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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-eighth Meeting
Montreal, 22–26 June 2026
Item 8(c) of the provisional agenda¹

PROJECT PROPOSAL: PANAMA

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

Phase-out

- HCFC phase-out management plan (stage III, third tranche) UNDP Blanket approval

¹ UNEP/OzL.Pro/ExCom/98/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Panama

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

ARTICLE 7 DATA (Annex C, Group I)	Year: 2025	5.62 ODP tonnes
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COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2025
Substance	Aerosol	Foam	Firefighting	Refrigeration		Solvent	Total sector consumption
				Manufacturing	Servicing		
HCFC-22					5.62		5.62

CONSUMPTION DATA (ODP tonnes)			
2009–2010 baseline:	24.78	Starting point for sustained aggregate reductions:	27.28
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	13.89	Remaining:	0.00

ENDORSED BUSINESS PLAN		2026	2027	2028	Total
UNDP	ODS phase-out (ODP tonnes)	4.75	0.00	0.00	4.75
	Funding (US \$)	490,957	0	0	490,957

PROJECT DATA			2020	2021-2022	2023	2024-2025	2026	2027	2028	2029	2030	Total
Consumption (ODP tonnes)	Montreal Protocol limits		16.11	16.11	16.11	16.11	8.05	8.05	8.05	8.05	0.0	n/a
	Maximum allowable		16.11	16.11	16.11	16.11	8.05	8.05	0.62	0.62	0.0	n/a
Amounts approved in principle (US \$)	UNDP	Project costs	206,800	0	497,612	0	458,838	0	0	129,250	0	1,292,500
		Support costs	14,476	0	34,833	0	32,119	0	0	9,047	0	90,475
Funds approved by ExCom (US \$)		Project costs	206,800	0	497,612	0		0	0	0	0	704,412
		Support costs	14,476	0	34,833	0		0	0			49,309
Total funds recommended for approval at this meeting (US \$)		Project costs					458,838					458,838
		Support costs					32,119					32,119

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Panama, UNDP as the designated implementing agency has submitted a request for funding for the third tranche of stage III of the HCFC phase-out management plan (HPMP), in the amount of US \$458,838, plus agency support costs of US \$32,119.² The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption from 2023 to 2024, and the tranche implementation plan for 2026 to 2029.

Report on HCFC consumption

2. The Government of Panama reported a consumption of 5.62 ODP tonnes of HCFCs in 2025, which is 77.3 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 Panama (Article 7 data)

HCFC-22	2021	2022	2023	2024	2025	Baseline*
Metric tonnes (mt)	196.16	183.82	160.97	136.86	102.10	430.66
ODP tonnes	10.79	10.11	8.85	7.53	5.62	24.78

*Including a consumption of 2.54 ODP tonnes of HCFC-123, HCFC-124, HCFC-141b and HCFC-142b

3. The use of HCFC-22 in Panama during the implementation of stage III of the HPMP is mainly associated with the servicing and maintenance of refrigeration and air-conditioning (RAC) equipment. No other HCFCs are currently consumed. The steady decreasing trend shows that the control of HCFCs is effective due to the activities implemented under the HPMP, including the implementation of control measures through the import quota system, the adoption of alternative technologies, and the market transition towards newer technologies.

Country programme implementation report

4. The HCFC consumption data provided by the Government of Panama in its CP 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 HCFC imports and exports and that the total consumption of HCFCs reported under Article 7 of the Montreal Protocol for 2023 and 2024 was correct (as shown in table 1 above). The verification concluded that Panama has an updated legal and institutional framework aligned with its international obligations on ODS, supported by strong import control procedures, strict oversight of registered companies with assigned quotas, and good-quality documentation management for these activities.

6. The verification report recommended strengthening oversight by establishing written procedures for applying Panamanian regulations across the national territory and all sectors using refrigerant gases; assessing the feasibility of limiting the registration of companies or individuals with direct or indirect commercial, family, or employment links to already registered importers, in order to reduce the risk of price speculation, monopolies, or hoarding; and improving transparency by disseminating information on remaining quota allocations through public calls for action, including publication on the Ministry of Health website and outreach to stakeholders.

² As per the letter of 9 April 2026 from the Ministry of Health of Panama to UNDP.

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

Legal framework

7. During the implementation of the second tranche, resolution No. 007 of 19 March 2024 was issued, approving the labor competency standards for good practices in RAC systems and RAC mechanics.

8. From 2023 to 2025, annual follow-up was conducted on HCFC quota distribution and allocation to importers in Panama, in accordance with resolution No. 481 of August 2022 and the applicable reduction targets. Throughout each year, import applications were reviewed to ensure that companies did not exceed their assigned ODS quotas. In addition, a digital licensing system has been developed to manage the registration of importers, exporters and re-exporters of controlled substances, including HCFC-22, HFCs and alternatives, as well as related technologies. The platform is expected to become operational by the end of 2026 and will help streamline administrative procedures and reduce licensing errors.

9. One workshop on illicit trade control for customs officers was conducted, with 37 officials participating (including 26 women); two workshops were held to disseminate the contents of resolution No. 697 of 7 September 2023, which approves the control and quota allocation mechanisms for HFCs and HCFCs, with a total of 40 key stakeholders participating (including 16 women); one updated session on tariff codes was conducted; one formal presentation was also delivered to update the customs system with the specific tariff codes; and one workshop on the implementation of the Montreal Protocol, Kigali Amendment, and other environmental agreements was conducted for a total of 38 participants (including 20 women).

Refrigeration servicing sector

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

- (a) *Application of good refrigeration practices and procedures in the RAC servicing sector:* Conducted the national capacity-building programme for a total of 1,602 RAC technicians to advance the adoption of environmentally sound practices and technologies; established an agreement between the Ministry of Health and National Institute for Vocational and Human Development (INADEH) regarding the training centre's support in providing courses for RAC technicians; conducted a series of training and awareness courses and forums targeting a wide range of stakeholders; enhanced the technical capacity of the national service sector by providing a comprehensive toolkit³ for applying good practices and ensuring the safe handling of hydrocarbon refrigerants for a total of 56 RAC workshops across the country; trained 136 graduating refrigeration students (including 10 women), on good practices in RAC; and awarded basic RAC toolkits to 24 outstanding students from these courses;
- (b) *Establishment of the RAC technician certification scheme:* Promoted the approval of the labor competency standards for good practices in RAC systems and RAC mechanic; developed two systems to train local experts in evaluating good practices certification tests for RAC technicians jointly with the Technical Secretariat of the National Competency Commission and the International Labour Organization, through the Inter-American Centre for Knowledge Development in Vocational Training; six local experts were certified to evaluate RAC technicians applying for the labor competency certification on good servicing practices; developed two promotion campaigns on the labor competency certification process resulting in the enrollment of 104 RAC technicians (including 58 women) of which

³ Including manifold, welding equipment, pipe cutter, leak detector, vacuum pump, pipe bender.

46 RAC technicians became certified; updated the evaluation instruments for the labor competency standards; and strengthened the technical capacity of INADEH training centers to be used for the technician certification process by providing the necessary equipment and materials⁴ to evaluate technicians against the national competency standard;

- (c) *Strengthening of the formal education technical institutes:* Conducted one virtual train-the-trainers workshop on advanced refrigerant technologies for 10 instructors; organized one train-the-trainers workshop on good practices for the recovery and recycling (R&R) of refrigerants in the RAC sector for 36 participants (including five women); completed delivery of 13 tool kits⁵ and basic equipment for the laboratories of the technical education centres; and upgraded the curriculum of RAC good practices which was formally integrated into the RAC technical degree in the national education system;
- (d) *Strengthening of the refrigerant recovery, recycling and reclaiming (RRR) network:* Conducted a feasibility study to establish refrigerant collection, recycling and regeneration centers in the country which confirmed both economic and technical viability; progressed on securing a technical education institute to host the RRR center; procured equipment to operationalize the RRR center and procured additional equipment⁶ to strengthen 30 RAC workshops as part of the national refrigerant R&R network;
- (e) *Technical assistance for end-users in the adoption of zero ODP, low GWP technologies:* Conducted two workshops on good practices for R&R for 72 RAC technicians (including 24 women); organized five forums on life-cycle refrigerant management for 105 participants (including 15 women); conducted two training sessions for end-user sectors on the implementation of the Montreal Protocol, the Kigali Amendment, and the adoption of low-GWP alternatives for 76 participants (including 16 women); and conducted one field visit and held five strategic meetings with representatives of San Felipe market, to evaluate the viability of a technical assistance end-user project focused on the adoption of alternative technologies; and
- (f) *Public awareness activities:* A total of 466 awareness campaigns were conducted nationwide, reaching 7,565 participants (including 2,681 women) as decisions makers; consultancy services were contracted and supported the conceptualization, design, development, and implementation of a comprehensive communication strategy and plan.

Project implementation and monitoring

11. The national ozone unit (NOU) and UNDP have been monitoring activities, reporting on progress, and working with stakeholders to phase out HCFCs. Of the US \$29,500 approved for project monitoring activities under the second tranche, US \$20,500 was disbursed for project staff and consultants, US \$3,000 for meetings and workshops, and US \$6,000 for other expenses.

Level of fund disbursement

12. As of April 2026, of the US \$704,412 approved so far, US \$423,787 had been disbursed as shown in table 2. The balance of US \$280,625 will be disbursed during the implementation of the third tranche.

⁴ Includes recovery machines, digital vacuum gauges, 30 lb cylinders and personal safety equipment;

⁵ Includes RAC teaching modules, recovery units, recycling units, vacuum pumps, scales, cylinders, manifolds, refrigerant identifiers, piercing valves, hoses for different refrigerants, kit for HCs.

⁶ Includes reclaim machine (for the RRR center), transfer pump, refrigerant identifier, RR machine, digital scale, scale, leak detector, 30-, 50- and 100-pounds cylinders, manometers, vacuum pumps.

Table 2. Financial report of stage III of the HPMP for Panama (US \$)

Funding tranche	Funds approved	Funds disbursed	Disbursement rate (%)	Fund balance
First	206,800	206,800	100.0	0
Second	497,612	216,987	43.6	280,625
Total	704,412	423,787	60.2	280,625

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

13. The following activities will be implemented between July 2026 and December 2029:

- (a) *Strengthening of policies and legal frameworks to control HCFCs consumption:* Conduct nationwide monitoring visits to INADEH training centers and the Ministry of Education of Panama (MEDUCA) educational facilities to verify the implementation of RAC good practices courses and programmes; conduct nationwide inspection visits to 20 INADEH training centers and MEDUCA educational facilities to verify the proper use and condition of the donated equipment and tools; and conduct three training workshops for 90 customs officers on updated content on HCFC control measures and prevention of illicit traffic (US \$33,500 plus funds from previous tranche);
- (b) *Strengthening of the RRR network:* Conduct four training workshops for 120 RAC technicians on RRR techniques; conduct 45 RAC workshops with the provision of basis equipment kits for RRR⁷; establish, equip and install three collection centers for recovered refrigerant gases; and design, print and distribute 100 educational guidelines (US \$60,450 plus funds from previous tranche);
- (c) *Application of good refrigeration practices and procedures in the RAC servicing sector:* Conduct one training workshop for 30 RAC technicians from end-user enterprises and RAC workshops on new RAC technologies, energy efficiency and applied electronics; organize 10 training workshops for 150 RAC technicians on updated content on RAC good practices and alternative refrigerants; design, print, and distribute 150 educational publications and guides on good refrigeration practices; provide basic equipment and tool kits for the safe handling of refrigerant gases for 15 women RAC technicians; and provide 48 equipment and tool kits⁸ to outstanding students from the MEDUCA RAC programme (US \$70,750);
- (d) *Establishment of the RAC technician certification scheme:* Support the development and implementation of strategic communication actions regarding the labor competency certification process in RAC good practices; support the formal certification process for 75 RAC technicians to obtain their labor competency certification in RAC good practices; and equip four labor competency certification centers with the basic tools and equipment⁹ necessary to conduct the certification process (US \$58,000 plus funds from previous tranche);
- (e) *Strengthening of the formal education technical institutes:* Procure 18 equipment and tool kits¹⁰ to strengthen the laboratory capacity of formal and informal education centers nationwide (US \$36,000 plus funds from previous tranche);

⁷ Ibid., footnote 6

⁸ Ibid., footnote 3

⁹ Ibid., footnote 4

¹⁰ Includes a refrigerant recovery unit, a vacuum pump, a halogenated gas leak detector, a halogenated gas manifold set, a digital vacuum gauge, a five-bulb digital thermometer, recovery cylinders, refrigerant cylinders, portable welding equipment, a nitrogen tank, and other basic hand tools.

- (f) *Technical assistance for end-users in the adoption of zero-ODP, low-GWP technologies:* Conduct one training workshop for 30 technicians on alternative technologies for technicians from end-user sector enterprises; select two companies in the end-user sector to participate in the technical assistance project focused on alternative technologies; recruit one international consultant to provide technical advisory services to the end-user sector companies participating in the technical assistance project on alternative technologies; and implement two demonstration cases showcasing new RAC technologies that utilize low GWP refrigerants (US \$111,138 plus funds from previous tranche);
- (g) *Public awareness activities:* Conduct six awareness campaigns focused on HCFC alternatives and the use of zero ODP and low GWP technologies; procure and distribute promotional materials to participants attending the events and campaigns; and reproduce and distribute awareness and educational materials regarding zero-ODP and low-GWP alternatives (US \$45,000 plus funds from previous tranche); and
- (h) *Project monitoring and implementation* (US \$44,000): US \$28,000 for national consultants, US \$8,000 for verification report; US \$3,600 for travel, and US \$4,400 for stakeholder meetings.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption and verification

14. UNDP submitted the verification report for HCFC consumption for 2023–2024 and, upon the Secretariat's request, informed that the verification report for the 2025 HCFC consumption targets is under finalization and will be completed by June 2026. In line with decision 72/19, the Treasurer will be requested to transfer approved funds to UNDP only after receipt by the Secretariat of the complete verification report confirming that the country was in compliance for that period.

15. The Secretariat enquired about the recommendations included in the verification report, mainly related to free trade zones, the need for more robust oversight mechanisms for written procedures, and specialized professional institutional capacity. UNDP clarified that, regarding free trade zones, a technical meeting was held in March 2026 between the NOU of the Ministry of Health of Panama and the Colón Free Zone to discuss the control of regulated substances, applicable measures within free trade zones, and potential cooperation mechanisms. As a result, progress was made in creating user accounts for the Electronic Commercial Movement Declaration System to strengthen monitoring and oversight.

16. With respect to written procedures, UNDP indicated that technical and institutional coordination among competent authorities is continuously being strengthened through training forums, exchange of regulatory information, and awareness-raising activities targeting stakeholders involved in the import, monitoring, and commercialization of refrigerants, including customs authorities, private sector representatives and other relevant entities.

17. Regarding specialized professional capacity, UNDP noted that the need to further strengthen the technical and institutional capabilities of entities involved in the control and oversight of refrigerants, including hydrocarbons, is fully recognized. In this regard, the Panama Fire Department has been actively involved in strengthening capacity for the safe management and control of flammable refrigerants, including through technical training, coordination meetings with the National Directorate of Fire Prevention and Safety, and participation in update sessions organized under the Montreal Protocol and Kigali Amendment framework.

18. The Secretariat inquired about the data from 2009 to 2016 which was not consistent between CP and Article 7 data as it appeared that the data for HCFC-124, HCFC-141b, and HCFC-142b was shifted by one year. UNDP confirmed that the NOU reviewed and have made the necessary adjustments to the Article 7 data.

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

Legal framework

19. The Government of Panama has issued HCFC import quotas for 2026 at 4.38 ODP tonnes, which is lower than the Montreal Protocol control targets.

Refrigeration servicing sector

20. Upon inquiry about regulatory measures, UNDP confirmed that technical standard (DGNTI COPANIT ISO 5149 4:2014) that corresponds to the operation, maintenance, repair and recovery of refrigeration systems, safety and environmental requirements was put in place by 1 January 2024; Panama became a member of the Central American Customs Union, adopting the Central American Tariff System; and approved the modifications incorporating the seventh amendment to the Central American Import Tariff on Harmonized System Codes. UNDP also clarified that under current regulations governing the allocation of quotas for HFCs (Resolution No. 697 of 2023), all importers of low/zero-GWP refrigerants and HFCs are required to register with the Sub-Directorate General of Environmental Health (SDGSA) and all imports of low/zero-GWP refrigerants must be authorized by the SDGSA.

21. The Secretariat inquired about why the initial goal of 30 toolkits was exceeded by 26 toolkits, and UNDP explained that the purchase of additional equipment and tool kits resulted from two international procurements, during which all the equipment and tools were acquired, along with equipment and tools for the refrigerant RRR center which led to relatively low costs and allowed for an increase in the quantities ordered.

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

22. The Secretariat requested clarification on changes to the original plan to purchase three tool kits and basic equipment for laboratories of technical education centres for the whole stage. Under the second tranche, 13 training facilities were instead strengthened with kits containing equipment, tools, and supplies, and under the third tranche an additional 18 technical institutes will receive HCFC basic tools and equipment kits for their laboratories. UNDP explained that during the implementation of the project, it was identified that several INADEH training centers already possessed training modules that had become unusable due to the unavailability of replacement parts in Panama. As a result, it was decided to provide new kits including a refrigerant recovery unit, a vacuum pump, a halogenated gas leak detector, a halogenated gas manifold set, a digital vacuum gauge, a five-bulb digital thermometer, recovery cylinders, refrigerant cylinders, portable welding equipment, a nitrogen tank, and other basic hand tools. For safe handling of hydrocarbons, they were provided with a hydrocarbon manifold set, a hydrocarbon leak detector, and an electronic scale.

Gender policy implementation

23. In line with decisions 84/92(d) and 90/48(c), during the implementation of the previous tranche, various gender-related actions have been taken including monitoring and reporting of sex-disaggregated data, integration of gender considerations in training materials and awareness-raising communications, collection of baseline data on women technicians in the RAC sector, and inclusion of aspects encouraging recruitment of women. In 2023, a dedicated initiatives were implemented, including the first Dialogue for Women in the RAC and mobile air-conditioning (MAC) sectors, with 48 participants (including 35 women).

Sustainability of the HCFC phase-out and assessment of risks

24. The sustainability of the HCFC phase-out in Panama is ensured through integrating good practices and safety standards for handling flammable refrigerants into INADEH's official training curriculum, thus guaranteeing the continuous education of RAC technicians and supporting the certification process through targeted awareness-raising among key stakeholders and associations. At the regulatory and enforcement level, the risk of illicit trafficking is minimized through ongoing training of customs officers and maintaining dialogues and visits to the free trade zone and customs control centres.

Conclusion

25. The Government of Panama is in compliance with the maximum allowable consumption levels for both the Montreal Protocol and the Agreement with the Executive Committee, and that its 2025 HCFC consumption is 77.3 per cent below the baseline level and 30 per cent below the target for the year. During the reporting period, the disbursement level of funds approved in the previous tranche is 43.6 per cent, and progress has been achieved during the implementation of the tranche. The activities planned under the third tranche will further strengthen the refrigeration servicing sector and ensure the long-term sustainability of stage III. UNDP has committed to submitting the complete verification report for 2023 to 2025 at the earliest by June 2026 and as per decision 72/19 the Secretariat recommends *inter alia* that the Treasurer be requested to transfer approved funds to UNDP only after receipt by the Secretariat of the complete verification report confirming that the country was in compliance for that period.

RECOMMENDATION

26. The Fund Secretariat recommends that the Executive Committee note the progress report on the implementation of the second tranche of stage III of the HCFC phase-out management plan (HPMP) for Panama, and further recommends blanket approval of the third tranche of stage III of the HPMP and the corresponding 2026–2029 tranche implementation plan for Panama at the funding level shown in the table below, on the understanding that the approved funds will not be transferred to UNDP until the Secretariat has reviewed the complete verification report for HCFC consumption for 2023 to 2025 and confirmed that Panama was in compliance with the Montreal Protocol and the Agreement between the Government and the Executive Committee.

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage III, third tranche)	458,838	32,119	UNDP