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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Eighty-fourth Meeting  
Montreal, 16–20 December 2019

**PROJECT PROPOSAL: REPUBLIC OF MOLDOVA (THE)**

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

Phase-out

- HCFC phase-out management plan (stage II, second tranche) UNDP and UNEP

## PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

## Republic of Moldova (the)

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC Phase Out Plan (Stage II)	UNDP (lead), UNEP	77 <sup>th</sup>	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2018	0.31 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2018	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					0.31				0.31

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	1.0	Starting point for sustained aggregate reductions:	1.0
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.35	Remaining:	0.65

(V) BUSINESS PLAN		2019	2020	Total
UNDP	ODS phase-out (ODP tonnes)	0	0.03	0.03
	Funding (US \$)	0	19,020	19,020
UNEP	ODS phase-out (ODP tonnes)	0.04	0	0.04
	Funding (US \$)	29,493	0	29,493

(VI) PROJECT DATA			2016	2017	2018	2019*	2020	Total
Montreal Protocol consumption limits			0.9	0.9	0.9	0.9	0.65	n/a
Maximum allowable consumption (ODP tonnes)			0.9	0.9	0.9	0.9	0.65	n/a
Agreed funding (US\$)	UNDP	Project costs	104,850	0	0	0	17,450	122,300
		Support costs	9,437	0	0	0	1,570	11,007
	UNEP	Project costs	26,100	0	26,100	0	0	52,200
		Support costs	3,393	0	3,393	0	0	6,786
Funds approved by ExCom (US\$)	Project costs		130,950	0	0	0	0	130,950
	Support costs		12,830	0	0	0	0	12,830
Total funds requested for approval at this meeting (US\$)	Project costs		0	0	0	<b>26,100</b>	0	26,100
	Support costs		0	0	0	<b>3,393</b>	0	3,393

\* The second tranche should have been submitted in 2018.

<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 II of the HCFC phase-out management plan (HPMP), at the amount of US \$26,100, plus agency support costs of US \$3,393 for UNEP only.<sup>1</sup> The submission includes a progress report on the implementation of the first tranche and the tranche implementation plan for 2020 to 2021.

### Report on HCFC consumption

2. The Government of the Republic of Moldova reported a consumption of 0.31 ODP tonnes of HCFC in 2018, which is 69 per cent below the HCFC baseline for compliance. The 2014-2018 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in the Republic of Moldova (2014-2018 Article 7 data)**

HCFC-22	2014	2015	2016	2017	2018	Baseline
Metric tonnes	13.80	14.90	0.00	0.00	5.58	<b>17.0</b>
ODP tonnes	0.76	0.82	0.00	0.00	0.31	<b>1.0</b>

3. HCFC consumption has seen a decrease from 2014 to 2018 mainly due to reduction in population of HCFC-based equipment and adoption of alternatives mainly based on HFC-134a, R-404A, R-407C and R-410A; import of R-422D<sup>2</sup> that could be used as drop-in substitute in HCFC-22-based RAC applications; and recovered HCFC-22 to cater to the market demand. The national regulations that prohibit imports of HCFC-based equipment and activities undertaken in the servicing sector for training technicians and regulating supply of HCFCs have also resulted in the reduction in HCFC consumption in the country.

4. In 2016 and 2017, HCFC import quota had not been allocated as the national legislation was being reviewed, and only approved in June 2018. During those years, stockpiles of HCFCs were used to meet the domestic demand.

### *Country programme (CP) implementation report*

5. The Government of the Republic of Moldova reported HCFC sector consumption data under the 2018 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol.

### Progress report on the implementation of the first tranche of the HPMP

#### *Legal framework*

6. An enforceable import/export licensing and quota system is operational since 2013; importers continue to be registered and are issued licenses to import/export HCFCs according to the quota set by the Government which is in line with Montreal Protocol control measures. The Republic of Moldova signed an Association Agreement with the European Union (EU), effective September 2014, which commits the country to converge its policies and legislation to those of the EU including ozone protection and climate change. The country is committed to harmonize its ozone policy with the F-Gas (EU) Regulation on aspects relating to servicing sector and certification of technicians.

7. Legislative measures are established to control the import of ODS, including HCFCs, namely, quota allocation system for HCFCs. During implementation of the first tranche, the updated ODS regulation

<sup>1</sup> As per the letter of 27 September 2019 from the Ministry of Agriculture, Regional Development and Environment of the Republic of Moldova to UNDP.

<sup>2</sup> HFC blend containing HFC-125, HFC-134a and R-600a.

entered into force on 27 October 2017 to include bans on import and installation of ODS-based equipment, and on chemical use. An electronic online system for licensing and reporting on ODS including HCFCs was designed and is expected to be operational during implementation of the second tranche. Legal documentation relating to training and certification of technicians in line with F-Gas (EU) Regulation No. 517/2014 was approved in October 2019. The modality to include HFCs in the licensing system is planned after ratification of the Kigali Amendment by the country.

*Refrigeration servicing sector*

8. The following activities have been conducted:
- (a) Training of enforcement officers: 45 customs officers trained in two workshops on the monitoring and control of imports and exports of HCFCs and HCFC-based equipment, as well as on the detection and prevention of illegal trade. Training materials for customs and enforcement officers were elaborated and updated with latest information on legislation and monitoring-related issues;
  - (b) Training and certification of RAC technicians: 40 technicians trained in two training workshops according to the F-Gas (EU) Regulation No.517/2014, which establishes minimum training and certification requirements for servicing technicians;
  - (c) Strengthening of RAC association: A website was developed for the Public Association of Refrigeration Technicians; consultations and meetings with the Association were held to enable effective implementation of stage II;
  - (d) Preparation of training materials: The code of good practices in the RAC sector was updated in 2019 with new information to help the country to meet the HPMP reduction targets. Additional training materials for vocational schools were printed and published;
  - (e) Investment component: Technical specifications for recovery and recycling equipment and tools were developed, and 24 sets of such equipment (recovery machines, basic repair tools, leak detectors) were purchased and distributed to three training centres; and
  - (f) Demonstration projects for low-global-warming potential (GWP) technologies in commercial refrigeration equipment are currently being initiated; technical assessments and discussions with potential beneficiaries are at an advanced stage; and potential suppliers of compressors for equipment have also been identified. The project is expected to be implemented by the end of 2020.

*Project implementation and monitoring unit (PMU)*

9. Stage II of the HPMP for the Republic of Moldova does not include a PMU. The National Ozone Unit (NOU) is the central body within the Ministry of Agriculture, Regional Development and Environment, which is fully responsible for the coordination of governmental activities with respect to the Ozone Layer protection including activities under the HPMP.

Level of fund disbursement

10. As of October 2019, of the US \$130,950 approved so far (US \$104,850 for UNDP and US \$26,100 for UNEP), US \$53,883 (41 per cent) had been disbursed (US \$33,027 for UNDP and US \$20,856 for UNEP). The balance of US \$77,067 will be disbursed by the end of 2020.

Implementation plan for the second tranche of the HPMP

11. The following activities will be implemented between January 2020 and December 2021:
- (a) Regulatory measures to enforce the Montreal Protocol obligations: Approval of the implementation of a web-based electronic ODS licensing and reporting system under the State Information System on Chemicals Product Registry expected to be completed by December 2020 (UNEP) (US \$7,500);
  - (b) Training of 15 customs officers on enforcement of national HCFC import/export regulation, and 15 environmental inspectors on national HCFCs and EU regulations regarding ozone issues/climate change as well as on the role of the authorities in enforcing national regulations related to the Montreal Protocol; and implementation of HCFC import/export licensing and quota systems (UNEP) (US \$3,000);
  - (c) Updating training materials for RAC technicians on the safe handling of natural refrigerants, and for enforcement officers on legislation relating to licensing and quota systems, import/export control measures on HCFCs/HFCs and equipment, monitoring of illegal trade, and planned new Harmonized System Codes for HFCs (UNEP) (US \$6,400);
  - (d) Two training workshops and certification of 40 RAC technicians in refrigeration servicing good practices and in safe handling of flammable and toxic refrigerants to facilitate transition from HCFCs to alternative technology including hydrocarbons, CO<sub>2</sub> and ammonia (UNEP) (US \$5,000);
  - (e) Strengthening and supporting the Public Association of Refrigeration Technicians including updating of its website to provide more information on HCFC-free alternatives, new technologies in refrigeration and recovery and recycling process, equipment and tools; stakeholders' workshops with 50 participants focusing on information about the national strategies, programmes and action plans regarding the phase-out of HCFCs and implementation of alternative technologies (UNEP) (US \$3,000); and
  - (f) Project implementation and monitoring: National consultant to support the NOU in project coordination, management and monitoring. The consultant will participate in quarterly meetings with the NOU and provides reports on HPMP implementation (US \$1,200).

**SECRETARIAT'S COMMENTS AND RECOMMENDATION****COMMENTS**Progress report on the implementation of the first tranche of the HPMP

12. Upon request for clarification on the delay in submission of the second tranche, UNDP informed that this was mainly due to low levels of disbursement on account of procurement process; the component relating to technology demonstration using CO<sub>2</sub>-based technology in commercial refrigeration could not be initiated as the industry needed more time to understand the implication of adopting CO<sub>2</sub>-based technology and to commit co-financing.

*Legal framework*

13. The Government of the Republic of Moldova has already issued HCFC import quotas for 2019 for five enterprises at 0.605 ODP tonnes (11 mt), which is about 67.2 percent of the allowable level of consumption under the Montreal Protocol.

### *Refrigeration servicing sector*

14. 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.

15. Upon request for clarification on the process for certification of technicians, UNDP explained that the regulation on training and certification of technicians are in line with the F-Gas (EU) Regulation No. 517/2014; a section on the safe use of alternative refrigerants (NH<sub>3</sub>, CO<sub>2</sub>, hydrocarbons) is included in the theoretical training but will not be part of the certification for now. At this stage, the training and certification cover HCFCs and HFCs only. In the future, the Government would examine possibility of linking certification with purchase and use of refrigerants.

16. UNDP clarified that the Government has already initiated the implementation of technology demonstration projects using CO<sub>2</sub> in the commercial refrigeration sector; due to higher levels of co-financing required for the technology adoption, detailed outreach and consultations with the industry were required. UNDP also informed that technical consultations, confirmation on availability of components and discussions related to co-financing with potential beneficiaries are currently at an advanced stage. UNDP and UNEP would undertake a mission in March 2020 where, *inter alia*, detailed review of the status of implementation of activities related to the demonstration projects will be undertaken. The number of beneficiaries that will install CO<sub>2</sub>-based technology will be finalised in consultation with the NOU by 31 March 2020. UNDP also clarified that the project would be expedited in 2020 and the third tranche will be submitted to the 86<sup>th</sup> meeting as planned.

### Conclusion

17. The implementation of stage II of the HPMP is progressing. The country's import licensing and quota system is operational and will enable compliance with the Montreal Protocol control targets; the current consumption is 65.6 per cent below the 2018 targets and the quota for 2019 has been established at 67.2 percent of the allowable consumption. Training of customs and enforcement officers on regulation of HCFCs and HCFC-based equipment and integration of training module into the curriculum of customs and enforcement officers are under implementation. Tehnofrig and two colleges in Chisinau that provide training in refrigeration, air-conditioning and heat-pump were equipped with training equipment. Implementation of these activities are expected to ensure the long-term sustainability of HCFC phase-out and continue to enable the country to meet its compliance obligations under the Protocol. The disbursement of the funding for the second tranche has reached 41 per cent.

### **RECOMMENDATION**

18. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan (HPMP) for the Republic of Moldova; and further recommends blanket approval of the second tranche of stage II of the HPMP for the Republic of Moldova, and the corresponding 2020–2021 tranche implementation plan, at the funding level shown in the table below, on the understanding that the Government, through UNDP, will submit to the 85<sup>th</sup> meeting a detailed report on the status of implementation of the demonstration projects for using CO<sub>2</sub>-based technology in the commercial refrigeration sector:

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

	<b>Project title</b>	<b>Project funding (US \$)</b>	<b>Support cost (US \$)</b>	<b>Implementing agency</b>
(a)	HCFC phase-out management plan (stage II, second tranche)	26,100	3,393	UNEP

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