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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(d) of the provisional agenda¹

PROJECT PROPOSAL: MOROCCO

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, first tranche) | UNIDO | Individual consideration |
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¹ UNEP/OzL.Pro/ExCom/98/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Morocco

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

ARTICLE 7 DATA (Annex C, Group I)	Year: 2024	17.20 ODP tonnes
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COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2024
Substance	Aerosol	Foam	Firefighting	Refrigeration		Solvent	Total sector consumption
				Manufacturing	Servicing		
HCFC-22					17.20		17.20

CONSUMPTION DATA (ODP tonnes)			
2009–2010 baseline:	51.35	Starting point for sustained aggregate reductions:	67.79
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	51.10	Remaining:	16.69

ENDORSED BUSINESS PLAN		2026	2027	2028	Total
UNIDO	ODS phase-out (ODP tonnes)	7.39	0.00	7.63	15.02
	Funding (US \$)	690,078	0	712,583	1,402,661

PROJECT DATA AS AGREED			2026	2027	2028	2029	2030	Total	
Consumption (ODP tonnes)	Montreal Protocol limits		16.69	16.69	16.69	16.69	0	n/a	
	Maximum allowable		16.69	12.52	8.35	4.17	0	n/a	
Project costs requested in principle (US \$)	UNIDO	Project costs	165,240	1,128,764	-	-	145,800	1,439,804	
		Support costs	11,567	79,013	-	-	10,206	100,786	
Total amounts recommended in principle (US \$)			Project costs	165,240	1,128,764	-	-	145,800	1,439,804
			Support costs	11,567	79,013	-	-	10,206	100,786
			Total funds	176,807	1,207,777	-	-	156,006	1,540,590

Request for funding for the first tranche (2026)		
Implementing agency	Funds recommended (US \$)	Support costs (US \$)
UNIDO	165,240	11,567
Total	165,240	11,567

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Morocco, 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 \$1,466,467, plus agency support costs of US \$102,653, 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 \$160,600, plus agency support costs of US \$11,242, 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 Morocco was originally approved at the 88th meeting³ and revised at the 91st meeting⁴ to phase out 16.54 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector and the polyurethane (PU) foam sector, and to meet the 67.5 per cent reduction from the baseline by 2025, at a total cost of US \$1,098,532, plus agency support costs. As stipulated in the Agreement between the Government of Morocco and the Executive Committee, stage II of the HPMP was planned to be completed by December 2026.

Report on HCFC consumption

4. The Government of Morocco reported a consumption of 17.20 ODP tonnes of HCFCs in 2024, which is 66.5 per cent below the HCFC baseline for compliance. The Article 7 and CP data for 2025 have not been reported yet. The 2021-2025 HCFC consumption is shown in table 1.

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

HCFC	2021	2022	2023	2024	2025*	Baseline
Metric tonnes (mt)						
HCFC-22	320.41	360.72	314.55	312.69	277.74	819.54
Total (mt)	320.41	360.72	314.55	312.69	277.74	819.54**
HCFC-141b in imported pre-blended polyols	104.30	104.30	104.30	0.00	0.00	71.82****
ODP tonnes						
HCFC-22	17.62	19.84	17.30	17.20	15.28	51.35
Total (ODP tonnes)	17.62	19.84	17.30	17.20	15.28	51.35**
HCFC-141b in imported pre-blended polyols	11.47	11.47	11.47	0.00	0.00	7.90****

* Data from the verification report on HCFC consumption.

** The baseline includes 114.09 mt (12.55 ODP tonnes) of HCFC-141b, consumption of which has been zero since 2014.

**** Average consumption between 2007 and 2009

5. The HCFC consumption in Morocco has been steadily decreasing and remains at or below the maximum allowable levels for each year. Morocco does not produce HCFCs, and all imports are used exclusively for servicing existing RAC equipment following the phase-out of HCFC-141b in pre-blended polyol in the PU foam sector. HCFC-22 is the only HCFC consumed, with exports generally negligible, although small quantities have been recorded.

² As per the letter of 2 March 2026 from the Ministry of Industry and Trade of Morocco to UNIDO.

³ Decision 88/52

⁴ Decision 91/54

Verification report

6. The verification report submitted along with the annual progress report on the implementation of stage II of the HPMP in line with decision 96/26,⁵ confirmed that the Government of Morocco was implementing a licensing and quota system for HCFC imports and exports. The report further confirmed that the Government complied with the maximum allowable consumption level for all Annex C, Group I substances in 2025 and maintained a comprehensive legal and institutional framework for controlling ozone-depleting substances (ODS), including HCFCs. HCFC consumption in 2025 was based on imports, with only a small quantity exported; there was no production or destruction of these substances. In addition, not all quotas were used in 2025, as 24.80 metric tonnes of allocated HCFC-22, equivalent to 1.36 ODP tonnes, were not imported.

7. The verification report recommended to continue strict monitoring of import licences and actual imports, given that the 2025 HCFC-22 quota of 16.64 ODP tonnes remained very close to the maximum allowable consumption limit of 16.69 ODP tonnes and recommended applying conservative quota allocation as much as feasible. It was also recommended to ensure regular and timely update of the public import statistics platform Adil.⁶ In addition, the report recommended organizing new and regular training sessions for customs officers and customs trainers, noting that the last training under the HPMP took place in 2019. The national ozone unit (NOU) confirmed that these recommendations will be addressed during the implementation of stage III of the HPMP as well as stage I of the Kigali HFC implementation plan (KIP).

Status of progress and disbursement

Legal framework

8. The Government of Morocco has in place an operational HCFC import licensing and quota system, an electronic licensing system, and a ban on the import of pure HCFC-141b since 2015. The Government is also committed to enact a ban on the import and use of HCFC-141b contained in pre-blended polyols after the completion of the umbrella project, in the second half of 2026.⁷

9. The Government has completed the development of the tariff codes for specialized HCFC-22-based equipment. The tariff code was transferred to the customs department and applied in 2025 to facilitate the implementation of the licensing system for HCFC-22-based equipment. In relation to the ban of HCFC-22-based air conditioning (AC) equipment, while a formal ban has not been established yet, the local minimum energy performance standards (MEPS)⁸ have effectively prevented the import and use of HCFC-22-based air conditioners, as such equipment can no longer meet the applicable MEPS.

10. The Ministry of Industry and Trade has a market surveillance system to ensure the quality and authenticity of imported refrigerants. This system is integrated with the customs system through PortNet platform,⁹ allowing suspicious shipments identified through the customs risk management process to be flagged to the market surveillance system and the NOU for joint inspection.

⁵ As contained in annex IX of document UNEP/OzL.Pro/ExCom/96/66, requesting the Government of Morocco and UNIDO to submit on a yearly basis, a progress report on the implementation of all the remaining activities in the previously approved tranches and the work programmes associated with the final tranche through completion of the project, verification reports until approval of stage III, and the project completion report to the first meeting of the Executive Committee in 2027.

⁶ Assistant au Dédouanement des Marchandises à l'Importation en Ligne.

⁷ Decision 91/54(c)(i)

⁸ NM 14.2.302 (2019) minimum energy efficiency and mandatory labeling requirements for household and similar electrical air conditioners.

⁹ Guichet Unique National des Procédures du Commerce Extérieur.

Manufacturing sector

11. Stage II includes an umbrella project for the phase-out of HCFC-141b contained in pre-blended polyols in the manufacture of PU rigid foam in four enterprises. The conversion at Métaux Profilage Isolation (MPI) to cyclopentane is underway, and a study tour is being organised by UNIDO and the NOU for the remaining three enterprises (CF Loudaya, Indisol, and Roto Moulage du Sud), with completion of all conversions anticipated by end of 2026. CP data confirm zero consumption of HCFC-141b at MPI since 2024, consistent with the enterprise's transition to cyclopentane-based polyols. Technical assistance to the small foam enterprises will be initiated once the MPI conversion reaches an advanced stage during the second half of 2026.

Refrigeration servicing sector

12. In the RAC servicing sector, a code of practice has been developed in coordination with Moroccan Standardization Institute (IMANOR), along with a technician certification system established through consultation among IMANOR, the National Office for Professional Training (OFPPT), the local RAC association (AMPF), the National Agency for Energy Efficiency (AMEE), and the private sector, where it is expected to be operational within 2026. Four train-the-trainer sessions were held for 54 trainers, including six women, and 29 trainers received certification on the European F-gas regulation. The training of 200 technicians in good servicing practices and flammable refrigerant handling will be conducted under the fourth tranche of stage II of the HPMP, six training centres have been equipped with professional servicing tools and specialised equipment.

13. As for the recovery, recycling, and reclamation (RRR) scheme, an introduction study was finalised in 2025, concluding that an HCFC-22 reclamation scheme is technically viable and financially profitable, with Casablanca identified as the most appropriate location. The purchase of 50 sets of recovery machines and tools is in progress. Awareness-raising activities complemented, including World Refrigeration Day events and dedicated activities promoting women's involvement in the RAC sector; supported HCFC phase-out objectives by informing importers, technicians and end users on the phase-out timeline and low-global-warming-potential (GWP) alternatives; promoting training, certification and responsible refrigerant management, including the RRR scheme; and engaging sector stakeholders in HPMP and KIP activities.

Project management unit

14. The NOU and UNIDO have been monitoring activities, reporting on progress, and working with stakeholders to phase out HCFCs under stage II, including the preparation of annual work plans and progress reports, coordination of activities, equipment procurement, delivery and verification of procured equipment, management of the administrative and financial aspects of project implementation.

Level of fund disbursement

15. As of February 2026, of the US \$1,098,532 approved so far, US \$579,285 had been disbursed. The balance of US \$519,247, out of which US \$250,842 has been obligated against ongoing contracts and procurement orders, will be disbursed by the end of 2027.

Request for extension

16. Since the approval of the fourth tranche at the 96th meeting, substantive preparatory work has been undertaken: consultations were held with national stakeholders on training of the 450 RAC technicians remaining in stage II; the curriculum framework, learning pathway and delivery modalities have been developed in consultation with the NOU, AMPF and vocational training centres; and the operational framework has been defined, covering nationwide outreach and pre-registration mechanisms, merit-based

participant selection, geographically balanced choice of training locations, identification and validation of certified trainers, preparation of training materials and communication tools, and full logistical arrangements for 50-day sessions.

17. Despite the progress, activities from previous tranches remain pending. These include the training of 12 customs officers which was postponed twice and there have been no customs trainings since 2019; surveys in the fisheries sector; and the procurement of 50 recovery machines under the RRR component. These activities are currently being organized and are expected to start during the first and second quarter of 2026.

18. Accordingly, the Government of Morocco is requesting an extension of the date of completion of stage II to 31 December 2027 to allow sufficient time to complete the remaining activities.

Stage III of the HCFC phase-out management plan

Remaining consumption eligible for funding

19. After deducting 51.10 ODP tonnes of HCFCs associated with stages I and II of the HPMP, the remaining consumption eligible for funding in stage III amounts to 16.69 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

20. There are approximately 40,000 RAC technicians and 7,000 servicing workshops providing installation and maintenance services for domestic, commercial and industrial equipment in Morocco. HCFC consumption in Morocco is largely concentrated in the refrigeration sector (267.8 mt), with the remainder in the AC sector (44.9 mt). A significant share of refrigeration use (134.8 mt of HCFC-22) is linked to the fisheries sector, reflecting the importance of fisheries in Morocco's economy, with production estimated at 1.13 million tonnes in 2025. RAC applications in the fisheries sector include both shore-based facilities and offshore systems like fishing vessels with significant leakage rates. Commercial refrigeration is the second dominant sub-sector (91 mt), followed by industrial refrigeration which includes mainly condensing units and centralized systems, while room air conditioners account for most AC consumption, as shown in table 2 below.

Table 2. Estimation of demand for HCFC-22 in the RAC servicing sector in Morocco

Sector	Equipment inventory	Average charge (kg)	HCFC bank (mt)	Estimated service rate (%)	Annual need for servicing (mt)
Refrigeration					
Commercial refrigeration	130,000	7	910	10	91.0
Industrial refrigeration	2,800	125	350	12	42.0
Fishing vessels	321	200	64	210	134.8
Air-conditioning					
Residential AC	370,000	0.95	352	10	35.2
Commercial AC	200	10	2	10	0.2
Chillers	1,900	50	95	10	9.5
Total	505,221		1,773		312.7

Phase-out strategy

21. The Government of Morocco proposes to completely phase out HCFCs by 2030, with a servicing tail until 2040, in line with the Montreal Protocol. Stage III of the HPMP builds on stakeholder consultations and recommendations undertaken during the preparation and implementation of stage II of the HPMP and

stage I of the KIP and adopts a comprehensive approach combining regulatory and control measures, capacity-building, and targeted sectoral interventions. It aims to strengthen import controls and the policy framework, enhance technical skills and infrastructure across the servicing sector, and expand the refrigerant RRR network. Particular emphasis is placed on the fisheries sub-sector through demonstration projects introducing low-GWP technologies across key applications.

Proposed activities

22. Activities proposed for implementation in the servicing sector under stage III and in the first tranche and their cost breakdown are presented in table 3.

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

Submitted

	Activity	Cost (US \$)	
		Stage III	First tranche
Component 1: Regulatory framework and control mechanism			
1.1	Support in the implementation of existing regulatory measures and in the update and adoption of new regulations, including organisation of coordination meetings with relevant public authorities and private-sector stakeholders.	12,052	3,000
1.2	National assessment to develop a consumption management strategy during the maintenance period by analysing the remaining HCFC-22 servicing demand and HCFC-based installations expected to be in service after 2030, reviewing the existing regulatory, institutional, and enforcement framework to identify gaps and risks and developing a practical consumption management strategy for 2030–2040.	25,000	-
1.3	Provision of six refrigerant identifiers for customs and borders’ control.	36,000	-
1.4	Training for 100 customs officers and environmental inspectors (theoretical and practical), including targeting at least 10 per cent participation of women.	25,000	-
Sub total		98,052	3,000
Component 2: Capacity-building			
2.1	Provision of equipment and tools for six RAC training institutes (OFPPT) ¹⁰ (US \$25,000 per training centre), including recruiting a national consultant to assess the specific needs of each institution, considering existing infrastructure, curricula, and training priorities.	150,000	-
2.2	Five training of trainer’s sessions to certify around 50 trainers, with a 10 per cent women participation.	56,100	-
2.3	47 training sessions for RAC technicians and professionals, targeting approximately 700 technicians, and ensuring at least 10 per cent participation of women, and combining theoretical instruction with practical demonstrations to strengthen and update competencies in line with evolving technologies and regulatory requirements.	175,000	35,000
2.4	Provision of equipment and tools ¹¹ to 16 RAC servicing companies to strengthen their capacity for the sound management of refrigerants, including provision of a total of seven refrigerant identifiers to enhance verification of refrigerant quality and composition; and recruit a national consultant to assess and confirm the specific requirements of each company.	154,000	77,000

¹⁰ Vocational Training and Employment Promotion

¹¹ Including ATEX recovery station, digital manifold, recovery cylinder, HCFC and HFC leak detector, vacuum gauge, ATEX vacuum pump.

	Activity	Cost (US \$)	
		Stage III	First tranche
2.5	Operationalisation of and provision of equipment ¹² to a RRR centre, including the selection of a company to host and operate the centre to aggregate recovered refrigerants from servicing companies across the region and recruit a national consultant to confirm the technical specifications and site-specific requirements.	150,000	-
2.6	Demonstration of direct expansion (DX)-assisted indirect evaporative cooling (IEC) technology at one pilot site in the hospitality sector including coordination and selection of beneficiaries (US \$5,000); provision of a DX-assisted IEC unit (US \$43,000); generation of field data on installation, operation and maintenance (US \$5,000); monitoring of energy performance (US \$3,000); and dissemination of results and promotion of replication (US \$4,000).	60,000	8,000
Sub total		745,100	120,000
Component 3: Fisheries			
3.1	Demonstration of HCFC-22 retrofit to R-453A on fishing vessels, including engagement of a national consultant to assess and select beneficiary vessels (US \$10,000); organization of awareness and training workshops in major fishing ports (US \$15,000), demonstration of retrofit procedures on selected vessels (US \$10,000); procurement of recovery and recycling equipment for shared use (US \$14,000), and retrofit of 46 additional vessels with co-financing from owners and data-sharing commitments (US \$161,000); leveraging the compatibility of R-453A with mineral oil to avoid additional costs; and monitoring, performance analysis and dissemination of results (US \$10,000).	220,000	10,000
3.2	Demonstration of ammonia-based freezing tunnel for fish processing facilities including coordination with national stakeholders and selection of the beneficiary enterprise (US \$5,000); training of technicians and operators on installation (US \$5,000); supply of the refrigeration system, installation and commissioning (US \$103,000); monitoring and verification of energy efficiency and operational performance against the baseline (US \$3,000); and dissemination of results through stakeholder workshops to promote replication and inform future investments (US \$4,000).	120,000	5,000
3.3	Demonstration of R-290 cold room refrigeration units in fisheries cold storage facilities, including coordination and selection of beneficiaries (US \$3,000); installation by certified technicians trained in the safe handling of flammable refrigerants (US \$3,000); monitoring of energy consumption and operational performance for six months before and after installation (US \$3,000); purchase of three monoblocks (US \$73,000); installation and commissioning of monoblocks, collection and proper disposal of old devices (US \$4,000); formal agreements with beneficiaries covering implementation and participation in awareness activities; preparation and dissemination of communication materials; and engagement with equipment importers to promote wider adoption based on demonstration results (US \$4,000).	90,000	5,000
3.3	Demonstration of R-290 ice-making machines including coordination with national stakeholders and selection of the beneficiary enterprise (US \$3,000); training of technicians and operators on installation (US \$3,000); purchase of two ice-making machines (US \$47,000), installation and commissioning of the units; monitoring and verification of energy efficiency and operational performance against the baseline (US \$3,000); and dissemination of results through stakeholder workshops to promote replication and inform future investments (US \$4,000).	60,000	3,000
Sub total		490,000	23,000

¹² Including 1,000 lbs. storage tanks, transfer pump for recovered/contaminated refrigerant, recovery unit with filter module, refrigerant identifier, gas chromatograph, Karl Fischer moisture tester, hot water dispenser, rack for cylinder washing and drying installation, industrial vacuum pump for evacuation of cleaned cylinders.

	Activity	Cost (US \$)	
		Stage III	First tranche
Subtotal for activities		1,333,152	146,000
4	Project management and coordination (see paragraph 23 below)	133,315	14,600
Total		1,466,467	160,600

Project implementation and monitoring

23. The system established under stages I and II of the HPMP will continue into stage III, with the NOU and UNIDO monitoring activities, reporting on progress, and working with stakeholders to phase out HCFCs. The cost of those activities amounts to US \$133,315 for UNIDO, including consultants (US \$48,100), travel (US \$28,000), meetings and consultations (US \$28,000), monitoring and reporting (US \$18,600) and other costs (US \$10,615).

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

24. The total cost of stage III of the HPMP for Morocco has been estimated at US \$1,466,467 (plus agency support costs), as originally submitted, for achieving a 100 per cent reduction by 2030. The proposed activities and cost breakdown are summarized in table 3 above.

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

25. The first funding tranche of stage III of the HPMP in the total amount of US \$160,600 will be implemented during June 2026 to June 2027. Detailed information on the activities included in the first tranche, indicating adjustments made and the level of funds agreed, is presented in table 4 below.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Stage II of the HPMP

26. The Secretariat noted that the country's HCFC consumption for 2025 is in line with the target specified in the Agreement between the country and the Executive Committee, that substantive progress has been made in preparation for implementation of the fourth tranche approved at the 96th meeting and the remaining activities from previous tranches, and that UNIDO confirmed that all remaining activities will be implemented in an expeditious manner. The Secretariat considers that the requested extension of implementation of the HPMP to 31 December 2027 would facilitate the country to complete all the remaining activities.

Stage III of the HPMP

27. The Secretariat reviewed stage III of the HPMP in light of stages I and II, stage I of the KIP, 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, 90/31), and the 2026–2028 business plan of the Multilateral Fund.

Overarching strategy

28. The Government of Morocco 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.¹³ The first two stages of Morocco's HPMP successfully phased out HCFC-22 in manufacturing and HCFC-141b in the foam sector, leaving remaining consumption concentrated in the RAC servicing sector, particularly in the fisheries sub-sector, as key economic segment in Morocco, which relies heavily on refrigeration across its value chain and accounts for 49.8 per cent of the country's remaining HCFC-22 consumption with high leakage rates especially in fishing vessels. The transition to low-GWP alternatives is hindered by technical, economic, and safety barriers, although market trends are shifting toward greener solutions. Stage III is designed to address these challenges through an integrated approach on strengthening regulatory controls, enhancing technical capacity and servicing infrastructure, and implementing targeted demonstration projects in the fisheries sector to promote adoption of low-GWP technologies and support long-term sustainability.

29. The Government of Morocco also commits to reduce the remaining HCFCs in an accelerated manner, by 76 per cent of the country's baseline by 2027, 84 per cent by 2028 and 92 per cent by 2029.

30. In line with decision 86/51, to allow for consideration of the final tranche of its HPMP, the Government of Morocco agreed 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 Morocco intended to have consumption in 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.

Legal framework

31. The Government of Morocco has issued HCFC import quota for 2026 at 16.56 ODP tonnes, which is slightly lower than the Montreal Protocol control targets.

Sector distribution of HCFCs

32. In relation to the Secretariat's enquiry requesting additional analysis of the fisheries sector, UNIDO provided details outlining that the installed capacities in fishing cold chain in Morocco as concentrated in major fishing ports including Agadir, Safi, Tan-Tan, Dakhla, and Nador. A total of 321 trawlers with HCFC-22-based refrigeration systems were identified during the preparation of the project, representing an estimated 93 per cent of the trawler fleet, while coastal fishing vessels (estimated as 1,808 units) are not equipped with on-board refrigeration systems. As for shore-based fisheries facilities, 414 processing establishments were identified as part of the industrial refrigeration category in the proposal. An estimated 50 per cent of these establishments operate on HCFC-22, accounting for approximately 21 mt of the total 155.8 mt fisheries consumption. The rest are mainly relying on HFC-based technologies and less than 5 per cent use ammonia. A comprehensive survey and report about cold chain capacities in fisheries sector is being developed under stage II of the HPMP which will provide detailed disaggregated data by application type, installed capacity, and refrigerant profile.

33. The Secretariat enquired about the large remaining population of HCFC-22-based residential AC units (370,000) compared to estimates at the time of submitting stage II of the HPMP (340,600 in 2021). UNIDO clarified that the capacity to best estimate the population equipment during the preparation of the proposal improved, compared to the previous stage, through advanced data collection and the thorough conduct of national survey. Furthermore, the MEPS regulation, which became mandatory in September

¹³ 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.

2025, formalised this market transition away from HCFC-22. Imports of HCFC-22-based AC equipment stopped since 2023 by most of importers, although sales of remaining stock continued until 2024.

Technical and cost-related issues

Component 1: Regulatory framework and control mechanism

34. The Secretariat enquired about the reasons for not conducting regular training of customs officers since the last training held in 2019, particularly in view of the regulatory frameworks established since then, updates to Harmonized System codes and evolving controlled-substance trade trends. UNIDO explained that continuation of the training was affected by the COVID-19 pandemic period for several years and it took time to rebuild the training programme which is being resumed now under stage II of the HPMP and will be further strengthened with activities under stage I of the KIP. Nevertheless, Morocco's customs enforcement of ODS import controls remained operational through the continuous application of the licensing and quota system, enforcement was also supported by the integration of the BADR¹⁴ electronic customs platform with the PortNet single-window system, enabling systematic screening of refrigerant imports at points of entry, as well as by the market surveillance mechanism operated by the Ministry of Industry and Trade, which continued to function without interruption.

Component 2: Capacity-building for RAC sector

35. In relation to the proposed RAC training that includes a target of 700 technicians and noting the significant remaining training under stage II of the HPMP, as well as similar training under stage I of the KIP and the energy efficiency pilot project approved under decision 91/65,¹⁵ the Secretariat enquired whether the training target was realistic within the implementation period of stage III of the HPMP. UNIDO clarified that the original target of 700 technicians under stage III was based on an estimated 40,000 RAC technicians in Morocco, including about 30 per cent working in the informal sector. However, given the substantial ongoing training under the different HPMP stages, stage I of the KIP and the energy-efficiency project, and following consultation with the Government of Morocco, it is proposed to reduce the stage III target to approximately 350 technicians, with a revised budget of US \$88,000 for activity 2.3.

36. The Secretariat further requested clarification on the certification of technicians trained before the RAC certification system becomes operational and what would be the overall targets under all ongoing projects. UNIDO elaborated that the national certification system for RAC technicians is expected to become operational in 2026, after which activity 2.3 will be aligned with certification requirements. Any technicians trained before the system is operational will have their prior training recognized and arrangements will be considered to test and certify them within the established scheme. The overall target under stages II and III of HPMP and stage I of KIP includes technical support to 17 centres and training 2,020 technicians which represents approximately 5 per cent of Morocco's estimated RAC workforce.

37. Regarding the RRR scheme, the Secretariat enquired about the request to procure additional equipment under stage III, given that the reclamation centre has not yet been established or made operational. The Secretariat also requested a summary of the feasibility study, including the expected quantities to be reclaimed, the proposed business model and capacities to have an independent testing lab, and whether Morocco intends to ban non-refillable cylinders. UNIDO explained that stage II of the HPMP funded the foundational work, including the techno-economic feasibility study, 50 recovery machines for servicing workshops, and the selection of a host company in Casablanca, but did not fund equipment for the reclamation centre itself. The centre will be made operational through the reclamation machines funded under stage I of the KIP and the supporting infrastructure proposed under stage III, including storage, logistics, quality-control laboratory and cylinder-cleaning equipment, as well as additional recovery

¹⁴ Base Automatisée des Douanes en Réseau

¹⁵ Decision 97/77

equipment for servicing companies and the fisheries sector. The beneficiary company will co-finance infrastructure, civil works and initial operating costs.

38. The feasibility study concluded that the scheme is technically viable and financially sustainable, with an initial expected processing capacity of around 30 metric tonnes per year of used refrigerant, mainly HCFC-22, increasing as the recovery network develops. Morocco will also consider banning non-refillable cylinders as part of the regulatory measures to be developed during stage III. The feasibility study has been completed and is under technical review, and the Government of Morocco agreed to submit the finalized study to the Secretariat latest by the submission of the second tranche of stage III of the HPMP.

39. Regarding the proposed business model for the reclamation centre and the arrangements for independent testing of reclaimed refrigerants, UNIDO emphasised that reclaimed refrigerants must meet Air-conditioning, Heating, and Refrigeration Institute (AHRI) Standard 700 before being reintroduced into the market. Primary quality control will be carried out at the RRR centre using the gas chromatograph and Karl Fischer moisture tester to be procured under activity 2.5, supported by a refrigerant identifier for field-level verification of incoming material. Given the technical constraints of routine third-party refrigerant testing, including the need for refrigerant-specific calibration standards, validated testing methods and regular calibration cycles, the quality assurance framework will focus on independent oversight of the testing methods rather than duplicate testing which will be ensured through validation of analytical methods and calibration procedures¹⁶.

40. The Secretariat requested clarification on the relevance of the IEC technology in the hospitality sector, given that AC is not a main HCFC-consuming sector and sought further information on Morocco's climatic zones and the potential local use of IEC technology. UNIDO explained that, although AC represents a smaller share of HCFC-22 consumption than refrigeration, it remains relevant, particularly in hotels and commercial buildings still using HCFC-22 systems. DX-assisted IEC offers a not-in-kind cooling solution that can significantly reduce reliance on chemical refrigerants and achieve high energy savings under hot and dry conditions. Morocco has diverse climatic zones, and climatic suitability will be a key criterion for selecting the pilot site. The selected DX-assisted configuration, using an evaporative cooling stage supported by a small R-290 direct-expansion unit, will ensure performance during periods of higher humidity or peak cooling demand.

Component 3: Support to the fisheries sector

41. UNIDO welcomed the Secretariat's suggestion to institutionalize technical support for the fisheries sector through a Fisheries RAC Technology Hub, to consolidate sector-related technical assistance and ensure that the outcomes, knowledge and capacity-building activities developed under the pilot demonstrations are sustained beyond the lifetime of the project. In line with this recommendation, a new activity 3.5, related to the establishment of a coordination mechanism for RAC fisheries technologies, is proposed, with a budget of US \$10,000 reallocated from activity 2.3, related to RAC technician training. The activity will support the identification and formalization of a coordination mechanism involving relevant stakeholders, building, where possible, on existing fisheries infrastructure and institutional arrangements. It will assist in consolidating the technical support elements under the fisheries-related demonstration activities including knowledge dissemination, stakeholder engagement and sector-specific training, thereby helping to sustain capacity-building beyond the project's lifetime. The scope and composition of the mechanism will be defined based on the findings of the fisheries sectoral study currently being implemented under the second tranche of stage II of the HPMP and capitalizing on existing fishing institutional setups of the Ministry of Agriculture, Maritime Fisheries, Rural Development, Water and Forests.

¹⁶ Through the Moroccan Accreditation Service (SEMAC) accreditation under ISO/IEC 17025 or periodic audits by an accredited inspection body in Morocco, such as Bureau Veritas or General Surveillance Company.

42. UNIDO clarified to the Secretariat that the selection of R-290, rather than ammonia, for ice production facilities, reflects the operational profile and scale of the targeted segment. While ammonia is a proven and energy-efficient refrigerant for ice production, the proposed demonstration, at approximately 3 tonnes of ice per day, requires a technology that is more comparable to the existing HCFC-22 equipment being replaced. R-290 monobloc units are self-contained and can be maintained under standard RAC servicing arrangements, with flammability risks managed through compliance with IEC 60335-2-89. The objective of the demonstration is therefore to validate a technology pathway that fish processing enterprises can replicate independently through normal commercial procurement without requiring the specialized engineering, industrial safety infrastructure or dedicated maintenance contracts associated with ammonia systems at this scale.

43. In line with decision 92/36(g), UNIDO will submit final reports on the implementation of the end-user demonstration projects included in stage III of the HPMP, including the HCFC phase-out and energy-efficiency gains achieved.

Component 4: Leak detection and monitoring

44. Following a thorough discussion between the Secretariat and UNIDO, and in view of the importance of emissions reduction during stage III of the HPMP as well as post-2030 maintenance period, where supply of virgin HCFC-22 will be very limited to the service tail allowance, UNIDO and the Government of Morocco welcomed the Secretariat's suggestion to develop a dedicated leak detection and monitoring component, which is added as component 4 with a total budget of US \$102,000. This component is designed to establish a robust, evidence-based foundation for integrating leak monitoring into servicing practices and the regulatory framework for the post-2030 period. It will also include the activity 1.2, related to the national assessment for developing a consumption management strategy for the maintenance post 2030 period, with a budget of US \$25,000, together with the new proposed activities funded through the reallocation of US \$77,000 from the technician training budget under activity 2.3, which has been revised from US \$175,000 to US \$88,000. The revised activity structure and tranche breakdown reflecting these adjustments are presented in table 4. Component 4 is structured around four sub-activities, as follows:

- (a) *Sector-specific leakage rate study:* Field characterisation of HCFC-22 leakage rates across the commercial refrigeration, industrial refrigeration, fisheries refrigeration and tourism AC sub-sectors, drawing in particular on data from operators that have already deployed leak detection systems on a voluntary basis, and producing Morocco-specific leakage rate data by sector and equipment type to inform both the demonstration design and the national consumption management strategy ;
- (b) *Demonstration and pilot record-keeping:* Demonstration of leak detection and monitoring systems at four to five sites in the commercial refrigeration, industrial refrigeration, fisheries refrigeration and/or AC tourism sub-sectors. The activity will cover installation and commissioning of permanent leak detection equipment, monitoring of refrigerant consumption and energy performance after installation, establishment of pilot refrigerant consumption logbooks and record-keeping tools at the demonstration sites, and documentation of operational and economic outcomes;
- (c) *National consumption management strategy for the maintenance period:* This activity, previously proposed as activity 1.2 under component 1, is integrated into component 4 so that the consumption management strategy is directly informed by the sector-specific leakage data and demonstration outcomes generated under activities 4.1 and 4.2. The activity will consist of: analysing the remaining HCFC-22 servicing demand and installed base expected after 2030; reviewing the existing regulatory, institutional and enforcement framework and identifying gaps requiring action before 1 January 2030; translating the demonstration outcomes into operational recommendations for replication; and developing

a practical consumption management strategy for 2030–2040, including roles, responsibilities, monitoring, verification and risk-mitigation measures if post-2030 consumption is expected; and

- (d) *Training and dissemination:* Capacity-building of technicians and end users on leak detection methodologies, refrigerant logbook-keeping and the use of permanent leak detection equipment, complemented by targeted workshops with professional associations, AMPF, Moroccan Federation of Industries for the processing and Valorization of Fishery Products and end-user federations to promote replication beyond the demonstration sites.

45. Following the discussion with the Secretariat, UNIDO will provide a detailed workplan, including a suggested list of tools and activities for sub-activities (b) and (c) above, when submitting the second tranche of stage III of the HPMP based on the outcomes of the sector-specific leakage rate study.

Project management and coordination unit

46. Based on the discussion between the Secretariat and UNIDO, the project management unit budget for the whole stage III was revised and agreed at US \$106,652 instead of US \$133,315; including consultants (US \$38,400), travel (US \$22,400), meetings and consultations (US \$22,400), monitoring and reporting (US \$14,900) and other costs (US \$8,552).

Revised project costs

47. Following discussions on the various project components, UNIDO, in consultation with the Government of Morocco, agreed to reduce the technician training budget under activity 2.3, from US \$175,000 to US \$88,000 by reducing the target technicians to be trained from 700 to 350. The resulting savings of US \$87,000 will be used to create a new sub-activity under component 3 for the establishment of a coordination mechanism for RAC fisheries technologies (US \$10,000), and to add a new component to develop a dedicated leak detection and monitoring. This new component will have a total of US \$102,000, comprising of US \$77,000 from the reallocated savings and activity 1.2 (US \$25,000), related to the national assessment for developing a consumption management strategy for the maintenance post 2030 period, which will be moved to be part of the new component.

Table 4: Servicing sector activities and their costs under stage III of the HPMP for Morocco as agreed

#	Activity	Original (US \$)	Revised (US \$)
Component 1: Regulatory framework and control mechanism			
1.1	Regulatory support	12,052	12,052
1.2	National assessment to develop a consumption management strategy during the maintenance period	25,000	-
1.3	Provision of identifiers to customs officers	36,000	36,000
1.4	Training for customs officers	25,000	25,000
Subtotal		98,052	73,052
Component 2: Capacity building for RAC sector			
2.1	Provision of equipment and tools for RAC training institutes	150,000	150,000
2.2	Training of trainers	56,100	56,100
2.3	Training of RAC technicians	175,000	88,000
2.4	Provision of equipment and tools for RAC servicing companies	154,000	154,000
2.5	Operationalisation and equipment of the RRR centre	150,000	150,000
2.6	Showcasing DX-assisted IEC technology to the hospitality sector	60,000	60,000
Subtotal		745,100	658,100

#	Activity	Original (US \$)	Revised (US \$)
Component 3: Fisheries Sector			
3.1	Demonstration of HCFC-22 retrofit with R-453A on fishing vessels	220,000	220,000
3.2	Demonstration of ammonia-based freezing tunnel for fish processing facilities	120,000	120,000
3.3	Demonstration of HC-290 cold room refrigeration units in fisheries cold storage facilities	90,000	90,000
3.4	Demonstration of HC-290 ice production machines	60,000	60,000
3.5	Establishment of a coordination mechanism for RAC fisheries technologies	-	10,000
Subtotal		490,000	500,000
Component 4: Leak detection and monitoring			
4.1	Sector-specific leakage rate study	-	12,000
4.2	Demonstration and pilot record-keeping	-	50,000
4.3	National consumption management strategy for the maintenance period	-	25,000
4.4	Training and dissemination	-	15,000
Subtotal			102,000
Subtotal for activities		1,333,152	1,333,152
5.1	Project management and coordination (8%)	133,315	106,652
Total		1,466,467	1,439,804

Total project cost

48. The total cost of stage III of the HPMP amounts to US \$1,333,152, based on decision 74/50(c)(xii) on the eligible funding level for a non-low-volume-consuming country, plus US \$106,652 for project monitoring and implementation. The funding for the first tranche was revised and agreed including US \$165,240 for activities of the HPMP.

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

49. Considering the reallocation of budget lines among different activities and the addition of component 4, as described in paragraphs 33 to 44 above, the funding distribution for the first tranche of stage III has been revised accordingly. The agreed plan of action will include the following activities:

- (a) *Regulatory framework and control mechanism:* Organize two coordination meetings with relevant public authorities and private-sector stakeholders (US \$3,000);
- (b) *Capacity building for RAC sector:* Conduct five training sessions for 80 RAC technicians combining theoretical instruction with practical demonstrations to strengthen and update competencies in line with evolving technologies and regulatory requirements; provision of equipment and tools for 11 RAC servicing companies to strengthen their capacity for the sound management of refrigerants; recruit a national consultant to assess and confirm the specific requirements of each company; and showcasing DX-assisted IEC technology to the hospitality sector, including one coordination meeting with national stakeholders, selection of the beneficiary enterprise, and engagement of a national consultant to conduct a technical assessment of the existing HCFC-based system at the pilot site (US \$105,000);
- (c) *Fisheries sector:* Establish a coordination mechanism for RAC fisheries technologies, including two coordination meetings; demonstration of HCFC-22 retrofit to R-453A on fishing vessels, including the engagement of a national consultant to assess and select

beneficiary vessels and to conduct a technical assessment of selected vessels' refrigeration systems; demonstration of ammonia-based freezing tunnel for fish processing facilities including a coordination meeting with national stakeholders and selection of the beneficiary enterprise; demonstration of R-290 cold room refrigeration units in fisheries cold storage facilities, including one coordination meeting with national stakeholders and selection of two beneficiary enterprises; demonstration of R-290 ice production machines including a coordination meeting with national stakeholders and selection of the beneficiary enterprise(US \$33,000);

(d) *Leak detection and monitoring*: Conduct a sector specific leakage rate study (US \$12,000); and

(e) Project management and coordination (US \$12,240).

Co-financing

50. At present, no co-financing grants have been secured for stage III of the HPMP; however, several stakeholders will provide in-kind contributions to support implementation. These include the beneficiary company hosting the RRR centre which will co-finance infrastructure, civil engineering works, recovery equipment, and initial operating costs; vessel owners participating in retrofit demonstrations, who will cover additional costs such as R-453A refrigerant and system repairs beyond retrofit requirements; beneficiaries of demonstration activities in the ice-making and cold storage subsectors, who will finance land, civil works, site adaptations, support environmentally disposal practices for equipment refrigerants and, where feasible, additional system replacements to promote replication; and training institutions and sector stakeholders, including OFPPT and AMPF, which will contribute in providing training facilities, infrastructure, and technical expertise.

2026–2028 draft business plan of the Multilateral Fund

51. UNIDO is requesting US \$1,439,804, plus agency support costs, for the implementation of stage III of the HPMP for Morocco. The total requested value of US \$1,384,584, including agency support costs for the period of 2026–2028, is US \$ 18,077 below the amount in the business plan.

Gender policy implementation

52. In line with decisions 84/92(d), 90/48(c), and 92/40(b), the Government of Morocco has incorporated the Multilateral Fund gender policy into the project preparation and formulation for stage III of the HPMP. During stage II, awareness-raising events attracted 380 participants from the RAC sector, of whom 10 per cent were women, and a dedicated side event on women in the refrigeration sector was organized in 2024. Building on this momentum, stage III will continue implementing the policy across all components through targeted measures, including prioritizing the allocation of tools and equipment to women technicians where appropriate, collecting sex-disaggregated data to track participation, and establishing specific targets and indicators, including an initial target of 10 per cent women's participation in training programmes for customs and enforcement officers and RAC technicians. UNIDO and the NOU will be responsible for monitoring progress against these targets and reporting on performance indicators at each tranche request, while the NOU will continue to promote women's participation in customs training, technician training and small medium enterprises programmes and raise awareness among stakeholders on the gender policy of the Multilateral Fund throughout implementation. The HPMP also supported World Refrigeration Day events in 2023 and 2024, attended by 180 and more than 200 representatives of the Moroccan RAC sector, respectively, with around 10 per cent female participation.

Sustainability of the HCFC phase-out and assessment of risks

53. The implementation of stage III of the HPMP in Morocco has identified several key risks, including the limited uptake of low-GWP alternatives due to safety concerns or unfamiliarity among technicians and end-users; this will be mitigated through demonstration projects and the integration of alternative refrigerant handling into OFPPT curricula. A further risk relates to insufficient refrigerant recovery volumes to ensure the viability of RRR operations, which will be addressed by the rising cost of virgin refrigerants and the phase-out of HCFC-22 imports by 2030. Additional risks include weak enforcement capacity at borders and within the servicing sector, delays in the procurement and delivery of specialized equipment, and limited private sector engagement in replicating demonstration project outcomes. These risks will be mitigated through the integration of HCFC controls into routine customs inspection protocols and strengthened coordination between customs authorities and the NOU, the early identification of qualified suppliers and the use of established UNIDO procurement procedures, and targeted outreach through industry associations and sector workshops, including co-financing arrangements to reduce barriers to enterprise adoption.

54. The risk of reversion to HCFC-22 in the fishing vessel refrigeration sector due to limited availability of R-453A, will be mitigated by establishing dedicated import quotas to ensure sufficient supply. Finally, resistance from fishing vessel operators due to retrofit costs and operational downtime which will be addressed by the use of R-453A technology that does not require oil changes or major modifications, aligning retrofit schedules with seasonal fishing closures, and clearly communicating long-term cost savings and regulatory compliance obligations.

55. The sustainability of the results of stage III of the HPMP will be ensured through a combination of regulatory enforcement, institutional strengthening, and long-term capacity-building measures. The roll-out of the technician certification system will equip the workforce with the necessary skills to safely handle alternative refrigerants, while strengthened HCFC import controls supported by targeted training for customs and enforcement officers. Further sustainability will be enhanced through the operationalisation of refrigerant RRR activities, including equipping servicing companies to increase recovery volumes and supply quality-assured reclaimed refrigerants, thereby progressively reducing reliance on virgin refrigerants. In addition, demonstration projects implemented under stage III are expected to catalyse wider replication across the servicing and end-user sectors, ensuring long-term impact beyond the project's duration.

56. The introduction of and an overarching leak detection and monitoring component that offer background validated analysis and leakage rate study, the demonstration of real leak monitoring and detection practices and techniques, development of dedicated management plan and logging practices, and specialized training; all will support in ensuring transforming the servicing sector practice towards sustainable and less emission approach and significantly mitigate risks associated with continuing improper practices by operators and service providers.

Impact on the climate

57. The activities proposed in the servicing sector, including better refrigerant containment through training and provision of equipment, will reduce the use of HCFC-22 in servicing. Each kilogram of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-equivalent tonnes. A calculation of the impact on the climate was provided in the HPMP. The activities planned by Morocco, including its efforts in strengthening the regulatory controls, enhancing technical capacity and servicing infrastructure, and implementing targeted demonstration projects in the fisheries sector to promote adoption of low-GWP technologies, indicates that the implementation of the HPMP will reduce refrigerant emissions in the atmosphere, resulting in climate benefits.

Draft Agreement

58. A draft Agreement between the Government of Morocco 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:

Stage II of the HCFC phase-out management plan

- (a) Noting the progress report on the implementation of all the remaining activities in the previously approved tranches and the work programmes associated with the final tranche of stage II of the HCFC phase-out management plan (HPMP) for Morocco;
- (b) Approving, on an exceptional basis, and on the understanding that no further extension would be approved, the extension to 31 December 2027 of the completion date of the project referred to in subparagraph (a) above;
- (c) Requesting the Government of Morocco and UNIDO to submit on a yearly basis, a progress report on the implementation of all the remaining activities in the previously approved tranches and the work programmes associated with the final tranche through completion of the project, verification reports until approval of stage III, and the project completion report to the first meeting of the Executive Committee in 2028.

Stage III of the HCFC phase-out management plan

- (d) Approving, in principle, stage III of the HCFC phase-out management plan (HPMP) for Morocco for the period from 2026 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$1,439,804, plus agency support costs of US \$100,786, for UNIDO, on the understanding that no more funding from the Multilateral Fund will be provided for the phase-out of HCFCs;
- (e) Noting the commitment of the Government of Morocco to completely phase out HCFCs by 1 January 2030, and that HCFCs will not be imported after that date, except for those allowed for a servicing tail between 2030 and 2040, where required, consistent with the provisions of the Montreal Protocol;
- (f) Deducting 16.69 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (g) Approving the draft Agreement between the Government of Morocco 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;
- (h) Requesting the Government of Morocco and UNIDO to report on the outcomes of the fisheries study, the feasibility study of the recovery, recycling, and reclamation and the sector-specific leakage rate study when submitting the second tranche;
- (i) Noting that, upon completion of the end-user projects included in stage III of the HPMP, UNIDO will submit a final report on their implementation in line with decision 92/36(g), including the HCFC phase-out and energy-efficiency gains achieved;

- (j) That, to allow for consideration of the final tranche of its HPMP, the Government of Morocco should submit:
 - (i) 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; and
 - (ii) If Morocco 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; and
- (k) Approving the first tranche of stage III of the HPMP for Morocco, and the corresponding tranche implementation plan, in the amount of US \$165,240, plus agency support costs of US \$11,567, for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF MOROCCO 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 Morocco (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 0.00 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 rows 4.1.3, 4.2.3 and 4.3.3 (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; and
- (c) 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 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	45.88
HCFC-141b	C	I	14.01
Subtotal			59.89
HCFC-141b contained in imported pre-blended polyols			7.90
Total			67.79

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2026	2027	2028	2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	16.69	16.69	16.69	16.69	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	16.69	12.52	8.35	4.17	0.00	n/a
2.1	Lead IA (UNIDO) agreed funding (US \$)	165,240	1,128,764	-	-	145,800	1,439,804
2.2	Support costs for Lead IA (US \$)	11,567	79,013	-	-	10,206	100,786
3.1	Total agreed funding (US \$)	165,240	1,128,764	-	-	145,800	1,439,804
3.2	Total support costs (US \$)	11,567	79,013	-	-	10,206	100,786
3.3	Total agreed costs (US \$)	176,807	1,207,777	-	-	156,006	1,540,590
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)						16.69
4.1.2	Phase-out of HCFC-22 to be achieved in previous stages (ODP tonnes)						29.19
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)						0.00
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)						0.00
4.2.2	Phase-out of HCFC-141b to be achieved in previous stages (ODP tonnes)						14.01
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)						0.00
4.3.1	Total phase-out of HCFC-141b contained in imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes)						0.00
4.3.2	Phase-out of HCFC-141b contained in imported pre-blended polyols to be achieved in previous stages (ODP tonnes)						7.90

Row	Particulars	2026	2027	2028	2029	2030	Total
4.3.3	Remaining eligible consumption for HCFC-141b contained in imported pre-blended polyols (ODP tonnes)						0.00

* Date of completion of stage II as per stage II Agreement: 31 December 2026. Extension to 31 December 2027 is being requested at the present meeting.

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the first 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 (NOU) of the Country is responsible for monitoring the progress of implementation of activities in the Plan.

2. The monitoring will be conducted during the implementation of the Plan to ensure efficient and effective implementation; overall project coordination; stakeholder engagement and coordination; smooth implementation of activities planned under various tranches; delivery of trainings and other expected outcomes; and facilitation of the HCFC consumption verification undertaken by the Lead IA.

3. The Ministry of Industry and Trade in the Country will be responsible for the sustainability of consumption reduction targets achieved through the agreement.

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) Ensuring appropriate sequence of activities;
- (k) 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;
- (l) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (m) Providing assistance with policy, management and technical support when required; and
- (n) 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 \$173 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.