CP implementation report for 2024 was correct (as shown in table 1 above). The report noted that Ministry of Environment's inspectors check various customs entry points for illegal or counterfeit refrigerants, and based on their inputs, the national ozone unit (NOU) takes measures to prevent these products from entering the market. The report also noted the collaboration between the NOU and UNIDO to address the supply chain issues affecting the availability of identifiers.

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

Legal framework

6. The framework law on environmental management has been under review by the Ministry of Environment, Protection of Nature and Sustainable Development since October 2024; it is proposed to be

² As per the letter of 13 March 2025 from the Ministry of Environment, Protection of Nature and Sustainable Development of Cameroon to UNIDO.

submitted to the Prime Minister's Office before the end of 2025 for approval. The Ministerial order as the legal framework for the adoption of safety standards is expected to be issued by the end of 2025.

7. A servicing technician database was developed and is updated yearly after completion of training, registration and certification of technicians. As at the end of 2023, 7,550 technicians in both the formal (2,187) and informal (5,363) sectors had been registered and received a certificate issued by the relevant authorities upon completing their training.

Refrigeration servicing sector

8. During the implementation period, the following activities were implemented:

- (a) *Strengthening the capacities of customs officers and environmental inspectors:* To enhance control and monitoring of ODS and ODS-related equipment, 34 control posts for environmental officers were established. A training workshop was conducted for 52 customs and enforcement officers and environmental inspectors, including eight women, and two orientation sessions were held for 75 customs and environmental enforcement officers. These trainings focused on controlling and monitoring illegal trade of ODS and equipment containing ODS, monitoring and verifying "Visa Techniques"³ and ODS quotas, using the new harmonized systems code effective since 1 January 2022, and utilizing refrigerant identifiers;
- (b) *Training of RAC servicing technicians:* A total of 289 RAC technicians were trained on good servicing practices, consumption reductions, adoption of low-GWP alternatives and recovery and recycling (R&R). A code of good practices for the servicing sector was developed, emphasizing the importance of R&R. A training session was held for additional 55 service technicians on R&R and the use of flammable and toxic low-GWP alternative technologies;
- (c) *Establishment of centres of excellence for service sector training:* Two centres (the Limbe Advanced Vocational Training Centre (LAVTC) and the Douala Advanced Vocational Training Centre (DAVTC)) were selected for infrastructure strengthening to provide training for certification of RAC technicians. Their curriculum will be updated to include safe handling of low-GWP refrigerants. Technical specifications for upgrading the centres' infrastructure, including the purchase of fire safety systems, were prepared. Rehabilitation work at DAVTC is complete pending final site inspection by the NOU and UNIDO, and that at LAVTC is ongoing;
- (d) *Recovery and recycling:* Equipment and tools were procured and delivered to 37 beneficiaries (e.g., R&R machines, recovery cylinders, flexible kits, piercing and pinching pliers). A survey was conducted to understand current refrigerant management practices and identify interventions to promote good servicing practices, and the findings of the survey were presented to stakeholders. A business logbook for RAC equipment servicing was developed and distributed to importers, distributors, maintenance workshops, end users, and the RAC association. An initial assessment of the logbook shows that a RAC service workshop can recover 9-12 kg of HCFC/HFC monthly, potentially earning an additional 30,000 FCFA⁴ (approximately US \$52) per month;
- (e) *End-user programme:* The fisheries sector, which uses HCFC-22-based commercial refrigeration equipment, was prioritized, with the Artisanal Maritime Fisheries

³ A license issued to importers of ODS and ODS-based equipment to monitor the demand and supply of refrigerants and goods.

⁴ Central African CFA franc, currency of six independent states of Central Africa.

Development Authority (MIDEPECAM) identified as the beneficiary. To gain firsthand understanding of R-290-based alternatives, a study tour to Nigeria was organized for commercial refrigeration installers, including consultations with the equipment manufacturer. MIDEPECAM agreed to purchase four R-290-based ice-making machines co-financed by Food and Agriculture Organization (FAO); two machines have been purchased by UNIDO and are expected to be installed in Douala by the third quarter of 2025. The other two machines are being procured by FAO. The machines will be operated by technicians trained in handling flammable refrigerants.

Project implementation and monitoring

9. A total of US \$50,000 was disbursed to hire three staff members. The balance of US \$5,000 will be disbursed for travel to visit project sites.

Level of fund disbursement

10. As of March 2025, of the US \$1,304,500 approved so far, US \$759,139 had been disbursed, as shown in table 2. The balance of US \$545,361 will be disbursed by December 2026.

Table 2. Financial report of stage II of the HPMP for Cameroon (US \$)

Funding tranche	Funds approved	Funds disbursed	Disbursement rate (%)	Fund balance
First	517,750	388,398	75.0	129,352
Second	786,750	370,741	47.1	416,009
Total	1,304,500	759,139	58.2	545,361

Implementation plan for the third and final tranche of stage II of the HCFC phase-out management plan

11. The following activities will be implemented between June 2025 and December 2026:

- (a) *Regulatory updates and capacity building of enforcement officers:* Regular inspection of informal servicing workshops for compliance checking; assisting at least 10 informal servicing workshops in completing the training and being registered in the servicing technician database; procuring 10 refrigerant identifiers and training of 53 customs officers on monitoring and control of HCFCs and processes to prevent any illegal trade of ODS (US \$10,000, plus US \$137,000 from previous tranches);
- (b) *Training in the RAC sector:* Training of at least 110 technicians in good service practices and R&R with specific training sessions for female technicians in the informal sector (US \$34,000, plus US \$46,000 from previous tranches);
- (c) *End-user component:* Procurement of 95 cylinders of R-290 refrigerants for servicing support for the HC-based equipment purchased (US \$20,000, plus US \$10,000 from previous tranches); and
- (d) *Project monitoring* (US \$15,000, plus US \$5,000 from previous tranche): Hiring of new staff and consultants to monitor and report on activities.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

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

Legal framework

12. The Government of Cameroon has already issued HCFC import quotas for 2025 at 22.20 ODP tonnes, which is lower than the Montreal Protocol control targets and in accordance with the maximum allowable consumption for that year.

13. UNIDO confirmed that the administrative process for finalizing and issuing safety standards for flammable refrigerants is in progress and that the Ministerial order establishing the legal framework for these standards is expected to be issued by December 2025.

Delays in implementation

14. Upon clarification on the delays in implementation of activities, UNIDO explained that political unrest in the country from 2022 to 2024 caused disruptions in conducting training activities for RAC service technicians and customs and enforcement officers. As the situation has now improved, these training activities are expected to be implemented expeditiously.

Implementation plan for the third and final tranche of stage II of the HCFC phase-out management plan

Refrigeration servicing sector

15. Concerning the requirements of decisions 72/17 and 73/34 for eventual retrofitting of RAC equipment, UNIDO indicated that the practice of retrofitting HCFC-based equipment using flammable refrigerants is not prevalent in the country.

End-user incentive programme

16. The Secretariat had detailed discussions on the status of the end-user incentive programme. UNIDO explained that, of the total reallocated funding of US \$100,000, there was a remaining balance of approximately US \$10,000. This amount, along with the funds allocated in the third tranche of US \$20,000, will be used to procure 95 cylinders (13.6 kg each) of R-290 refrigerants. HCFC-22 from the existing equipment that are replaced would be recovered and reused in other equipment, and the old equipment will be rendered unusable in accordance with the national regulations. The project is expected to be completed by December 2026. Upon completion, UNIDO will submit a final report on its implementation, including the HCFC phase-out and energy-efficiency gains achieved, in line with decision 92/36(g).

Gender policy implementation

17. The Government of Cameroon and UNIDO are fully committed to implementing the Multilateral Fund's operational policy on gender mainstreaming. Sex-disaggregated data on training activities and other consultative meetings/workshops are collected during project implementation. The Government also takes measures to increase awareness on the gender policy and encourage women's participation in different HPMP activities.

Sustainability of the HCFC phase-out and assessment of risks

18. To ensure the long-term sustainability of the HPMP, the Government of Cameroon will continue to strengthen regulations for controlling and monitoring HCFCs. Through this project and future stage III of the HPMP, the country will also continue providing training to service technicians on good practices, including safe servicing of equipment using alternatives. The end-user incentive programme and awareness activities will result in the adoption of low-GWP alternatives, including R-290, in various applications. These efforts will be combined with activities from stage I of the Kigali HFC implementation plan (KIP) approved at the 92nd meeting. Together, these initiatives will support the sustainability of HCFC phase-out. The risks associated with the adoption of low-GWP alternative technologies will be addressed through ongoing training activities and additional technical support from equipment suppliers. Delays due to administrative and other factors will be managed by the NOU in consultation with UNIDO, with periodic monitoring and relevant corrective actions.

Conclusion

19. Cameroon's import licensing and quota system is fully automated and operational. The HCFC import quota for 2025 was equal to the maximum allowable consumption set in the country's Agreement with the Executive Committee. Efforts to strengthen the capacity of customs and enforcement officers and servicing technicians will continue to support the HCFC phase-out. Planned actions under the third tranche include further enhancement of the capacity of customs officers and RAC technicians, an end-user incentive programme for replacing RAC equipment using HCFC-22 with R-290-based technology, and completion of the remaining HPMP activities. These activities will be coordinated with those from stage I of the KIP. Stage III of the HPMP is expected to be submitted at the 97th meeting.

RECOMMENDATION

20. The Fund Secretariat recommends that the Executive Committee:

- (a) Note the progress report on the implementation of the second tranche of stage II of the HCFC phase-out management plan (HPMP) for Cameroon;
- (b) Note also that, upon completion of the end-user project included in stage II of the HPMP, UNIDO will submit a final report on the implementation of that project, including the HCFC phase out and energy-efficiency gains achieved in line with decision 92/36(g); and
- (c) Request the Government of Cameroon and UNIDO to submit a final progress report on the implementation of the work programme associated with the final tranche and the project completion report to the first meeting of the Executive Committee in 2027.

21. The Fund Secretariat further recommends blanket approval of the third and final tranche of stage II of the HPMP for Cameroon and the corresponding 2025-2026 tranche implementation plan at the funding level shown in the table below.

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage II, third tranche)	79,000	5,530	UNIDO