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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(d) of the provisional agenda¹

Addendum

PROJECT PROPOSALS: ARGENTINA

This document is issued to **add** to the comments and recommendation of the Secretariat on the project proposals issued for Argentina:

Phase-out

- | | | | |
|---|---|-------|--------------------------|
| • | HCFC phase-out management plan (stage III, first tranche) | UNIDO | Individual consideration |
|---|---|-------|--------------------------|

¹ UNEP/OzL.Pro/ExCom/97/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Argentina

(I) PROJECT TITLE	AGENCY
HCFC phase-out plan (stage III)	UNIDO (lead)

(II) LATEST ARTICLE 7 DATA (Annex C, Group I)	Year: 2024	158.45 ODP tonnes
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(II) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2024
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use
				Manufacturing	Servicing			
HCFC-22	0.10			2.20	59.60			61.90
HCFC-123			0.66		0.16			0.81
HCFC-141b	1.78	32.61			6.66			41.05
HCFC-141b in imported pre-blended polyols		4.17						4.17
HCFC-142b					0.20			0.20

*Actual use by sector may differ from reported consumption (production and imports minus exports) due to stocks management

(IV) CONSUMPTION DATA (ODP tonnes)			
2009–2010 baseline:	400.70	Starting point for sustained aggregate reductions:	377.51
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	198.72	Remaining:	178.79

(V) ENDORSED BUSINESS PLAN		2025	2026	2027	Total
UNIDO	ODS phase-out (ODP tonnes)	21.44	0.0	0.0	21.44
	Funding (US \$)	2,000,000	0	0	2,000,000

(VI) PROJECT DATA		2025	2026	2027	2028 2029	2030	Total
Montreal Protocol consumption limits (ODP tonnes)		130.22	130.22	130.22	130.22	0.0	n/a
Maximum allowable consumption (ODP tonnes)		130.22	130.22	130.22	130.22	0.0	n/a
Project costs requested in principle (US \$)	UNIDO	Project costs	2,548,000	0	5,404,832	0	1,291,183
		Support costs	178,360	0	378,338	0	90,383
Total amounts recommended in principle (US \$)		Project costs	2,548,000	0	5,404,832	0	1,291,183
		Support costs	178,360	0	378,338	0	90,383
		Total funds	2,726,360	0	5,783,170	0	1,381,566

(VII) Request for approval of funding for the first tranche (2025)		
Implementing agency	Funds recommended (US \$)	Support costs (US \$)
UNIDO	2,548,000	178,360

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Argentina, UNIDO as the designated implementing agency has submitted a request for stage III of the HCFC phase-out management plan (HPMP), in the amount of US \$9,639,994, plus agency support costs of US \$674,800, as originally submitted.² The implementation of stage III of the HPMP will phase out the remaining consumption of HCFCs by 2030.

2. The first tranche of stage III of the HPMP being requested at this meeting amounts to US \$2,809,916, plus agency support costs of US \$196,694, for UNIDO, as originally submitted.

Status of implementation of stage II of the HCFC phase-out management plan

3. Stage II of the HPMP for Argentina was originally approved at the 79th meeting³ and subsequently updated and revised at the 80th and 92nd meetings.⁴ It set out to phase out 115.19 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector and in the extruded polystyrene (XPS) and polyurethane (PU) foam manufacturing sectors, and to meet the 50 per cent reduction from the baseline by 2022 (subsequently extended to 2024), at a total cost of US \$9,941,238, plus agency support costs. An overview of the implementation of stage II, including the analysis of HCFC consumption, progress and financial reports on the implementation, and the request for the fourth and final tranche submitted to the current meeting, is presented in paragraphs 1 to 45 of document UNEP/OzL.Pro/ExCom/97/36.

Stage III of the HCFC phase-out management plan

Remaining consumption eligible for funding

4. After deducting 198.72 ODP tonnes of HCFCs associated with stages I and II of the HPMP, the remaining consumption eligible for funding in stage III amounts to 178.79 ODP tonnes of HCFCs.

Sector distribution of HCFCs

5. The refrigeration servicing sector accounts for 63.2 per cent of Argentina's HCFC consumption. After removing HCFC consumption in the foam sector, addressed in stage II of the HPMP, servicing represents 93 per cent of total HCFC consumption to be addressed under stage III. Table 1 presents the distribution of average HCFC use among sectors for the years 2022–2024 based on the country programme (CP) data.

Table 1. Average HCFC use by sector in Argentina in 2022–2024 (CP data))

Sector	Substance	Metric tonnes (mt)		ODP tonnes	
		tonnage	%	tonnage	%
Manufacturing					
Aerosol	HCFC-22	1.07	0.0	0.06	0.0
	HCFC-141b	28.81	1.3	3.17	2.1
Commercial refrigeration	HCFC-22	58.33	2.6	3.21	2.1
	HCFC-142b	0.64	0.0	0.04	0.0
Firefighting	HCFC-123	47.22	2.1	0.94	0.6
XPS foam	HCFC-22	11.20	0.5	0.62	0.4

² As per the letter of 26 August 2025 from the Ministry of Foreign Affairs, International Commerce and Worship of Argentina to UNIDO.

³ Decision 79/33

⁴ Decisions 80/31 and 92/31

Sector	Substance	Metric tonnes (mt)		ODP tonnes	
		tonnage	%	tonnage	%
PU foam	HCFC-141b*	440.38	19.4	48.44	31.5
Subtotal manufacturing		587.65	25.9	56.48	36.8
Servicing					
Refrigeration servicing sector	HCFC-22	1,598.81	70.3	87.93	57.3
	HCFC-123	3.73	0.2	0.07	0.0
	HCFC-141b	81.38	3.6	8.95	5.8
	HCFC-142b	1.59	0.1	0.10	0.1
Subtotal servicing		1,685.51	74.1	97.06	63.2
Total		2,273.16	100.0	153.54	100.0

*Including 389.89 mt (42.89 ODP tonnes) of pure HCFC-141b and 50.49 mt (5.55 ODP tonnes) of HCFC-141b contained in the imported pre-blended polyols

Aerosol sector

6. Of the approximately 20 enterprises identified as aerosol producers, 10 still consume HCFC-22 and HCFC-141b, mostly in electrical, electronics, and automotive subsectors, with the primary application being cleaning products designed to dissolve active ingredients like lubricants, insulators, and adhesives. Blowers for particle removal typically use pure HCFC-22, while products such as cold pain-relief aerosol dispensers employ blends of HCFC-141b and HCFC-22. Artificial snow in aerosol form (aqueous foam) is manufactured using a mixture of HCFC-22, butane, and dimethyl ether. Household aerosols, however, already use hydrocarbons (HCs) as propellants. To date, the aerosol sector has not received assistance to phase out HCFCs.

Commercial refrigeration

7. Large domestic and commercial refrigeration manufacturers (e.g., Bambi, Briket and Mabe) have already received assistance to phase out HFCs, but numerous small and medium-sized enterprises (SMEs) still rely on HCFC-22 to manufacture equipment such as display cabinets, freezers, bottle coolers, counter displays, and horizontal and vertical showcases to serve local market niches—corner stores, bakeries, cafés, pastry shops, and specialty stores in nearby cities and regions. These demands cannot be met by larger manufacturers located far from end users. More than 80 commercial refrigeration manufacturing enterprises have been identified in the sector, consuming approximately 40 mt of HCFC-22 in 2024.

Firefighting sector

8. The 12 identified manufacturers of fire extinguishers use mostly HCFC-123, HFC-227ea and HFC-236fa in their production processes; six of those enterprises consume close to 80 per cent of total HCFC-123 used in the sector. The firefighting sector has not yet been assisted to phase out HCFCs.

Foam manufacturing sector

9. HCFC-141b is widely used in Argentina's PU foam manufacturing sector, mostly by numerous SMEs, and small quantities of HCFC-22 and HCFC-142b were used in the manufacturing of XPS insulation boards. Stage II of the HPMP included activities to phase out the use of HCFCs in the PU and XPS foam sectors. The conversion of the XPS foam sector to alternatives with low global-warming potential (GWP) has been completed, whereas the conversion of the PU foam sector is still underway and is expected to be finalized by the end of 2027. As of 2025, no import quotas have been issued for HCFC use in either PU or XPS foam manufacturing.

Refrigeration servicing sector

10. There are over 10,000 technicians and 6,500 workshops operating in Argentina servicing sector, consuming mostly HCFC-22 and small amounts of HCFC-123 to service residential air-conditioning (AC) units, chillers, a range of RAC systems in supermarkets (e.g., display cabinets, bottle coolers, condensing units, centralized refrigeration systems), and refrigeration systems in industries such as ice cream factories, dairy farms, wineries and fishing vessels, as shown in table 2. The biggest HCFC consumers among the RAC servicing subsectors are supermarkets (44.1 per cent of total HCFC consumption), followed by fishing vessels (32.1 per cent) and small retail stores (14.6 per cent).

Table 2. Estimation of demand for HCFCs in the RAC servicing sector in Argentina

Sector/Application	Installed capacity (mt)	Installed capacity refilled/year (%)	Estimated HCFC demand	
			(mt)	(%)
Air-conditioning				
Room AC	7,500.00	2	150.00	8.8
Chillers	232.77	2	*4.66	0.3
Subtotal AC			154.66	9.0
Commercial and industrial refrigeration				
Supermarkets	1,833,304	40	753.00	44.1
Small retail stores	n/a	n/a	250.00	14.6
Fisheries	217.99	252	549.00	32.1
Ice cream, winery, dairy farms	132.96	2	2.66	0.2
Subtotal refrigeration			1,554.66	91.0
Grand total			1,709.32	100

* Including 2.7 mt of HCFC-123

Note: The estimated HCFC demand differs from consumption reported in 2024, which was lower than in previous years due to economic contraction. The estimation is largely consistent with the average 2022–2024 use in servicing of 1,685.51 mt, based on CP data.

Commercial and industrial refrigeration

11. Commercial refrigeration servicing in Argentina includes cooling equipment for supermarkets and stores, ice cream factories, and winery and dairy farm cooling installations. The most commonly used refrigerants are HFC-134a, HCFC-22 and R-404A, with HCFC-22 gradually being replaced by R-404A and, more recently, CO₂-based cooling. Supermarkets are the main users of HCFCs. Leakage ratios vary between direct and indirect systems and by business scale. While large supermarket chains with dedicated service teams are able to conduct timely and effective maintenance, smaller independent shops often lack specialized expertise, leading to less efficient interventions. The average refrigerant loss due to leaks is estimated at 40 per cent.

12. Argentina's fishing fleet averages 35 years in age, with most vessels equipped with outdated refrigeration systems. The majority operate with HCFC-22 (approximately 585 vessels), while a smaller number use R-404A, R-507A, or ammonia (R-717/NH₃). Refrigerant losses in this subsector are significant due to the vessels' constant and often rough motion (pitch and roll) during extended fishing campaigns lasting weeks or months. In the event of leaks or equipment failure, refrigerant must be replenished or replaced immediately to preserve fish and seafood cargo. The average leakage rate per vessel during a single campaign is about 30 per cent. Depending on the vessel, the number of trips per year range from 8 to 20, resulting in HCFC-22 consumption that is two to sixfold higher than initial refrigerant charge.

13. Small amounts of HCFC-22 are used by dairy farms, wineries and ice cream manufacturers. Enterprises in these sectors also use R-717 and R-407A. The industrial refrigeration sector primarily relies on R-717, particularly in facilities dedicated to fruit storage, meat processing, and seafood preservation.

Air-conditioning

14. The main refrigerant used in residential AC is R-410A. The use of HCFC-22 in the residential AC manufacturing sector was phased out in stage I of the HPMP, followed by the corresponding ban on the import of HCFC-22-based equipment. However, there is still an estimated 9.4 million HCFC-22-based residential AC units currently in use across the country that require servicing. As those units gradually reach end of life, it is estimated that they will be replaced at an annual rate of five per cent.

15. Argentina has 12 importers and/or manufacturers of chillers. The use of HCFC-22 and HCFC-123 in chiller manufacturing has steadily declined, and no HCFCs are currently used in domestic manufacturing. Most imported chillers now rely primarily on HFC refrigerants, and there are still an estimated 2,232 chillers based on HCFC-22 and HCFC-123 that continue to require HCFCs for servicing.

Phase-out strategy

16. Stage III of the HPMP aims to completely phase out HCFC consumption⁵ through activities in the aerosol, firefighting, manufacturing of commercial refrigeration, and refrigeration servicing sector, as well as through the strengthening of national capacity for trade control, dissemination and awareness activities, and programme coordination and monitoring.

Proposed activities

Aerosol

17. Stage III proposes to provide technical assistance to aerosol manufacturers transitioning from the use of HCFCs to alternative propellants. Activities include the technology review of current processes used by aerosol enterprises; guidance on best practices in the industry; workshops and individual consultations to identify and select the most suitable alternative propellants or solvents—preferably HCs or hydrofluoroolefins (HFOs)—for specific uses while addressing flammability concerns; technical modifications to plant equipment where necessary; pilot trials with selected alternatives; and commercial-scale production without HCFCs.

18. Funding requested for this sector amounts to US \$138,500, covering international expert support (US \$14,500 including travel), workshops and individual enterprise consultations (US \$18,000), and equipment modifications and process adjustments to adopt low-GWP alternatives at four enterprises (US \$106,000).

Commercial refrigeration manufacturing

19. Stage III proposes to phase out 46.91 mt (2.58 ODP tonnes) of HCFC-22 through converting the 10 largest SMEs in the commercial manufacturing sector to low-GWP alternatives (i.e., R-600a and R-290) in the manufacturing of display cabinets, freezers, coolers and other equipment manufactured and charged on-site.

20. Funding requested for this sector amounts to US \$713,000, including procurement of tools and equipment (charging units, hand-held detectors and locking tools), safety measures (sensors, alarms, ventilation and ducts), equipment installation, trials and startup for 10 enterprises (US \$650,000); and

⁵ And to maintain a maximum annual consumption of HCFCs in the period of 2030 to 2040 at a level consistent with Article 5, paragraph 8 ter(e)(i), of the Montreal Protocol.

technical assistance, including a workshop for SMEs on safety issues related to the manufacturing processes when working with flammable refrigerants, visits to support conversions to HCs, and safety audits (US \$63,000). No incremental operating costs (IOCs) were requested. An additional 25 SMEs, with an associated consumption of around 9.1 mt of HCFC-22, will convert to non-HCFC alternatives without assistance from the Multilateral Fund.

Firefighting

21. Stage III proposes to assist 12 fire-extinguisher manufacturers in phasing out 48.23 mt (0.96 ODP tonnes) of HCFC-123 through technical support, capacity building, and equipment upgrades to ensure a sustainable transition to HCFC-free alternatives. The recommended replacement technology is HFC-236fa, which is highly effective against class A, B, and C fires, as well as electrically initiated fires, and leaves no harmful residue—making it ideal for protecting sensitive, high-value equipment in server rooms, telecommunications facilities, and other electronic environments. However, HFC-236fa has a high GWP of 9,810 and higher vapor pressure compared to HCFC-123. These factors necessitate specialized storage tanks, upgraded filling machines capable of withstanding elevated pressures, and closed loop charging and recovery systems.

22. The funding requested for this sector in the amount of US \$231,500 includes technical advice by an international expert (US \$14,500), workshops and individual discussions with enterprises to find the most appropriate alternatives for their applications (US \$17,000), and adjustments to the manufacturing processes to replace HCFCs in at least eight enterprises (US \$200,000).

Refrigeration servicing sector

23. Activities in this component include the strengthening of the legal framework and national capacity for trade control, strengthening of the refrigeration servicing sector, dissemination and awareness-raising activities, coordination and monitoring, and a special contingency component. The activities and their cost breakdown for the stage and the first tranche are presented in table 3.

Table 3. Servicing sector activities and costs under stage III of the HPMP for Argentina, as submitted

Activity	Cost (US \$)	
	Stage III	1 st tranche
Strengthening of the legal framework and the national capacity for trade control		
<u>Strengthening of the legal and institutional framework:</u> Establish bans on import of commercial refrigeration equipment containing HCFCs by 1 January 2027 and on the manufacturing of equipment containing HCFCs by 1 January 2028; regulate and monitor HCFC production in line with phase-out schedule, with full bans on HCFC production and on the import of all HCFCs established by 1 January 2030, except for the servicing tail	*	*
<u>Strengthening of the national capacity to control and monitor HCFC trade:</u> Training of 60 to 90 customs and enforcement officers, importers and brokers in identifying and controlling HCFC-related substances and equipment	42,000	16,800
Strengthening of the refrigeration servicing sector		
<u>Training, certification and equipping of technicians:</u> Under the ongoing technician training and certification scheme, train 1,000 additional technicians (US \$242,704) and certify 400 technicians (US \$48,400) in good servicing practices, safe handling of flammable alternatives and refrigerant recovery; and provide 500 tool kits ⁶ to certified technicians (US \$750,500)	1,041,204	397,800

⁶ Containing *inter alia* piercing pliers, vacuum gauges, manifolds, electronic leak detector, charging machine, digital multimeter, and personal protection items.

Activity		Cost (US \$)	
		Stage III	1 st tranche
<i>Incentive programme to accelerate HCFC phase-out in supermarkets:</i> Assist selected locally owned hypermarket and supermarket chains and promote demand for locally manufactured HC-based refrigerators, bottle coolers and other RAC units, where technically feasible, by replacing 380 HCFC-based stand-alone coolers, freezers and display cabinets (US \$1,900,000) and 125 centralized refrigeration systems (US \$1,500,000) to low-GWP alternatives at beneficiaries capable of replacing additional equipment with their own funding. Project costs also cover consultations with industry associations, organization of workshops, publications, coordination of the bidding process, selection of beneficiaries, monitoring of new equipment installation, disposal of baseline equipment and release of the incentive (US \$200,000)		3,600,000	800,000
<i>Technical and financial assistance to accelerate HCFC-22 phase-out in fishing vessels:</i> Organize 9 workshops for 180 stakeholders from the fisheries sector to present, discuss and select the most suitable alternative refrigerants (US \$127,000); carry out 8 demonstration trials with selected alternatives on different vessels across regions (US \$56,232); purchase 10 high-capacity recovery and recycling machines and large storage tanks for fisheries associations to recover HCFC-22 from fishing vessels prior to retrofits (US \$100,000); and establish an incentive programme for fishing enterprises to partially compensate and accelerate retrofit to alternative refrigerants, based on workshop findings (US \$2,164,768). Potential alternatives considered include R 417A, R 422D, R-424A, R-434A, R-438A, and R-453A.		2,448,000	500,000
Dissemination and awareness-raising activities			
Continue public-awareness activities to sensitize consumers to the issue of refrigerant venting and the advantages of using HCFC-free products, including media campaigns, dissemination of information, press conferences, and exhibitions for industry experts and main stakeholders		96,000	38,400
Project coordination and monitoring			
Project management activities, including technical and legal experts and consultants (US \$230,400), travel and monitoring (US \$204,000), operating costs and other expenses (US \$21,170)		455,570	182,228
Total		7,682,774	1,935,228
HCFC phase-out	mt	1,599.40	n/a
	ODP tonnes	87.97	n/a
Cost-effectiveness (US \$/kg)		4.80	
Special contingency		874,220	349,688

*US \$57,200 (US \$20,000 for the first tranche) included in the special contingency line

Project implementation and monitoring

24. The system established under stages I and II of the HPMP will continue into stage III, with Argentina's national ozone unit (OPROZ) and UNIDO monitoring activities, reporting on progress, and working with stakeholders to phase out HCFCs. The cost of those activities amounts to US \$455,570 for UNIDO, as presented in table 3 above.

25. As shown in table 3, stage III of the HPMP proposal included a budget line at approximately 9 per cent of total project value for special contingency, not linked to any HCFC reductions. The Government of Argentina explained that while the remaining eligible consumption in the Agreement is 178.79 ODP tonnes, the 2024 consumption still to be addressed is only 62.92 ODP tonnes due to economic contraction, and the average consumption in 2022–2024 is 93.10 ODP tonnes. The special contingency assistance was proposed to give flexibility to reinforce activities already planned for each sector and to address additional needs that may arise as HCFC demand progressively returns to typical levels.

Total cost of stage III of the HCFC phase-out management plan

26. The total cost of stage III of the HPMP for Argentina has been estimated at US \$9,639,994 (plus agency support costs), as originally submitted, for achieving a 100 per cent reduction by 2030. The proposed activities and their cost breakdown are summarized in table 4.

Table 4. Cost of stage III and the first tranche of stage III of the HPMP for Argentina, as submitted

Activity	Phase-out		Stage cost (US \$)	CE* (US \$/kg)	Tranche cost (US \$)
	mt	ODP tonnes			
Commercial refrigeration manufacturing	46.91	2.58	713,000	15.20	324,000
Aerosol	28.85	1.59	138,500	4.80	60,000
Firefighting	48.23	0.96	231,500	4.80	141,000
Refrigeration servicing sector activities	1,599.00	87.97	7,682,774	4.80	1,935,228
Contingency	n/a	n/a	874,220		349,688
Total	1,723.39	93.10	9,639,994	5.59	2,809,916

*CE=cost-effectiveness

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

27. The first funding tranche of stage III of the HPMP in the total amount of US \$2,809,916 will be implemented between January 2026 and December 2028. Detailed information on the activities included in the first tranche, indicating adjustments made and the level of funds agreed, is presented in table 6 below.

SECRETARIAT'S COMMENTS AND RECOMMENDATION**COMMENTS**

28. The Secretariat reviewed stage III of the HPMP in light of stages I and II, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decisions 74/50 and 90/31), and the 2025–2027 business plan of the Multilateral Fund. Due to the time needed to address gaps in several components identified during the discussions and to allow submission of a revised proposal, the review process was prolonged.

Overarching strategy*Total HCFC phase-out and use of the servicing tail*

29. The Government of Argentina proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, and to maintain a maximum annual consumption of HCFCs in the period of 2030 to 2040 at a level consistent with Article 5, paragraph 8 ter(e)(i), of the Montreal Protocol.⁷

30. In line with decision 86/51, to allow for consideration of the final tranche of its HPMP, the Government of Argentina will be required to submit a detailed description of the regulatory and policy framework in place to implement measures to ensure that HCFC consumption is in compliance with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol for the period 2030–2040, and, if Argentina intends to have consumption during the period 2030–2040, in line with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol, proposed modifications to its Agreement with the Executive Committee covering the period beyond 2030.

⁷ HCFC consumption may exceed zero in any year so long as the sum of its calculated levels of consumption over the ten-year period from 1 January 2030 to 1 January 2040, divided by 10, does not exceed 2.5 per cent of the HCFC baseline.

Basis for calculation of remaining consumption to be funded

31. In line with the guidelines, Argentina has chosen to base its reference consumption on the average HCFC consumption of the last three years (2022–2024), resulting in a funding request to phase out 93.01 ODP tonnes—significantly below the remaining eligible consumption level of 178.79 ODP tonnes. The Secretariat notes that the calculation is based only on HCFC-22, HCFC-123 and HCFC-142b, as HCFC-141b phase-out was already funded under stage II. The Secretariat’s similar calculation based on the CP reports resulted in 92.36 ODP tonnes, with the small difference likely related to consumption of HCFC-22 in the XPS foam sector that the Secretariat deducted as all HCFC consumption in foam sectors was already funded under stage II. The reference value of 92.36 ODP tonnes has been used in the review of this project.

Technical and cost-related issues

Aerosol

32. The Secretariat notes that, according to the CP reports, the average use of HCFC-22 in aerosols during 2022–2024 was 1.07 mt (0.06 ODP tonnes), while the average consumption of HCFC-141b was 28.81 mt (3.17 ODP tonnes). However, HCFC-141b consumption was fully addressed in previous stages of the HPMP, and there is no remaining eligible consumption of this substance under the Agreement. Consequently, funding for this activity would, in principle, be limited to approximately US \$5,000 based solely on HCFC-22 consumption—an amount insufficient to support a meaningful intervention in the sector.

33. The Secretariat and UNIDO discussed this issue and agreed on the importance of assisting local aerosol manufacturers to eliminate HCFC use. UNIDO indicated that the Government of Argentina was aware of this limitation; however, the current HCFC-141b consumption in the aerosol sector represented an ongoing industrial use that was not covered by commitments or technical assistance under previous stages. The Secretariat notes that Argentina has consistently reported HCFC-141b use in aerosols since the HCFC baseline years and considers it important to explore a flexible approach within the guidelines to support enterprises in transitioning to alternative technologies.

34. Given that the funding requested for this activity is relatively small compared to the overall stage III budget, that it would provide essential assistance to a sector still dependent on HCFCs, and that under previous refrigerant servicing sector activities assistance had been provided for phasing out HCFC-141b used as solvent in flushing refrigeration systems but not for other aerosol/solvent applications, the Secretariat proposed incorporating the small HCFC-22 tonnage for aerosols (0.06 ODP tonnes) into the servicing sector component and allowing the use of up to US \$130,000 from the servicing component for technical assistance to aerosol enterprises. Adjustments were made to other activities to accommodate this allocation while maintaining the cost-effectiveness threshold of US \$4.80/kg.

Commercial refrigeration manufacturing

35. There are an estimated 80 SMEs operating in the commercial refrigeration manufacturing sector, consuming 58.97 mt (3.25 ODP tonnes) of HCFCs (average 2022–2024). UNIDO provided a list of 35 identified eligible enterprises, indicating that the 10 largest ones would be directly assisted by the project, complemented by a technical assistance component for the sector. In reviewing the list of identified beneficiaries, the Secretariat noted that there were 11 enterprises with consumption above 1 mt, and that the incremental costs of converting those 11 enterprises, calculated in line with the agreed cost-effectiveness threshold and decision 19/32(a)(iv),⁸ amounted to US \$657,683, i.e., were only slightly higher than the cost of converting 10 enterprises, as submitted. Consequently, the Secretariat and UNIDO agreed on including 11 enterprises in the project and adjusting the technical assistance component from US \$63,000 to US \$55,317 to maintain funding at US \$713,000, as proposed.

⁸ None of the individual enterprise proposals exceeded the established cost-effectiveness threshold.

36. Upon request, UNIDO confirmed that the national RAC association, Cámara Argentina de industrias de refrigeración y aire acondicionado (CAIRAA), which had previously participated in national initiatives and other projects related to the Montreal Protocol, would be involved in facilitating SME engagement and supporting the implementation of technical assistance activities under this project.

37. UNIDO also confirmed the commitment from the Government of Argentina to establish a ban on the import of all equipment containing HCFC refrigerants and requiring HCFCs for operation, servicing and maintenance by 1 January 2027, and a ban on the manufacturing of HCFC-based commercial refrigeration equipment by 1 January 2028, to support the sustainability of conversions in the sector. Nothing that the implementation of this project and the promulgation of two bans will result in complete phase-out of HCFC consumption in the commercial refrigeration manufacturing sector (58.97 mt), the cost-effectiveness of the project is US \$12.09/kg.

Firefighting

38. Noting that the only viable alternative to HCFC-123 identified in the country is HFC-236fa, which has a very high GWP of 9,810, the Secretariat suggested an alternative strategy that focused rather than on adopting high-GWP HFCs, on implementing activities to ensure the proper handling and management of stocks of HCFC-123, monitor the availability of low-GWP alternatives while considering a potential ban should such alternatives become available before 2030, and to assess the potential impact of servicing needs on the country's consumption in the 2030–2040 period. The Secretariat noted that the consumption of HCFC-123 in firefighting over the past three years was small (0.94 ODP tonnes) and recalled decision XXX/2 of the Meeting of the Parties, whereby the Parties decided *inter alia* to include the servicing of fire-suppression and fire-protection equipment existing on 1 January 2030 in the permissible uses for the 2030–2040 servicing tail in Article 5 countries.

39. UNIDO informed the Secretariat that HCFC-123 consumption was expected to increase as the economy recovered and that provision of technical assistance and financial support to adopt feasible alternative technologies was needed. However, both UNIDO and the Government agreed with the approach of maintaining the production, repair, and recharge of fire-fighting equipment containing HCFC-123 in the transitional period until lower GWP alternatives became commercially available and conversion could take place. Until then, some imports of HCFC-123 would have to be maintained to recharge extinguishers for regular use and following leaks or losses during recovery.

40. The agreed alternative strategy focuses on the provision of technical assistance for recharging and maintaining portable fire extinguishers using HCFC-123 (US \$31,000), developing guidelines on good environmental practices in the maintenance, recharge, and use of these fire extinguishers (US \$8,000), provision of tools for analyzing, testing and re-using HCFC-123 recovered from fire protection equipment and associated training (US \$140,000),⁹ monitoring the availability of low-GWP alternatives with a view to establishing a ban should such alternatives become available before 2030 (US \$8,000), and assessing the potential impact of servicing needs on the country's consumption in the 2030–2040 period, including stakeholder consultations, workshops, and an awareness campaign to disseminate the results of the above assessment (US \$39,500). The funding level was agreed at US \$226,500, with a cost-effectiveness level of US \$4.80/kg.

Refrigeration servicing sector

Supermarkets

41. In explaining the 40 per cent leakage rate in supermarket RAC systems, UNIDO reported that prior to 2013, almost all cooling stations in the country had been of direct-expansion type, with long pipelines

⁹ Including recovery equipment, measuring/testing instruments to test recovered HFC-123, and awareness workshops.

filled with refrigerant and numerous connections that could lead to leaks. While indirect refrigeration systems using water or glycol have been introduced since then, their adoption rate remains low due to high associated costs. The average leakage rate of 40 per cent estimated in stage III is lower than the rates observed in previous two projects in Argentina, including one project where baseline leakage was measured at 103 per cent.

42. Upon discussions with UNIDO, the Secretariat reviewed the incentive programme for supermarkets in light of decision 84/84 applicable to end-user incentive schemes, with the following findings:

- (a) Project potential and regulatory support: The incentive targets primarily six hypermarket chains with 120 branches, operating 112 centralized refrigeration systems and 388 stand-alone units, as well as 14 supermarket chains with 936 branches, operating 1,062 centralized systems and 289 stand-alone units, with an estimated combined consumption of 274.18 mt of HCFC-22, out of the total consumption in supermarkets of 753 mt. Stage III proposes the establishment of a ban on imports of HCFC-22-based commercial refrigeration equipment in 2027 and a ban on the manufacturing of the same equipment in 2028, which will provide regulatory support and an additional incentive for adopting equipment based on alternatives;
- (b) Co-financing by beneficiaries: The project plans to replace 380 stand-alone units and 125 centralized systems currently in operation. UNIDO explained that the incentive will only be granted to supermarkets that can demonstrate that, by receiving support for one system, they will simultaneously self-finance the replacement of two to four additional systems, representing a 66 to 80 per cent level of co-financing. On this basis, in addition to the 505 RAC systems or units replaced by the project, the beneficiaries will replace an additional 1,010 to 2,020 RAC systems or units;
- (c) Availability and price of selected technologies and components: UNIDO indicated that technologies based on HCs, carbon dioxide (CO₂), and HFCs where required, were widely available in Argentina. Stand-alone HC-based equipment (e.g., bottle coolers, freezers, and refrigerators) are locally manufactured by enterprises assisted by the Multilateral Fund (Bambi, Bricket and Mabe), while centralized direct and indirect refrigeration systems with connected and stand-alone display counters and cold-room equipment for supermarkets, based on either CO₂ or HFC, are also locally available; and
- (d) Links to other HPMP activities: The activities to train and certify technicians in the handling of flammable refrigerants and refrigerant recovery and reclamation, which will support this project, have been strengthened under stage II of the HPMP. The decommissioning of numerous HCFC-22-based RAC systems expected from this project will provide a stream of refrigerant for reclaiming and reuse, further reducing demand for new HCFC-22 and rendering the replaced equipment unusable.

43. In line with decision 84/84 on end-user incentive schemes, the supermarket project is integrated with other HPMP activities and includes details on the estimated number of users who could replicate the demonstration, co-financing by beneficiaries, and availability of alternative technologies. The HPMP also incorporates regulatory measures to ensure the sustained replacement of equipment. Given the scale and complexity of the project, its potential impact, and the value of information it could provide to other Article 5 countries engaging with end users, the Secretariat recommends requesting UNIDO to include, in the submission for the second tranche of stage III of the HPMP, a progress report on the development and implementation of the incentive mechanism programme.

Fisheries

44. The Secretariat sought clarification on the unusually high leakage rates in this sector, noting that the fishing vessels' refrigeration systems were completely refilled at least twice and, in some cases, up to six times a year. UNIDO explained that fishing vessels operated under extreme weather conditions, including fluctuating temperatures, and were subject to intense movement and vibrations during the weeks- or months-long campaigns at sea. These factors cause premature wear and tear, loosening or displacement of seals, gaskets and piping, and even breakages. Additionally, the marine environment is highly humid and corrosive. The fleet in Argentina averages 35 years of age, compared to 10–15 years for supermarket refrigeration equipment. Most vessels lack refrigeration technicians on board, and since refrigerant costs are negligible compared to the value of the catch and represent a minor share of operating costs, no time is devoted to preventive maintenance; instead, after rudimentary repairs, refrigeration systems are simply recharged. Recalling that the Multilateral Fund has limited experience with large-scale projects in this sector, the Secretariat considers it important to monitor consumption during the implementation of the proposed project to gain better understanding of consumption patterns for this application.

45. Noting that the potential alternatives considered for this conversion project included R-417A, R-422D, R-424A, R-434A, R-438A, and R-453A, the Secretariat expressed concern regarding the viability of those options, all of which—except R-453A—have a GWP higher than HCFC-22. The Secretariat enquired whether vessel owners could consider prioritizing leakage reduction over system retrofits, given that the current refrigerant leakage rates strongly suggested that investing in repairs could reduce losses and result in potential energy savings. UNIDO explained that substantially lowering leakage rates was difficult due to the age of the vessels and emphasized the importance of replacing HCFC-22 wherever possible to comply with the complete phase-out by 2030. In view of the limited experience with the alternatives, the project includes stakeholder workshops and trials to identify the most suitable options for local conditions.

46. UNIDO agreed that, when converting HCFC-22-based systems, priority would be given to vessels selecting the lowest-GWP option, such as R-453A. This replacement is relatively low-cost, requiring only a retrofit, which enables coverage of a large number of vessels. Addressing the Secretariat's concern that retrofitted systems might retain high leakage rates, UNIDO explained that the project would provide training and technical assistance to beneficiary enterprises on proper retrofit and servicing practices, system inspection methods, and elimination of potential leak sources prior to conversion. During retrofits, technicians will replace seals, gaskets, lubricants, and other components as needed, contributing to reduced leakage. All retrofits will also account for reinforced reliability—given that major repairs at sea are not feasible—along with vessel movement conditions (pitch and roll), high safety requirements due to limited escape options, the corrosive marine environment, and the compatibility of materials with seawater.

47. UNIDO expects to retrofit as many fishing vessels with a lifespan beyond 2030 as possible, aiming to eliminate all use of virgin HCFC-22 by that year to ensure compliance. Regarding co-financing, the project will cover the costs of retrofit parts, labour, filters, oil, seals, and other components, as well as approximately 30–35 per cent of the cost of the alternative refrigerant. Beneficiary contributions are estimated at about 50 per cent of retrofit costs, totaling between US \$1.8 and US \$2.2 million for the entire project.

48. In line with decision 84/84 on end-user incentive schemes, UNIDO provided information on the project's linkages with other HPMP activities, including training and refrigerant recovery/reclaim components, the estimated number of users who could replicate the demonstration, co-financing arrangements, and the availability of alternative technologies. Given the Fund's limited experience in this sector, the extremely high leakage rates, and the potential opportunities to reduce them—which require further exploration—the Secretariat recommends approving funding in principle to initiate workshops, trials, and procurement of recovery and recycling equipment, and requesting UNIDO to submit to the 99th meeting a detailed report including updated data on refrigerant leakage rates in the fisheries sector; opportunities for additional interventions to reduce leakages in fishing vessels; progress made on developing the retrofit

incentive mechanism; and information on potential lower-GWP technologies that could be incorporated into the project.

49. An addition, in line with decision 92/36(g), UNIDO is requested to submit the final reports on the implementation of end-user projects in the supermarket and fisheries sectors upon project completion, including the HCFC phase-out and energy-efficiency gains achieved.

Project implementation and monitoring and special contingency costs

50. Including contingency costs without any corresponding reduction in tonnage is not consistent with the Fund's policies and guidelines; therefore, the Secretariat could not recommend it. Following discussions, it was agreed—consistent with the approach taken in other approved HPMPs—that the project management unit (PMU) costs would be separated from the servicing sector activities and recommended separately, as shown in table 5 below. Removing the PMU component from servicing allows for the inclusion of the technical assistance component in the aerosol sector project and for the adjustment of the technician training and certification project.

51. The PMU cost was agreed at US \$600,000. The funds will be used on staff and technical and legal experts (US \$269,000); travel, coordination and monitoring (US \$310,000); and operational costs including office supplies, communication and sundries (US \$21,000).

Total project cost

52. The total cost for stage III of the HPMP amounts to US \$9,244,015. The project will phase out 92.36 ODP tonnes (1,711.30 mt) of HCFCs, plus additional 86.43 ODP tonnes (1,576.78 mt) of HCFCs to be deducted from the country's remaining HCFC consumption eligible for funding, at an overall cost effectiveness of US \$2.81/kg. The adjusted budget breakdown and associated details are presented in table 5, which also presents the agreed adjustments made to each component.

Table 5. Adjustments to stage III of the HPMP for Argentina, as agreed

Project component	Phase-out to be achieved		Cost (US \$)	Cost- effectiveness (US \$/kg)
	mt	ODP tonnes		
Commercial refrigeration	58.97	3.25	713,000	12.09
Firefighting	47.22	0.94	226,500	4.80
Servicing (including aerosol)	1,605.11	88.17	7,704,515	4.80
PMU	n/a	n/a	600,000	n/a
Total funded activities	1,711.30	92.36	9,244,015	5.40
Additional reductions from the remaining eligible consumption for funding	1,576.78	86.43	0	n/a
Total	3,288.08	178.79	9,244,015	2.81

Agreed implementation plan for the first tranche of stage III of the HCFC phase-out management plan

36. The agreed plan of action for the first tranche is included in table 6.

Table 6. Agreed implementation plan for the first tranche of stage III of the HPMP

Component / Activity	Cost (US \$)
<i>Commercial refrigeration manufacturing</i>	
Provide technical assistance to 11 SMEs through national experts; conduct diagnostic visits and on-site coaching; organize 4 workshops on the safe handling of flammable refrigerants; deliver tailored training; prepare terms of reference (TOR); and initiate equipment procurement	324,000
<i>Firefighting</i>	
Carry out technical assessment and prepare guidance documents; train manufacturers; upgrade plant equipment; test prototype extinguishers; prepare validation reports; and initiate manufacturing of HCFC-free extinguishers	141,000
<i>Servicing sector (including aerosol)</i>	
<u>Strengthening of the legal and institutional framework:</u> Draft, adopt and enforce bans on HCFC-based equipment; regulate and monitor HCFC production in line with phase-out schedule; and carry out stakeholder consultations	20,000
<u>Strengthening the national capacity of customs and trade control:</u> Conduct updated training sessions in major ports and cities; organize coordination meetings with enforcement institutions; train at least 50 customs officers and enforcement agents; and create a joint action plan for preventing illegal trade	16,800
<u>Training, certification, and equipping of technicians:</u> Train and certify 400 technicians; distribute 100 servicing tool kits; and monitor the training and certification activities	397,800
<u>Incentive programme to accelerate HCFC phase-out in supermarkets:</u> Conduct stakeholder consultations; organize a workshop; publish programme announcement; collect and evaluate bids from supermarkets; prepare the TOR; and receive and evaluate proposals related to equipment procurement	800,000
<u>Technical assistance to accelerate HCFC-22 phase-out in fishing vessels:</u> Organize 9 workshops in major fishing ports; engage an international consultant; conduct 8 demonstration trials on vessels; prepare the TOR; and receive and evaluate proposals related to the procurement of 10 recovery and recycling machines with tanks	500,000
<u>Awareness-raising activities:</u> Conduct national media campaigns; implement dissemination actions with brochures, guides and technical notes; participate in specialized exhibitions and fairs; produce media spots and outreach reports; distribute awareness materials, press releases and event reports; organize exhibition stands; and produce demonstration materials	38,400
<u>Technical assistance for the aerosol sector:</u> Engage an international consultant to review technologies and advise on alternatives; hold individual enterprise consultations; organize workshops to support technical modifications; conduct trials and market tests; prepare assessment, market validation and recommendation reports; create enterprise-specific action plans; and upgrade equipment in 4 plants	60,000
<i>Subtotal servicing</i>	1,833,000
<i>PMU</i>	
Organize regular coordination meetings with stakeholders; recruit technical, legal, and assistant staff; conduct monitoring missions and inspection visits; manage reporting and communication tasks; and maintain financial and administrative control, including staff, experts and assistants (US \$112,000), travel, coordination and monitoring (US \$129,000), and operational costs (US \$9,000)	250,000
Total	2,548,000

Co-financing

53. The Government of Argentina, through institutions engaged in the implementation of stage III of the HPMP, provides counterpart contributions in the form of office space, logistical support, qualified staff, technical resources, and institutional backing to strengthen coordination, policy enforcement, and

stakeholder engagement. Both the Government and UNIDO remain committed to identifying and promoting co-financing opportunities to ensure a timely and successful implementation of the plan, including cost-sharing schemes whereby beneficiary enterprises directly contribute to investments required for adopting low-GWP technologies, enhancing national ownership and fostering long-term sustainability and replication potential.

2025–2027 draft business plan of the Multilateral Fund

54. UNIDO is requesting US \$9,244,015, plus agency support costs, for the implementation of stage III of the HPMP for Argentina. The total requested value of US \$8,509,530, including agency support costs, for the period of 2025–2027, is US \$6,509,530 above the amount in the business plan.

Gender policy implementation

55. In line with decisions 84/92(d), 90/48(c) and 92/40(b), will continue applying the Multilateral Fund gender policy in implementing stage III of the HPMP by collecting disaggregated data, ensuring that both women and men access and participate in project activities, sensitizing project staff and stakeholders to the participation of women in all activities, carrying out balanced recruitment of project personnel, and ensuring a balanced representation in project boards and steering committees.

Sustainability of the HCFC phase-out and assessment of risks

56. This issue is covered in the sustainability section of the request for the fourth tranche of stage II of the HPMP for Argentina (paragraphs 41–43 of document UNEP/OzL.Pro/ExCom/97/36).

Impact on the climate

57. The replacement of HCFC-22 by R-600a and R-290 in commercial refrigeration manufacturing will result in avoiding the emissions of approximately 179,853 CO₂-equivalent (CO₂-eq) tonnes, based on the revised Multilateral Fund climate impact indicator (MCII). The activities proposed in the servicing sector, including better refrigerant containment to be achieved through training and provision of equipment, will reduce the use of HCFC-22. Each kilogram of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-eq tonnes. Similarly, each kilogram of HCFC-123 not emitted due to better practices in the maintenance, recharge, and use of portable HCFC-123 fire extinguishers, and recovery of HCFC-123 from fire protection equipment, will result in savings of approximately 77 kg of CO₂. The activities planned by Argentina, including its efforts to promote low-GWP alternatives and refrigerant recovery and reuse, and improved servicing of portable fire extinguishers indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Draft Agreement

58. A draft Agreement between the Government of Argentina and the Executive Committee for stage III of the HPMP is contained in annex I to the present document.

RECOMMENDATION

59. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage III of the HCFC phase-out management plan (HPMP) for Argentina for the period from 2025 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$9,244,015, plus agency support costs of US \$647,081,

for UNIDO, on the understanding that no more funding from the Multilateral Fund will be provided for the phase-out of HCFCs;

- (b) Noting:
 - (i) The commitment of the Government of Argentina:
 - a. To completely phase out HCFCs by 1 January 2030 and to ban the import of HCFCs by 1 January 2030, except for those allowed for a servicing tail between 2030 and 2040, where required, consistent with the provisions of the Montreal Protocol;
 - b. To establish a ban on the import of all equipment containing HCFC refrigerant and equipment requiring HCFCs for operation, servicing and maintenance by 1 January 2027, and on the manufacturing of HCFC-based aerosol and commercial refrigeration equipment by 1 January 2028;
 - (ii) That, upon completion of the end-user projects in the supermarkets and fisheries sectors included in stage III of the HPMP, UNIDO will submit final reports on their implementation in line with decision 92/36(g), including the HCFC phase-out and the energy-efficiency gains achieved;
 - (iii) That, to allow for consideration of the final tranche of its HPMP, the Government of Argentina should submit:
 - a. A detailed description of the regulatory and policy framework in place to implement measures to ensure that HCFC consumption was in compliance with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol for the period 2030–2040;
 - b. If Argentina were intending to have consumption during the period 2030-2040, in line with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol, proposed modifications to its Agreement with the Executive Committee covering the period beyond 2030;
- (c) Deducting 178.79 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Requesting UNIDO to submit to the 99th meeting a detailed report including updated data on refrigerant leakage rates in the fisheries sectors, opportunities for additional interventions to reduce leakages in fishing vessels, progress on developing the retrofit incentive mechanism, and additional information on potential lower-GWP technologies that could be incorporated in the project;
- (e) Approving:
 - (i) The draft Agreement between the Government of Argentina and the Executive Committee for the reduction in consumption of HCFCs, in accordance with stage III of the HPMP, contained in annex I to the present document; and
 - (ii) The first tranche of stage III of the HPMP for Argentina, and the corresponding tranche implementation plan, in the amount of US \$2,548,000, plus agency support costs of US \$178,360, for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF ARGENTINA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE III OF THE HCFC PHASE-OUT MANAGEMENT PLAN

Purpose

1. This Agreement represents the understanding of the Government of Argentina (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of zero ODP tonnes by 1 January 2030 in compliance with Montreal Protocol schedule.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in row 4.1.3, 4.2.3, 4.3.3, 4.4.3 and 4.5.3 (remaining consumption eligible for funding).
3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (“Funding Approval Schedule”).
4. The Country agrees to implement this Agreement in accordance with stage III of the HCFC phase-out management plan approved (“the Plan”). In accordance with subparagraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

Conditions for funding release

5. The Executive Committee will only provide the Funding in accordance with the Funding Approval Schedule when the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country has met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which there are no due country programme implementation reports at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
 - (b) That the meeting of these Targets has been independently verified for all relevant years, unless the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted a Tranche Implementation Report in the form of Appendix 4-A (“Format of Tranche Implementation Reports and Plans”) covering each previous calendar year; that it had achieved a significant level of implementation of

activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

- (d) That the Country has submitted a Tranche Implementation Plan in the form of Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

Monitoring

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A (“Monitoring Institutions and Roles”) will monitor and report on implementation of the activities in the previous Tranche Implementation Plans in accordance with their roles and responsibilities set out in the same Appendix.

Flexibility in the reallocation of funds

7. The Executive Committee agrees that the Country may have the flexibility to reallocate part or all of the approved funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

- (a) Reallocations categorized as major changes must be documented in advance either in a Tranche Implementation Plan as foreseen in subparagraph 5(d) above, or as a revision to an existing Tranche Implementation Plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
 - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
 - (ii) Changes which would modify any clause of this Agreement;
 - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches;
 - (iv) Provision of funding for activities not included in the current endorsed Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
 - (v) Changes in alternative technologies, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;
- (b) Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report;
- (c) Any enterprise to be converted to non-HCFC technology included in the Plan and that would be found to be ineligible under the policies of the Multilateral Fund (i.e., due to foreign ownership or establishment post the 21 September 2007 cut-off date), would not receive financial assistance. This information would be reported as part of the Tranche Implementation Plan; and

- (d) Any remaining funds held by the bilateral or implementing agencies or the Country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

Considerations for the refrigeration servicing sector

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sector included in the Plan, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

Bilateral and implementing agencies

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNIDO has agreed to be the lead implementing agency (the “Lead IA”) in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA taking part in this Agreement.

10. The Lead IA will be responsible for ensuring coordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per subparagraph 5(b). The role of the Lead IA is contained in Appendix 6-A. The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 of Appendix 2-A.

Non-compliance with the Agreement

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A (“Reductions in Funding for Failure to Comply”) in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 5 above.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decisions that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA with access to the information necessary to verify compliance with this Agreement.

Date of completion

14. The completion of the Plan and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan and its subsequent revisions as per subparagraph 5(d) and paragraph 7, the completion of the Plan will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per subparagraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion of the Plan unless otherwise specified by the Executive Committee.

Validity

15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

16. This Agreement may be modified or terminated only by mutual written agreement between the Government of the Country and the Executive Committee of the Multilateral Fund.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	266.20
HCFC-123	C	I	1.57
HCFC-124	C	I	0.83
HCFC-141b	C	I	94.57
HCFC-142b	C	I	14.34
Total			377.51

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2025	2026	2027	2028	2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group substances (ODP tonnes)	130.22	130.22	130.22	130.22	130.22	0.0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	130.22	130.22	130.22	130.22	130.22	0.0	n/a
2.1	Lead IA (UNIDO) agreed funding (US \$)	2,548,000	0	5,404,832		0	1,291,183	9,244,015
2.2	Support costs for Lead IA (US \$)	178,360	0	378,338	0	0	90,383	647,081
3.1	Total agreed funding (US \$)	2,548,000	0	5,404,832		0	1,291,183	9,244,015
3.2	Total support costs (US \$)	178,360	0	378,338	0	0	90,383	647,081
3.3	Total agreed costs (US \$)	2,726,360	0	5,783,170	0	0	1,381,566	9,891,096
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)							163.79
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stages (ODP tonnes)							102.41
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)							0.0

Row	Particulars	2025	2026	2027	2028	2029	2030	Total
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)							0.0
4.2.2	Phase-out of HCFC-141b to be achieved in the previous stages (ODP tonnes)							94.57
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)							0.0
4.3.1	Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)							12.60
4.3.2	Phase-out of HCFC-142b to be achieved in the previous stages (ODP tonnes)							1.74
4.3.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)							0.0
4.4.1	Total phase-out of HCFC-123 agreed to be achieved under this Agreement (ODP tonnes)							1.57
4.4.2	Phase-out of HCFC-123 to be achieved in the previous stages (ODP tonnes)							0.0
4.4.3	Remaining eligible consumption for HCFC-123 (ODP tonnes)							0.0
4.5.1	Total phase-out of HCFC-124 agreed to be achieved under this Agreement (ODP tonnes)							0.83
4.5.2	Phase-out of HCFC-124 to be achieved in the previous stages (ODP tonnes)							0.0
4.5.3	Remaining eligible consumption for HCFC-124 (ODP tonnes)							0.0

* Date of completion of stage II as per decision 92/31(e)(i): 31 December 2024. Extension to 31 December 2027 requested at the 97th meeting.

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the second meeting of the year specified in Appendix 2-A.

APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Tranche Implementation Report and Plans for each tranche request will consist of five parts:

- (a) A narrative report, with data provided by tranche, describing the progress achieved since the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include the amount of ODS phased out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes;
- (b) An independent verification report of the Plan results and the consumption of the Substances, as per subparagraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in subparagraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
- (c) A written description of the activities to be undertaken during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall Plan that are foreseen.

The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under subparagraph (a) above;

- (d) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database; and
 - (e) An Executive Summary of about five paragraphs, summarizing the information of the above subparagraphs 1(a) to 1(d).
2. In the event that in a particular year two stages of the Plan are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:
- (a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and
 - (b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The National Ozone Unit (OPROZ) is a tripartite coordination office for the Country Programme for the Implementation of the Montreal Protocol (CP). It is composed of a representative of the Ministry of Environment and Sustainable Development (MAYDS), the Ministry of Production, and the Ministry of Foreign Affairs, International Commerce and Worship.
2. OPROZ is coordinated by MAYDS that serves as the Montreal Protocol national focal point. MAYDS is responsible for the tasks related to the implementation of the CP, control of the import licensing system and the evaluation of consumption data, issuing of reports on a quarterly basis on compliance with the CP, and the reduction of consumption of ozone-depleting substances.
3. The Lead IA will be responsible for the overall management, monitoring of progress, performance verification and reporting to the Fund Secretariat and the Executive Committee, working in close cooperation with OPROZ and the beneficiaries. The work will be carried out under the supervision and guidance of the Lead IA's Project Manager. Necessary local coordination and control will be done by OPROZ.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities, including at least the following:
- (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's Plan;
 - (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;

- (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with subparagraphs 1(c) and 1(d) of Appendix 4-A;
- (e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee;
- (f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;
- (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
- (h) Carrying out required supervision missions;
- (i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country, the allocation of the reductions to the different budget items and to the funding of the Lead IA;
- (k) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (l) Providing assistance with policy, management and technical support when required; and
- (m) Timely releasing funds to the Country/participating enterprises for completing the activities related to the project.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the Plan's results and the consumption of the Substances mentioned in Appendix 1-A, as per subparagraph 5(b) of the Agreement and subparagraph 1(b) of Appendix 4-A.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$103.40 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.

2. In the event that the penalty needs to be applied for a year in which there are two Agreements in force (two stages of the Plan being implemented in parallel) with different penalty levels, the application of the penalty will be determined on a case-by-case basis taking into consideration the specific sectors that lead to the non-compliance. If it is not possible to determine a sector, or both stages are addressing the same sector, the penalty level to be applied would be the largest.