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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-fifth Meeting
Montreal, 4-8 December 2024
Item 9(d) of the provisional agenda¹

PROJECT PROPOSAL: PAKISTAN

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, second tranche) | UNIDO and UNEP | Individual consideration |
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¹ UNEP/OzL.Pro/ExCom/95/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Pakistan

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (stage III)	UNIDO (lead), UNEP	90 th	100% phase-out by 2030

(II) LATEST ARTICLE 7 DATA (Annex C, Group I)	Year: 2023	118.94 ODP tonnes
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2023	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22				1.65	110.01				111.66
HCFC-123			0.02						0.02
HCFC-141b		7.26							7.26
HCFC-141b in imported pre-bended polyols		34.92							34.92

(IV) CONSUMPTION DATA (ODP tonnes)			
2009-2010 baseline:	248.11	Starting point for sustained aggregate reductions:	248.11
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	248.11	Remaining:	0.00

(V) ENDORSED BUSINESS PLAN		2024	2025	2026	Total
UNIDO	ODS phase-out (ODP tonnes)	11.57	0.00	9.56	21.13
	Funding (US \$)	1,123,286	0	928,118	2,051,404
UNEP	ODS phase-out (ODP tonnes)	8.13	0.00	6.57	14.7
	Funding (US \$)	821,853	0	664,514	1,486,367

(VI) PROJECT DATA			2022	2023	2024	2025	2026	2027-2029	2030	Total
Montreal Protocol consumption limits (ODP tonnes)			161.27	161.27	161.27	80.63	80.63	80.63	0	n/a
Maximum allowable consumption (ODP tonnes)			124.06	124.06	124.06	80.63	80.63	80.63	0	n/a
Funding agreed in principle (US \$)	UNIDO	Project costs	1,468,883	0	1,049,800	0	867,400	0	478,000	3,864,083
		Support costs	102,822	0	73,486	0	60,718	0	33,460	270,486
	UNEP	Project costs	426,750	0	737,154	0	596,030	0	280,730	2,040,664
		Support costs	49,034	0	84,699	0	68,484	0	32,256	234,473
Funds approved by ExCom (US \$)	Project costs		1,895,633	0	0	0	0	0	0	1,895,633
	Support costs		151,856	0	0	0	0	0	0	151,856
Total funds recommended for approval at this meeting (US \$)	Project costs		0	0	1,786,954	0	0	0	0	1,786,954
	Support costs		0	0	158,185	0	0	0	0	158,185

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

1. On behalf of the Government of Pakistan, UNIDO as the lead implementing agency has submitted a request for funding for the second tranche of stage III of the HCFC phase-out management plan (HPMP), at a total cost of US \$1,945,139, consisting of US \$1,049,800, plus agency support costs of US \$73,486, for UNIDO and US \$737,154, plus agency support costs of US \$84,699, for UNEP.² The submission includes a progress report on the implementation of the first tranche, the verification report on HCFC consumption for 2021 to 2023, and the tranche implementation plan for 2024 to 2026.

Report on HCFC consumption

2. The Government of Pakistan reported a consumption of 118.94 ODP tonnes of HCFCs in 2023, which is 52 per cent below the country's HCFC baseline for compliance. The 2019-2023 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in Pakistan (2019-2023 Article 7 data)

HCFC	2019	2020	2021	2022	2023	Baseline
Metric tonnes						
HCFC-22	2,752.4	2,021.7	2,046.0	2,032.9	2030.2	1,908.3
HCFC-123	0.0	0.0	0.00	1.0	1.0	0.0
HCFC-141b	495.5	73.0	73.3	66.0	66.0	1,259.1
HCFC-142b	44.0	46.0	0.00	0.0	0.0	71.6
Total (mt)	3,291.9	2,140.7	2,119.2	2,099.9	2,097.2	3,238.9
HCFC-141b in imported pre-blended polyols*	0.0	690.0	0.0	119.0	317.5	n/a
ODP tonnes						
HCFC-22	151.38	111.19	112.53	111.81	111.66	104.95
HCFC-123	0.00	0.00	0.00	0.02	0.02	0.00
HCFC-141b	54.51	8.03	8.03	7.26	7.26	138.50
HCFC-142b	2.86	2.99	0.00	0.00	0.00	4.650
Total (ODP tonnes)	208.75	122.21	120.56	119.09	118.94	248.11
HCFC-141b in imported pre-blended polyols*	0.00	75.90	0.00	13.09	34.92	n/a

* Country programme implementation report (CP) data

3. Since the implementation of stage II of the HPMP, HCFC consumption has shown an overall decline, except for an increase in the consumption of HCFC-141b in 2019, followed by a sharp decline in 2020, due to the conversion of several foam manufacturing enterprises. There has been no consumption of HCFC-142b since 2021 due to its phase-out from extruded polystyrene (XPS) foam boards for insulation after the conversion to dimethyl ether (DME)/CO₂/HFO technology. The major reduction in the consumption of HCFC-22 in 2020 was due to the conversion of domestic and commercial air-conditioning (AC) manufacturing enterprises to R-410A-based refrigerant, funded with their own resources, and to an increase in the production and import of R-410A-based residential AC units due to market demand. Since 2021, there has been a modest decrease in HCFC consumption due to the continuation of activities implemented in the servicing sector under stage III of the HPMP.

4. At the 88th meeting, after the Government of Pakistan reported in its CP data for the first time a consumption of 75.90 ODP tonnes of HCFC-141b contained in imported pre-blended polyols, the Government committed to monitor and report on the use of HCFC-141b contained in pre-blended polyols

² As per the letter of 24 September 2024 from the Ministry of Climate Change and Environmental Coordination of Pakistan to UNIDO.

and to establish monitoring mechanisms to ensure that the converted foam manufacturing enterprises were no longer using HCFC-141b, either pure or contained in pre-blended polyols. At the 92nd meeting, UNIDO reported that some of the beneficiary enterprises in the polyurethane (PU) foam sector had not commenced the use of the replacement foaming machines as the water-blown technology was not yielding the desired product quality. To address the issue, UNIDO had contacted three major system houses to undertake testing of formulations using methyl formate. These enterprises were expected to complete their phase-out by December 2024. The consumption of HCFC-141b in imported pre-blended polyols was reported in CP data in 2022 (119.0 mt) and again in 2023 (317.5 mt).

Country programme implementation report

5. The Government of Pakistan reported HCFC sector consumption data under the 2023 country programme (CP) implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

Verification report

6. 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 2021 to 2023 was correct (as shown in table 1 above). However, in 2022 and 2023, a consumption of 1.57 ODP tonnes (14.28 mt) and 4.54 ODP tonnes (41.27 mt) of HCFC-141b in imported pre-blended polyols was reported, respectively, which was much lower than the amounts reported under the CP report (shown in table 1 above). The verification concluded that Pakistan's existing procedures for the licensing system and monitoring of HCFC import and export have been properly followed and attributed the difference in amounts of HCFC-141b in imported pre-blended polyols to a lack of specific harmonized system (HS) code for this substance. The report recommends amending the relevant policy order to include the 2022 World Customs HS codes, implementing the 2023 policy order with various clauses on sanctions and penalties for violation of the regulation, and coordination between the relevant ministries³ to issue a code for HCFC-141b in imported pre-blended polyols for recording, monitoring and reporting purposes.

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

7. Stage II of the HPMP was extended at the 88th meeting with implementation to be completed on 31 December 2024 and the project completion report is due at the first meeting of 2025.

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

Legal framework

8. The licensing and quota system for the import and export of HCFCs has been operational since 2013, and the importation of previously phased-out ODS substances is banned. HCFC-142b was added to the list of controlled substances under regulation SRO 634(1) as part of Pakistan's Customs Rules, which was updated in 2014.

9. Under the first tranche of stage III of the HPMP consultative and coordinating meetings were held to discuss policies and regulations to support a sustained phase-out of HCFCs, and the terms of reference (TOR) was drafted for the recruitment of an expert, which is under review. Coordination meetings were also held to discuss the development and implementation of an e-licensing system for imports and for the development of a mandatory certification requirement in the refrigeration and air-conditioning (RAC)

³ The Ministry of Climate Change and Environmental Coordination (MOCC&EC) and the Ministry of Commerce

sector. For both, a work plan is under development, and the TOR are under preparation to recruit an expert to develop the certification scheme.

10. Meetings were held to initiate the train-the-trainers programme; the TOR was drafted to recruit an international customs trainer, and a draft training agenda is under discussion for the train-the-trainers programme and for the training programme for customs officers.

Foam manufacturing sector

11. Stage III included the conversion of six remaining eligible enterprises in the PU foam manufacturing sector to phase out 8.19 ODP tonnes (74.33 mt) of HCFC-141b: one manufacturing insulation foam for commercial refrigeration (Cool Point Lahore (Cool Point)), and one manufacturing insulation foam for pipes (Islam ud Din), to cyclopentane; and four enterprises manufacturing spray foam (Symbol Industries, Master Foam Karachi, Master Foam Lahore, Razi Sons) to water-blown technology.

12. No progress in implementation has been reported for the conversion for the insulation foam enterprise Cool Point due to challenges in arranging meetings with the enterprise. Additionally, it was discovered that the baseline equipment has been re-sold to another company, but information regarding the new location of the equipment has not been disclosed. The TOR have been completed for the enterprise manufacturing pipe insulation, a contract has been awarded, and commissioning is expected by the end of the year.

13. Regarding the four conversions in the spray foam enterprises, the bidding process for the procurement of spray foam machines has been completed. Offers have been received and are under technical review. The delivery is estimated to be completed by the end of 2024 or by the first quarter of 2025 at the latest.

Refrigeration servicing sector

14. Under the first tranche, a workplan and schedule for technician training workshops have been prepared and are under discussion. The workplan includes a methodology for the selection of servicing workshops and technical institutions to receive tools and equipment under stage III and the contract for equipment procurement for workshops and technical institutions has been signed; delivery is expected by the end of 2024. Work has commenced to update the master trainer workshop, and the national ozone unit (NOU) is discussing budget, new trainers, agenda, and locations with the technical training authority and has held stakeholder coordination meetings to discuss training workshops on specific applications. An international expert was hired to develop the specialized training for eight residential and four commercial AC manufacturers, and tools and equipment for leak detection, charging, and recovery were procured with delivery expected before the end of 2024.

15. A business model was developed by international experts on recovery, recycling, and reclamation (RRR) and shared with the NOU, which included case studies of business models in four countries, and an agenda is under development for a study visit to a facility in Poland. Proposals have been prepared for a study trip to Poland and Mexico for industry stakeholders to exchange information on low-global-warming-potential (GWP) technologies. An application form to establish a RRR centre was developed, and candidate centres were identified based on region among other criteria. A discussion document on RRR was developed to facilitate awareness-raising and stakeholder consultation. Guidelines were developed for the selection of servicing workshops for the provision of recovery equipment and to become part of the recovery and recycling (R&R) network. The feasibility study on low-GWP technologies commenced with a field survey and stakeholder consultation.

16. Training and awareness sessions were organized on alternative technologies with relevant stakeholders (e.g., industry and government). Two informational flyers regarding the implementation of the

HPMP were created and shared. Awareness was raised in industries on alternative technologies and the phase-out of HCFCs through an awards ceremony for five pioneer companies; celebration of the World Ozone Day and the World Refrigeration Day; and participation in the heating, ventilation, AC, and refrigeration (HVACR) exposition.

Project implementation and monitoring

17. Of the US \$155,000 approved for project management (US \$25,000 for UNEP and US \$130,000 for UNIDO), US \$88,979 was disbursed for staff and consultants, travel and other expenses.

Level of fund disbursement

18. As of August 2024, of the US \$1,895,633 approved so far (US \$1,468,883 for UNIDO and US \$426,750 for UNEP), US \$829,964 (44 per cent) had been disbursed (US \$809,150 for UNIDO and US \$20,814 for UNEP). The balance of US \$1,065,669 will be disbursed in 2024 to 2026.

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

19. The following activities will be implemented between December 2024 and December 2026:
- (a) *Conversion of six enterprises in the foam sector:* Continue the conversion of the two individual enterprises in the PU insulation foam sector and four spray foam enterprises, including developing the specifications for the equipment, procurement, delivery, installation, and commissioning (UNIDO) (US \$123,712 from the previous tranche);
 - (b) *Policy/regulations study and development:* Continue the review of existing policy and regulations to identify needs to support HCFC phase-out, including the servicing tail; conducting consultation meetings; continue the development of an e-licensing system, including an assessment of hardware and software required; continue the development and implementation of mandatory qualification requirements for RAC servicing technicians (UNEP) (US \$126,990 and US \$130,950 from the previous tranche); develop policy and standards for reclamation centre (UNIDO) (US \$10,000);
 - (c) *Enforcement and customs training:* One train-the-trainers' workshop in 2025 with international experts; eight training workshops for a total of 200 customs officers on Montreal Protocol and HCFC control including risk profiling and an update of risk profiling criteria; two training workshops for a total of 60 customs agents and importers to support enforcement beyond the customs check-point; one training workshop for 20 enforcement officers in provincial governments; one border dialogue with neighboring countries (UNEP) (US \$72,864 and US \$55,000 from the previous tranche);
 - (d) *Capacity building of RAC servicing training:* Organize six train-the-trainer workshops for 20 trainers in six provinces and 45 training workshops for 1,350 RAC technicians on good servicing practices; organize a master trainers' workshop in 2025; organize two training workshops for 90 trainees on good servicing practices for large commercial air conditioners/chillers in 2025; update the provincial training syllabus in consultation with provincial boards from technical institutions; continue work to integrate good servicing practices into National Qualification Framework and National Occupational Competency Standards; update the evaluation criteria for the recognition of prior learning (RPL), organize six training sessions for 60 assessors and implement a pilot certification programme and certify and initial 300 technicians through RPL (UNEP) (US \$464,500 and US \$168,000 from the previous tranche);

- (e) *Capacity building of RAC servicing and training centres (tools and equipment)*: Continue acquisition of 144 sets of tools/equipment for selected servicing workshops (including recovery station for HCFC-22, charging unit, vacuum pumps, weighted scales, vacuum gauges, leak detectors for hydrocarbon (HC), refillable cylinders, etc.) (UNIDO) (US \$172,800);
- (f) *National recycling, recovery and reclamation scheme*: Establish two national RRR centres including refrigerant reclaim, laboratory equipment, consumables, transportation, installation and training (including inter alia recovery unit for HCFC-22, reclaim station, refrigerant identifier, cylinders, leak detector, gas chromatograph, filter chiller unit, electric liquid transfer pump); acquire and deliver 150 service kits (including inter alia cylinders, manifolds and gauges, hoses, valves, recovery station for HCFCs, vacuum pump, charging unit, brazing equipment, safety equipment); establish four training centres at selected technical colleges and conduct eight awareness workshops and training for 200 RAC technicians on RRR; develop certification procedure for reclamation centre (UNIDO) (US \$492,000 and US \$415,000 from the previous tranche);
- (g) *Promotion of alternative technologies*: Continue to organize study tours and webinars for 12 industries to other countries to exchange information on the development of low-GWP technologies; continue to organize the training for key residential and commercial AC manufacturers and continue procurement and delivery of tools and equipment; ongoing collaboration with RAC associations and stakeholder consultation meetings to disseminate information on new emerging technologies in RAC manufacturing and servicing sectors; technical assistance to large end users to reduce leakage and promote alternatives; establish a country-wide registration system to track refrigerant management (cylinder tracking, reporting and stock management) (UNIDO) (US \$260,000 and US \$80,000 from the previous tranche);
- (h) *Awareness-raising*: Continue production and distribution of printed materials (e.g., newspaper advertisements, articles in journals), and promotion through mass media (e.g., short films) in local language; celebration of the World Refrigeration Day, World Ozone Day and Ozone2Climate roadshow and roundtable (UNEP) (US \$47,800 and US \$26,986 from the previous tranche); and
- (i) *Project management unit (PMU)*: US \$140,000 (US \$25,000 for UNEP and US \$115,000 for UNIDO) allotted for staff and consultants (US \$85,000) and for travel (US \$30,000), meetings (US \$15,000) and other expenses (US \$10,000), plus US \$66,021 allotted under previous tranche.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption and verification

20. On the quantities of imported HCFC-141b contained in pre-blended polyols in 2022 and 2023, UNIDO confirmed that the quantities imported were 119 mt and 317.43 mt respectively, as reported under the CP data.

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

21. Upon request, UNIDO provided an update on the various components of stage II of the HPMP since the 94th meeting.

Conversion project in Dawlance

22. On the implementation of the conversion of the air conditioner manufacturing enterprise Dawlance for which a technology change from R-290 to HFC-32 had been approved at the 90th meeting, UNIDO explained that about 43 per cent of the total production in the enterprise had been converted to HFC-32 by December 2023. By 30 September 2024, Dawlance had further increased the conversion to 75 per cent of total air conditioner production. It is projecting to reach approximately 80 per cent by the end of 2024. The goal of the enterprise for 2025 is to achieve at least a 95 per cent conversion in split air conditioner production. Noting the progress in the conversion, it was agreed that UNIDO would provide an update to the 96th meeting, as a part of the final progress report of the final tranche of stage II of the HPMP, on the status of conversion to HFC-32 in that enterprise.

Conversion projects in thermoware enterprises

23. On the technology transfer for thermoware enterprises, for which water-blown technology had not yielded sufficient quality in products, UNIDO informed that methyl-formate testing, including testing conducted in the FSI facility, was unsuccessful.⁴ Currently, HFO-based solutions are being considered, and the process for adoption includes a phase for testing to ensure the proposed technology delivers acceptable results and once those results are achieved, the remaining batch will be delivered; this would result in the completion of the technology transfer. It was agreed that UNIDO would provide an update to the 96th meeting, as a part of the final progress report of the final tranche of stage II of the HPMP, on the status of finalisation of the technology adoption for thermoware enterprises.

Remaining implementation of training for customs and enforcement officers and service technicians under stage II

24. Under service sector activities from stage II the NOU planned to organize the remaining three customs and enforcement trainings for a total of 73 officers and to complete the training on good servicing practices for 200 RAC technicians, to update the RAC curriculum, and develop a roadmap for a certification system for RAC technicians and implement a pilot certification programme with an initial certification of 120 technicians. These activities had not been completed due to administrative challenges faced in the country, which are described in the next section under stage III implementation. These will be carried out during the implementation of the second tranche of stage III.

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

Legal framework

25. The Government of Pakistan has already issued HCFC import quotas for 2024 at 119.98 ODP tonnes, which is lower than the Montreal Protocol control targets and the maximum allowable consumption under the Country's Agreement with the Executive Committee.

26. The Secretariat requested additional information on the status of implementation of regulations in accordance with decision 90/43(b). UNIDO provided the following update:

- (a) On the ban on imports of HCFC-141b in pre-blended polyols, formalities relating to the implementation of this ban are under approval and after endorsement by the Cabinet, the ban would be implemented by end of November 2024;

⁴ FSI is a leading, global PU systems supplier.

- (b) On the ban on imports of HCFC-based equipment by 1 January 2026, the initial consultation with relevant stakeholders will be undertaken by February 2025 and following approval by the Cabinet will be implemented; and
- (c) Manufacturing based on HCFCs (i.e., HCFC-22, HCFC-142b and HCFC-141b) has not yet been banned in the country and the Government would implement a ban on use of HCFCs in manufacturing from 1 January 2026 as it is expected that all manufacturing sector projects including the foam sector projects in stage III would have been implemented.

Foam manufacturing sector

27. It was noted in the submission that the foam projects would phase out the use of HCFC-141b contained in imported pre-blended polyols in the foam manufacturing processes in the country. In response to an inquiry from the Secretariat, UNIDO explained that the ban on HCFC-141b contained in imported pre-blended polyols is in the process of approval and that the recommendations of the verification report would be implemented. Further, on the sustainability of the HCFC-141b phase-out, UNIDO explained that the Government will be able to fully phase out the use of HCFC-141b in the country after the completion of all phase-out projects in the foam sector in the country under stage III of the HPMP. Industry consultations revealed that cyclopentane, methyl formate, water-based formulations, and HFO-based formulations would be adopted by the industry once the HCFC-141b supply is fully phased out in the country. UNIDO also explained that with completion of the conversion project at Symbols Industry, consumption of HCFC-142b in the country is nil.

Conversion project in Cool Point

28. The Secretariat noted with concern that the conversion at Cool Point had not progressed, and the baseline equipment was moved to a different facility. UNIDO explained that they are in close consultation with the NOU to address this serious concern. With the support of the NOU, UNIDO will conduct a field visit to Cool Point to discuss and finalise the way forward for the implementation of this project. It was agreed that UNIDO would provide an update to the 96th meeting on the consultation with the NOU and the enterprise and the plan for project implementation.

Refrigeration servicing sector

29. On slow progress in project implementation, UNEP explained that Project Cooperation Agreement (PCA) for implementation of the first tranche of stage III of the HPMP between the NOU, MoCC&EC and UNEP was signed on 19 December 2023 and the first instalment of funds was transferred in February 2024. However, four National Project Directors have been appointed within a nine-month span, and this frequent change led to delays in initiating project activities. UNEP also mentioned that they have continued to raise the issue of the implementation delays and the need for continuous high-level support from the Ministry to ensure the stability of the relevant processes.

Training of customs officers and service technicians

30. Due to the administrative issues faced in the country,⁵ training of customs officers planned under the first tranche of stage III was not carried out, but the TOR and training agenda were prepared, and training will be carried out under the second tranche in addition to other training from the previous stage and

⁵ As 2024 was an election year in the country it was not possible to work with government departments for part of the year. Additionally, the ongoing currency crisis further compounded issues and the changes in the National Project Director interrupted the financial transactions and planned activities.

tranches. During these training programmes, 15 trainers and 200 customs officers, enforcement officers at provincial level, and customs clearing agents will be trained.

31. The Secretariat requested information on the progress on training-related activities for the servicing sector. On the training of technicians, activities could not be conducted due to the administrative challenges; however, it is anticipated that during 2025 and 2026, 1,620 technicians, trainers, and assessors and 90 technicians specializing in large-commercial air conditioners and chillers will be trained on good service practices and safe servicing of equipment using flammable alternatives; the TOR for integration of good service practices in the National Occupational Competency Standards (NOCS) and the National Qualifications Framework (NQF) are under preparation and would be finalised in consultation with the relevant stakeholders by June 2025. The NOU is discussing with the technical training authorities the nomination of new master trainers for service sector training, and is consulting with other industry stakeholders (e.g., large-commercial air conditioner/chiller manufacturers, installers, and other relevant stakeholders) on the implementation of the training programme in the second tranche of stage III.

32. On equipment support to training institutes, the 720 sets of equipment and tools for selected service workshops, 12 sets for RAC training institutes and those for the establishment of a recovery and reuse network are expected to arrive in the country by the end of 2024. Once a Memorandum of Understanding (MOU) is signed with the recipient institutions, the equipment will be distributed accordingly and is expected to be completed during 2025.

Recovery, recycling and reclamation programme

33. On the RRR programme, UNIDO explained that the business model for the programme had been developed after a thorough analysis of both international experiences and country-specific characteristics, such as geographic spread, logistics, and quality control for different refrigerants. This model has been shared with the NOU, and technical specifications for the refrigerant reclamation centres, and guidelines for selecting service workshops were finalized. Sixteen potential candidates for establishing the RRR centres were identified, and the evaluation and selection process, in coordination with the NOU, will be completed before the end of 2025, and the delivery of tools and equipment will be undertaken during the year 2026.

Equipment support and training for small manufacturers handling low-GWP and hydrocarbon technologies in major cities and towns

34. On the status of implementation of activities to promote the adoption of low-GWP and flammable refrigerant-based technologies, a comprehensive work plan and guidance document to support small manufacturers in major cities have been developed. Equipment, including portable charging stations, leak detectors, recovery systems, and refrigerant cylinders, has already been ordered and is expected to arrive by the end of the year. The training for the identified recipients will be conducted in 2025. Additionally, the feasibility study on adopting low-GWP alternatives in Pakistan is currently under preparation and is expected to be completed by 2025.

Gender policy implementation

35. In line with the decisions 84/92, 90/48(c) and 92/40(b) gender mainstreaming is being incorporated into all HPMP activities. During the implementation of stage III, the NOU will make all possible efforts to collect gender-disaggregated data and information to track and enable reporting on gender based on set targets and indicators for Multilateral Fund projects.⁶ Training and meetings on ozone issues will incorporate sessions on gender to sensitize participants to the importance of gender mainstreaming and women's participation and empowerment. Throughout project implementation, staff will be sensitized on

⁶ Annex XXII of document UNEP/OzL.Pro/ExCom/92/56

gender mainstreaming aspects and encouraged to take steps to maximize women's participation in project design and implementation activities.

Sustainability of the HCFC phase-out and assessment of risks

36. The Government of Pakistan will continue to strengthen their licensing and quota system for HCFCs and to implement regulations to prohibit the use of different HCFCs in a timely manner (excluding HCFCs needed for the service tail after 1 January 2030). More training will be provided to customs and enforcement officers to ensure effective monitoring and control of HCFCs, and the finalization of the conversion projects in the foam sector will result in the full phase-out of the use of HCFC-141b (pure and that contained in imported pre-blended polyol) in the country. This, along with other measures planned under stage III to promote adoption of low-GWP alternatives in RAC applications would ensure sustainable achievement of HCFC phase-out targets. The Government is also planning to implement a range of capacity-building activities in the service sector to ensure continued adoption of good service practices by servicing workshops, capacity building in using low-GWP alternatives in a safe manner and is progressively implementing the certification for RAC technicians. The Government through their national and provincial regulatory set-up, will continue to monitor the implementation of activities and to promote the safe adoption of low-GWP alternatives. These measures will result in the sustainable phase-out of HCFCs and adoption of low-GWP alternatives to HCFCs in different applications.

37. The project faced implementation delays during the first tranche primarily due to the political and economic situation in the country and to frequent changes in the NOU administration. These risks have been mitigated through sensitization of senior government officials on the importance of stable and trained NOU staff. The Government is also closely monitoring the project implementation progress to ensure expeditious implementation of training and other capacity-building activities and the finalization of regulations to phase-out the use of different HCFCs following the implementation of relevant phase-out projects. This will reduce the risks of continued dependence on HCFCs and minimise risks of continuous imports of HCFC-based equipment.

Conclusion

38. The Government of Pakistan has been implementing a licensing and quota system for HCFC imports and exports and has remained in compliance with the Montreal Protocol targets stated in its Agreement with the Executive Committee. The quota for HCFCs for 2024 is 119.98 ODP tonnes (96.7 per cent of the allowable limit for that year). The conversion projects are progressing and specific issues relating to Cool Point are being systematically addressed by UNIDO in consultation with the NOU. Though delays were faced in project implementation, during the first tranche due to frequent changes in the NOU, these issues have been resolved. The disbursement for the first tranche is 44 per cent of the approved funds. During the second tranche, all outstanding activities relating to the conversion projects and training of technicians and customs and enforcement officers will be implemented in addition to the training activities planned for the second tranche and the capacity-building activities for the industry. For closer monitoring of implementation progress, UNIDO agreed to report on the progress on the development and enforcement of regulations and the status of implementation of remaining activities in the conversion projects in thermoware enterprises and Dawlance as a part of the final progress report of the final tranche of stage II of the HPMP, and on the progress in implementing the conversion at Cool Point, to the 96th meeting.

RECOMMENDATION

39. The Executive Committee may wish to consider:

- (a) Noting the progress report on the implementation of the first tranche of stage III of the HCFC phase-out management plan (HPMP) for Pakistan;

- (b) Approving the second tranche of stage III of the HPMP for Pakistan, and the corresponding 2024-2026 tranche implementation plan, in the amount of US \$1,945,139 consisting of US \$1,049,800, plus agency support costs of US \$73,486, for UNIDO and US \$737,154, plus agency support costs of US \$84,699, for UNEP on the understanding that the Government of Pakistan, through UNIDO, will:
 - (i) Include as part of the final progress report on the implementation of the final tranche of stage II of the HPMP, an update on the status of the ban on imports of HCFC-141b contained in imported pre-blended polyols; on the technology transfer in thermoware industries; and on the conversion project at the Dawlance enterprise, supported under stage II of the HPMP; and
 - (ii) Report to the 96th meeting on the implementation of the conversion project in the Cool Point enterprise, supported under stage III of the HPMP.
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