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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-seventh Meeting
Montreal, 1–5 December 2025
Item 9(c) of the provisional agenda¹

PROJECT PROPOSAL: CUBA

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) | UNDP | Blanket approval |
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¹ UNEP/OzL.Pro/ExCom/97/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Cuba

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

(II) LATEST ARTICLE 7 DATA (Annex C, Group I)	Year: 2024	2.44 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					2.44				2.44

(IV) CONSUMPTION DATA (ODP tonnes)			
2009-2010 baseline:	16.88	Starting point for sustained aggregate reductions:	30.23
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	30.23	Remaining:	0.00

(V) ENDORSED BUSINESS PLAN		2025	2026	2027	Total
UNDP	ODS phase-out (ODP tonnes)	2.00	0.00	0.00	2.00
	Funding (US \$)	223,000	0	0	223,000

(VI) PROJECT DATA			2020	2021-2022	2023	2024	2025	2026-2027	2028	2029	2030	Total
Montreal Protocol consumption limits (ODP tonnes)			10.97	10.97	10.97	10.97	5.49	5.49	5.49	5.49	0	n/a
Maximum allowable consumption (ODP tonnes)			10.97	10.97	10.97	10.97	5.49	5.49	5.49	5.49	0	n/a
Funding agreed in principle (US \$)	UNDP	Project costs	260,000	0	260,000	120,000	208,000	0	208,000	0	104,000	1,160,000
		Support costs	18,200	0	18,200	8,400	14,560	0	14,560	0	7,280	81,200
Funds approved by ExCom (US \$)		Project costs	260,000	0	260,000	120,000	0	0	0	0	0	640,000
		Support costs	18,200	0	18,200	8,400	0	0	0	0	0	44,800
Total funds recommended for approval at this meeting (US \$)		Project costs	0	0	0	0	208,000	0	0	0	0	208,000
		Support costs	0	0	0	0	14,560	0	0	0	0	14,560

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Cuba, UNDP as the designated implementing agency has submitted a request for funding for the third tranche of stage II of the HCFC phase-out management plan (HPMP), at the amount of US \$208,000, plus agency support costs of US \$14,560.² The submission includes a progress report on the implementation of the second tranche and the tranche implementation plan for 2026 to 2027.

Report on HCFC consumption

2. The Government of Cuba reported a consumption of 2.44 ODP tonnes of HCFCs in 2024, which is 85.6 per cent below the country's HCFC baseline for compliance. The 2020-2024 HCFC consumption is shown in table 1.

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

HCFC	2020	2021	2022	2023	2024	Baseline
Metric tonnes (mt)						
HCFC-22	23.46	14.74	25.36	10.06	44.45	259.05
HCFC-124	0.37	0.00	0.00	0.00	0.00	0.60
HCFC-141b	0.00	0.00	0.00	0.00	0.00	23.61
HCFC-142b	0.23	0.00	0.00	0.00	0.00	0.36
Total (mt)	24.06	14.74	25.36	10.06	44.45	283.62
ODP tonnes						
HCFC-22	1.29	0.81	1.39	0.55	2.44	14.25
HCFC-124	0.01	0.00	0.00	0.00	0.00	0.01
HCFC-141b	0.00	0.00	0.00	0.00	0.00	2.60
HCFC-142b	0.01	0.00	0.00	0.00	0.00	0.02
Total (ODP tonnes)	1.31	0.81	1.39	0.55	2.44	16.88

3. Cuba currently imports only HCFC-22, which is used in the refrigeration and air-conditioning (RAC) servicing sector, mainly for servicing of air-conditioning equipment. Imports of HCFC-141b were prohibited since 1 January 2014, and that contained in pre-blended polyols since 1 January 2016. Imports of equipment containing HCFCs were banned since 1 January 2015.

4. The overall level of HCFC consumption in Cuba had been maintained below the control limits in previous years due to the implementation of HPMP activities and the gradual introduction of alternative technologies. HCFC consumption decreased considerably in 2020, with a level of 78.8 per cent below the 2019 level (in metric tonnes). The consumption remained low since then due to the impact of the COVID-19 pandemic on key economic sectors, particularly tourism, and the slow post-pandemic economic recovery, which only happened in 2024 leading to an increase in demand for servicing, thus a rise in consumption.

Country programme implementation report

5. The Government of Cuba reported HCFC sector consumption data under the 2024 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 22 September 2025 from the Ministry of Science, Technology and Environment of Cuba to UNDP.

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

Legal framework

6. Cuba replaced Law 81/1997 with Law 150/2023, updating the National Environmental System with stricter emission controls, mandatory licenses for hazardous chemical and waste management under international conventions, and revised quota and permit procedures. Technical inputs were provided for the development of these new legislations. Tariff codes in the harmonized system were modified as directed by the World Customs Organization.

7. Training was provided (in person and online) to 79 customs officers (including 48 women), and workshops were conducted for 100 importers of refrigerants and RAC equipment (including 38 women) on updated legislation, tariff codes, equipment permits, documentation, and trend of technologies. One refrigerant identifier was procured for customs, and posters having information, about refrigerants being phased out and alternatives, were developed and disseminated to customs officers and importers.

Refrigeration servicing sector

8. The following activities have been implemented in the RAC servicing sector during the previous tranche:

- (a) *Application of good servicing practices:* A total of 1,301 technicians (including nine women) and 108 trainers (including nine women) received training on good servicing practices, including safe handling of flammable refrigerants; three workshops were held for the small and medium enterprises (SMEs) on the installation, maintenance, and repair of RAC equipment; 25 toolkits³ were procured for technicians; technical sessions were held with the Ministry of Education regarding the technician certification system; and communication materials (leaflets, posters) on good service practices for HCFCs and hydrocarbon (HC) management were developed and distributed nationally;
- (b) *Strengthening of technical education institutes:* Three new training centres were established in three provinces making a total of 17 training facilities (14 refrigeration polytechnics, two universities, and one Institute of Refrigeration and Air-Conditioning); and equipment and tools⁴ were procured for 14 training centres providing training on good service practices;
- (c) *Strengthening of the refrigerant recovery, recycling, and reclaiming (RRR) network:* Two regional visits were conducted with two specialists to learn RRR strategies; three workshops were conducted for 120 participants (technicians and trainers) to share the experiences related to RRR and to promote the recovery and recycling; technical working sessions were held with the Ministry of Environment on developing recovery and recycling network, and the network is planned to be operational during the third tranche;
- (d) *Promotion of alternatives for the reduction of HCFC consumption and the use of low-global-warming-potential (GWP) refrigerants:* Diagnostics and site visits at end users were conducted, supported by technical sessions with executives of facilities and technicians with the objective of understanding the setup, its HCFC consumption and technology options; two workshops (in person and online) for decision-makers and designers were held with 85 participants (including 27 women) on environmental

³ Recovery machine, vacuum pump, cylinders, manifold gauge set, refrigerant scale and filters.

⁴ Equipment (air conditioner, mini fridge), vacuum pumps, recovery machines, pressure gauges, compressors.

overview, selection of alternative refrigerants, and new technologies by sector; a statistics workshop was held for environmental specialists to introduce gender-related topics and collecting RAC sector data to support project implementation and strategic planning; and two missions (to Germany and Spain) were organised with two specialists each, aimed at technical training and learning about alternative technologies for different sectors and applications;

- (e) *Public awareness activities:* Four outreach and awareness-raising campaigns on alternatives to HCFCs were organised, including television and radio spots, and leaflets with information on HCFC phase-out and ozone layer protection; brochures were developed and distributed during workshops and at national-level activities to promote enrollment in good practices courses.

Activities to maintain energy efficiency in the refrigeration servicing sector

9. The project related to energy efficiency, submitted in line with decision 89/6, aimed at designing, installing, and putting in operation two cold rooms using R-290 and CO₂ as refrigerants, was initiated; site visits were conducted, and technical data were collected (refrigeration capacity, cold room dimensions); the machine room conditions were assessed; suppliers of CO₂-based and HC-based equipment were identified; the international consultant providing technical support was confirmed; initial meetings to discuss technical requirements were held; terms of reference for local personnel were prepared, and the selection process was initiated.

Project implementation and monitoring

10. Of the US \$12,500 approved for project implementation and monitoring, a total of US \$5,918 was disbursed on local travel, meetings, and other administrative costs.

Level of fund disbursement

11. As of September 2025, of the US \$640,000 approved so far, US \$381,723 (59.6 per cent) had been disbursed for UNDP, as per table 2 below. The balance of US \$258,277 will be disbursed in 2026 and 2027.

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

Funding tranche	Funds approved	Funds disbursed	Disbursement rate (%)	Fund balance
First	260,000	260,000	100	0
Second	260,000	118,824	45.7	141,176
Additional activities (decision 89/6)	120,000	2,899	2.4	117,101
Total	640,000	381,723	59.6	258,277

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

12. The following activities will be implemented between January 2026 and December 2027:
- (a) *Strengthening of policies and legal framework:* Training of 35 customs officers and 65 importers on refrigerant identification and compliance with updated legislation; providing technical input for new environmental resolutions, contributing to Cuba's legal framework for ozone protection and climate action (US \$20,000);
 - (b) *Application of good servicing practices:* Training of 820 technicians in good refrigeration practices and the safe use of flammable refrigerants; training of 68 trainers in refrigerants and alternative technologies, and updating classroom with resources (US \$50,000);

- (c) *Strengthening of technical education institutes:* Procurement of three sets of tools for three training centres;⁵ organising two training workshops for 40 decision-makers and designers, and training of two specialists on alternative technologies (US \$20,000);
- (d) *Strengthening of the RRR network:* Procurement of equipment and tools⁶ to strengthen five existing RRR centres; three workshops for training of 90 technicians on RRR; and one workshop for 30 trainers on RRR (US \$25,000);
- (e) *Promotion of alternatives for the reduction of HCFC consumption and the use of low-GWP refrigerants:* Procurement of low-GWP-based equipment for three training centres;⁷ demonstration of low-GWP technology through procurement of three HC-based rooftop air conditioners (10-20 TR) at a healthcare company, to promote low-GWP technology as well as for providing training to technicians; and procurement of three monitoring device, reporting energy saving, and dissemination (US \$50,000);
- (f) *Public awareness activities:* Development of communication material including posters and brochures for campaigns and media outreach; organisation of three outreach and awareness-raising campaigns on HCFC phase-out, for target stakeholders (US \$30,000);
- (g) *Additional activities for energy efficiency:* Design, procurement and installation of two cold rooms based on transcritical CO₂ and R-290 technology; procurement of devices for measuring energy consumption; two training sessions for 60 participants, including technicians and beneficiaries, on alternative technology; monitoring and analysis of data collected; organisation of one workshop for 30 participants to disseminate the results (balance from funds approved at the 94th meeting); and
- (h) *Project implementation and monitoring (US \$13,000):* Local travel (US \$5,000), operational costs (US \$4,000), meetings with stakeholders (US \$3,000), and other administrative costs (US \$1,000).

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

13. The Government of Cuba has issued HCFC import quotas for 2025 at 5.06 ODP tonnes, which is below the Montreal Protocol control targets.

Refrigeration servicing sector

14. The Secretariat noted that the procurement of equipment and tools under the activity of strengthening existing RRR facilities has been pending since the first tranche. It could not be implemented during the second tranche either and is now proposed under the third tranche. Upon inquiring, UNDP

⁵ Recovery machine, pressure gauge, leak detector, recovery cylinders, welding tool, vacuum pump, digital thermometer and other tools.

⁶ One reclaiming unit, cylinders, vacuum pumps, precision scales, manifolds, refrigerant identifiers and protection equipment.

⁷ Air-conditioning units, commercial refrigeration HC-based units, and additional smaller tools and equipment for training centres.

explained that although the procurement process had been initiated, no suitable supplier was found. Given the increase in the number and capacity of suppliers over the past few years, the national ozone unit (NOU) is currently identifying new companies capable of providing RRR equipment that meet the project's requirements. The NOU is collaborating with UNDP to develop the procurement process.

15. The Secretariat noted that pilot demonstration of replacement of HCFC-based equipment in end users under the component "Promotion of alternatives for reducing HCFC consumption and using low-GWP refrigerants," was approved as part of stage II of the HPMP at the 86th meeting. However, during the approval of the first tranche of stage II of the HPMP,⁸ it was noted that since this activity includes funding for the demonstration of alternative technologies in end-users, and in order to be considered for funding by the time of submission of the second tranche, detailed information needs to be provided on how the demonstrations are in compliance with the requirements of decision 84/84, before the activity could be recommended for funding. Subsequently, it was proposed to procure three HC-based rooftop air conditioners for demonstration at a healthcare company under the third tranche. In light of decision 92/36(c)⁹ and considering that the activity involves a single beneficiary and includes a training component for technicians at the demonstration site, the Secretariat has determined that decision 84/84 does not apply in this case.

16. Further, the Secretariat requested UNDP to provide additional details on key aspects of the proposed activity, including relevant policy measures, market readiness for the technology, mechanisms for monitoring and dissemination of results, capacity building for technicians, potential for scalability, and co-financing arrangements. UNDP replied that the NOU is working with the National Office for the Control of Rational Use¹⁰ to implement energy efficiency standards that support the adoption of HC-based equipment, which offers optimal energy performance and aligns with the standards being developed. This type of equipment could be used in a wide range of sectors and facilities such as hospitality, retail, and healthcare. As Cuba's economy evolves, demand for high-efficiency RAC systems is rising, making this initiative timely and impactful. Under the Kigali HFC implementation plan and HPMP, training is provided to technicians on safe handling of HCs. The results of the project will be shared through all HPMP awareness-raising and training activities such as workshops, reports, and media. The beneficiary will be required to sign an agreement with the NOU, which will include ensuring access to the equipment of training purposes; collecting technical information about the equipment such as energy and refrigerant consumption, performance; and providing cofinancing for the installation of the equipment. The cofinancing of the beneficiary will include installation, local transportation, civil works, electrical works, tubes and materials, and commissioning.

Gender policy implementation

17. The Government of Cuba supports the gender policy of the Multilateral Fund. The HPMP takes into account equality by ensuring the participation of both men and women in all project activities. While female participation among technicians remains limited, their representation in other areas, such as customs, importers, specialists, and awareness programmes, is well noted. To create awareness and engagement, various initiatives are being implemented within the project such as developing interest circles in schools, participating in career guidance open houses of universities, and developing educational media targeting children and parents. The Ministry of Education is also taking steps to promote greater female participation in the RAC sector.

⁸ Paragraph 33 of document UNEP/OzL.Pro/ExCom/86/45.

⁹ Not to apply decision 84/84 to technology demonstration projects involving a limited number of end users or to end-user leakage-reduction programmes when they were submitted for funding under the HPMPs.

¹⁰ ONURE, attached to the Ministry of Energy and Mines, is the institution in charge of regulating, controlling and inspecting the processes for the operation and efficient use of energy.

Sustainability of the HCFC phase-out and assessment of risks

18. Sustainability is ensured through legislation and regulations specifically designed for this purpose. These laws are mandatory, apply nationwide, and are embedded within inclusive legal frameworks such as the Environmental Law, which includes provisions like usage bans, import restrictions, and other relevant measures. Project beneficiaries and stakeholders sign contracts and agreements that include sustainability clauses for the post-project phase. The development of training centres will provide sustainability by continuing building technicians skills, and RRR centres will help support reduce the demand of refrigerants. Potential risks include delays in equipment and tool procurement and limited availability of low-GWP alternatives in Cuba. To mitigate these risks, the NOU will work with UNDP to expedite procurement, and explore supplier databases during visits, fairs, and technical seminars.

Conclusion

19. The Secretariat notes that the country is in compliance with the Montreal Protocol targets, and with its Agreement with the Executive Committee. The activities in the refrigeration servicing sector continue to be implemented as planned except for the delay in operationalisation of RRR. However, this is expected to be completed during the third tranche. The activities implemented so far, and those planned under the third tranche, will further strengthen the servicing sector, ensure the long-term sustainability of the activities, and continue to enable the country to meet its compliance obligations under the Montreal Protocol.

RECOMMENDATION

20. The Fund Secretariat recommends that the Executive Committee note the progress report on the implementation of the second tranche of stage II of the HCFC phase-out management plan (HPMP) for Cuba and further recommends blanket approval of the third tranche of stage II of the HPMP and the corresponding 2026-2027 tranche implementation plan for Cuba 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)	208,000	14,560	UNDP