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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Ninety-fourth Meeting  
Montreal, 27-31 May 2024  
Item 9(c) of the provisional agenda<sup>1</sup>

**PROJECT PROPOSAL: THE REPUBLIC OF MOLDOVA**

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) UNDP and UNEP

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<sup>1</sup> UNEP/OzL.Pro/ExCom/94/1

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**

**Republic of Moldova (the)**

<b>(I) PROJECT TITLE</b>	<b>AGENCY</b>	<b>MEETING APPROVED</b>	<b>CONTROL MEASURE</b>
HCFC phase-out plan (stage III)	UNDP (lead), UNEP	88 <sup>th</sup>	100% phase-out by 2030

<b>(II) LATEST ARTICLE 7 DATA (Annex C Group I)</b>	Year: 2022	0.26 ODP tonnes
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<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)</b>							<b>Year: 2023</b>		
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					0.39				0.39

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009-2010 baseline:	1.00	Starting point for sustained aggregate reductions:	1.00
<b>CONSUMPTION ELIGIBLE FOR FUNDING</b>			
Already approved:	0.35	Remaining:	0.65

<b>(V) ENDORSED BUSINESS PLAN</b>		<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
UNDP	ODS phase-out (ODP tonnes)	0.19			0.19
	Funding (US \$)	231,985*			231,985*
UNEP	ODS phase-out (ODP tonnes)	0.07			0.07
	Funding (US \$)	55,935	226,000*		281,935*

\* Including US \$76,300 for UNDP and US \$226,000 for UNEP for additional activities to maintain energy efficiency (decision 89/6)

<b>(VI) PROJECT DATA</b>			<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025-2026</b>	<b>2027</b>	<b>2028-2029</b>	<b>2030</b>	<b>Total</b>
Montreal Protocol consumption limits			0.65	0.65	0.65	0.65	0.33	0.33	0.33	0	n/a
Maximum allowable consumption (ODP tonnes)			0.65	0.58	0.50	0.43	0.33	0.33	0.33	0	n/a
Funding agreed in principle (US \$)	UNDP	Project costs	75,500	0	0	145,500	0	92,500	0	28,000	341,500
		Support costs	5,285	0	0	10,185	0	6,475	0	1,960	23,905
	UNEP	Project costs	51,500	0	0	49,500	0	23,000	0	22,000	146,000
		Support costs	6,695	0	0	6,435	0	2,990	0	2,860	18,980
Funds approved by ExCom (US \$)	Project costs		127,000	0	0	0					127,000
	Support costs		11,980	0	0	0					11,980
Total funds recommended for approval at this meeting (US \$)	Project costs					195,000					195,000
	Support costs					16,620					16,620

<b>Secretariat's recommendation:</b>	Blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of the Republic of Moldova, UNDP 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 \$211,620, consisting of US \$145,500, plus agency support costs of US \$10,185, for UNDP and US \$49,500, plus agency support costs of US \$6,435, for UNEP.<sup>2</sup> The submission includes a progress report on the implementation of the first tranche, and the tranche implementation plan for 2024 to 2026.

### Report on HCFC consumption

2. The Government of the Republic of Moldova reported under the country programme (CP) implementation report a consumption of 0.32 ODP tonnes of HCFCs in 2023, which is 68 per cent below the country's HCFC baseline for compliance. The Article 7 data for 2023 has not been reported yet. The 2019-2023 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in the Republic of Moldova (2019-2022 Article 7 data)**

HCFC-22	2019	2020	2021	2022	2023*	Baseline
Metric tonnes (mt)	9.62	10.10	9.85	4.80	5.90	17.00
ODP tonnes	0.53	0.56	0.54	0.26	0.32	1.00

\* CP data on imports of HCFC-22

3. There is almost a 50 per cent reduction of HCFC imports from 9.85 mt (0.54 ODP tonnes) in 2021 as compared to 4.80 mt (0.26 ODP tonnes) in 2022 as about 3.60 mt of HCFC-22 has been recovered and reused by the RAC servicing companies. The overall reduction in HCFC consumption is resulted from the HPMP activities including enforcement of a licensing and quota system, training and certification of refrigeration and air-conditioning (RAC) technicians; and implementation of a ban on imports of HCFC-based equipment. The use of HCFC-22 in 2023 is higher at 7.18 mt (0.39 ODP tonnes) than the imports (5.9 mt, 0.32 ODP tonnes) as reported in the CP data, due to the use from HCFC-22 imported and the recovered amount from the previous year.

### *Country programme implementation report*

4. The Government of the Republic of Moldova reported HCFC sector consumption data under the 2022 country programme (CP) implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

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

#### *Legal framework*

5. In March 2023, a law (Law No.43/2023) to regulate fluorinated greenhouse gases at national level, including the isolation, use, recovery, and destruction of F-gases and related auxiliary measures; placing on the market of specific products and equipment, containing, or operating on F-gases; specific use of F-gases; and the application of quantitative limits for placing of HFCs on the market, was adopted. The legal framework was reviewed and would be adjusted to the provisions of the new law.

6. The Republic of Moldova ratified the Kigali Amendment on 22 September 2023. Additional regulatory amendments were made relating to implementation of annual quota system for HFCs that is

<sup>2</sup> As per the letter of 6 March 2024 from the Ministry of Environment of the Republic of Moldova to UNDP.

operational from January 2024, prevention of leakage of HFCs, training and certification of specialists and management process for monitoring and reporting of HFCs.

*Refrigeration servicing sector*

7. The training curriculum for customs officers has been updated to add new topics on new tariff codes, low- or zero-GWP alternatives to HCFCs/HFCs, international and national standards, the Kigali Amendment, the revised ODS regulations, the import procedure for ODS, and equipment and products containing or relying on ODS. Three trainings were organized for 66 custom officers (12 women and 54 men) on the control of the import/export of ODS, equipment containing ODS, import quota of ODS and illegal trade of ODS.

8. The update of the training curriculum for RAC technicians was completed and approved by the Technical University of Moldova (TUM) and the Centre of Continuing Education. Concurrently, support materials and other related information on new refrigerants and their safety standards for refrigeration, air-conditioning and heat pump (RACHP) professionals have been published. Three training events, covering good service practices and safe servicing of equipment using low-GWP alternatives, were held to train 57 RACHP specialists. All participants (57 men) were evaluated and awarded certificates of professional competence. Two training workshops for 59 environmental inspectors (24 women and 35 men) were organized to inform the objectives of the Montreal Protocol, the national legislation on trade regime and regulation of the use of halogenated hydrocarbons (HC), and the national framework on fluorinated greenhouse gases.

9. Thirty-six sets of electronic refrigerant leak detectors were procured and will be provided to the Environmental Protection Inspectorate to implement leak detection measures at installations/equipment containing F-gases. Further, training was held for 38 environmental inspectors (12 women and 26 men) on classification, labeling and identification of ODS, equipment that uses such substances, leakage detection of refrigerants, and the impact of leaks.

10. The best practice guidelines have been developed for HCFCs recovery, recycling, reclamation (RRR) system and application of good refrigeration practices and procedures in the RAC servicing sector and used as teaching material for the training of technicians in the cooling and air-conditioning sector. RRR equipment that included HCFCs and HFCs charging station with three cylinders; recovery and recycling station (freon recuperator) on oilless compressor with two cylinders; reclaim station (refrigerant recycling unit) with three cylinders each with tools and spare kits was procured to be used for practical training of RAC technicians.

11. A detailed assessment of the end-user incentive projects is being undertaken and the final report will be available in June 2024.

*Project implementation and monitoring*

12. UNDP, UNEP and the national Montreal Protocol Unit (MPU) have performed their regular monitoring activities on the implementation of the approved workplans.

Level of fund disbursement

13. As of March 2024, of the US \$127,000 approved so far (US \$75,500 for UNDP and US \$51,500 for UNEP, US \$46,399 (36.5 per cent) had been disbursed (US \$20,522 for UNDP and US \$25,877 for UNEP). The balance of US \$80,601 will be disbursed by UNDP and UNEP by December 2024.

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

14. The following activities will be implemented between September 2024 and December 2026:

- (a) *Legal framework*: Feasibility study on economic instruments to discourage use of HCFC-22 in equipment and financing schemes for adopting low-GWP alternatives including stakeholder consultation, a web-based electronic reporting and licensing system including organization of trainings for importers and end-users, and continue improving the legislative framework including introducing new legislation and regulatory measures (UNEP) (US \$7,500);
- (b) *Capacity building of customs and enforcement officers*: Continue update of curricula and training materials for customs and enforcement officers, one training workshop for 20 customs and enforcement officers on controlling and monitoring of HCFCs, and finalisation of the third edition of the “Handbook for Customs and Enforcement Officers” (UNEP) (US \$9,500);
- (c) *Capacity building of refrigeration technicians and environmental inspectors*: Training of one national expert trainer on safe use of low-GWP alternative technologies, continue update of training curricula and printing of training materials for refrigeration technicians and environmental inspectors on new emerging technical developments, two training workshops and certification of 30 refrigeration technicians on good service practices and safe use of low-GWP alternative refrigerants, and one training workshop for 20 environmental inspectors on equipment inspection, use of controlled substances in sites and leakage controls (UNEP) (US \$20,500);
- (d) *Recovery, recycling, and reclamation programme and use of alternative refrigerants*: Application of good refrigeration practices and procedures in the RAC servicing sector including: conducting two training workshops for service technicians/equipment owners/operators/importers (at least 20 participants each) to introduce the guidelines for the RRR scheme, the good practices in refrigerant management and the safe use of flammable and low-GWP refrigerants, and to raise awareness on the incentive system on replacement of old HCFC-based and HFC-based equipment with low-GWP technologies; designing and printing of materials on good environmental practices for all relevant refrigerant users in the country; and distribution of kits for handling HC refrigerants (UNDP) (US \$5,000);
- (e) *Equipment for handling hydrocarbon refrigerants*: Recruitment of national consultant with the purpose of providing technical and consultative expertise in the development of technical specifications for kits for handling HC refrigerants to RAC servicing sector, and supply 10 kits that includes charging station/vacuum pump, hoses kit, leak detector, manometer and precision balance for HC (UNDP) (US \$40,500);
- (f) *Development and implementation of an incentive programme and a new technologies demonstration programme on low-GWP technologies*: Finalize the study to identify interested/eligible companies willing to participate in the incentive programme in the supermarket and cold store sectors; provide technical assistance to develop and implement the new technologies demonstration programme (e.g., supporting the preparation of technical specifications, formulation and launch of the request for quotation, and evaluation of offers) and assistance to end-users on installation and commissioning of demonstration equipment and to the incentive programme for scaling up the low-GWP technologies in supermarkets and cold storages; promote the phase-out of HCFCs and scaling up the low-GWP technologies (HC, CO<sub>2</sub> and other low-GWP refrigerants as alternatives to

HCFCs) through public awareness activities including four workshops with about 20-25 participants each on the incentive programme, which is under development as a tool for scaling up the low-GWP technologies in relevant sectors (e.g., end-users, suppliers and importers of equipment, refrigerants technicians and decision makers from respective sectors), and production of technical brochures on alternative refrigerants; and implement the new technologies demonstration programme on natural refrigerants (UNDP) (US \$100,000);

- (g) *Strengthening the public association of the refrigeration technicians*: Promotion materials to raise technology awareness, and one technology roundtable/exhibition booth on low-GWP alternative technologies (UNEP) (US \$6,000);
- (h) *Technical capacity development measures*: Feasibility study on the benefits of improved cooling efficiency and sustainability, including stakeholder consultation, and cooperation with the State Hydrometeorological Service on UV radiation index (UNEP) (US \$3,000); and
- (i) *Project monitoring*: Continue with project management and reporting (UNEP) (US \$3,000).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

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

##### *Legal framework*

15. The Government of the Republic of Moldova has already issued HCFC-22 import quotas for 2024 at 6.6 mt (0.36 ODP tonnes), which are lower than both the Montreal Protocol control targets and the maximum allowable consumption for the year.

##### *Refrigeration servicing sector*

16. On training of technicians on good service practices and using low-GWP alternatives, UNDP explained that the updated training curriculum approved in 2023 included the application of good refrigeration practices and alternative procedures for servicing RAC equipment, safe use of refrigerants and energy efficiency standards applicable in the country.

17. UNDP reported that the report by the consultant on the study to identify the number of interested/eligible companies willing to participate in an incentive programme for the expansion of low refrigerant technologies in supermarkets and cold store sectors will be submitted in June 2024. The interested beneficiaries have been identified and the results of the study will be used to develop and implement an awareness programme to promote the phase-out of HCFCs and the expansion of low refrigerant charge technologies in the sectors concerned, and to provide technical and advisory expertise in relation to the development and implementation of the demonstration programme of new natural refrigerant technologies. All required information has been provided in compliance of decision 84/84(b) and (c).

18. UNDP clarified that there is no retrofit of HCFC-based equipment with flammable refrigerants in the country. The Government of Moldova is fully aware of the relevant decisions of the Executive

Committee on retrofitting.<sup>3</sup> The training programmes and code of good practices cover safe use of flammable refrigerants but do not encourage retrofitting of HCFC-based equipment with flammable alternatives.

#### Gender policy implementation

19. The Government of Moldova and UNEP are fully committed to implementing the operational gender mainstreaming policy of the Multilateral Fund. The Government is taking all steps to promote more women participation in the training programmes. During the preparation of the tranche request and implementation plans, due attention has been given to identifying entry points to promote gender equality and women's empowerment activities to be implemented as part of the HPMP. The project requires the collection of sex-disaggregated data and qualitative information to analyze and track gender issues, tracking and continuous implementation of efforts undertaken to recruit women and encourage women to apply, and data collection on number of women participating in different activities.

#### Sustainability of the HCFC phase-out and assessment of risks

20. The Government of Moldova continues to control and monitor implementation of national regulations relating to HCFC licensing and quotas, through their ongoing training of customs and enforcement officers, the consumption of HCFCs is controlled and is below the targets set in the Agreement for stage III of the HPMP. The Government will also implement training for technicians on good service practices including recovery and reuse of refrigerants and safe adoption of alternatives. The Government is also implementing a certification programme of specialists in the field of refrigeration technology containing HCFCs and fluorinated gases with greenhouse effect, as approved through the Regulation, Government Decree GD No. 483. Further, the Government will continue to implement awareness activities to maximise the adoption of low-GWP alternative-based RAC equipment and through the proposed project for demonstration of low-GWP alternatives as well as publicizing results of feasibility study on the benefits of improved cooling efficiency and sustainability, including stakeholder consultation, uptake of low-GWP alternatives is expected to increase. A combination of the above activities, together with other activities being planned for stage I of the KIP, is expected to contribute to further reduction of HCFC consumption and accelerate adoption of sustainable low-GWP alternatives.

#### Conclusion

21. The Government of Moldova has reduced its consumption of HCFCs to 0.32 ODP tonnes in 2023 which is 68 per cent below the HCFC baseline for compliance and 36 per cent below the consumption target for that year. The Government is implementing the licensing and quota system for HCFCs and is working closely with customs and enforcement authorities on strengthening implementation of the system; the activities relating to training and capacity building of service technicians including certification system and customs and enforcement officers are progressing. Awareness and outreach activities relating to HPMP implementation including promoting adoption of recovery and reuse of HCFCs and adoption of low-GWP refrigerant technologies in the country is ongoing; the results of the project for demonstration of low-GWP alternatives as well as publicizing results of feasibility study on the benefits of improved cooling efficiency and sustainability are expected to catalyse adoption of low-GWP refrigerant technologies. Of the total funds approved under the first tranche, 36.5 percentage was disbursed with the remaining approved funds to be fully disbursed by December 2024. In the second tranche, the Government will continue to implement training activities for service technicians, strengthen RAC association as well as its involvement in HPMP activities, implement refrigerant recovery and reuse programme, awareness and outreach on the incentive programme that is under development as a tool for future implementation, customs and enforcement officers training for controlling and monitoring HCFC imports and exports and awareness and outreach activities for promoting adoption of low-GWP alternative technologies. The Government is planning to submit its

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<sup>3</sup> Decisions 72/17 and 73/34

stage I of KIP to the first meeting in 2025, which together with the HPMP activities, will help accelerate adoption of sustainable low-GWP alternatives.

**RECOMMENDATION**

22. The Fund Secretariat recommends that the Executive Committee note the progress report on the implementation of the first tranche of stage III of the HCFC phase-out management plan (HPMP) for the Republic of Moldova, and further recommends blanket approval of the second tranche of stage III of the HPMP and the corresponding 2024-2026 tranche implementation plan for the Republic of Moldova at the funding levels shown in the table below.

	<b>Project title</b>	<b>Project funding (US \$)</b>	<b>Support costs (US \$)</b>	<b>Implementing agency</b>
(a)	HCFC phase-out management plan (stage III, second tranche)	145,500	10,185	UNDP
(b)	HCFC phase-out management plan (stage III, second tranche)	49,500	6,435	UNEP