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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-ninth Meeting
Montreal, 7–11 December 2026
Item 9(c) of the provisional agenda[1]

PROJECT PROPOSAL: ETHIOPIA

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)	UNEP and UNIDO	Blanket approval

[1] UNEP/OzL.Pro/ExCom/99/1

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.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Ethiopia

PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (stage II)	UNEP (lead), UNIDO	88th	100% phase-out by 2030

ARTICLE 7 DATA (Annex C, Group I)	Year: 2025	1.71 ODP tonnes

COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2025
Substance	Aerosol	Foam	Firefighting	Refrigeration		Solvent	Total sector consumption
				Manufacturing	Servicing		
HCFC-22					1.71		1.71

CONSUMPTION DATA (ODP tonnes)			
2009–2010 baseline:	5.50	Starting point for sustained aggregate reductions:	5.50
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	5.50	Remaining:	0.00

ENDORSED BUSINESS PLAN		2026	2027	2028	Total
UNEP	ODS phase-out (ODP tonnes)	0.51	0.00	0.00	0.51
	Funding (US $)	110,740	0	0	110,740
UNIDO	ODS phase-out (ODP tonnes)	0.19	0.00	0.00	0.19
	Funding (US $)	40,330	0	0	40,330

PROJECT DATA			2021	2022-2023	2024	2025	2026	2027-2029	2030	Total
Consumption (ODP tonnes)	Montreal Protocol limits		3.58	3.58	3.58	1.79	1.79	1.79	0.00	n/a
	Maximum allowable		3.58	3.58	3.58	1.79	1.79	1.79	0.00	n/a
Amounts approved in principle (US $)	UNEP	Project costs	137,000	0		200,000	98,000	0	63,000	498,000
		Support costs	17,810	0		26,000	12,740	0	8,190	64,740
	UNIDO	Project costs	60,000	0		90,000	37,000	0	0	187,000
		Support costs	5,400	0		8,100	3,330	0	0	16,830
Funds approved by ExCom (US $)		Project costs	197,000	0		290,000	0	0	0	487,000
		Support costs	23,210	0	0	34,100	0	0	0	57,310
Total funds recommended for approval at this meeting (US $)		Project costs	0	0	0	0	135,000	0	0	135,000
		Support costs	0	0	0	0	16,070	0	0	16,070

Secretariat's recommendation:	Blanket approval

PROJECT DESCRIPTION

1. On behalf of the Government of Ethiopia, UNEP as the lead implementing agency has submitted a request for funding for the third tranche of stage II of the HCFC phase-out management plan (HPMP), at a total cost of US $151,070, consisting of US $98,000, plus agency support costs of US $12,740, for UNEP and US $37,000, plus agency support costs of US $3,330, for UNIDO.[2] The submission includes a progress report on the implementation of the second tranche and the tranche implementation plan for 2027 to 2030.

Report on HCFC consumption

2. The Government of Ethiopia reported a consumption of 1.71 ODP tonnes of HCFCs in 2025, which is 69 per cent below the country's HCFC baseline for compliance. The 2021–2025 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in 2021–2025 in Ethiopia (Article 7 data)

HCFC-22	2021	2022	2023	2024*	2025	Baseline
Metric tonnes (mt)	61.20	57.62	61.20	60.00	31.03	100.00
ODP tonnes	3.37	3.17	3.37	3.30	1.71	5.50

*The 2024 consumption of 18.46 mt (1.02 ODP tonnes) reported to the 96th meeting and confirmed by the verification report on HCFC consumption for 2020 to 2024,[3] did not reflect the full consumption for that year (see paragraph 11 below).

3. HCFC-22 is the only HCFC consumed in Ethiopia and is used for servicing refrigeration and air-conditioning (RAC) equipment, mainly in residential and commercial air-conditioning, commercial refrigeration, cold rooms and cold-chain facilities. Consumption remained stable at around 60 mt between 2021 and 2024 and then decreased by 48 per cent to 31.03 mt in 2025. The decrease in HCFC consumption in 2025 reflects the reduction of the HCFC import quota in line with the required 67.5 per cent reduction step under the Montreal Protocol, the implementation of activities in the refrigeration servicing sector under the HPMP, the progressive retirement of existing HCFC-22-based equipment, and the introduction of alternatives.

Country programme implementation report

4. The HCFC consumption data provided by the Government of Ethiopia in its CP implementation report for 2025 is consistent with the data reported under Article 7 of the Montreal Protocol.

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

Legal framework

5. The main legislative instrument in Ethiopia is the Control of Ozone Layer Depleting Substances Proclamation No. 716/2011, which establishes an HCFC import and export licensing and quota system, administered by the Environmental Protection Authority through the National Ozone Unit (NOU), in coordination with the Customs Commission and the Ministry of Trade and Regional Integration. Only registered importers receive quotas. The licensing and quota system is now supported by an online licensing, import authorization and recording system, through which the NOU reviews and endorses import permit applications before licences are issued. Registered importers must also submit annual returns on the quantities authorized, imported, sold or held in stock.

[2] As per the letter of 3 September 2026 from the Environmental Protection Authority of Ethiopia to the Secretariat.
[3] UNEP/OzL.Pro/ExCom/96/35

Refrigeration servicing sector

6. The following activities were implemented under the second tranche:

(a) *ODS policy and regulations*: Conducted four training and awareness workshops for 120 customs officers, law enforcement officers and other stakeholders (42 women); trained 95 standards officers, environmental inspectors and other stakeholders (34 women) on the enforcement of controlled substances and equipment related policies and standards; and inspected 45 consignments of imported RAC equipment and refrigerants. No illegal trade or counterfeit refrigerants were detected at the 14 border control points during the period 2025–2026;

(b) *Customs and enforcement training:* Held one border dialogue on preventing illegal trade in controlled substances and counterfeit refrigerants for 38 participants (13 women); trained 18 national trainers (seven women); and conducted four workshops on standards and ODS regulations for 128 customs, consumer protection and other law enforcement officers (46 women). In addition, six refrigerant identifiers have been delivered to customs and deployed at six border control points; and

(c) *RAC technician training and certification*: Trained and certified 320 RAC technicians (80 women) in good servicing practices, in collaboration with vocational training institutions and industry partners. Trainings covered refrigerant recovery, leak prevention, safe refrigerant handling and the safe use of low-global-warming-potential (GWP) and flammable alternatives.

Activities to maintain energy efficiency in the refrigeration servicing sector

7. A national coordination mechanism comprising 56 stakeholders (24 women) from the NOU, energy and standards authorities, customs, the RAC sector and training institutions, was established to coordinate the implementation of minimum energy performance standards (MEPS) and the transition to energy-efficient, low-GWP RAC equipment. Training covered MEPS enforcement at borders for 45 customs officers (13 women); installation and servicing of energy-efficient, low-GWP equipment for 40 RAC technicians (five women); and MEPS compliance and market surveillance for 30 compliance monitoring experts (nine women). A study visit to Kenya for 20 stakeholders (eight women) covered labelling, appliance registration and market surveillance and will inform an implementation strategy for energy efficiency standards and labelling. Awareness activities included one video, 20 banners, two workshops and media briefings (72 participants and 12 media representatives), a national roadshow for 350 participants (145 women) and six community demonstrations on reading energy labels for 720 participants (315 women).

Project implementation and monitoring

8. Four monitoring meetings were held with 52 stakeholders (20 women) from the NOU, energy authorities, vocational training institutions and the RAC sector. The US $10,000 approved for project monitoring under the second tranche was fully disbursed for reviewing licensing, quota and import data and verifying consumption data (US $2,000), following up on import controls (US $2,000), verifying training results (US $2,000), reviewing expenditures (US $2,000) and reporting (US $2,000).

Level of fund disbursement

9. As of September 2026, of the US $487,000 approved so far, US $356,700 had been disbursed (US $297,000 for UNEP and US $59,700 for UNIDO), as shown in table 2. The balance of US $130,300 will be disbursed in 2027 and 2028.

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

Tranche		UNEP	UNIDO	Total	Disbursement rate (%)
First	Approved	137,000	60,000	197,000	99.8
	Disbursed	137,000	59,700	196,700	
Second	Approved	200,000	90,000	290,000	55.2
	Disbursed	160,000	0	160,000	
Total	**Approved**	337,000	150,000	487,000	**73.2**
	Disbursed	297,000	59,700	356,700	
	Balance	40,000	90,300	130,300	

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

10. The following activities will be implemented between January 2027 and December 2030:

(a) *ODS policy and regulations:* Four training workshops for at least 100 customs, environmental inspection and enforcement officers on regulatory implementation and standards, and sensitization of the general public; four capacity-building workshops for 70 standards officers, environmental inspectors and other stakeholders; regular inspections of imported RAC equipment and refrigerants at entry points; and the establishment of systematic cross-checking of import permits against customs entries and of customs endorsement of actual imports against allocated quotas, expected in early 2027 (UNEP) (US $20,000);

(b) *Strengthening of customs and enforcement:* One cross-border dialogue with at least 30 representatives of customs, environmental, border control and law enforcement bodies from Ethiopia and neighbouring countries; training of 15 trainers; and four workshops for 100 customs officers, consumer protection and other enforcement officers on the identification and control of imports of controlled substances (UNEP) (US $28,000);

(c) *Capacity-building and certification of RAC technicians*: Training and certification of 225 RAC technicians in good servicing practices, including refrigerant recovery and recycling, leak detection and the handling of low-GWP refrigerants, and an assessment of the availability and condition of training units at the vocational training centres (UNEP) (US $30,000);

(d) *Provision of equipment for vocational training centres and refrigerant reclamation*: Distribution of the tools procured under the first tranche to five vocational training centres once their site readiness has been confirmed (first quarter of 2027); procurement and distribution of four sets of servicing toolkits, including tools for hydrocarbon refrigerants[4] to four vocational training centres; and establishment of two refrigerant reclamation centres in Addis Ababa, including the development of a business model (first quarter of 2027), to be completed before the procurement and installation of multi-refrigerant reclaim units (UNIDO) (US $37,000, plus US $90,300 from previous tranches);

(e) *Activities to maintain energy efficiency (decision 89/6*): Completing training on MEPS enforcement, compliance and energy-efficient, low-GWP technologies for 40 customs officers, 30 RAC technicians and 20 compliance monitoring experts; MEPS compliance inspections and market surveillance, including a tracking database and a compliance and market-surveillance report; finalizing the implementation strategy for energy-efficiency

[4] Recovery machines, manifold gauges, leak detectors, vacuum pumps and safety equipment

standards and labelling by mid-2027; and awareness activities, including a video with infographics (UNEP) (US $40,000 from previous tranche); and

(f) *Project monitoring*: Monitoring visits (US $10,000) and four stakeholder meetings (US $10,000) (UNEP).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption and verification of 2024 consumption data

11. The 2024 HCFC-22 consumption of 18.46 mt (1.02 ODP tonnes) was reported to the 96th meeting and confirmed by the verification report on HCFC consumption for 2020–2024.[5] It differs from the 60.00mt (3.30 ODP tonnes) reported for 2024 under Article 7 and in the CP data. UNEP clarified that the verification report submitted to the 96th meeting originally covered the period 2021–2023, and it was subsequently revised and resubmitted to include the year 2024. The verification for 2024 took place during a period of instability in the country, which limited access to stakeholders and import documentation. Data collection was therefore incomplete, and the reported figure did not reflect actual consumption. The relevant importers then disclosed additional import information after further engagement and awareness-raising. This information was reconciled with official national records and confirmed that actual HCFC-22 consumption in 2024 was 60.00 mt (3.30 ODP tonnes), consistent with the Article 7 and CP data. The Government acknowledged that the original verification report had not captured complete import data. It also recognized the importance of ensuring that verification findings are fully consistent with the country's official consumption records.

12. Regarding the recommendations of the verification report for 2020 to 2024, the online e-service system is fully operational, and the NOU utilizes it to review and endorse import permit applications before licences are issued; all registered importers are required to submit annual returns; six refrigerant identifiers have been deployed at six border control points; and two capacity-building sessions have been held for environmental inspectors and customs officers. However, the systematic cross-checking of import permits against customs entries and the endorsement by customs of actual imports against allocated quotas, the measures that would allow discrepancies such as those identified for 2024 to be detected, will only be established by the first quarter of 2027, and the NOU's role in issuing licences will only be formalized in the revised regulations. Given discrepancies identified between the previously submitted verification report and data reported under Article 7 for the year 2024, the Secretariat recommends that UNEP submit to the second meeting of 2027 a revised verification report for the year 2024.

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

Legal framework

13. The Government of Ethiopia has issued an HCFC import quota for 2026 at 1.71 ODP tonnes, which is lower than the Montreal Protocol control target. The country plans to maintain the 2027 quota at the same level.

14. In relation to the regulations required by decision 88/48(b)(ii) and (iii), the Government of Ethiopia had committed, on approval of stage II of HPMP, to ban imports of HCFC-based equipment and to establish regulatory measures controlling intended emissions of HCFCs during installation, servicing and decommissioning by 1 January 2024. On submission of the second tranche, it was reported that the draft

[5] UNEP/OzL.Pro/ExCom/96/35

regulations were under finalization and expected to be adopted by 2025, with the ban on HCFC-based equipment to take effect by January 2026. When the Secretariat enquired about the current status of the regulations and the lack of subsequent reporting, UNEP explained that they were still under review, with adoption now expected by June 2027. The revised regulations will also include the ban on imports of virgin HCFCs from 2030 (decision 88/48(b)(i)) and formalize the role of the NOU in issuing import licences. Noting the delay in fulfilling these commitments, the Secretariat recommends that UNEP report on the adoption of the revised regulations to the 101st meeting.

Refrigeration servicing sector

15. In response to the Secretariat's enquiry on the status of the mandatory certification scheme for RAC technicians and RAC-related standards, UNEP explained that ongoing training of technicians is based on a voluntary certification scheme which is being updated and will become mandatory, and that the national RAC standards developed under the first tranche also await implementation, with both expected to be adopted by end of 2027.

16. In relation to the delay in distributing equipment purchased under the first tranche, UNIDO explained that due to delay in confirming the readiness of the five designated vocational training centres, the tools procured under the first tranche remained in storage with the NOU and are expected to be distributed by the first quarter of 2027. As for the delay in starting procurement of equipment of the second tranche, this is attributed to the lengthy process of finalizing and agreeing on the list of equipment due to institutional changes within the Ministry and the NOU. UNIDO confirmed that both the distribution of the tools and the pending procurement will proceed during 2027.

17. The Secretariat noted zero disbursement under the activity of development of business model and establishment of two reclamation centres planned under the second tranche. On enquiring, UNIDO explained that the delay was due to institutional changes as mentioned in paragraph 16 above. UNIDO added that the business model will be completed before initiating procurement of the reclamation units, following an assessment that will demonstrate the technical feasibility and operational and financial viability of the proposed centres. The results will inform the final selection of locations, equipment specifications, and appropriate reclamation capacities. In order to ensure there is no further delay in this activity, the Secretariat recommends that UNEP, in cooperation with UNIDO, report on the business model to the 101st meeting.

Project implementation and monitoring

18. The National Ozone Officer (NOO) has been in post since January 2024, following a vacancy in 2023 that delayed first tranche procurement decisions, including equipment specifications. Restructuring of the Environmental Protection Authority in 2025 led to the reorganization of the NOU and replacement of its staff, temporarily reducing its operational capacity and delaying submission of the third tranche.[6] UNEP provided induction training to the NOO and new staff in April 2025, and the NOU is now fully staffed and operational. Stage II of the HPMP and stage I of the KIP share an institutional framework, monitoring mechanism and national partners, with joint planning of customs and technician training, technician certification and support to technical and vocational education and training institutions.

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

19. In relation to the distinction between similar training activities, UNEP clarified that the workshops for enforcement officers under the policy and regulations component and under the customs and enforcement component will be coordinated to avoid duplication, the former focusing on regulatory implementation,

[6] Decision 98/19

standards and public awareness and the latter on the identification and control of imports of controlled substances.

Gender policy implementation

20. In line with the Multilateral Fund's policy, the NOU collects sex-disaggregated data and promotes women's participation in HPMP activities. Under the second tranche, women represented 35 per cent of the participants in the policy and enforcement workshops, 36 per cent of the enforcement officers trained and 25 per cent of the RAC technicians trained and certified. The NOU participates in career fairs to encourage young women and girls to pursue careers in the RAC sector and the consultant team included one female consultant. The engagement of a specialist to develop a strategy aligned with Ethiopia's national policy is at an initial stage; the strategy and a database of women experts will be developed in the first quarter of 2027 and gender-sensitive training materials in the second quarter of 2027. A project focal point for the engagement of women is yet to be designated. UNEP will monitor women's participation with the aim of increasing it in technician training, and UNIDO will target a minimum participation of 20 per cent of women in the training for the reclamation centres and consider women's participation in the selection of the centres.

Sustainability of the HCFC phase-out and assessment of risks

21. Ethiopia has an operational licensing and quota system to control HCFC imports, under which only registered importers are eligible for quota permits. The system is supported by an online licensing system, through which the NOU reviews import permit applications, and by mandatory annual reporting by importers; six refrigerant identifiers have been deployed at border control points. The training of national trainers and of technicians through vocational training institutions, under the competency-based certification programme, supports the continuation of capacity-building after the completion of the HPMP. Importers, distributors and retailers are being sensitized on the planned bans pending the adoption of the revised regulations.

22. The main risk to the sustainability of the HCFC phase-out is the further delay in adopting the revised regulations, and with them the equipment import ban, the emission controls and the legal basis for refrigerant recovery. Other risks include the pending approval of the mandatory technician certification and adoption of the RAC standards; the reliability of import data, as shown by the discrepancy in the 2024 data; illegal imports and limited enforcement capacity; limited capacity to handle flammable refrigerants in the absence of safety standards and practical training equipment; the viability of the reclamation centres; and the slow uptake of low-GWP and energy-efficient technologies, owing to their high upfront costs and higher refrigerant prices. These risks will be addressed through quota control, the cross-checking of import permits against customs entries from the first quarter of 2027, border inspections, enforcement and technician training, the procurement planned from the first quarter of 2027, the completion of the business model before the reclaim units are procured, and the reporting requested in the recommendation. The national coordination mechanism established under the activities to maintain energy efficiency, together with the training of customs officers and compliance experts, MEPS market surveillance and the implementation strategy for energy-efficiency standards and labelling due by mid-2027, is expected to support the continued uptake of energy-efficient equipment.

Conclusion

23. Ethiopia is in compliance with the Montreal Protocol and its Agreement with the Executive Committee, and its 2026 HCFC import quota of 1.71 ODP tonnes is lower than the Montreal Protocol control targets. The disbursement rate of the second tranche is 55.2 per cent. The restructuring of the NOU in 2025 temporarily reduced its operational capacity; the NOU is now fully staffed. UNEP has completed its second tranche activities, the online licensing system is operational, and energy-efficiency activities are on schedule. Work is under way on the remaining priorities, with the revised regulations incorporating the equipment import ban and emission controls (decision 88/48(b)(ii) and (iii)) now expected by June 2027, followed by mandatory technician certification, RAC standards and UNIDO procurement for training equipment and

reclamation centres, and with a revised verification report for the 2024 consumption. The approval recommendation therefore requests additional information and a progress report on these outstanding issues for the second meeting in 2027.

RECOMMENDATION

24. 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 Ethiopia;

(b) Request UNEP, as the lead implementing agency and in consultation with UNIDO and the Government of Ethiopia, to submit, no later than 10 weeks prior to the 101st meeting:

(i) A revised verification report on HCFC consumption for 2024;

(ii) A progress report on the status of adoption of the revised regulations, as referred to in decision 88/48(b)(ii) and (iii); and

(iii) A progress report on establishment of the reclamation centres together with the business model demonstrating the technical feasibility and operational and financial viability of the proposed centres.

25. The Fund Secretariat further recommends blanket approval of the third tranche of stage II of the HPMP for Ethiopia, and the corresponding 2027–2030 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)	98,000	12,740	UNEP
(b)	HCFC phase-out management plan (stage II, third tranche)	37,000	3,330	UNIDO