



**United Nations
Environment
Programme**

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/98/22
19 May 2026

ORIGINAL: ENGLISH



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: BAHRAIN

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

Phase-out

- | | | |
|---|------|--------------------------|
| <ul style="list-style-type: none">• HCFC phase-out management plan (stage III, first tranche) | UNEP | Individual consideration |
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¹ UNEP/OzL.Pro/ExCom/98/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Bahrain

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

ARTICLE 7 DATA (Annex C, Group I)	Year: 2025	13.53 ODP tonnes
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COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2025
Substance	Aerosol	Foam	Firefighting	Refrigeration		Solvent	Total sector consumption
				Manufacturing	Servicing		
HCFC-22					13.53		13.53

CONSUMPTION DATA (ODP tonnes)			
2009–2010 baseline:	51.90	Starting point for sustained aggregate reductions:	61.39
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	58.64	Remaining:	2.75

ENDORSED BUSINESS PLAN		2026	2027	2028	Total
UNEP	ODS phase-out (ODP tonnes)	0.00	0.00	0.00	0.00
	Funding (US \$)	94,920	0	0	94,920
UNIDO	ODS phase-out (ODP tonnes)	0.69	0.00	0.00	0.69
	Funding (US \$)	64,199	0	0	64,199

PROJECT DATA AS AGREED			2026	2027	2028	2029	2030	Total
Consumption (ODP tonnes)	Montreal Protocol limits		13.75	13.75	13.75	13.75	0.0	n/a
	Maximum allowable		13.75	13.75	11.75	11.75	0.0	n/a
Project costs requested in principle (US \$)	UNEP	Project costs	145,000	0	95,000	0	0	240,000
		Support costs	18,850	0	12,350	0	0	31,200
Total amounts recommended in principle (US \$)		Project costs	145,000	0	95,000	0	0	240,000
		Support costs	18,850	0	12,350	0	0	31,200
		Total funds	163,850	0	107,350	0	0	271,200

Request for funding for the first tranche (2026)		
Implementing agency	Funds recommended (US \$)	Support costs (US \$)
UNEP	145,000	18,850
Total	145,000	18,850

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Bahrain, UNEP 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 \$240,000, plus agency support costs of US \$31,200, 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 \$145,000, plus agency support costs of US \$18,850, for UNEP, as originally submitted.

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

3. Stage II of the HPMP for Bahrain was approved at the 88th meeting³ to phase out 40.61 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing, RAC manufacturing, and foam sectors, and to meet a 73.5 per cent reduction from the baseline by 2025, at a total cost of US \$662,999, plus agency support costs. Stage II of the HPMP will be completed by December 2026, as stipulated in the Agreement between the Government of Bahrain and the Executive Committee.

Report on HCFC consumption

4. The Government of Bahrain reported a consumption of 13.53 ODP tonnes of HCFCs in 2025, which is 74 per cent below the HCFC baseline for compliance. The 2021–2025 HCFC consumption is shown in table 1.

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

HCFC	2021	2022	2023	2024	2025	Baseline
Metric tonnes (mt)						
HCFC-22	447.38	463.90	538.13	519.43	246.00	935.80
HCFC-141b	0.00	0.00	0.00	0.00	0.00	4.00
Total (mt)	447.38	463.90	538.13	519.43	246.00	939.70
HCFC-141b in imported pre-blended polyols*	115.18	155.90	149.54	175.12	0.00	91.87**
ODP tonnes						
HCFC-22	24.61	25.51	29.60	28.57	13.53	51.50
HCFC-141b	0.00	0.00	0.00	0.00	0.00	0.40
Total (ODP tonnes)	24.61	25.51	29.60	28.57	13.53	51.90
HCFC-141b in imported pre-blended polyols*	12.67	17.15	16.45	19.26	0.00	10.11**

* Country programme (CP) data

** Average consumption between 2007 and 2009

5. HCFC consumption in Bahrain had been decreasing in the years leading up to 2021 due to the implementation of the HPMP, after which it began increasing in line with the economic recovery following the COVID-19 pandemic; consumption in 2025 decreased in line with the country's target for that year. Use of HCFC-141b contained in imported pre-blended polyols increased substantially between 2020 and 2024, mostly attributed to the boom in the building sector and increased demand for polyurethane (PU) foam insulation. Following the phase-out in the manufacturing and foam sectors as of 1 January 2025, the only remaining HCFC consumption in Bahrain is HCFC-22, which is used exclusively in the RAC servicing sector. HCFC-123, which was used to service chillers, has not been imported since 2017 as

² As per the letter of 15 February 2026 from the Supreme Council for Environment of Bahrain to UNEP.

³ Decision 88/44

hydrofluoroolefin-based technologies are phased in; current servicing needs are being met through existing stocks.

Country programme implementation report

6. The Government of Bahrain reported HCFC sector consumption data under the 2025 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

Verification report

7. In line with decision 97/15(b), UNEP submitted the verification of HCFC consumption for 2024. The verification report confirmed that the Government was implementing a licensing and quota system for HCFC imports and exports, and that the total consumption of HCFCs reported under Article 7 of the Montreal Protocol for 2024 was correct (as shown in table 1 above). The verification concluded that Bahrain is in compliance with the maximum allowable consumption levels established in its Agreement with the Executive Committee.

Status of progress and disbursement

Legal framework

8. The Government of Bahrain ratified the Kigali Amendment on 1 July 2024. The Government banned the import and use of HCFC-141b pure in 2021, and the import and use of HCFC-141b contained in pre-blended polyols and the import and manufacture of all HCFC-based RAC equipment from 1 January 2025.

Manufacturing sector

9. Consumption of HCFCs has been completely phased out in the manufacturing sector.

10. The umbrella project to phase out 135.93 mt of HCFC-141b contained in imported pre-blended polyols in the foam sector is complete. The enterprises included in the project⁴ received technical assistance to transition to technologies with low global warming potential (GWP), with methyl formate being the preferred technology adopted following the 1 January 2025 ban on the import and use of HCFC-141b contained in pre-blended polyols. Technical support was provided to beneficiary enterprises to ensure the stabilization of their manufacturing using the alternative technology, and the national ozone unit (NOU) conducted final site visits to verify that no HCFC-141b was being utilized and that the old equipment had been successfully decommissioned.

Refrigeration servicing sector

11. The following activities were implemented during the third tranche:

- (a) An awareness workshop was organized for 66 participants (including 18 women) from private and Government bodies on the new Gulf Cooperation Council regulations related to the Montreal Protocol and the Kigali Amendment;
- (b) Four training workshops were held and 40 customs officers trained (including two women) on the Montreal Protocol and the control of HCFCs including risk profiling;

⁴ Two insulation foam enterprises (Awal Gulf Manufacturing (AGM) and Awal Refrigeration and Air-Conditioning), two spray foam enterprises (Al Khonaizi and Al Manai), and an additional 35 spray foam enterprises.

- (c) Three training sessions were held where 50 RAC technicians were trained and certified on RAC good servicing practices in collaboration with local institutes, for a total of 130 technicians certified under stage II; an additional 420 technicians were trained and certified through the HPMP-implemented training structure and certification scheme without direct assistance from the Multilateral Fund; and
- (d) Sets of tools and equipment were provided to four training centres and included refrigerant recovery and recycling units and manifold gauges.

Project implementation and monitoring

12. The project management unit (PMU) implements project activities, monitors progress and reports achievements. Of the US \$10,000 approved for the PMU in the third tranche, US \$7,000 was disbursed for staff and consultants and US \$3,000 for meetings and workshops.

13. The total expenditure of the PMU for stage II amounts to US \$48,000, comprising US \$34,000 for staff and consultants and US \$14,000 for meetings and workshops.

Level of fund disbursement

14. As at December 2025, of the US \$662,999 approved under stage II, 100 per cent had been disbursed, as shown in table 2.

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

Tranche		UNEP	UNIDO	Total	Disbursement rate (%)
First	Approved	249,500	203,999	453,499	100
	Disbursed	249,500	203,999	453,499	
Second	Approved	79,500	54,000	133,500	100
	Disbursed	79,500	54,000	133,500	
Third	Approved	55,000	21,000	76,000	100
	Disbursed	55,000	21,000	76,000	
Total	Approved	384,000	278,999	662,999	100
	Disbursed	384,000	278,999	662,999	
	Balance	0	0	0	

Stage III of the HCFC phase-out management plan

Remaining consumption eligible for funding

15. After deducting 58.64 ODP tonnes of HCFCs associated with stages I and II of the HPMP, the remaining consumption eligible for funding in stage III amounts to 2.75 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

16. There are approximately 2,500 technicians (of which 550 are certified) operating in the servicing sector, consuming HCFC-22 mainly to service domestic and commercial air-conditioning (AC) units, with some consumption to service commercial and industrial refrigeration equipment and transportation reefers as well. A mandatory, competency-based RAC technician certification system is in place.

17. The most frequently used refrigerants in the RAC servicing sector presently are R-410A, HFC-134a, and HCFC-22, followed by ammonia and other HFCs. Propane is also consumed in small

amounts. Consumption of HCFCs in the manufacturing of domestic AC equipment, PU insulation foam for refrigeration equipment, and spray foam was phased out during stage II of the HPMP.

Phase-out strategy

18. The overarching strategy of stage III builds upon the foundation established in stages I and II of the HPMP and aims for a strengthened partnership between the Government and industry. It considers the commercial and technical challenges involved to reduce the risk of the phase-out of HCFCs leading to a transition toward high-GWP HFCs in the servicing sector. Technical capacity-building and awareness-raising will continue, and a comprehensive policy and regulatory framework will be developed that will prioritize HCFC recovery and reuse, including through reclamation; improved servicing practices; the adoption of technically feasible, energy-efficient, and environmentally sustainable alternative technologies; and regulations to effectively manage the phase-out.

Proposed activities

19. 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 Bahrain, as submitted

Activity	Cost (US \$)	
	Stage III	First tranche
<i>Strengthening the legal framework to support the long-term management of a servicing tail (US \$5,000)</i>		
Develop a compendium of ODS policies and regulations in the form of a practical handbook to support importers, customs, and service workshops	3,000	3,000
Establish the regulatory conditions needed to develop the necessary use restrictions and ban by 1 January 2030 on the import of HCFCs other than that allowed under the servicing tail, including a legal analysis on the economic and social impacts of the use restrictions and ban	2,000	2,000
<i>Customs capacity-building (US \$10,000)</i>		
Develop a risk profile manual, update customs training materials, and train 40 customs supervisors and trainers on ODS control	10,000	5,000
<i>RAC technician training and equipment procurement (US \$182,000)</i>		
Hold 13 workshops to train and certify 250 RAC technicians on improved servicing practices, leakage control, and improved quality of services	149,000	69,000
Procure specialized tools and portable servicing equipment ⁵ for four training centres to meet national certification standards	33,000	33,000
<i>Awareness-raising (US \$10,000)</i>		
Continue and expand the awareness campaigns on HCFC bans, ODS control, and leakage reduction	4,000	4,000
Carry out a campaign for end users on ODS-free products and equipment	3,500	3,500
Organize a capacity-building workshop for end users on the safety and benefits of alternative technologies	2,500	2,500
<i>PMU (US \$33,000)</i>		
Project implementation and monitoring activities (see paragraph 20)	33,000	23,000
Total	240,000	145,000

⁵ Includes recovery and vacuum pumps, electronic leak detectors, digital manifolds, recovery cylinders, weigh scales, and safety kits for handling flammable and high-pressure alternatives.

Project implementation and monitoring

20. The system established under stages I and II of the HPMP will continue into stage III, with the NOU and UNEP monitoring activities, reporting on progress, and working with stakeholders to phase out HCFCs. The cost of those activities amounts to US \$33,000 for UNEP, including project staff and consultants (US \$10,000), coordination and travel (US \$4,000), meetings and workshops (US \$3,000), verification of consumption (US \$10,000), operational costs (US \$4,000), and miscellaneous costs (US \$2,000).

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

21. The total cost of stage III of the HPMP for Bahrain has been estimated at US \$240,000 (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

22. The first funding tranche of stage III of the HPMP in the total amount of US \$145,000 will be implemented between July 2026 and December 2028. Detailed information on the activities included in the first tranche, indicating adjustments made and level of funds agreed during the project review process, is presented in paragraph 33 below.

SECRETARIAT'S COMMENTS AND RECOMMENDATION**COMMENTS**

23. 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 2026–2028 business plan of the Multilateral Fund.

Status of implementation of stage II of the HCFC phase-out management plan*Recycling, recovery, and reclamation*

24. Ministerial Decree No. 1/2020 on the management of refrigerants and RAC equipment established mandatory recovery and refill practices, including prohibition on the intentional venting of refrigerants during the installation, maintenance, servicing, and decommissioning of RAC equipment; prohibits the use of disposable cylinders, effective as of 2021 for HCFCs and 2022 for all refrigerants (including HFCs); requires that the installation, maintenance, and decommissioning of RAC equipment be performed only by certified technicians; and requires the registration of refrigerants, equipment, and servicing enterprises.

25. The reclamation centre in the country is operating effectively, with 3.21 mt of refrigerants reclaimed in 2025 (including 3.19 mt of HCFC-22 and 0.02 mt of HFC-134a). UNEP attributed the reclamation centre's successful operation to the enhanced collection schemes and the mandatory recovery requirements of Ministerial Decree No. 1/2020 implemented under stage II, which incentivized technicians to bring contaminated refrigerants to the centre. Additional elements of the recycling, recovery, and reclamation (RRR) scheme believed to be integral to its success include the early integration of mandatory recovery requirements into legislation; establishing the centre in an easily accessible location using equipment suitable for conditions in the region; providing technicians with the necessary tools (including recovery units) as well as clear instructions for participation; the prohibition on disposable cylinders; and close collaboration between the NOU and servicing enterprises to ensure reclaimed gas meets the purity standards required for use in RAC equipment. The effective use of the reclamation centre will continue under stage III.

Overarching strategy

26. The Government of Bahrain 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.⁶ The Government will maintain a robust regulatory and policy framework beyond 2030, anchored by the Supreme Council for Environment (SCE), including:

- (a) Strict quota controls: Continuing the e-licensing and quota system to ensure that total consumption never exceeds the annual average of 2.5 per cent of the baseline (approximately 24 mt of HCFC-22);
- (b) Targeted servicing: Restricting the use of these HCFCs specifically to the servicing of existing RAC equipment, as permitted under paragraph 8 ter(e)(i) of the Montreal Protocol; and
- (c) Enhanced monitoring: Regular reporting under Article 7 and as part of the country's CP data report will continue, including in the servicing tail period, to demonstrate compliance.

27. In line with decision 86/51, to allow for consideration of the final tranche of its HPMP, the Government of Bahrain 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 Bahrain 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

28. The Government of Bahrain has issued HCFC import quotas for 2026 and 2027 in accordance with the Montreal Protocol control targets.

29. Bahrain has a three-tier system to ensure that only qualified, legally employed professionals handle HCFCs and HFCs, comprising registration, certification, and licensure. Registration refers to the legal labour status of the technician and means the technician is officially registered with the Labour Market Regulatory Authority (LMRA) under the specific professional category of “RAC Technician.” Certification is a mandatory requirement under Ministerial Decree No. 1/2020 and is provided only after a technician successfully passes the competency-based (theoretical and practical) assessment on good servicing practices and refrigerant recovery. Licensure refers to the operational authorization wherein a technician is considered licensed to handle controlled refrigerants when they hold a valid professional permit issued by the SCE. This permit is only granted to technicians that are registered (with LMRA) and certified.

Total project cost, phase-out targets and tranche distribution

30. The total cost of stage III of the HPMP amounts to US \$240,000, in line with decision 74/50 and the country's remaining HCFC-22 consumption eligible for funding of 2.75 ODP tonnes.

31. In line with the precedent of past projects, funding for the PMU was agreed at US \$21,818 (i.e., 9.1 per cent of the activity costs). This change would allow the Government to undertake additional activities amounting to US \$11,182 within the country's eligible funding. Given the need to ensure the

⁶ 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.

sustainability of the phase-out, it was agreed to allocate that additional funding to further support strengthening the legal framework, building the capacity of customs, and training technicians, as presented in table 4. The overall funding for the first tranche was agreed as submitted, with changes to the cost of individual activities as described in paragraph 33 below.

32. As submitted, stage III of the HPMP comprised two tranches, with the second tranche envisioned in 2028 rather than in 2030 as requested under decision 62/17. Further to discussions between the Secretariat and UNEP, where it was noted that requiring a third tranche in 2030 that comprised 10 per cent of the agreed funding would be impractical and create an unnecessary administrative burden and cost to the country, and the willingness of the country to reduce HCFC consumption by 77 per cent of its baseline by 1 January 2028 and to complete stage III of the HPMP by 31 December 2029, it was agreed that the last tranche would be provided in 2028.

Table 4. Servicing sector activities and their costs under stage III of the HPMP for Bahrain, as agreed

Activity	Cost (US \$)	
	Submitted	Revised
<i>Strengthening the legal framework to support the long-term management of a servicing tail</i>	5,000	8,000
Develop a compendium of ODS policies and regulations in the form of a practical handbook to support importers, customs, and service workshops	3,000	3,000
Develop standardized electronic reporting templates for importers and large end users to support the transition toward a mandatory logbook system and automated quota monitoring, and initiate linking the e-licensing system for refrigerant purchases to technicians' registration and certification identification	0	3,000
Establish the regulatory conditions needed to develop the necessary use restrictions and ban by 1 January 2030 on the import of HCFCs other than that allowed under the servicing tail, including a legal analysis on the economic and social impacts of the use restrictions and ban	2,000	2,000
<i>Customs capacity-building</i>	10,000	12,182
Develop a risk profile manual, update customs training materials, and train 40 customs supervisors and trainers on ODS control	10,000	12,182
<i>RAC technician training and equipment procurement</i>	182,000	188,000
Hold 13 workshops to train and certify 250 RAC technicians on improved servicing practices, leakage control, and improved quality of services	149,000	149,000
Hold two workshops to train master trainers on the safe handling of flammable and high-pressure (CO ₂) alternative refrigerants to support sustainability of the national certification scheme	0	6,000
Procure specialized tools and portable servicing equipment ⁷ for four training centres to meet national certification standards	33,000	33,000
<i>Awareness-raising</i>	10,000	10,000
Continue and expand the awareness campaigns on HCFC bans, ODS control, and leakage reduction	4,000	4,000
Carry out a campaign for end users on ODS-free products and equipment	3,500	3,500
Organize a capacity-building workshop for end users on the safety and benefits of alternative technologies	2,500	2,500

⁷ Includes recovery and vacuum pumps, electronic leak detectors, digital manifolds, recovery cylinders, weigh scales, and safety kits for handling flammable and high-pressure alternatives.

PMU	33,000	21,818
Project staff and consultants (US \$8,500), coordination and travel (US \$3,000), meetings and workshops (US \$3,000), verification of consumption (US \$4,318), and operational costs (US \$3,000)	33,000	21,818
Total	240,000	240,000

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

33. The agreed plan of action will include the following activities:

- (a) Strengthening the legal framework: Develop a compendium of ODS policies and regulations to support stakeholders; develop standardized electronic reporting templates for importers and large end users and initiate linking the e-licensing system for refrigerant purchases to technicians' registration and certification identification; and establish the regulatory conditions needed to develop the necessary use restrictions and ban on the import of HCFCs other than those allowed under the servicing tail, including a legal analysis on the economic and social impacts of the use restrictions and ban (US \$8,000);
- (b) Customs capacity-building: Develop a risk profile manual, update training materials, and train 20 customs officers on ODS control (US \$6,182);
- (c) RAC technician training and equipment procurement: Train and certify 190 RAC technicians on improved servicing practices, leakage control, and improved quality of services (US \$69,000); hold one workshop to train master trainers on the safe handling of flammable and high-pressure (CO₂) alternative refrigerants (US \$3,000); and procure specialized tools and portable servicing equipment for four training centres to meet national certification standards (US \$33,000);
- (d) Awareness-raising: Continue and expand the awareness campaigns on HCFC bans, ODS control, and leakage reduction; carry out a campaign for end users on ODS-free products and equipment; and organize a capacity-building workshop for end users on the safety and benefits of alternative technologies (US \$10,000); and
- (e) Project monitoring (US \$15,818): Project staff and consultants (US \$6,000), coordination and travel (US \$3,000), meetings and workshops (US \$1,000), verification of consumption (US \$4,318), and operational costs (US \$1,500).

Co-financing

34. The Government of Bahrain provides in-kind contributions through the SCE and Customs Affairs that include the operational costs of the licensing and quota system and monitoring of the RAC market. The Centre of Excellence, through the Ministry of Education, provides use of its facilities, and the Bahrain Society of Engineers provides technical oversight and independent auditing, reducing the per-capita cost of technician certification. The Government is further exploring the introduction of industry-led co-financing to ensure long-term sustainability of the phase-out, which would include nominal fees for certification and workshop licensing, to be further developed under the Kigali HFC implementation plan.

2026–2028 draft business plan of the Multilateral Fund

35. UNEP is requesting US \$240,000, plus agency support costs, for the implementation of stage III of the HPMP for Bahrain. The total requested value of US \$271,200, including agency support costs for the period of 2026–2028, is US \$176,280 above the amount in the business plan.

Gender policy implementation

36. Stage III of the HPMP has been developed with the aim to create equal opportunities for women to build careers in the RAC sector and a safe place for women's participation. Stage III will build on the activities of stage II, which included prioritizing women's participation in awareness and training events and collecting sex-disaggregated data. The Fund's gender policy was considered in the planning of all stage III project activities, and the PMU will support and monitor the implementation of the policy.

37. The NOU reported that, during the implementation of stage II, 5 per cent of participants in the training for customs and enforcement officers were women and no women had participated in the technician trainings. UNEP explained that the labour force for RAC servicing technicians is composed of almost entirely male workers, but that women hold key technical and administrative roles within the PMU, ensuring balance in the planning, regulatory drafting, and oversight phases of the HPMP. UNEP further provided data on 15 activities conducted during stage II that showed women's participation ranging from 1 to 40 per cent, demonstrating a higher level of female participation in regulatory, coordination, and awareness-raising activities.

38. During the preparation of stage III, a targeted sectoral review was undertaken evaluating the participation of women in policy and regulatory oversight, industrial management (foam/manufacturing), and RAC field servicing. As the results showed low engagement in field servicing, the strategy for stage III instead decided to focus on maximizing women's impact in decision-making, legislation, and engineering roles within the RAC sector. Recommendations from the assessment include formalizing the high participation of women in the PMU and national ozone committees as a model for other environmental sectors; targeting female students in environmental engineering and chemistry for specialized seminars on low-GWP technologies; and ensuring that any future technical forums and legislation workshops maintain gender-balanced invitations, aiming for at least 30 per cent female participation in advisory roles.

Sustainability of the HCFC phase-out and assessment of risks

39. Notwithstanding the continued demand for HCFC-22 to service existing equipment in the country, the Secretariat considers the risks to the sustainability of the HCFC phase-out to be low given Bahrain's well-functioning licensing and quota system; the country's mandatory, competency-based RAC technician certification system; the further training and certification of RAC technicians that will be undertaken under stage III; the bans implemented by the country on the import and use of HCFC-141b pure and contained in imported pre-blended polyols, on the manufacture and import of HCFC-based RAC equipment, and on the use of disposable cylinders; and the well-functioning RRR system, which is supported by the prohibition on the intentional venting of refrigerants during the installation, maintenance, servicing, and decommissioning of RAC equipment and that is already making reclaimed refrigerant available in the market.

40. The Secretariat further inquired whether UNEP had considered implementing risk mitigation measures in view of recent regional instability. UNEP confirmed that the following measures were integrated into the implementation plan: (a) local implementation of training using the four training centres across different regions of the country, (b) availability of virtual platforms for stakeholder consultations and policy meetings, (c) prioritisation of local and regional suppliers for the procurement of specialized tools, and (d) flexibility in the implementation timeline for field-based activities.

Impact on the climate

41. The activities proposed in the servicing sector, including better refrigerant containment through training and the 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 Bahrain, including its efforts to promote low-GWP alternatives, as well as refrigerant recovery and reuse, indicate that the implementation of the HPMP will reduce refrigerant emissions in the atmosphere, resulting in climate benefits.

Draft Agreement

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

RECOMMENDATION

43. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage III of the HCFC phase-out management plan (HPMP) for Bahrain for the period from 2026 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$240,000, plus agency support costs of US \$31,200, for UNEP, on the understanding that no more funding from the Multilateral Fund will be provided for the phase-out of HCFCs;
- (b) Noting the commitment of the Government of Bahrain to reduce HCFC consumption by 77.4 per cent by 1 January 2028 and 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;
- (c) Further noting that the date of completion of stage III of the HPMP is 31 December 2029;
- (d) Deducting 2.75 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (e) Approving the draft Agreement between the Government of Bahrain 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;
- (f) That, to allow for consideration of the final tranche of its HPMP, the Government of Bahrain 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;
 - (ii) If Bahrain 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
- (g) Approving the first tranche of stage III of the HPMP for Bahrain, and the corresponding tranche implementation plan, in the amount of US \$145,000, plus agency support costs of US \$18,850, for UNEP.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF BAHRAIN 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 Bahrain (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 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. UNEP 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 date of completion of the Plan is 31 December 2029. 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	50.84
HCFC-141b	C	I	0.44
Subtotal			51.28
HCFC-141b contained in imported pre-blended polyols			10.11
Total			61.39

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)	13.75	13.75	13.75	13.75	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	13.75	13.75	11.75	11.75	0.00	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	145,000	0	95,000	0	0	240,000
2.2	Support costs for Lead IA (US \$)	18,850	0	12,350	0	0	31,200
3.1	Total agreed funding (US \$)	145,000	0	95,000	0	0	240,000
3.2	Total support costs (US \$)	18,850	0	12,350	0	0	31,200
3.3	Total agreed costs (US \$)	163,850	0	107,350	0	0	271,200
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)						2.75
4.1.2	Phase-out of HCFC-22 to be achieved in previous stages (ODP tonnes)						48.09
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)						0.44
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)						10.11
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

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) is the central administrative unit established within the Supreme Council for Environment (SCE) and is responsible for the coordination of governmental agencies with respect to ozone layer protection and facilitation of ODS phase-out, and for the implementation of activities under the Plan.

2. The NOU will manage the implementation of activities under the Plan in cooperation with the Lead IA. An independent verifier will verify the consumption of HCFCs reported by the Government under Article 7 of the Montreal Protocol and the country programme reporting.

3. The project management unit will monitor the implementation of the activities. The detailed responsibilities include the following:

- (a) Day-to-day implementation of investment projects (where applicable), training programmes, technical assistance and awareness-raising activities included in the approved Plan;
- (b) Providing support to the NOU and independent verifier during the verification process (e.g., meetings with relevant stakeholders, data collection coordination, and inputs on review findings);
- (c) Under the guidance of the NOU, coordinating non-governmental stakeholders or some Government department(s), industrial associations, research institutes, standard bureau, training institutes, and statistics bureau for the implementation of activities under the Plan; and
- (d) Assisting the NOU in data gathering, analysis and reporting, including collecting and analyzing consumption data pertaining to the controlled substances associated with the Plan implementation.

4. The SCE, Customs Affairs, and Centre of Excellence are the primary bodies responsible for the long-term sustainability of the phase-out targets.

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 \$174.55 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.