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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: CUBA

This document consists of the comments and recommendation of the Secretariat on the following project proposal:

Phase-down

• Kigali HFC implementation plan (stage I, second tranche)	UNDP	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

Cuba

PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
Kigali HFC implementation plan (stage I)	UNDP	93rd	10% phase-out by 2029

ARTICLE 7 DATA (Annex F)	Year: 2025	365.05 mt	763,291 CO_2-eq tonnes

COUNTRY PROGRAMME SECTORAL DATA (CO_2-eq tonnes)								Year:	2025
Substance	Aerosol	Foam	Fire-fighting	Air-conditioning (AC) and refrigeration			Servicing	Solvent	Other
				Manufacturing					
				Refrigeration	AC	Other			
HFCs	40,019						723,272		

CONSUMPTION DATA (CO_2-eq tonnes)			
HFC baseline:	1,030,662	Starting point for sustained aggregate reductions:	n/a
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	n/a	Remaining:	n/a

ENDORSED BUSINESS PLAN		2026	2027	2028	Total
UNDP	HFC phase-down (mt)	16.72	0.0	0.0	16.72
	Funding (US $)	146,900	0	0	146,900

PROJECT DATA			2023	2024-2025	2026*	2027-2028	2029	Total
Consumption (CO_2-eq tonnes)	Montreal Protocol limits		n/a	1,030,662	1,030,662	1,030,662	927,596	n/a
	Maximum allowable		n/a	1,030,662	1,030,662	1,030,662	927,596	n/a
	Reduction from baseline (%)		n/a	0.0	0.0	0.0	10.0	n/a
Amounts approved in principle (US $)	UNDP	Project costs	160,000	0	130,000	0	35,000	325,000
		Support costs	20,800	0	16,900	0	4,550	42,250
Funds approved by ExCom (US $)		Project costs	160,000	0		0	0	160,000
		Support costs	20,800	0		0	0	42,250
Total funds recommended for approval at this meeting (US $)		Project costs			130,000			130,000
		Support costs			16,900			16,900

* Recommended for approval at the present meeting

Secretariat's recommendation	Blanket approval

PROJECT DESCRIPTION

1. On behalf of the Government of Cuba, UNDP as the designated implementing agency has submitted a request for funding for the second tranche of stage I of the Kigali HFC implementation plan (KIP), in the amount of US $130,000, plus agency support costs of US $16,900.[2] The submission includes a progress report on the implementation of the first tranche, verification report on HFC consumption for 2024 to 2025, and the tranche implementation plan for 2026 to 2029.

Report on HFC consumption

2. The Government of Cuba reported a consumption of 763,291 CO_2-equivalent (CO_2-eq) tonnes of HFCs in 2025, which is 26 per cent below the country's HFC baseline for compliance. The 2021–2025 HFC consumption is shown in table 1.

Table 1. 2021–2025 HFC consumption and HFC baseline for Cuba (Article 7 data)

HFCs	GWP	2021	2022	2023	2024	2025
Metric tonnes (mt)						
HFC-134a	1,430	198.47	199.60	366.98	182.50	149.09
R-404A	3,921.6	24.92	59.13	103.78	44.20	53.38
R-407C	1,773.85	3.33	39.28	25.10	11.05	18.88
R-410A	2,087.5	61.45	83.67	125.57	54.81	85.78
R-417A	2,346	0.38	19.82	15.49	7.61	16.82
R-438A	2,264.44	0	22.51	27.11	19.02	32.75
Others*		1.44	15.52	23.11	19.98	8.35
Total (mt)		**289.99**	**439.53**	**687.14**	**339.16**	**365.05**
CO_2-eq tonnes						
HFC-134a	1,430	283,812	285,428	524,781	260,975	213,204.42
R-404A	3,921.6	97,726	231,884	406,984	173,315	209,327
R-407C	1,773.85	5,907	69,677	44,524	19,596	33,483
R-410A	2,087.5	128,277	174,661	262,127	114,408	179,074
R-417A	2,346	891	46,498	36,340	17,860	39,453
R-438A	2,264.44	0	50,973	61,389	43,061	74,169
Others*		3,031	23,551	32,525	41,807	14,580
Total (CO_2-eq tonnes)		**519,644**	**882,672**	**1,368,670**	**671,021**	**763,291**
HFC baseline calculation (CO_2-eq tonnes)						
HFC average consumption in 2020–2022						713,991
HCFC baseline (65%)						316,671
HFC baseline						**1,030,662**

* HFC-32, HFC-125, HFC-227ea, HFC-236cb, R-407A, R-449A, R-452A, R-507A, and R-508B

3. The annual HFC consumption in Cuba fluctuated between 2021 and 2025 due to supply-chain constraints, maritime freight logistics, and the country's energy and economic challenges. The increase in HFC consumption in 2022 is attributable to the recovery of economic sectors following the COVID-19 pandemic. In 2023, consumption was driven by imports of HFC-134a for the domestic manufacture of metered-dose inhalers (MDIs), as well as refrigerants for servicing refrigeration and air-conditioning (RAC) equipment. In 2024, overall HFC consumption decreased by approximately 50 per cent, reflecting lower MDI production and reduced demand for refrigerants. In 2025, however, increased imports of refrigerant

[2] As per the letter of 25 September 2026 from the Ministry of Science, Technology and Environment of Cuba to UNDP.

blends, particularly R-404A and R-410A, for charging new equipment replacing older commercial RAC systems, offset the reductions resulting from lower MDI production and reduced use of other refrigerants.

Country programme implementation report

4. The HFC consumption data provided by the Government of Cuba in its country programme implementation report for 2025 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 HFC imports and exports and that the total HFC consumption reported under Article 7 of the Montreal Protocol for 2024 and 2025 was correct, as shown in table 1 above. The verification also found that the established procedures had not been fully followed in the period of review, as some importers had imported HFCs without an allocated quota, while others had exceeded their respective quotas. Nevertheless, total recorded imports remained below the Montreal Protocol targets for the country.

6. The verifier recommended strengthening coordination to improve information sharing and access to information on HFC licences, quotas and imports; enhancing training for customs and enforcement officers, brokers and importers on HFC import procedures and requirements; and reviewing and, where necessary, updating the list of HFCs and blends to clearly identify the corresponding tariff codes.

Progress report on the implementation of the first tranche of stage I of the Kigali HFC implementation plan

Legal framework

7. The main regulations governing HFC imports and consumption are Resolution No. 253/2021, which establishes prior registration and authorization requirements for entities intending to import HFCs, and Resolution No. 8/2022, which establishes the procedure for implementing the HFC import quota system. The latter requires importers to hold an import licence and establishes quotas expressed in CO_2-equivalent tonnes. It also defines the baseline years and phase-down schedule for HFCs, specifies the requirements for obtaining quotas, provides for a 10 per cent reserve quota, which is managed by the Government, to cover unforeseen circumstances, and establishes global-warming potential (GWP) values applicable to pure HFCs.

Refrigeration servicing sector

8. The following activities have been implemented under the first tranche:

(a) *Customs training, inter-institutional coordination and awareness-raising*:

(i) A total of 60 customs officers and 102 customs brokers and importers were trained on measures to control and reduce HFC consumption in two workshops for each group, with women accounting for 46 per cent of total participants; 30 government officers (14 women and 16 men) attended three workshops on the HFC quota system and harmonized system (HS) codes; the national HFC licensing and quota system was operationalized, and the reorganization of the Importer Registry was initiated in collaboration with the Customs, the National Statistics Office and the Ministry of External Trade, with a view to integrating and auditing the emerging micro-, small- and medium-sized enterprises in the sector;

(ii) A national inception workshop brought together 40 participants (23 men and 17 women) including policymakers, customs officers, importers and RAC servicing enterprises, to align the KIP with national environmental and energy initiatives; a

further workshop engaged 23 specialists (eight men and 15 women) from the Ministry of Science, Technology and Environment in preparing the KIP action plan at a provincial level; a coordination meeting brought together 12 high-level representatives (seven men and five women) from six institutions to align the national strategic action plans; and a workshop on integrating the needs and roles of women and men into projects related to the Montreal Protocol gathered 35 participants (17 men and 18 women) from various institutions;

(iii) A total of 108 RAC and MAC trainers (19 women and 89 men) attended three outreach workshops and capacity-building courses covering alternatives to HFCs, refrigerant recovery and recycling (RR), the safe handling of hydrocarbons (HCs), leak prevention, refrigerant identification and energy efficiency; several working sessions were held between the national ozone unit (NOU) and training institutes to plan and implement capacity-building activities; and three specialized posters on HFC alternatives, refrigerant RR, good servicing practices for RAC and MAC, and the promotion of energy efficiency in RAC technology, were finalized for distribution and use in awareness-raising campaigns;

(b) *Strengthening technical capacity for the safe use of low-GWP refrigerants:* Procurement of specialized equipment for the safe handling of HCs was initiated for 10 training centres; coordination with the National Office for the Control of the Rational Use of Energy was strengthened through two planning sessions and an institutional agreement to align KIP targets with national energy-efficiency strategies; and four technical sessions with the Ministry of Education led to the approval of technician competency certification procedures, the designation of two initial evaluation centres and initiation of work to develop a secure online registration platform;

(c) *Reducing demand for high-GWP HFCs:* Two technical workshops strengthened the end users' knowledge of low-GWP refrigerant alternatives, including decentralized commercial refrigeration systems using HCs, reaching 97 participants, 24 of whom were women; and

(d) *Reducing HFC emissions*: Procurement was initiated for specialized equipment and toolkits for five selected MAC workshops as well as 27 refrigerant RR units for large end users.

Pilot project to enhance energy efficiency (decision 91/65)

9. At its 96th meeting, the Executive Committee approved a pilot project to introduce energy-efficient refrigeration technology with low GWP and to develop and enforce minimum energy performance standards (MEPS), or equivalent, for chillers in the tourism sector, to be implemented by UNDP by 30 May 2028.[3] The project is currently in its initial phase. Technical data have been collected from participating end users, technical specifications for the equipment to be procured have been finalized and agreed with the beneficiaries, and the procurement process has been launched.

Project implementation and monitoring

10. The NOU and UNDP have been monitoring activities, including follow-up to training and courses, reporting on progress, and working with stakeholders to phase down HFCs. Of the US $14,545 approved for project monitoring activities under the first tranche, US $3,327 was disbursed for travel (US $3,067) and project staff and consultants (US $260).

[3] Document UNEP/OzL.Pro/ExCom/96/31 and decision 96/47

Level of fund disbursement

11. As of October 2026, of the US $160,000 approved so far, US $34,398 (21.5 per cent) had been disbursed. The balance of US $125,602 will be disbursed in 2027.

Implementation plan for the second tranche of stage I of the Kigali HFC implementation plan

12. The following activities will be implemented between January 2027 and December 2029:

(a) *Customs training, inter-institutional coordination and awareness-raising:* Organize two training workshops for 50 customs brokers and importers and three training workshops for 60 customs officers on HFC quotas and updated HS codes; hold four meetings (with approximately 20 participants each) with HFC consumers and MAC stakeholders to explain HFC import controls and promote the import of RAC equipment using zero- and low-GWP refrigerants; hold one national monitoring meeting to review progress in KIP implementation; implement national outreach campaigns throughout the country; and update and print a technical guide on low-GWP refrigerants for RAC technicians (US $19,910 plus US $18,833 from the previous tranche);

(b) *Strengthening technical capacity for the safe use of low-GWP refrigerants:* Complete the procurement of specialized equipment for the safe handling of HCs (R-290 and R-600a) and distribute it to 10 training centres across the country; hold two technical coordination meetings with educational institutions, standardization agencies and RAC servicing enterprises to consolidate the certification framework, including the adoption of the certification standard and related mechanisms and tools; conduct capacity-building workshops for the evaluation leaders of the Polytechnic Institute "Hermanos Gómez" and the University of Oriente as designated evaluation centres, and organize two workshops to promote technician enrolment, targeting the certification of at least 100 technicians by 2029 (US $57,650 plus US$45,000 from the previous tranche);

(c) *Reducing demand for high-GWP HFCs:* Organize two workshops to map major HFC end users, three workshops to promote energy-efficient alternative technologies using low-GWP refrigerants, and three technology transfer workshops to demonstrate the performance of a commercial HC refrigeration system to commercial users (US $22,500 plus US $7,782 from the previous tranche);

(d) *Reducing HFC emissions*: Complete the procurement process and distribute specialized toolkits[4] to five selected MAC servicing workshops and 27 refrigerant RR units to large end users; conduct an equipment needs assessment for an additional five MAC servicing workshops and procure the corresponding equipment and toolkits (US $18,122 plus US $42,769 from the previous tranche); and

(e) *Project monitoring:* Engage national consultants and undertake domestic travel for project monitoring (US $11,818 plus US $11,218 from the previous tranche).

[4] Including at least one automatic recovery/recycling/reloading machine, pressure gauge, electronic leak detector, infrared thermometer, set of fittings and valves for MAC, five 30 lb recovery cylinders, two 123 lb recovery cylinders, and two sets of safety goggles and gloves.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HFC consumption and verification

13. UNDP indicated that the NOU had acknowledged the recommendations of the verification report and would address them, in coordination with relevant counterparts, during the implementation of the second tranche of the KIP, under activities to strengthen the customs and enforcement mechanisms. In addition, importers found to have failed to comply with the requirements governing HFC imports will be subject to penalties.

Progress report on the implementation of the first tranche of stage I of the Kigali HFC implementation plan

Legal framework

14. The Government of Cuba has issued HFC import quotas[5] for 2026 and 2027 in accordance with the Montreal Protocol control targets.

Refrigeration servicing sector

15. Regarding equipment procurement, UNDP explained that the process had been delayed due to difficulties in securing international suppliers and completing the necessary procurement, financial and administrative arrangements. The NOU and UNDP were exploring alternative procurement options to move the process forward, and the corresponding bidding process was launched in October 2026.

Implementation plan for the second tranche of stage I of the Kigali HFC implementation plan

16. The Secretariat requested clarification on how the procurement of equipment and tools would be coordinated between UNDP and the NOU and how the effective use of equipment under the second tranche of the KIP and stage II of the HPMP would be ensured. UNDP explained that the equipment would be procured based on separate lists prepared in consultation with beneficiaries, with each item assigned to a specific project and beneficiary institution. Oversight of both projects would be undertaken by the NOU and UNDP country office to avoid duplication of activities and equipment procurement, while the NOU would follow up on the use of the equipment and tools. UNDP also indicated that the distributed equipment would contribute to reducing the consumption of virgin HFCs and promoting good refrigeration practices. Furthermore, the demonstration of the benefits of refrigerant recovery and the associated cost savings was expected to encourage other workshops to acquire similar equipment and apply these practices.

Co-financing

17. The country provided in-kind co-financing through legal and communications support, office space for the project management unit, classrooms, laboratory facilities, professors, and utilities.

Gender policy implementation

18. In line with decisions 84/92(d) and 90/48(c), equality between women and men is integrated into the KIP implementation through activities promoting women's participation, gender-sensitive publications and the collection of sex-disaggregated data. While women's participation remains lower in technical sectors, it is comparable to or higher than that of men in cross-cutting areas, such as customs and legal frameworks.

[5] 927,595.80 CO_2-eq tonnes allocated among authorized importers, plus an additional 10 per cent for contingencies.

Sustainability of the HFC phase-out and assessment of risks

19. Cuba initiated the implementation of the first tranche of the KIP and established the institutional foundations for continuing activities to promote zero- and low-GWP refrigerants and reduce demand for HFCs. The sustainability of HFC reductions is supported by the implementation of the HFC quota system, strengthened customs and enforcement mechanisms, continued collaboration among national institutions, including further efforts to strengthen communication among the actors involved in the licensing and quota system, and awareness-raising activities targeting key stakeholders. Continued training of customs officers and other enforcement personnel is expected to further support the effective implementation of HFC import controls.

20. Cooperation with the Ministry of Education regarding the RAC technician certification led to the approval of technician competency certification procedures, designation of two initial evaluation centres, and initiation of work on a secure online registration platform. Sustainability of training activities will depend on the capacity of local institutions to continue providing training after completion of the KIP. Updating the capacity of RAC trainers to cover the safe handling of low-GWP alternative refrigerants, together with the provision of equipment and tools to training institutions, is intended to strengthen national technical capacity and reduce the risk of unsafe servicing practices, particularly when using flammable alternatives.

21. The main risks to project implementation relate to geopolitical stability and the limited availability of suppliers, procurement and delivery delays, and rising equipment costs. Mitigation measures include initiating procurement processes in advance, exploring alternative suppliers, and reviewing technical specifications to identify cost-effective equipment that meets the required technical and safety standards.

Conclusion

22. Cuba's HFC consumption during the reporting period was below the maximum allowable consumption level under the Agreement and the control targets of the Montreal Protocol, as confirmed by the verification report. The recommendations of the verification report will be addressed during the implementation of the second tranche. The disbursement of funds approved under the first tranche exceeded 20 per cent. Despite the delays in equipment procurement, significant progress has been made in implementing the first tranche. During the second tranche, the country will continue and further strengthen the KIP strategy, including the promotion of low-GWP refrigerants, enhancement of technical capacity for their safe use in RAC systems, measures to reduce HFC demand and emissions throughout their life cycle, and initiatives to enhance energy efficiency in RAC equipment. Therefore, the Secretariat recommends the approval of the second tranche of the KIP for Cuba.

RECOMMENDATION

23. The Fund Secretariat recommends that the Executive Committee note the progress report on the implementation of the first tranche of stage I of the Kigali HFC implementation plan (KIP) for Cuba, and further recommends blanket approval of the second tranche of stage I of the KIP and the corresponding 2026–2029 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)	Kigali HFC implementation plan (stage I, second tranche)	130,000	16,900	UNDP