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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-first Meeting
Montreal, 18-22 June 2018

PROJECT PROPOSAL: KYRGYZSTAN

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

Kyrgyzstan

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (stage II)	UNDP (lead), UNEP	74 th	97.5% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2016	1.73 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2017		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22				0.26	1.11				1.37

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	4.1	Starting point for sustained aggregate reductions:	4.1
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	4.1	Remaining:	0

(V) BUSINESS PLAN		2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)	0.7	0.0	0.0	0.7
	Funding (US \$)	176,054	0	7,006	183,060
UNDP	ODS phase-out (ODP tonnes)	0.8	0.0	0.2	1.0
	Funding (US \$)	187,250	0	58,850	246,100

(VI) PROJECT DATA			2015	2016	2017	2018	2019	2020*	Total
Montreal Protocol consumption limits			3.69	3.69	3.69	3.69	3.69	2.67	n/a
Maximum allowable consumption (ODP tonnes)			3.08	2.67	2.05	1.32	0.41	0.10	n/a
Agreed funding (US\$)	UNDP	Project costs	170,000	0	0	175,000	0	55,000	400,000
		Support costs	11,900	0	0	12,250	0	3,850	28,000
	UNEP	Project costs	150,000	0	0	155,800	0	6,200	312,000
		Support costs	19,500	0	0	20,254	0	806	40,560
Funds approved by ExCom (US\$)		Project costs	320,000	0	0	0	0	0	320,000
		Support costs	31,400	0	0	0	0	0	31,400
Total funds requested for approval at this meeting (US\$)		Project costs	0	0	0	330,800	0	0	330,800
		Support costs	0	0	0	32,504	0	0	32,504

*Remaining consumption of 0.10 ODP tonnes of HCFCs per year for service tail up to 2025.

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Kyrgyzstan, 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 a total cost of US \$363,304, consisting of US \$175,000, plus agency support costs of US \$12,250 for UNDP, and US \$155,800, plus agency support costs of US \$20,254 for UNEP.¹ The submission includes a progress report on the implementation of the first tranche, the verification report on HCFC consumption for 2012 to 2015 and the tranche implementation plan for 2018 to 2020.

Report on HCFC consumption

2. The Government of Kyrgyzstan reported a consumption of 1.73 ODP tonnes of HCFC in 2016 and estimated a consumption of 1.37 ODP tonnes for 2017, which is 67 per cent below the HCFC baseline for compliance. The 2013-2017 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Kyrgyzstan (2013-2017 Article 7 data)

HCFC	2013	2014	2015	2016	2017*	Baseline
Metric tonnes						
HCFC-22	60.40	43.60	28.75	31.50	24.91	57.40
HCFC-141b	0.00	0.00	0.00	0.00	0.00	6.61
HCFC-142b	10.30	0.00	0.00	0.00	0.00	2.60
Total (metric tonnes)	70.70	43.60	28.75	31.50	24.91	66.61
ODP tonnes						
HCFC-22	3.32	2.40	1.58	1.73	1.37	3.16
HCFC-141b	0.00	0.00	0.00	0.00	0.00	0.73
HCFC-142b	0.67	0.00	0.00	0.00	0.00	0.17
Total (ODP tonnes)	3.99	2.40	1.58	1.73	1.37	4.05

*Country programme data submitted on 27 March 2018.

3. The decrease in consumption is mainly because of strict enforcement of the licensing and quota systems, implementation of good practices in servicing equipment by trained technicians, introduction of non-HCFC-based equipment; and the influence of the European Union (EU) which resulted in faster adoption of HCFC-free technologies in the country. In 2016, the Government adopted a resolution outlining the schedule to phase out all HCFCs, which resulted in a slight increase in HCFC imports.

Country programme (CP) implementation report

4. The Government of Kyrgyzstan reported HCFC sector consumption data under the 2016 CP implementation report, which is consistent with the data reported under Article 7 of the Montreal Protocol.

Verification report for stage I of the HPMP

5. In line with decision 76/17, the verification report of HCFC consumption for the years 2013 to 2015 specified in the decision, confirmed that the targets for HCFC consumption for each of those years were met. Furthermore, the licensing and quota systems operate in line with Eurasian Economic Union (EAEU) policies, and are capable of ensuring the country's compliance with its Montreal Protocol obligations.

¹ As per the letter of 23 April 2018 from the State Agency of Environment Protection and Forestry of Kyrgyzstan to the Secretariat.

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

Legal framework

6. The Government of Kyrgyzstan has banned imports of HCFC-based equipment as of 1 September 2015; has established regulations requiring national certification of refrigeration specialists working with HCFCs, HFCs and natural refrigerants, and the renewal of such certification through trainings every two years. Certification of technicians is mandatory for refrigeration and air-conditioning (RAC) equipment servicing.

7. Following a study of the refrigeration sector by the National Ozone Unit (NOU), a technical regulation on safety requirements related to the operation of refrigeration equipment and the standard “EN 378-3-2014” for refrigeration systems and heat pumps have been adopted. Safety requirements and environmental protection have been incorporated into provisions for the training and certification of personnel, which are based on EU standards for the safe operation and servicing of refrigeration equipment.

Refrigeration servicing sector

8. The following activities were carried out:

- (a) Five hundred seventy-seven customs and border officers and inspectors were trained in 18 training workshops on regulations concerning import, export and transit of ODS and ODS-containing equipment and prevention of illegal trade of ODS;
- (b) Five hundred eighty-four refrigeration technicians were trained in 14 training workshops on availability and safe use of HCFC-free and low-global warming potential (GWP) alternatives including flammable and toxic refrigerants; and technicians training curriculum was updated to include safety standards for the design, manufacturing and installation of RAC equipment;
- (c) Six sets of recovery equipment and tools were provided to refrigeration service technicians; 11 sets of equipment and tools (e.g., recovery machines, vacuum pumps, charging stations) were distributed to training centres; 61 sets of tool kits (e.g., vacuum pumps, pipe cutters, hoses) were distributed to service technicians; projectors and communication equipment were provided to 10 vocational schools; and an R-290 demonstration training unit was purchased to support training on the safe handling of flammable refrigerants;
- (d) Six hundred forty-nine refrigeration specialists were trained and certified on refrigeration technologies in cooperation with the Refrigeration Association and the National Technical University; 248 technicians on operation and repair of refrigeration equipment; and 20 technicians on the standard “EN 378-3-2014” for refrigeration systems and heat pumps;
- (e) Training materials were updated and manuals were developed to include new topics on refrigerants and the environment, new low-GWP and non-HFC alternative technologies; and the technician Code of Good Practices in RAC was updated to include information on natural refrigerants, and international and national standards for ozone- and climate-friendly technologies; and
- (f) Awareness materials including posters, leaflets, fact sheets and a video on ozone layer protection, availability and use of alternatives, including safe use of flammable and toxic refrigerants and other information on use of RAC equipment were developed and disseminated.

Project implementation and monitoring unit (PMU)

9. The NOU, under the State Agency on Environment Protection and Forestry, is responsible for the implementation and monitoring of the HPMP programme.

Level of fund disbursement

10. As of April 2018, the US \$320,000 approved so far (US \$170,000 for UNDP and US \$150,000 for UNEP) had been fully disbursed.

Implementation plan for the second tranche of the HPMP

11. The following activities will be implemented between July 2018 and December 2020:
- (a) Develop and update regulatory acts in accordance with the requirements of the Montreal Protocol and the EAEU including three stakeholder consultations for updated regulations implementation (UNEP) (US \$43,300);
 - (b) Conduct five training workshops for 50 Customs and enforcement officers on implementation of HCFC licensing system and national regulations for monitoring and controlling HCFCs including updating and reproduction of training materials (UNEP) (US \$41,000);
 - (c) Conduct five training workshops on HCFC-free alternatives for 75 refrigeration technicians, two training workshops for 40 managers of companies on state register of ODSs and alternatives, one training workshop for 25 building planners/architects (UNEP) (US \$33,000);
 - (d) Update training materials and a handbook for the safe handling of natural refrigerants including the national safety standards; continue to implement mandatory certification for technicians, mandatory equipment logbooks (inspection, equipment inventory) to support the servicing sector (UNEP) (US \$27,600);
 - (e) Provide 10 training equipment and servicing tools (e.g., charging station for natural refrigerants, welding and vacuum test stand, basic multi-refrigerant analyzer) to training centres and vocational schools (UNDP) (US \$25,000);
 - (f) Implement the end-user's incentive programme to non-ODS retrofits/replacement with low-GWP alternatives to be decided during implementation; conduct awareness workshops regarding the end-user component; hire a national expert for the programme (UNDP) (US \$60,000);
 - (g) Import key components and assembly *in situ* of one or two commercial installations on natural refrigerants such as ammonia and CO₂ for demonstration of alternative refrigerants (UNDP) (US \$90,000); and
 - (h) Continue HPMP monitoring activities (UNEP) (US \$10,900).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption

Legal framework

12. The Government of Kyrgyzstan has already issued HCFC import quota of 24 mt (1.32 ODP tonnes) for 2018 to three importers in accordance with the maximum allowable consumption targets under its Agreement with the Executive Committee.

Refrigeration servicing sector

13. UNDP clarified that a session on safety requirements of different flammable refrigerants are covered during the training courses and seminars by refrigeration specialists to inform technicians on the risks associated with the use of flammable refrigerants in equipment not designed for these refrigerants, in line with decisions 72/17 and 73/34. The National Refrigeration Service Association also disseminates precautionary information for use of different refrigerants including flammables to their members in the service industry.

14. UNDP explained that the incentive programme for end-users will identify beneficiaries who will receive 30 to 50 per cent of the cost for retrofit or replacement of their AC equipment to low-GWP alternatives. The choice of refrigerants by the beneficiaries will mainly depend on availability and costs at the time of replacement/retrofit.

15. The sustainability of the technicians training is ensured given that certification of technicians is mandatory; vocational training schools will provide training for such certification with support from the HPMP.

Conclusion

16. The estimated HCFC consumption in 2017 of 1.37 ODP tonnes was about 67 per cent below HCFC baseline and 33 per cent lower than the maximum allowable consumption for that year. The Government continues to implement licensing and quota systems for monitoring and controlling HCFCs and bans imports of HCFC-based equipment. Activities are progressing including training of customs and law enforcement officers and technicians with emphasis on servicing equipment using flammable refrigerants and HCFC-free alternatives. The Government is also implementing mandatory certification system for technicians which results in better control on servicing practices for the equipment and ensures sustainability of training. All funds approved under the first tranche had been disbursed. The Government will continue to implement HPMP activities focusing on enforcement of regulations, training of service technicians and adoption of HCFC-free low-GWP alternatives through incentive and outreach programmes, to achieve the accelerated phase-out of HCFCs by 2020.

RECOMMENDATION

17. 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 of (HPMP) for Kyrgyzstan; and further recommends blanket approval of the second tranche of stage II of the HPMP for Kyrgyzstan, and the corresponding 2018-2020 tranche implementation plan, at the funding levels shown in the table below, on the understanding:

- (a) That end-users would provide co-financing to participate in the incentive programme for retrofit or replacement of air-conditioning equipment to technologies with low global-warming potential refrigerants; and
- (b) That, if Kyrgyzstan were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and air-conditioning equipment originally designed for non-flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage II, second tranche)	175,000	12,250	UNDP
(b)	HCFC phase-out management plan (stage II, second tranche)	155,800	20,254	UNEP