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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-sixth Meeting
Montreal, 2-6 November 2020
Postponed to 8-12 March 2021[1]

**PROJECT PROPOSAL: LAO PEOPLE'S DEMOCRATIC REPUBLIC (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, first tranche) UNEP and UNDP

[1] Due to coronavirus disease (COVID-19)

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

**Lao People's Democratic Republic (The)**

| **(I) PROJECT TITLE** | **AGENCY** |
|---|---|
| HCFC phase-out plan (stage II) | UNEP (lead) and UNDP |

| **(II) LATEST ARTICLE 7 DATA (Annex C Group l)** | Year: 2019 | 1.29 (ODP tonnes) |
|---|---|---|

| **(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: | 2.30 | Starting point for sustained aggregate reductions: | 5.54 |
| **CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)** | | | |
| Already approved: | 0.80 | Remaining: | 1.50 |

| **(V) BUSINESS PLAN** | | **2020** | **2021** | **2022** | **Total** |
|---|---|---|---|---|---|
| UNEP | ODS phase-out (ODP tonnes) | 0.53 | 0 | 0 | 0.53 |
| | Funding (US $) | 205,660 | 0 | 0 | 205,660 |

| **(VI) PROJECT DATA** | | | **2020** | **2021-2022** | **2023** | **2024** | **2025** | **2026** | **2027-2029** | **2030** | **Total** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Montreal Protocol consumption limits | | | 1.50 | 1.50 | 1.50 | 1.50 | 0.75 | 0.75 | 0.75 | 0.00 | n/a |
| Maximum allowable consumption (ODP tonnes) | | | 1.50 | 1.50 | 1.50 | 1.50 | 0.75 | 0.75 | 0.75 | 0.00 | n/a |
| Projects costs requested in principle (US $) | UNEP | Project costs | 106,400 | 0 | 87,100 | 0 | 0 | 86,900 | 0 | 52,000 | 332,400 |
| | | Support costs | 13,832 | 0 | 11,323 | 0 | 0 | 11,297 | 0 | 6,760 | 43,212 |
| | UNDP | Project costs | 107,000 | 0 | 64,480 | 0 | 0 | 16,120 | 0 | | 187,600 |
| | | Support costs | 9,630 | 0 | 5,803 | 0 | 0 | 1,451 | 0 | 0 | 16,884 |
| Total project costs requested in principle (US $) | | | 213,400 | 0 | 151,580 | 0 | 0 | 103,020 | 0 | 52,000 | 520,000 |
| Total support costs requested in principle (US $) | | | 23,462 | 0 | 17,126 | 0 | 0 | 12,748 | 0 | 6,760 | 60,096 |
| Total funds requested in principle (US $) | | | 236,862 | 0 | 168,706 | 0 | 0 | 115,768 | 0 | 58,760 | 580,096 |

| **(VII) Request for approval of funding for the first tranche (2020)** | | |
|---|---|---|
| **Agency** | **Funds requested (US $)** | **Support costs (US $)** |
| UNEP | 106,400 | 13,832 |
| UNDP | 107,000 | 9,630 |
| Total | 213,400 | 23,462 |

| **Secretariat's recommendation:** | Individual consideration |
|---|---|

## PROJECT DESCRIPTION

### Background

1. On behalf of the Government of the Lao People's Democratic Republic, UNEP as the lead implementing agency has submitted a request for stage II of the HCFC phase-out management plan (HPMP), at a total cost of US $580,096, consisting of US $332,400, plus agency support costs of US $43,212 for UNEP, and US $187,600, plus agency support costs of US $16,884 for UNDP, as originally submitted.[2] The implementation of stage II of the HPMP will phase out the remaining consumption of HCFCs by 2030.

2. The first tranche of stage II of the HPMP being requested at this meeting amounts to US $236,862, consisting of US $106,400, plus agency support costs of US $13,832 for UNEP, and US $107,000, plus agency support costs of US $9,630 for UNDP, as originally submitted.

### Status of implementation of stage I of the HPMP

3. Stage I of the HPMP was originally approved at the 63rd meeting[3] and revised at the 74th meeting[4] to achieve the 35 per cent reduction from the baseline by 2020, at a total cost of US $280,000, plus agency support costs to phase out 0.80 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector. The third and final tranche of stage I was approved under the intersessional approval process for the 85th meeting in May 2020; stage I of the HPMP will be completed by 31 December 2021.

HCFC consumption

4. The Government of the Lao People's Democratic Republic reported a consumption of 1.29 ODP tonnes of HCFC 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 the Lao People's Democratic Republic (2015-2019 Article 7 data)**

| HCFC-22 | 2015 | 2016 | 2017 | 2018 | 2019 | Baseline |
|---|---|---|---|---|---|---|
| Metric tonnes (mt) | 36.35 | 36.99 | 10.70 | 15.56 | 23.39 | 41.93 |
| ODP tonnes | 2.00 | 2.03 | 0.59 | 0.86 | 1.29 | 2.30 |

5. 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 for customs officers and servicing technicians, and the market transformation of air-conditioners from HCFC-22 to alternative technologies. As the Lao People's Democratic Republic 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. The starting point established by the country for aggregate reductions in HCFC consumption contained 3.24 ODP tonnes of HCFC-141b in imported pre-blended polyols; however, there have been no such imports since 2014.

[2] As per the letter of 2 July 2020 from the Ministry of Natural Resources and Environment of the Lao People's Democratic Republic to UNEP.
[3] UNEP/OzL.Pro/ExCom/63/38, and Annex XXXI of document UNEP/OzL.Pro/ExCom/63/60
[4] Annex VI of document UNEP/OzL.Pro/ExCom/74/56

*Country programme (CP) implementation report*

6. The Government of the Lao People's Democratic Republic reported HCFC sector consumption data under the 2019 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

Status of progress of and disbursement

*Legal framework*

7. 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 Montreal 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, HFCs and HFC-blends are classified as category II chemicals, the import, export, possession and use of which must be licensed by the Government authority.

8. 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, and is expected to be approved by the end of 2020 and enter into force from 1 January 2021. 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 ministerial decision on ODS control no. 7858 to regulate the traders and servicing workshops that handle controlled substances under the Montreal Protocol.

9. The Government established and continued to enforce the licensing and quota system to control imports of HCFCs, as well as the mandatory inspection and labelling of HCFC refrigerant cylinders. Following the recommendations of the verification report[5] submitted to the 85th meeting, a joint inspection team was established to inspect refrigerant trading shops; unauthorized imports and mislabelled refrigerant containers were confiscated.

10. The ODS controls have been integrated into the customs training curriculum, with the PCD delivering training on Montreal Protocol-related issues to new customs officers. As of July 2020, 158 customs officers had been trained in the control of HCFC imports and the prevention of illegal trade.

11. 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.

*Manufacturing sector*

12. Prior to 2014 and in baseline years, 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 the Lao People's Democratic Republic to submit a foam sector plan during the implementation of stage I (decision 63/49(f)). However, since 2014, there has been no import of HCFC-141b-based pre-blended polyols, as all of the eligible enterprises consuming HCFC-141b in pre-blended polyols have either converted to an alternative technology on their own or have stopped manufacturing foam products. To sustain the phase-out of

[5] The verification recommended strengthening the prosecution of violation to prevent illegal import; improving collaboration between the national ozone unit (NOU) with the customs authority in reconciliation of import data; and applying mandatory reporting by importers on annual imports.

HCFC-141b contained in imported pre-blended polyols and to avoid the import of HCFC-141b pure, the Government has categorized HCFC-141b (both pure and contained in pre-blended polyols) as a prohibited chemical under the Chemical Management Law since 3 April 2018.

*Refrigeration servicing sector*

13. As of July 2020, a total of 31 trainers and 268 refrigeration technicians had been trained in good servicing practices. The certification system for technicians will be fully developed and implemented in stage II. As reported to the 85th meeting,[6] the refrigerant recovery and reclamation programme has been adjusted to provide training equipment to strengthen a training institute. The revised plan and a list of equipment has been approved and it is expected that the activity will be completed by the end of 2020.

Level of fund disbursement

14. As of July 2020, of the total funds of US $280,000 approved (US $235,000 for UNEP and US $45,000 for the Government of France), US $191,773 had been disbursed by UNEP only. As stated in paragraph 13, the sub-project of refrigerant recovery and reclamation implemented by the Government of France has been replaced with strengthening a training institute because an enabling environment for conducting the refrigerant recovery and reclamation does not exist given the low price of HCFC-22. It is expected that the equipment purchased for the training centre will be delivered by the end of 2020. The balance of US $88,227, including US $28,000 approved for the third and final tranche, will be disbursed in 2020 and 2021.

**Stage II of the HPMP**

Remaining consumption eligible for funding

15. After deducting 0.80 ODP tonnes of HCFC-22 associated with stage I of the HPMP and 3.24 ODP tonnes of HCFC-141b contained in the imported pre-blended polyols phased out without assistance from the Multilateral Fund, as there has not been any consumption of this substance since 2014, the remaining consumption eligible for funding amounts to 1.50 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

16. There are approximately 1,000 technicians and 250 workshops in the servicing sector, consuming HCFC-22 to service unitary and split air-conditioning (AC) systems, commercial refrigeration equipment (stand-alone freezers and supermarket display equipment) and chillers, as shown in Table 2.

**Table 2. Overview of the HCFC-22 used in the RAC servicing sector in the Lao People's Democratic Republic in 2019**

| Sub-sector | Number of units | HCFC-22 bank (mt) | Leakage (%) | Annual needs (mt) | | Total | |
|---|---|---|---|---|---|---|---|
| | | | | Servicing | Installation | mt | ODP tonnes |
| Domestic AC | 483,000 | 434.70 | 5.63 | 24.47 | 0.16 | 24.65 | 1.36 |
| Commercial refrigeration | 2,219 | 11.15 | 5.56 | 0.62 | 0 | 0.62 | 0.03 |
| Chillers | 22 | 4.40 | 7.05 | 0.31 | 0 | 0.31 | 0.02 |
| **Total** | **485,241** | **450.25** | **5.71** | **25.42** | **0.16** | **25.58** | **1.41** |

[6] Paragraphs 12(d), 15(d) and 20 of document UNEP/OzL.Pro/ExCom/85/33.

17. Most of the HCFC-22 (96.5 per cent) is used for servicing domestic AC with less than 4 per cent used in commercial refrigerators and chillers. HCFC-22 represents 19.8 per cent of the refrigerants used in the servicing sector; other refrigerants include HFC-134a (68.5 per cent), R-404A (4.1 per cent), R-410A (3.6 per cent), and R-600a, R-290, ammonia and HFC-32 (4.0 per cent).

Phase-out strategy in stage II of the HPMP

18. Stage II of the HPMP proposes to achieve a total phase-out of HCFCs by 1 January 2030 with a servicing tail of 2.5 per cent of the baseline from 2030 to 2040 in compliance with the Montreal Protocol phase-out schedule. The Government has banned import of all ODS including HCFCs except for HCFC-22 as of 3 April 2018. After 2030, the control of HCFC-22 consumption will be through the licensing and quota system.

19. Stage II of the HPMP will build upon the experience gained during the implementation of stage I; it will reinforce and supplement the policy measures and the activities implemented in stage I, including the HCFC licensing and quota system; further strengthen the capacity of the servicing sector; establish a certification scheme for technicians; and promote the transition to low-global-warming potential (GWP) technologies in the RAC sector.

Proposed activities in stage II of the HPMP

20. Stage II proposes the following activities:

(a) Strengthening policy and regulations including the licensing and quota system to support the sustained HCFC phase-out; banning the establishment of manufacturing capacity using HCFCs; mandatory labelling of HCFC containers; regulatory support for certification of technicians; registration of servicing workshops; and joint inspection on labelling of refrigerant containers and sales; training of 325 customs officers, importers and brokers in the control of ODS import and prevention of illegal trade (UNEP) (US $166,000); and provision of five refrigerant identifiers (UNDP) (US $25,000);

(b) Upgrading training curriculum; conducting 15 workshops to train 300 servicing technicians on good practices in servicing room AC systems and safe handling of flammable alternative technologies; conducting two workshops to train 30 technicians in servicing large commercial refrigeration equipment and cold storage facilities; developing and implementing mandatory certification for technicians through integrating good servicing practices into national qualification framework in the Technical and Vocational Education and Training (TVET) system (UNEP)(US $86,400);

(c) Providing equipment and tools (e.g., weighing scales, two-stage rotary vacuum pump, manifold gauge, and micro gauge) to 100 registered large servicing workshops and certified technicians to incentivize participation in the technicians certification scheme and to enable good servicing practices in servicing and installation of RAC equipment; and providing training equipment (e.g., 32 air-conditioners in rack unit, nitrogen cylinders, leak detectors, various tools) to upgrade five professional training institutes in provinces for technicians' training (UNDP) (US $162,600); and

(d) Public awareness and outreach programme to raise awareness on activities implemented under stage II; informing mandatory labelling requirement; informing the availability of non-HCFC, low-GWP alternative refrigerants and energy efficient RAC equipment; and dissemination of safety information on flammable refrigerants (UNEP) (US $30,000).

*Project implementation and monitoring*

21. There is no dedicated project management unit for the implementation of stage II. The NOU, with the assistance of UNEP where relevant, will implement the HPMP, coordinate and work with stakeholders, monitor and report progress on HPMP activities. The cost of those activities amounts to US $75,000 (i.e., staff and consultants: US $60,000 and travel: US $15,000).

*Gender policy implementation*

22. In line with decision 84/92(d),[7] the implementation of the stage II 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 and the impacts of gender mainstreaming on HPMP activities will be collected for reporting. Training and awareness campaigns will be conducted to develop staff competency in gender mainstreaming. Gender issues will be discussed during the thematic workshops to share experiences and lessons learned on gender mainstreaming.

Total cost of stage II of the HPMP

23. The total cost of stage II of the HPMP for the Lao People's Democratic Republic amounts to US $520,000, plus agency support costs, as originally submitted for achieving 100 per cent reduction by 2030, which is in accordance with decision 74/50(c)(xii).

Activities planned for the first tranche of stage II

24. The first funding tranche of stage II, at the total amount of US $213,400, will be implemented between January 2021 and December 2023 and will include the following activities:

(a) Stakeholders coordination meetings to strengthen policy and regulations; implementing mandatory labelling of HCFC cylinders; conducting one workshop to train 25 trainers, two workshops to train 50 customs officers and one workshop to train 15 importers and brokers on strengthening the trade control of HCFCs and handling of flammable refrigerants and RAC equipment using flammable refrigerants in the Customs warehouse, including fire service officers for preparation of emergency response; technical assistance on risk profiling to prevent illegal trade (UNEP) (US $48,000); and purchasing five refrigerant identifiers (UNDP) (US $25,000);

(b) Training trainers and conducting four workshops to train 80 technicians in good servicing practices and safely installing and servicing equipment using flammable refrigerants (HFC-32, R-290, R-600a); employing one consultant to develop certification system for technicians (UNEP) (US $26,900);

(c) Purchasing training equipment (e.g., air-conditioners in rack unit, nitrogen cylinders, leak detectors, various tools) to upgrade four vocational training institutes for technicians training (UNDP) (US $82,000);

(d) Public awareness and outreach activities to support the implementation of stage II of the HPMP, including design, production of awareness materials and media campaign for targeted groups (UNEP) (US $9,000); and

[7] Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

(e) Coordination of implementation, monitoring and reporting progress on HPMP activities (UNEP) (US $22,500 with the following breakdown: US $18,000 for staff and consultants and US $4,500 for travel).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

25. The Secretariat reviewed stage II of the HPMP in light of stage I, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decision 74/50), and the 2020-2022 business plan of the Multilateral Fund.

Overarching strategy

26. The strategy adopted under stage II of the HPMP was determined through national stakeholder consultation. A stage II covering a 10-year period toward complete phase-out by 2030 will enable the Government to have the long-term planning on strategy and policy intervention to support the HCFC phase-out. It will set a clear target with measurable milestones for the industry to plan their business and be prepared for market transformation taking into consideration of the life span of the RAC equipment. Stage II also takes into consideration HFC phase-down under the Kigali Amendment, and the country is ready to further align its HFC phase-down with HCFC phase-out following the guidance of the Executive Committee.

27. The Government proposed to meet the 100 per cent reduction of its HCFC baseline consumption by 2030 in stage II of its HPMP, on the understanding that the consumption between 2030 and 2040 (i.e., the servicing tail) may exceed zero in any year so long as the sum of its calculated levels of consumption over the ten-year period from 1 January 2030 to 1 January 2040, divided by ten, does not exceed 2.5 per cent of the country's baseline, and provided that such consumption is restricted to the servicing of RAC equipment existing on 1 January 2030, as provided by the Montreal Protocol. [8]

Regulations to support the HCFC phase-out

28. With regard to whether a ban would be enacted on imports of HCFC-22 starting from 2030, UNEP explained that a "ban" in the country's regulations would mean a total ban without any exemption even for a servicing tail. The Government has banned all HCFCs except for HCFC-22; and starting from 1 January 2030, licenses and quotas will not be issued for HCFC-22 for the servicing tail without special permission from the Minister of Natural Resources and Environment. The approval of such imports will only be on a case-by-case basis upon meeting several conditions, including: sufficient demonstration of the necessity to import for the purpose of servicing existing HCFC-based equipment; importing according to the quota; and allowing sales only to certified technicians. The distribution and use of imported HCFC-22 will be closely monitored. The Government is committed to following the guidance on monitoring and reporting on the servicing tail and complying with the Montreal Protocol.

*Legal framework*

29. 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.

[8] Article 5, paragraph 8 ter (e)(i) of the Montreal Protocol. Other applications where HCFCs can be used include the servicing of fire suppression and fire protection equipment existing on 1 January 2030; solvent applications in rocket engine manufacturing; and topical medical aerosol applications for the specialized treatment of burns.

Technical issues

30. The Secretariat noted that the RRR strategy that was included in stage I and later adjusted to strengthen training institutes had not been included in stage II. UNEP explained that the RRR programme was extensively debated among industry representatives during the implementation of stage I, and that the outcomes of the discussion had not been positive. HCFC-22 is mainly consumed by domestic AC, and little refrigerant could be recovered from these units as most refrigerant has leaked out before reporting leaks for repairs. The low price of HCFC-22 and occupational safety concerns (when condensing units are installed on a wall) also result in little incentive for recovery. Given that the HCFC-22 consumption is mainly in small AC units and the Government has banned the import of large HCFC-based chillers, the Secretariat notes that the current strategy appears appropriate for the country.

31. With regard to the legal support and operation of the certification of technicians, it was clarified that the existing ministerial decisions on ODS control, control the sale of refrigerants to certified technicians only and required at least one certified technician in each service workshop. It is expected that the certification system will be operational from 1 January 2024. The economic model and sustainability of the certification system will be looked into during the implementation of the first tranche of stage II.

Impact of the COVID-19 pandemic on HPMP implementation

32. With regard to COVID-19 pandemic, UNEP clarified that currently it is under control. The Government allows training sessions and meetings to be conducted physically with social distancing. Therefore, training under the first tranche is expected to be organized face-to-face. The training of master trainers by an international consultant is planned for the middle of 2021. Travel restrictions are expected to have been lifted at that time.

Impact on the climate

33. The proposed activities in the servicing sector, which include better containment of refrigerants through training and provision of equipment, will reduce the amount of HCFC-22 used for RAC servicing. Each kilogramme of HCFC-22 not emitted thanks to better refrigeration practices results in savings of approximately 1.8 $CO_2$-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by the Lao People's Democratic Republic, including its efforts in providing training and tools to technicians to enable good servicing practices and awareness-raising activities to promote low-GWP alternatives, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

**Co-financing**

34. The Government's in-kind contribution is estimated at US $108,000 including activities in policy development, training, public awareness and project monitoring. Other co-financing includes the development of a policy related to Minimum Energy Performance Standard (MEPS) supported by the Green Climate Fund (GCF). The draft ministerial regulation on labelling and applying MEPS on residential AC systems has been finalized and is pending signature by the Minister of Energy and Mines. The regulation will prevent the influx of inefficient AC systems into the country and maximize climate benefits.

**2020-2022 draft business plan of the Multilateral Fund**

35. UNEP and UNDP are requesting US $520,000, plus agency support costs, for the implementation of stage II of the HPMP for the Lao People's Democratic Republic. The total requested value of US $236,862, including agency support costs, for the period from 2020 to 2022, is US $31,202 above the amount in the business plan. This is because UNDP has only recently been selected as cooperating agency

for stage II; therefore, funding for UNDP had not been included in the business plan. UNDP will include the amount in its updated business plan for 2021.

**Draft Agreement**

36. A draft Agreement between the Government of the Lao People's Democratic Republic and the Executive Committee for the phase-out of HCFCs in stage II of the HPMP is contained in Annex I to the present document.

**RECOMMENDATION**

37. The Executive Committee may wish to consider:

(a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for the Lao People's Democratic Republic for the period from 2020 to 2030 for the complete phase-out of HCFC consumption, in the amount of US $580,096, consisting of US $332,400 plus agency support costs of US $43,212 for UNEP, and US $187,600 plus agency support costs of US $16,884 for UNDP, on the understanding that no more funding would be provided from the Multilateral Fund for the phase-out of the HCFCs;

(b) Noting the commitment of the Government of the Lao People's Democratic Republic:

(i) To completely phase out HCFCs by 1 January 2030, and that HCFCs would not be imported after that date, except for the allowance for a servicing tail between 2030-2040 where required, and consistent with the provisions of the Montreal Protocol;

(ii) To ban the import of all types of HCFC-based equipment from 1 January 2023;

(c) Deducting 1.50 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding, and 3.24 ODP tonnes of HCFC-141b contained in the imported pre-blended polyols phased out without assistance from the Multilateral Fund, as there has not been any consumption of this substance since 2014;

(d) Approving the draft Agreement between the Government of the Lao People's Democratic Republic and the Executive Committee for the reduction in consumption of HCFCs, in accordance with stage II of the HPMP, contained in Annex I to the present document; and

(e) Approving the first tranche of stage II of the HPMP for the Lao People's Democratic Republic, and the corresponding tranche implementation plans, in the amount of US $236,862, consisting of US $106,400 plus agency support costs of US $13,832 for UNEP, and US $107,000 plus agency support costs of US $9,630 for UNDP.

## Annex I

## DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF THE LAO PEOPLE'S DEMOCRATIC REPUBLIC AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

### Purpose

1. This Agreement represents the understanding of the Government of the Lao People's Democratic Republic (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of zero ODP tonnes prior to 1 January 2030 in compliance with Montreal Protocol schedule.

2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in rows 4.1.3 and 4.2.3 (remaining consumption eligible for funding).

3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (“Funding Approval Schedule”).

4. The Country agrees to implement this Agreement in accordance with the stage II of the HCFC phase-out management plan (HPMP) approved (“the Plan”). In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

### Conditions for funding release

5. The Executive Committee will only provide the Funding in accordance with the Funding Approval Schedule when the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:

(a) That the Country has met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which there are no due country programme implementation reports at the date of the Executive Committee meeting at which the funding request is being presented are exempted;

(b) That the meeting of these Targets has been independently verified for all relevant years, unless the Executive Committee decided that such verification would not be required;

(c) That the Country had submitted a Tranche Implementation Report in the form of Appendix 4-A ("Format of Tranche Implementation Reports and Plans") covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

(d) That the Country has submitted a Tranche Implementation Plan in the form of Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

**Monitoring**

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A ("Monitoring Institutions and Roles") will monitor and report on implementation of the activities in the previous Tranche Implementation Plans in accordance with their roles and responsibilities set out in the same appendix.

**Flexibility in the reallocation of funds**

7. The Executive Committee agrees that the Country may have the flexibility to reallocate part or all of the approved funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

(a) Reallocations categorized as major changes must be documented in advance either in a Tranche Implementation Plan as foreseen in sub-paragraph 5(d) above, or as a revision to an existing Tranche Implementation Plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:

(i) Issues potentially concerning the rules and policies of the Multilateral Fund;

(ii) Changes which would modify any clause of this Agreement;

(iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and

(iv) Provision of funding for activities not included in the current endorsed Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;

(b) Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report;

(c) The Country agrees, in cases where HFC technologies have been chosen as an alternative to HCFCs, and taking into account national circumstances related to health and safety: to monitor the availability of substitutes and alternatives that further minimize impacts on the climate; to consider, in the review of regulations standards and incentives adequate provisions that encourage introduction of such alternatives; and to consider the potential for adoption of cost-effective alternatives that minimize the climate impact in the implementation of the HPMP, as appropriate, and inform the Executive Committee on the progress accordingly in tranche implementation reports; and

(d) Any remaining funds held by the bilateral or implementing agencies or the Country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

**Considerations for the refrigeration servicing sector**

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sector included in the Plan, in particular:

(a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and

(b) The Country and relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

**Bilateral and implementing agencies**

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNEP has agreed to be the lead implementing agency (the "Lead IA") and UNDP has agreed to be the cooperating implementing agency (the "Cooperating IA") under the lead of the Lead IA in respect of the Country's activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA and/or Cooperating IA taking part in this Agreement.

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). The Cooperating IA will support the Lead IA by implementing the Plan under the overall co-ordination of the Lead IA. The roles of the Lead IA and Cooperating IA are contained in Appendix 6-A and Appendix 6-B, respectively. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

**Non-compliance with the Agreement**

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A ("Reductions in Funding for Failure to Comply") in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and

take related decisions. Once decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 5 above.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decisions that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee, the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to the information necessary to verify compliance with this Agreement.

**Date of completion**

14. The completion of the Plan and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion of the Plan will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion of the Plan unless otherwise specified by the Executive Committee.

**Validity**

15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

16. This Agreement may be modified or terminated only by mutual written agreement of the Country and the Executive Committee of the Multilateral Fund.

**APPENDICES**

**APPENDIX 1-A: THE SUBSTANCES**

| Substance | Annex | Group | Starting point for aggregate reductions in consumption (ODP tonnes) |
|---|---|---|---|
| HCFC-22 | C | I | 2.30 |
| HCFC-141b contained in imported pre-blended polyols | C | I | 3.24 |

**APPENDIX 2-A: THE TARGETS, AND FUNDING**

| Row | Particulars | 2020* | 2021-2022 | 2023 | 2024 | 2025 | 2026 | 2027-2029 | 2030 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.1 | Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes) | 1.50 | 1.50 | 1.50 | 1.50 | 0.75 | 0.75 | 0.75 | 0.00 | n/a |
| 1.2 | Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes) | 1.50 | 1.50 | 1.50 | 1.50 | 0.75 | 0.75 | 0.75 | 0.00 | n/a |
| 2.1 | Lead IA (UNEP) agreed funding (US $) | 106,400 | 0 | 87,100 | 0 | 0 | 86,900 | 0 | 52,000 | 332,400 |
| 2.2 | Support costs for Lead IA (US $) | 13,832 | 0 | 11,323 | 0 | 0 | 11,297 | 0 | 6,760 | 43,212 |
| 2.3 | Cooperating IA (UNDP) agreed funding (US $) | 107,000 | 00 | 64,480 | 0 | 0 | 16,120 | 0 | 0 | 187,600 |
| 2.4 | Support costs for Cooperating IA (US $) | 9,630 | 0 | 5,803 | 0 | 0 | 1,451 | 0 | 0 | 16,884 |
| 3.1 | Total agreed funding (US $) | 213,400 | 0 | 151,580 | 0 | 0 | 103,020 | 0 | 52,000 | 520,000 |
| 3.2 | Total support cost (US $) | 23,462 | 0 | 17,126 | 0 | 0 | 12,748 | 0 | 6,760 | 60,096 |
| 3.3 | Total agreed costs (US $) | 236,862 | 0 | 168,706 | 0 | 0 | 115,768 | 0 | 58,760 | 580,096 |
| 4.1.1 | Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes) | | | | | | | | | 1.50 |
| 4.1.2 | Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes) | | | | | | | | | 0.80 |
| 4.1.3 | Remaining eligible consumption for HCFC-22 (ODP tonnes) | | | | | | | | | 0.00 |
| 4.2.1 | Total phase-out of HCFC-141b contained in imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes) | | | | | | | | | 0.00 |
| 4.2.2 | Phase-out of HCFC-141b contained in imported pre-blended polyols to be achieved in the previous stage (ODP tonnes) | | | | | | | | | 3.24** |
| 4.2.3 | Remaining eligible consumption for HCFC-141b contained in imported pre-blended polyols (ODP tonnes) | | | | | | | | | 0.00 |

* Date of completion of stage I as per stage I Agreement: 31 December 2021.
** The phase-out was achieved without assistance from the Multilateral Fund.

**APPENDIX 3-A: FUNDING APPROVAL SCHEDULE**

1. Funding for the future tranches will be considered for approval at the first meeting of the year specified in Appendix 2-A.

**APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS**

1. The submission of the Tranche Implementation Report and Plans for each tranche request will consist of five parts:

(a) A narrative report, with data provided by tranche, describing the progress achieved since the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other.

The report should include the amount of ODS phased out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes;

(b) An independent verification report of the Plan results and the consumption of the Substances, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;

(c) A written description of the activities to be undertaken during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall Plan that are foreseen. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;

(d) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database; and

(e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

2. In the event that in a particular year two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:

(a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and

(b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

**APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES**

1. The Department of Pollution Control and Monitoring (DPCM) of the Ministry of Natural Resources and Environment will be responsible for the overall project monitoring of all activities under the Plan. The national ozone unit (NOU) will be responsible for the planning, coordination, implementation of daily work of the project implementation. It will also assist the Government and non-government organizations, to streamline their activities for smooth implementation of the projects. The NOU will submit annual progress reports on the status of the implementation to the Lead IA and the Cooperating IA to monitor implementation progress of the Plan.

2. Annual consumption of HCFCs and other ODSs will be monitored through the DPCM in collaboration with the Customs Department. The DPCM is a licensing authority to issue import and export permit, while the Customs Department will control and monitor the import and export of HCFCs and other ODSs at the point of entry. The NOU will liaise with importers of HCFCs and other ODSs to obtain necessary data for reconciliation of statistics on the periodically basis.

3. The NOU will undertake regular inspection to refrigeration and air-conditioning (RAC) training centres and RAC servicing workshops to monitor conditions of RAC servicing tools distributed under the Plan. It will also undertake regular inspection to monitor the implementation of labelling requirement for HCFC cylinders.

4. The NOU will also undertake market survey to gauge the penetration of non-HCFC substitutes and alternative technologies in the RAC sector. The NOU will monitor the implementation of capacity building activities with relevant agencies e.g. RAC technician training and customs and enforcement officers training.

**APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY**

1. The Lead IA will be responsible for a range of activities, including at least the following:

   (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;

   (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 4-A;

   (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;

   (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;

   (e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee, and should include the activities implemented by the Cooperating IA;

(f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;

(g) Ensuring that appropriate independent technical experts carry out the technical reviews;

(h) Carrying out required supervision missions;

(i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;

(j) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;

(k) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of the Lead IA and each Cooperating IA;

(l) Ensuring that disbursements made to the Country are based on the use of the indicators;

(m) Providing assistance with policy, management and technical support when required;

(n) Reaching consensus with the Cooperating IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and

(o) Timely releasing funds to the Country/participating enterprises for completing the activities related to the project.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

**APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCIES**

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the Plan, including at least the following:

(a) Providing assistance for policy development when required;

(b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities;

(c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A; and

(d) Reaching consensus with the Lead IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan.

## APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US $180 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.

2. In the event that the penalty needs to be applied for a year in which there are two Agreements in force (two stages of the HPMP being implemented in parallel) with different penalty levels, the application of the penalty will be determined on a case-by-case basis taking into consideration the specific sectors that lead to the non-compliance. If it is not possible to determine a sector, or both stages are addressing the same sector, the penalty level to be applied would be the largest.