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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Eighty-fifth Meeting  
Montreal, 25-29 May 2020  
Postponed to 19-22 July 2020\*

**PROJECT PROPOSAL: LAO PEOPLE'S DEMOCRATIC REPUBLIC**

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

Phase-out

- HCFC phase-out management plan (stage I, third tranche) UNEP and France

\* Due to coronavirus disease (COVID-19)

\*\*Reissued for technical reasons on 13 May 2020

## PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

## THE LAO PEOPLE' S DEMOCRATIC REPUBLIC

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (Stage I)	UNEP (lead)/France	63 <sup>rd</sup>	35 per cent by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2018	0.79 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2019		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					1.29				1.29

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	2.3	Starting point for sustained aggregate reductions:	5.54
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.81	Remaining:	4.73

(V) BUSINESS PLAN		2020	Total
France	ODS phase-out (ODP tonnes)	0.01	0.01
	Funding (US \$)	5,085	5,085
UNEP	ODS phase-out (ODP tonnes)	0.07	0.07
	Funding (US \$)	26,555	26,555

(VI) PROJECT DATA			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	2.30	2.30	2.07	2.07	2.07	2.07	2.07	1.50	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	2.30	2.30	2.07	2.07	2.07	2.07	2.07	1.50	n/a
Agreed funding (US \$)	UNEP	Project costs	113,625	0	0	0	97,875	0	0	0	0	23,500	235,000
		Support costs	14,771	0	0	0	12,724	0	0	0	0	3,055	30,550
Agreed funding (US \$)	France	Project costs	0	0	0	0	40,500	0	0	0	0	4,500	45,000
		Support costs	0	0	0	0	5,265	0	0	0	0	585	5,850
Funds approved by ExCom (US \$)		Project costs	113,625	0	0	0	138,375	0	0	0	0	0	252,000
		Support costs	14,771	0	0	0	17,989	0	0	0	0	0	32,760
Total funds requested for approval at this meeting (US \$)		Project costs										28,000	28,000
		Support costs										3,640	3,640

Secretariat's recommendation:	For blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of the Lao People's Democratic Republic, UNEP as the lead implementing agency has submitted a request for funding for the third and final tranche of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US \$31,640, consisting of US \$23,500, plus agency support costs of US \$3,055 for UNEP, and US \$4,500, plus agency support costs of US \$585 for the Government of France.<sup>1</sup> The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption for 2015 to 2019 and the tranche implementation plan for 2020 to 2021.

### Report on HCFC consumption

2. The Government of Lao People's Democratic Republic reported under country programme (CP) implementation report a consumption of 1.29 ODP tonnes of HCFC-22 in 2019, which is 44 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in Lao People's Democratic Republic (2015-2019 Article 7 data)**

Substances	2015	2016	2017	2018	2019*	Baseline
<b>Metric tonnes (mt)</b>						
HCFC-22	36.35	36.99	10.70	14.30	23.39	41.93
HCFC-141b in imported pre-blended polyols*	0.00	0.00	0.00	0.00	0.00	29.49**
<b>ODP tonnes</b>						
HCFC-22	2.00	2.03	0.59	0.79	1.29	2.30
HCFC-141b in imported pre-blended polyols*	0.00	0.00	0.00	0.00	0.00	3.24**

\* CP data.

\*\*The baseline (starting point) used average imports of 2007-2009

3. The HCFC consumption has been fluctuating with a decreasing trend due to the implementation of activities in the HPMP, including enforcement of the licensing and quota system, capacity building activities of customs officers and servicing technicians and the market transformation of air conditioners from HCFC-22 to alternative technologies. As it is a landlocked country, the import of HCFC-22 must transit through neighbouring countries. In 2017 and 2018, restrictions were imposed on transit; two of the three importers did not get a transiting licence issued by a neighbouring country and thus were unable to import HCFCs, resulting in the reduction of consumption. There have been no imports of HCFC-141b contained in pre-blended polyols since 2014.

### *CP implementation report*

4. The Government of Lao People's Democratic Republic reported HCFC sector consumption data under the 2018 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

### *Verification report*

5. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports, and that the total consumption of HCFCs from 2015 to 2019 was similar to the consumption reported under Article 7 of the Montreal Protocol, except for 2018 where verified 2018 consumption of 15.56 mt was 1.26 mt more than that reported under Article 7 (14.30 mt). The reason for this deviation was due to the fact that one shipment (1.26 mt) was imported without a prior authorized license and was not included in the report submitted by the Government under Article 7 of the Protocol. UNEP will follow up with the National Ozone Unit (NOU) to submit a request to the Ozone Secretariat to

<sup>1</sup> As per the letter of 5 March 2020 from the Ministry of Natural Resources and Environment of Lao People's Democratic Republic to UNEP.

revise the 2018 consumption data according to the verification report. The verification report confirmed that the country has complied with both the Montreal Protocol targets and those in the Agreement for those years. The verification recommended strengthening the prosecution of violation to prevent illegal import; improving collaboration between the NOU with the customs authority in reconciliation of import data; and applying mandatory reporting by importers on annual imports. UNEP and the Government confirmed that these recommendations will be implemented in the third tranche and will report on the progress when stage II is submitted.

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

#### *Legal framework*

6. The parliament endorsed the Chemical Management Law on 10 November 2016, which controls the production, import, export, possession and use of controlled chemicals under the Protocol. All CFCs, halon, methyl bromide, and all HCFCs except for HCFC-22, including blends, are classified as category I chemicals, the import and use of which are prohibited. HCFC-22 and HFCs as well as blends are classified as category II chemicals, the import, export, possession and use of which must be licensed by the Government authority.

7. A ban on the import and export of HCFC-based chillers with a cooling capacity above 20 refrigeration tonnes has been drafted and is awaiting approval by Ministerial Decision. A ban on the import of all types of HCFC-based equipment has been agreed by the National Ozone Committee, starting from 1 January 2023. The Pollution Control Department (PCD) of the Ministry of Natural Resources and Environment is working with the Ministry of Industry and Commerce to include all types of HCFC-based equipment on the list of prohibited items for import and export. It is also taking the lead in the amendment of the existing Ministry Decision on ODS control no. 7858 to regulate the traders and servicing workshops that handle controlled substances under the Montreal Protocol.

8. The Government continued enforcing the licensing and quota system to control imports of HCFCs, as well as mandatory inspection and labelling of HCFC refrigerant cylinders. Following the recommendations of the verification report, a joint inspection team was established to inspect refrigerant trading shops; unauthorized imports and mislabelled refrigerant containers were confiscated.

9. The integration of ODS control into customs training curriculum for new customs officers was discussed between the PCD and the customs. It was agreed that the PCD would deliver the training on Montreal Protocol-related issued for new customs officers. With this approach, 30 new customs officers were trained in 2019.

10. The Government of the Lao People's Democratic Republic ratified the Kigali Amendment in November 2017. The PCD is working with stakeholders to amend the existing Ministerial Decision on ODS control to include HFCs and HFC blends.

#### *Phase-out of HCFC-141b in imported pre-blended polyols*

11. Prior to 2014, a small quantity of HCFC-141b contained in pre-blended polyols was imported for manufacturing flexible moulded foam. Since there was no suitable alternative technology when stage I of the HPMP was prepared, the Executive Committee allowed Lao People's Democratic Republic to submit a foam sector plan during the implementation of stage I of its HPMP (decision 63/49(f)). However, since 2014, there has been no import of HCFC-141b-based pre-blended polyols. To sustain the phase-out of HCFC-141b contained in imported pre-blended polyols and to avoid the importation of HCFC-141b pure, the Government has categorized HCFC-141b (in both presentations) as prohibited chemical under the Chemical Management Law.

*Refrigeration servicing sector*

12. The following activities were implemented:

- (a) Training 65 customs officers on ODS identification and on safety measures and emergency response related to flammable refrigerants; providing onsite training to customs officers in two provinces (Khammune and Savannakhet); and enforcing mandatory labelling of HCFC refrigerant containers;
- (b) Training three trainers on the safe handling of flammable refrigerants, 203 technicians in good servicing practices in the installation and servicing of refrigeration and air-conditioning (RAC) equipment, safe handling of flammable refrigerants, raising awareness about energy efficiency;
- (c) Establishing the Refrigeration and Air-conditioner Servicing Technician Association (RASTA); and consultations on the development of a certification system for RAC technicians, including legal support, national quality framework, assessment framework and training;
- (d) Revision of the planned refrigerant recovery and reclamation component to provide training equipment to the Lao-Korea Institute for Skill Development, given that the current price of HCFC-22 is very low and there is no incentive for technicians to use the reclaimed refrigerant. The Government and the Government of France (as bilateral agency) have approved the revised plan of action and a list of equipment, and the financing agreement is under finalization. It is expected that the activity will be completed by the end of 2020; and
- (e) Conducting information dissemination, education and communication activities on HCFC phase-out through newspapers, television, radio and social media; and translation and dissemination of 500 copies of the quick guide on good servicing practices for flammable refrigerants.

*Project implementation and monitoring unit (PMU)*

13. The NOU is responsible for coordinating implementation, and monitoring and reporting on progress. Regular communication with all the members of the National Ozone Steering Committee was maintained to strengthen the implementation of the HPMP. One technical expert was employed to assist the NOU in planning, implementing and monitoring all activities under the HPMP. The total expenditure amounted to US \$8,800, including the salary of the technical expert.

Level of fund disbursement

14. As of March 2020, of the US \$252,000 approved so far, US \$190,036 had been disbursed by UNEP only, as shown in Table 2. The balance of US \$61,964 will be disbursed in 2020-2021.

**Table 2. Financial report of stage I of the HPMP for Lao People's Democratic Republic (US \$)**

Agency	First tranche		Second tranche		Total	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNEP	113,625	113,625	97,875	76,411	211,500	190,036
France	0	0	40,500	0	40,500	0
<b>Total</b>	113,625	113,625	138,375	76,411	252,000	190,036
<b>Disbursement rate (%)</b>	100		55		75	

Implementation plan for the third and final tranche of the HPMP

15. The following activities will be implemented until December 2021:
- (a) Developing a legal framework for mandatory certification of technicians; establishing a ban on import and export of HCFC-based equipment by 1 January 2023; organizing one workshop to train 30 customs and enforcement officers on import control, prevention of illegal trade and safety in handling refrigerants; and developing and publicizing 200 copies of the quick reference guide for the customs (UNEP) (US \$14,000);
  - (b) Conducting four workshops to train 120 technicians in good servicing practices to update knowledge about handling low-GWP alternatives including flammable refrigerants, mainly for technicians who have not received training in the previous tranches (UNEP) (US \$22,220, including US \$16,595 from the previous tranche);
  - (c) Completing the design and operational procedures for a technician certification system, in coordination with the Ministry of Labour and Social Welfare, RASTA and vocational training institutes (UNEP) (US \$3,500 from the previous tranches);
  - (d) Purchasing training equipment for the Lao-Korea Institute for Skill Development (servicing tools (including special tools for handling flammable refrigerants), recovery machines and cylinders, leak detectors, personal protection equipment, R-32-based air-conditioning units for training purposes); providing training on operation and maintenance of the equipment in collaboration with vocational training centres and RAC Association; and developing a general guidebook on the use and maintenance of RAC units in the local language (France) (US \$45,000, including US \$40,500 from the previous tranche);
  - (e) Awareness-raising activities, including the showcasing of OzonAction mobile applications for customs officers and technicians; dissemination of information on the ban on HCFC-based equipment; and holding a national stakeholder workshop to draw the lessons learnt upon completion of stage I of the HPMP (UNEP) (US \$5,245, including US \$1,370 from the previous tranche); and
  - (f) Project management, coordination, monitoring and reporting: one technical expert will be employed to assist the NOU in implementing activities in the HPMP, providing technical advice, collecting information and preparing reporting (UNEP) (no funds have been planned for this activity in the third tranche).
16. UNEP indicated that stage I of the HPMP will be completed as stipulated in the Agreement between the country and the Executive Committee and that stage II of the HPMP is scheduled to be submitted to the 86<sup>th</sup> meeting, provided that no major disruption occurs in the preparation process.

**SECRETARIAT'S COMMENTS AND RECOMMENDATION**

**COMMENTS**

Report on HCFC consumption

17. In response to the verification recommendations, UNEP indicated that to further strengthen the licensing and quota system, the Government plans to amend the regulation to establish clear procedures for prosecution and the application of penalties for violations of the licensing system on the part of importers. The NOU will also further strengthen data reconciliation and update the data recording system.

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

### *Legal framework*

18. The Government of the Lao People's Democratic Republic has set the national quota at 1.50 ODP tonnes for 2020, consistent with the Montreal Protocol control target for that year.

### *Phase-out of HCFC-141b in pre-blended polyols in the foam sector*

19. Since all the eligible enterprises consuming HCFC-141b in pre-blended polyols have either been converted to an alternative technology or stopped manufacturing foam products, UNEP confirmed that no financial support will be required for the phase-out of HCFC-141b in the foam sector.

### *Refrigeration servicing sector*

20. Upon a clarification on the capacity development of training institutes for refrigeration technicians, UNEP reported that five professional training institutes were currently working with the NOU to conduct training, while the capacity of other training institutes is being assessed as part of the preparation of stage II of the HPMP. The plan to support these training institutes will be formulated in the strategy for stage II.

### *Project implementation and monitoring*

21. The Secretariat noted that no funding was allocated to project implementation, coordination, and monitoring, even though these activities have been planned in the third tranche. UNEP explained that, due to limited funding, the NOU will undertake these responsibilities until the closure of stage I.

### Gender policy implementation<sup>2</sup>

22. In line with the gender mainstreaming policies of the Multilateral Fund and UNEP, the implementation of the third tranche will take into account gender mainstreaming and equity to encourage the full engagement of women in various steps including planning, policy and decision-making, consultation and advisory activities, capacity building and outreach, and monitoring and evaluation. Gender-disaggregated data will be collected for reporting.

### Sustainability of the HCFC phase-out

23. The Secretariat noted that a ban on the import of all HCFCs except HCFC-22 is in effect since 10 November 2016; and a ban on the import of HCFC-based equipment has been planned starting from 1 January 2023. A certification system for technicians is being developed to sustain the capacity development of the servicing sector, and the training on ODS control has been incorporated into the training curriculum for new customs officers. The continuous enforcement of the licensing and quota system and legal measures, and capacity building of the customs and servicing sector will ensure sustainability of the HCFC phase-out.

### Conclusion

24. The Government is enforcing a licensing and quota system for imports and exports of HCFCs and the consumption in 2019 was 44 per cent below the baseline and 38 per cent below the target for the year in the Agreement with the Executive Committee. The established ban on imports of HCFCs (excluding HCFC-22) and the planned ban on imports of HCFC-based equipment will support the sustainable

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<sup>2</sup> Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

phase-out of HCFCs. The Government has planned to take relevant actions in response to the verification recommendations. The activities under the HPMP are progressing and a certification system for managing servicing technicians is being developed. The overall disbursement rate has reached 75 per cent of the approved funds.

## RECOMMENDATION

25. The Fund Secretariat recommends that the Executive Committee take note of the progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan (HPMP) for the Lao People's Democratic Republic; and further recommends blanket approval of the third and final tranche of stage I of the HPMP for the Lao People's Democratic Republic, and the corresponding 2020-2021 tranche implementation plan, at the funding levels shown in the table below:

	<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 I, third tranche)	23,500	3,055	UNEP
(b)	HCFC phase-out management plan (stage I, third tranche)	4,500	585	France