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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-third Meeting
Montreal, 15-19 December 2023
Item 9(d) of the provisional agenda[1]

PROJECT PROPOSALS: KYRGYZSTAN

This document consists of the comments and recommendations of the Secretariat on the following project proposals:

Phase-down

• Kigali HFC implementation plan (stage I, first tranche)	UNDP and UNEP

Energy efficiency

• Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities)	UNEP

[1] UNEP/OzL.Pro/ExCom/93/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Kyrgyzstan

(I) PROJECT TITLE	AGENCY
Kigali HFC implementation plan (stage I)	UNDP (lead), UNEP

(II) LATEST ARTICLE 7 DATA (Annex F)	Year: 2022	215.21 mt	487,231 CO_2-eq tonnes

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (CO_2-eq tonnes)									Year: 2022
Chemical	Aerosol	Foam	Firefighting	AC and refrigeration			Solvent	Other	Total sector consumption
				Manufacturing		Servicing			
				AC	Other				
HFC-134a						175,043			175,043
R-404A						174,275			174,275
R-407C						1,808			1,808
R-410A						57,828			57,828
R-507A						78,277			78,277
HFC-245fa in imported pre-blended polyols*		3,523							3,523
HFC-365mfc in imported pre-blended polyols*		13,990							13,990

*CP data

(IV) AVERAGE 2020-2022 HFC CONSUMPTION IN SERVICING	172.35 mt	375,839 CO_2-eq tonnes

(V) CONSUMPTION DATA (CO_2-eq tonnes)			
Baseline: average 2020-2022 HFC consumption plus 65% of HCFC baseline	450,382	Starting point for sustained aggregate reductions	[n/a]*
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved	0	Remaining	[n/a]*

*For countries with 2020-2022 HFC consumption in servicing only and below 360 mt.

(VI) ENDORSED BUSINESS PLAN		2023	2024	2025	Total
UNDP	HFC phase-down (CO_2-eq tonnes)	0	0	0	0
	Funding (US $)	0	34,531	0	34,531
UNEP	HFC phase-down (CO_2-eq tonnes)	0	0	0	0
	Funding (US $)	16,272	0	0	16,272

(VII) PROJECT DATA			2023	2024	2025	2026	2027	2028	2029	Total
Consumption (CO_2-eq tonnes)	Montreal Protocol limits		n/a	450,382	450,382	450,382	450,382	450,382	405,344	n/a
	Maximum allowable		n/a	450,382	450,382	450,382	450,382	450,382	405,344	n/a
Amounts requested in principle (US $)	UNDP	Project costs	51,000	0	0	79,000	0	0	0	130,000
		Support costs	4,590	0	0	7,110	0	0	0	11,700
	UNEP	Project costs	30,000	0	0	30,000	0	0	0	60,000
		Support costs	3,900	0	0	3,900	0	0	0	7,800
Amounts recommended in principle (US $)	Total project costs		81,000	0	0	109,000	0	0	0	190,000
	Total support costs		8,490	0	0	11,010	0	0	0	19,500
	Total funds		89,490	0	0	120,010	0	0	0	209,500

(VIII) Request for approval of funding for the first tranche (2023)		
Implementing agency	**Funds recommended (US $)**	**Support costs (US $)**
UNDP	51,000	4,590
UNEP	30,000	3,900
Total	**81,000**	**8,490**

Secretariat's recommendation:	Individual consideration – all technical and cost issues resolved

PROJECT DESCRIPTION

1. On behalf of the Government of Kyrgyzstan, UNDP as the lead implementing agency has submitted a request for stage I of the Kigali HFC implementation plan (KIP), at a total cost of US $656,980, consisting of US $130,000, plus agency support costs of US $11,700 for UNDP and US $456,000, plus agency support costs of US $59,280 for UNEP, as originally submitted.[2] The submission includes a request for funding of US $396,000, plus agency support costs, for a pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down, submitted in line with decision 91/65.

2. The pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities) will be considered in paragraphs 49 to 65 below.

3. The implementation of stage I of the KIP will assist Kyrgyzstan in meeting the target of 10 per cent reduction from its HFC baseline consumption by 1 January 2029.

4. The first tranche of stage I of the KIP being requested at this meeting amounts to US $89,490, consisting of US $51,000, plus agency support costs of US $4,590 for UNDP and US $30,000, plus agency support costs of US $3,900 for UNEP, as originally submitted,[3] for the period of January 2024 to December 2026.

Background

5. Kyrgyzstan ratified all the amendments to the Montreal Protocol, including the Kigali Amendment on 8 September 2020. Kyrgyzstan has an HCFC consumption baseline of 4.10 ODP tonnes or 66.61 metric tonnes (mt) and phased out its consumption of HCFCs in 2020.[4]

Status of implementation of the HCFC phase-out management plan

6. Stage I of the HCFC phase-out management plan (HPMP) for Kyrgyzstan was originally approved at the 63rd meeting[5] and revised at the 72nd meeting[6] to meet the 25 per cent reduction from the baseline by 2015, resulting in the phase-out of 1.02 ODP tonnes of HCFCs, at a total cost of US $88,000, plus agency support costs.

7. Stage II of the HPMP for Kyrgyzstan was originally approved at the 74th meeting[7] and revised at the 85th meeting[8] to reduce HCFC consumption by 97.5 per cent and 100 per cent from the baseline by 2020 and 2025, respectively, at a total cost of US $712,000, plus agency support costs. Stage II of the HPMP was completed in December 2021, as stipulated in the Agreement between the Government of Kyrgyzstan and the Executive Committee. In line with decision 85/22(a), a verification report on HCFC consumption for 2019 to 2022 was submitted to the present meeting confirming that the country's HCFC consumption was

[2] As per the letter of 19 August 2023 from the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic to UNDP.
[3] Excluding funding for the pilot project on energy efficiency submitted in line with decision 91/65.
[4] Except remaining for service tail up to 2025 of 0.10 ODP tonnes per year.
[5] Decision 63/35
[6] Annex VIII of UNEP/OzL.Pro/ExCom/72/47
[7] Decision 74/40
[8] Annex V of UNEP/OzL.Pro/ExCom/85/67

0.71 ODP tonnes in 2019 and zero thereafter, in line with the Agreement between the country and the Executive Committee.[9]

Status of implementation of HFC-related activities

8. At the 74th meeting, Kyrgyzstan received funding to conduct a survey on the use of alternatives to ozone-depleting substances (ODSs) (US $20,000), which was completed in March 2017, noting that eligible funding (US $40,000) was reduced by 50 per cent to account for surveys funded outside the Multilateral Fund. At the 80th meeting, Kyrgyzstan received funding to implement the enabling activities for HFC phase-down (US $95,000), which were completed in June 2020. These activities assisted the country inter alia in ratifying the Kigali Amendment; completing activities promoting energy efficiency; and conducting HFC awareness-raising activities.

9. At the 92nd meeting, US $100,000 was approved for UNEP for additional activities to maintain energy efficiency for the servicing sector under decision 89/6(b). Details on those activities, including the status of implementation, can be found in paragraphs 50 and 51 of the present document.

Stage I of the Kigali HFC implementation plan

Policy, regulatory and institutional frameworks

10. The National Ozone Centre (NOC)[10] within the Ministry of Natural Resources, Ecology and Technical Supervision (MNRETS) is responsible for coordination and administration of matters related to the Montreal Protocol and implementation of national programmes, including inter alia communications with stakeholders (institutional, private sector service providers, end users, non-government organizations and the general public), associated public awareness activities, and media communication; and reporting to the Ozone and Fund Secretariats. Within MNRETS, the State Service of Ecological and Technical Supervision, with the NOC's support, have responsibility for certification of refrigeration technicians and related requirements applied to end users of refrigeration equipment; and monitoring the implementation of environmental legislation related to ODS and HFCs. The Ministry of Economic and Commerce (MEC) has authority for licensing and import/export matters, with related controls, enforcement, and reporting as a responsibility of the State Customs Committee under this Ministry.

11. Kyrgyzstan introduced an HFC licensing system in March 2021 and a HFC quota system will be in effect as of 1 January 2024. The national quota will be set in accordance with the maximum allowable limits and distributed to importers based on past sales, where individual importer's quota will be issued as an aggregated figure in CO_2-equivalent (CO_2-eq) tonnes thus giving importers flexibility to import the substances required as long as they do not exceed their assigned quota. Five per cent of the quota will be set aside for new importers and to allocate for unforeseen needs.

12. The Government of Kyrgyzstan 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, and regulatory measures are in place to prevent venting of controlled substances during installation, servicing and decommissioning of RAC equipment since March 2013. Other regulatory measures related to the HFC phase-down include an import fee exemption for "green" technologies, including RAC and heat pump (RACHP) equipment based on natural refrigerants,

[9] Document UNEP/OzL.Pro/ExCom/93/20 on Reports on projects with specific reporting requirements with no outstanding issues

[10] The NOC reports to the Interdepartmental Commission on Ozone Issues, which comprises several ministries that oversee the Montreal Protocol.

and value-added tax (VAT) exemptions for technologies, equipment and their components that meet requirements for energy and resource efficiency.

HFC consumption

13. Kyrgyzstan imports HFCs for use in the refrigeration servicing sector; in addition, the country imports HFC-245fa and HFC-365mfc contained in pre-blended polyols to manufacture foam. In 2022, Kyrgyzstan's HFC consumption in the servicing sector included HFC-134a and R-404A (68 per cent of total HFC consumption in CO_2-eq tonnes), R-507A (16 per cent), R-410A (12 per cent), and a small quantity of R-407C (less than 1 per cent). Table 1 presents the country's HFC consumption as reported under Article 7 to the Ozone Secretariat.

Table 1. HFC consumption in Kyrgyzstan (2018–2022 Article 7 data)

HFC	GWP*	2018	2019	2020	2021	2022	Share of HFC consumption in 2022 (%)
mt							
HFC-32	675	0.04	0.06	0.62	0	0	0
HFC-134a	1,430	58.70	91.30	85.80	34.74	122.41	57
R-404A	3,922	24.30	26.60	25.03	15.79	44.44	21
R-407C	1,774	3.10	2.70	4.03	34.11	1.02	0
R-410A	2,088	7.80	25.60	24.07	63.22	27.70	13
R-507A	3,985	1.70	2.80	3.28	11.16	19.64	9
Total (mt)		95.64	149.06	142.83	159.02	215.21	**100**
HFC-245fa in imported pre-blended polyols**	1,030	4.60***	5.20	3.50	3.33	3.42	
HFC-365mfc in imported pre-blended polyols**	794	30.40***	34.70	20.82	14.42	17.62	
CO_2-eq tonnes							
HFC-32	675	27	41	419	0	0	0
HFC-134a	1,430	83,941	130,559	122,694	49,678	175,043	36
R-404A	3,922	95,295	104,315	98,158	61,922	174,275	36
R-407C	1,774	5,499	4,789	7,149	60,506	1,808	0
R-410A	2,088	16,283	53,440	50,246	131,972	57,828	12
R-507A	3,985	6,854	11,158	13,071	44,473	78,277	16
Total (CO_2-eq tonnes)		207,899	304,301	291,736	348,551	487,231	**100**
HFC-245fa in imported pre-blended polyols**	1,030	4,738***	5,356	3,605	3,430	3,523	
HFC-365mfc in imported pre-blended polyols**	794	24,138***	27,552	16,531	11,449	13,990	

* Global warming potential
** CP data
*** Source: data included in the KIP proposal

14. HFC consumption grew in 2019 given the accelerated HCFC phase-out; that growth slowed in 2020 likely due to the economic downturn and supply chain constraints associated with the COVID-19 pandemic, and then accelerated in 2022 due to the post-COVID recovery. In particular, consumption of HFC-134a decreased dramatically in 2021 and rebounded in 2022, likely reflecting deferred servicing of

HFC-134a-based equipment, including mobile air-conditioning (MAC). Similarly, there was a small decrease in R-404A consumption in 2021 that then significantly increased in 2022, likely due to the economic recovery and increased demand for cooling in commercial and industrial refrigeration. R-507A, which is exclusively used in commercial and industrial refrigeration, has been increasing steadily. In contrast, consumption of both R-410A and R-407C used to service air-conditioning (AC) equipment decreased in 2022, while consumption of HFCs contained in pre-blended polyols used in construction-related insulation foam applications was roughly constant in 2020-2022, and substantially lower than in prior years.

Country programme implementation report

15. The Government of Kyrgyzstan reported its HFC sector consumption data in the 2022 country programme implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

HFC distribution by sector

16. Use of HFCs in the servicing sector is dominated by MAC, industrial refrigeration, and commercial refrigeration; those uses account for 69 and 77 per cent of the country's HFC consumption in metric tonnes and CO_2-eq tonnes, respectively. The servicing of residential and commercial AC and transport refrigeration account for a further 22 and 16 per cent in metric tonnes and CO_2-eq tonnes, respectively, of the country's HFC consumption; domestic refrigeration, industrial AC, heat pumps, and chillers each account for less than 5 per cent, as shown in table 2.

Table 2. Estimated* HFC consumption by sector/HFC consumption in the refrigeration and air-conditioning servicing subsectors (2022)

RAC servicing subsector	HFC-134a	R-404A	R-407C	R-410A	R-507A	Total	Share of total (%)
Mt							
Domestic refrigeration	6.1	0.0	0.0	0.0	0.0	6.1	3
Commercial refrigeration	6.1	20.9	0.0	0.0	6.9	33.9	16
Industrial refrigeration	7.0	23.5	0.0	0.0	12.7	43.2	20
Residential AC	7.3	0.0	0.0	8.3	0.0	15.7	7
Commercial AC	4.9	0.0	0.0	8.3	0.0	13.2	6
Industrial AC	1.6	0.0	0.0	5.5	0.0	7.1	3
Heat pumps	0.0	0.0	0.4	4.2	0.0	4.6	2
Chillers	0.0	0.0	0.6	1.4	0.0	2.0	1
Transport	18.3	0.0	0.0	0.0	0.0	18.3	9
MAC	70.9	0.0	0.0	0.0	0.0	70.9	33
Total	**122.3**	**44.4**	**1.0**	**27.7**	**19.6**	**215.0**	**100**
CO_2-eq tonnes							
Domestic refrigeration	8,752	0	0	0	0	8,752	2
Commercial refrigeration	8,752	82,098	0	0	27,337	118,168	24

RAC servicing subsector	HFC-134a	R-404A	R-407C	R-410A	R-507A	Total	Share of total (%)
Industrial refrigeration	9,977	92,022	0	0	50,769	152,821	31
Residential AC	10,502	0	0	17,347	0	27,843	6
Commercial AC	7,001	0	0	17,347	0	24,354	5
Industrial AC	2,275	0	0	11,565	0	13,838	3
Heat pumps	0	0	710	8,674	0	9,394	2
Chillers	0	0	1,064	2,891	0	3,966	1
Transport	26,255	0	0	0	0	26,169	5
MAC	101,519	0	0	0	0	101,416	21
Total	**175,032**	**174,120**	**1,774**	**57,824**	**78,106**	**486,720**	**100**

[*] Differences with Article 7 due to rounding.

17. There are eight centres that provide training for RAC technicians and approximately 850 technicians (of which approximately 5 per cent are women) working directly for end users, service enterprises, or as individual operators, many with limited training. The current roster of certified technicians is 259 (of which four are women); there is significant turnover of technicians (approximately 150 technicians/year) given the demand for technicians in other Russian-speaking countries in the region. A well-established association, the Public Association of the Refrigeration Technicians PA "Ecoholod" represents the sector, with a membership of 30 workshops and 150 individuals, and serves as a key stakeholder partner with the NOC and Government agencies.

Domestic, commercial, and industrial refrigeration servicing

18. The majority of the country's consumption (56 per cent in in CO_2-eq tonnes) is to service commercial and industrial refrigeration equipment. About 12 per cent of the commercial and industrial refrigeration equipment is still based on HCFC-22; most is HFC-based (R-404A and R-507A), though some stand-alone commercial refrigeration equipment is R-600a or R-290-based (less than 5 per cent of the equipment). There are nine enterprises that assemble and install commercial and industrial refrigeration equipment; a total of 859 systems with an associated first charge of 11.56 mt of HFCs were estimated to be assembled and installed in 2022. Approximately one third of domestic refrigerators in the country are HFC-134a-based; two thirds are R-600a based, with that proportion expected to increase with the retirement of HFC-134a-based equipment. Approximately 2 per cent (in CO_2-eq tonnes) of the country's consumption is to service the HFC-134a-based domestic refrigeration equipment in the country.

Residential, commercial and industrial air-conditioning servicing

19. Approximately 9 per cent of the country's consumption in metric tonnes (8 per cent in CO_2-eq tonnes) was to service residential ACs and heat pumps (pre-dominantly R-410A and also some R-407C); a further 9 per cent in metric tonnes (8 per cent in CO_2-eq tonnes) was to service HFC-134a and R-410A-based commercial and industrial AC. There are approximately 2,100 chillers in the country using R-407C and R-410A; servicing that equipment accounted for 1 per cent of the country' HFC consumption.

Mobile air-conditioning and transport refrigeration servicing

20. Servicing MAC units in vehicles was the largest HFC use in the country in metric tonnes, accounting for approximately one third of the country's HFC consumption in metric tonnes (21 per cent in CO_2-eq tonnes). There are approximately 910,000 vehicles in the country that are based on HFC-134a; there is no significant penetration of HFO-1234yf-based vehicles in the country. In addition, there are approximately 100,000 refrigerated trucks in the country, of which approximately 10 per cent are based on HCFC-22 while the remaining trucks use HFC-134a. Servicing those trucks accounted for approximately 9 per cent of the country's HFC consumption in metric tonnes (5 per cent in CO_2-eq tonnes).

Phase-down strategy for stage I of the Kigali HFC implementation plan

Overarching strategy

21. Kyrgyzstan is proposing four stages for the KIP implementation. Stage I is proposed to be implemented until 2029. Stage II is expected to cover a period of six years (from 2030 to 2035), stage III is expected to cover a period of five years (from 2036 to 2040), and stage IV is expected to cover a period of five years until 2045.

Established HFC baseline and proposed reductions

22. The Government of Kyrgyzstan reported its Article 7 data for 2020-2022. By adding 65 per cent of the HCFC baseline (in CO_2-eq tonnes) to the average HFC consumption in 2020-2022, the established HFC baseline is 450,382 CO_2-eq tonnes, as shown in table 3. The country will meet its 2029 Montreal Protocol target of 405,344 CO_2-eq tonnes, representing a reduction of 45,038 CO_2-eq tonnes.

Table 3. HFC baseline for Kyrgyzstan (CO_2-eq tonnes)

Baseline calculation	2020	2021	2022
HFC annual consumption	291,736	348,551	487,231
HFC average consumption 2020-2022			375,839
HCFC baseline (65%)			74,543
HFC baseline			**450,382**

Proposed activities

23. Stage I of the KIP prioritizes the commercial and industrial refrigeration subsectors, and includes three components:[11] the development of policy and regulatory mechanisms for controlling and monitoring HFCs; capacity building for customs and the servicing sector, including training and provision of equipment for training centres and servicing workshops; and project monitoring and coordination:

(a) *Policy and regulatory mechanisms*: implementation of the HFC import quota, strengthening of the licensing system by incorporating mandatory Prior Informed Consent (PIC) procedures on import and export of HFCs by 1 January 2024, and regulatory updates in the HFC control framework, including development of a strategy for the promotion of natural refrigerants and energy efficiency in RAC (UNEP) (US $20,000);

(b) *Capacity building for customs and the servicing sector*: strengthen HFC import controls and prevent illegal trade by expanding coordination between the NOC and customs (including through preparation of practical instructions on labelling and designation of controlled goods; development of streamlined reporting and information exchange

[11] The pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down is discussed in paragraphs 49 to 65 of the present document.

procedures; and evaluation of trends in imported HFC-based equipment and products for statistical purposes); updating training curricula for customs, and training of 60 customs officers; and strengthen the servicing sector by updating the RAC training curricula, update RAC standards on natural refrigerants to include certification that extend coverage to CO_2 and ammonia, update existing logbooks to include natural refrigerants and train 130 RAC technicians, technical assistance for the RAC association, and associated monitoring and reporting (UNEP) (US $40,000); and

(c) *Equipment support for training centres and servicing workshops*: provision of equipment to two training centres that had not been assisted under the HPMP (including recovery and recycling equipment and related accessories; tools for brazing and tube work; leak detection, including for hydrocarbons; tools to service hydrocarbon-based equipment; compressor training equipment; and safety protection equipment); setting up one training center for CO_2 (procurement of CO_2 condensing unit, CO_2 charging unit, and piping tools for safe handling of high-pressure refrigerant); provision of equipment for eight servicing workshops, including to service hydrocarbon-based equipment; and a national consultancy to support the training activities (UNDP) (US $110,000).

Project implementation, coordination and monitoring

24. Three activities will be implemented between UNDP and the NOC: monitoring and reporting activities (including safeguards, gender equality and overall risk management) (US $8,000); hiring a consultant to assist with procurement and related tasks (US $4,000); and consultations and technical studies to identify and develop possible demonstration project concepts with conversions/replacements for energy efficient and low-GWP alternative systems that could be included in future KIP stages (US $8,000).

Gender policy implementation

25. The NOC undertook a gender assessment related to women's participation in the RACHP sector as part of the project preparation. While women account for a limited proportion of RAC technicians (5 per cent) and members of the technician association (8 per cent), they represent a more sizeable component of refrigerant importers (20 per cent), customs officers (30 per cent), and a majority of technician training staff (60 per cent) and refrigerant importers (70 per cent). In line with decision 92/40(b), the KIP includes the mandatory project requirements and performance indicators of the Multilateral Fund gender mainstreaming policy,[12] including the collection of sex-disaggregated data and qualitative information to analyze and track gender issues; a results framework that includes gender-responsive indicators, targets and baseline data to monitor gender equality results; mechanisms to ensure both women and men can provide input, access, and participate in project activities; and project staff and stakeholders will be sensitized to gender.

Total cost of stage I of the Kigali HFC implementation plan

26. The cost for stage I has been established at US $190,000, in line with decision 92/37.

Coordination of activities in the servicing sector under HCFC phase-out and HFC phase-down plans

27. Stage I of the KIP will be implemented in two tranches. While the stage II of the HPMP was already completed, the schedule of HFC phase-down and HCFC phase-out commitments is presented in annex I to the present document.

[12] Annex XXII to document UNEP/OzL.Pro/ExCom/92/56

Implementation plan for the first tranche of stage I of the Kigali HFC implementation plan

28. The first funding tranche of stage I of the KIP in the total amount of US $81,000 will be implemented between January 2024 and December 2026 and will include the following activities:

(a) *Policy and regulatory mechanisms*: implementation of HFC import quota system, strengthening of the licensing system by incorporating mandatory PIC procedures and implementation of mandatory transit licenses, and extending the ban on 13.6 kg HCFC disposable cylinders to also cover 13.6 kg HFC disposable cylinders by 1 January 2024 (UNEP) (US $10,000);

(b) *Capacity building for customs and the servicing sector*: coordination between the NOC and customs, updating the training manual, and training 30 customs officers and inspectors; updating the technician training curriculum and standards, training 65 RAC technicians, and associated monitoring and reporting (UNEP) (US $20,000);

(c) *Equipment support for training centres and servicing workshops*: provision of equipment for one training center, four RAC servicing workshops, and national consultancy to support the training activities (UNDP) (US $45,000); and

(d) *Project coordination and monitoring*: monitoring and reporting activities (including safeguards, gender equality and overall risk management) and hiring a technical consultant to assist with procuring equipment for RAC training centers and RAC servicing workshops (UNDP) (US $6,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

29. The Secretariat reviewed stage I of the KIP for Kyrgyzstan in light of the existing policies and guidelines of the Multilateral Fund, including decision 92/37,[13] stage II of the HPMP, and the 2023-2025 business plan of the Multilateral Fund.

HFC consumption

30. The Secretariat noted that the country's 2022 consumption was already above its established HFC baseline and sought to better understand the trend in HFC consumption during the baseline years, including the growth in consumption in 2022. UNDP emphasized that it found no evidence of stockpiling of HFCs based on the bottom-up survey and analysis used to determine 2022 sectoral consumption and its correlation with the top-down import data; rather, UNDP attributed the increase in 2022 with renewed economic activity post-COVID and associated increase in refrigeration maintenance activity that had been delayed and reinitiated. UNDP further considered that HFC consumption will stabilize back to pre-2022 levels in 2023 following the one-time post-COVID increase in 2022. The Secretariat noted that while consumption grew considerably in 2022 relative to the baseline years, there was also considerable economic growth in those years.[14] Moreover, part of the increased consumption of R-404A may be due to increased assembly and installation of new R-404A-based commercial and industrial refrigeration systems; however, data on consumption associated with such assembly and installation in 2020 and 2021 was not available.

[13] Level and modalities of funding for HFC phase-down in the refrigeration servicing sector.
[14] The country's 2022 gross domestic product was 40 and 24 per cent higher than in 2020 and 2021, respectively.

31. The Secretariat also noted that the equipment leakage rate inferred from the estimated inventory of HFC-based equipment and the associated subsector HFC consumption differed from the assumed leakage rates included in the project submission that had been taken from UNDP's guidance note on assessing greenhouse gas emissions from refrigerants use in UNDP operations.[15] Moreover, the allocation of HFC consumption to certain subsectors (e.g., HFC-134a to residential AC) appeared unusual. Understanding HFC sectoral consumption is a new challenge and while implementing agencies and Article 5 countries are doing their best to develop that understanding, it is a learning process, and some time may be needed for Article 5 countries to develop a comprehensive understanding of HFC consumption across different subsectors. To further assist Kyrgyzstan, it was agreed that further analysis of HFC consumption would be included in the KIP activity to update the HFC control framework.

Policy, regulatory and institutional frameworks

HFC licensing and quota system

32. Decision 87/50(g) requests the bilateral and implementing agencies, when submitting stage I of the KIP, to include confirmation that the country has an established and enforceable national system of licensing and quotas for monitoring HFC imports/exports in place, consistent with decision 63/17. Accordingly, the Government of Kyrgyzstan has established a licensing system for HFCs and blends on 30 March 2021. The 2024 quota will set at the Montreal Protocol target of 450,382 CO_2-eq tonnes.

33. Noting that the HPMP was completed and that the country's HCFC target up to 2025 is 0.10 ODP tonnes, it was agreed to follow an approach similar to that agreed in decision 85/22(a), namely, that the next verification report to be submitted under the KIP would address both HFC and HCFC consumption, noting that in line with past practice, verifications for low-volume consuming (LVC) countries are selected in line with decision 61/46(c). In the unlikely event of non-compliance by the Government with its HCFC Agreement with the Executive Committee, relevant actions to be taken will be considered by the Executive Committee.

Policy and regulatory frameworks

34. Regarding the timeline for the introduction of mandatory PIC procedures, UNDP noted that Kyrgyzstan currently uses the informal PIC (iPIC) procedures in refrigerant trade with a major Article 5 exporter, and that one member of the Eurasian Economic Union (EAEU) had not yet ratified the Kigali Amendment. Given that Kyrgyzstan could only adopt mandatory PIC procedures once the EAEU had done so, it was agreed that a timeline of 1 January 2025 would be more realistic, while noting that Kyrgyzstan would continue to use iPIC procedures should this timeline be delayed within the EAEU.

35. A variety of additional regulatory measures were proposed as part of the activities to update the HFC regulatory framework, including bans on certain equipment; a prohibition of trade in used HFC-containing equipment in the wholesale and retail markets in the country; and strengthened refrigerant management regulations, including developing instructions on the management of used HFCs and HFC-containing equipment, registration of large RAC installations, updating existing equipment logbooks (combined with mandatory leakage checking and repair), and qualification requirements imposed on technicians servicing certain equipment. However, implementation of such additional measures would inter alia depend on progress made in the HFC phase-down, the availability of alternate technologies and refrigerants, the price of such alternative technologies and refrigerants, and other factors. Accordingly, it was agreed that:

[15] https://www.undp.org/sites/g/files/zskgke326/files/2022-07/Refrigerants%20methodology%20version%20July%202022.pdf

(a) The Government would continue to explore the possibility of establishing a ban on HFC-134a-based domestic refrigerators and HFC-based stand-alone commercial refrigeration equipment and to report on progress thereon in the country's tranche progress reports;

(b) UNDP would include information on progress the country had made in prohibiting trade in used HFC-containing equipment and developing instructions on management of used HFCs and HFC-containing equipment in tranche implementation reports submitted under the KIP; and

(c) The Government would implement strengthened refrigerant management regulations by 1 January 2029.

36. Regarding the management of used HFCs and HFC-containing equipment, and possible measures to strengthen refrigerant management regulations, UNEP noted that the country intends to submit to the 94th meeting a proposal for the preparation of a national inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction, in line with decision 91/66. The Secretariat considers such a project, to be implemented in parallel with stage I of the KIP, would assist the country establish end-of-life management capacity for used or unwanted controlled substances.

37. In 2022 the Government introduced exemptions to the application of import duties and VAT for low-GWP-based RACHP technologies, and labelling requirements covering imported HFC chemicals and HFC-containing products. Further to a clarification that the exemptions applied to RACHP equipment meeting European Union energy efficiency classifications "A" and "B," and using refrigerants with a GWP of less than 2,000 CO_2-eq tonnes, it was agreed that under the activity to update the HFC control framework, assistance would be provided to enable the Government to consider different GWP limits based on the application (e.g., 150 or below for domestic refrigeration could be considered for early adoption, while other refrigeration applications might require additional time to meet that threshold).

Technical and cost-related issues

38. Notwithstanding that servicing MAC represents the largest use of HFCs in metric tonnes in the country, stage I does not address this sector given opportunities to address consumption of higher GWP HFCs consumed in the commercial and industrial refrigeration sector, the high leakage rates of equipment in those sectors, and the need to prioritize activities given the limited funding available. Moreover, additional time was needed to better understand how to expand training and certification for the sector. It was agreed to include planning for those interventions as part of the update to the HFC control framework so that activities to address the MAC sector can be addressed in stage II.

39. Kyrgyzstan did not distinguish but instead included consumption associated with the first charge of assembled refrigeration equipment as part of the country's reported servicing sector consumption. Data on the subsector is limited: in 2022, approximately 11.56 mt of HFCs (predominantly R-404A and also some R-507A, representing approximately 5 per cent of the country's HFC consumption) were consumed to charge 859 newly assembled and installed commercial and industrial refrigeration systems; data for earlier years was not available. UNDP noted that the country may wish to address this subsector should the Executive Committee decide to make funding available for the subsector. Similarly, the country may wish to phase out its consumption of HFCs contained in pre-blended polyols at eight foam manufacturing enterprises if the Executive Committee decides on policies to address such imports.

40. At the 90th meeting, UNDP reported that six R-290-based refrigeration units procured under the demonstration component of the HPMP were installed in 2021 and the NOC had been monitoring their performance; the units performed well, including by maintaining stable refrigeration temperatures even in

extreme weather conditions. In addition, six R-290 refrigerated display cases had been procured but had not yet been installed at end users; accordingly, information on their performance had not yet been available.[16] UNDP informed that while the R-290 refrigeration units continued to perform well, the R-290 display cases did not. Given that the proposed activity to identify and develop demonstration project concepts would more properly be considered a project preparation activity and was not eligible under the KIP, it was agreed that the associated US $8,000 would be used for technical assistance to assess the reasons for the poor performance of the equipment and identify optimal solutions.

Total project cost

41. In line with decision 92/37(b)(ii), the total cost of stage I of the KIP is US $190,000. This funding will enable the country to meet the 10 per cent Montreal Protocol HFC reduction target by 2029.

Table 4. Agreed cost of activities to be implemented in stage I of the KIP for Kyrgyzstan (US $)

Programme components/activities	Budget (US $)
Policy and regulatory mechanisms (UNEP)	
Regulatory updates and strengthening the HFC control framework	20,000
Capacity building for customs and the servicing sector (UNEP)	
Enhanced coordination between NOC and customs, updating of training curricula and training of customs officers	15,000
Updating technician training curricula and standards, and training of technicians, and technical assistance to the RAC association	20,000
Monitoring and reporting	5,000
Technical capacity building (UNDP)	
Equipping two RAC training centers	34,000
CO_2 training set-up for one training center	20,000
National consultancy to support training activities	20,000
Equipping eight RAC servicing workshops	36,000
Technical assistance for R-290 refrigerated display units	8,000
Monitoring, reporting and coordination	12,000
Total	**190,000**
Total UNEP	**60,000**
Total UNDP	**130,000**

42. The proposed scheduling of tranches did not comply with decision 62/17 as the second and final tranche would be submitted in 2026 rather than in the last year of the Agreement. However, Kyrgyzstan is an LVC country that had already completed the final stage of its HPMP. Other LVC countries with concurrent HPMPs and KIPs with tranches in the final year of the respective Agreement would have the benefit of being able to reduce the administrative burden associated with their final tranche submission by coordinating their monitoring and reporting; Kyrgyzstan would not have that benefit. Accordingly, and on an exceptional basis, the Secretariat recommends the proposed tranche schedule.

Impact on the climate

43. The activities planned by Kyrgyzstan, including its efforts to promote low-GWP alternatives, training of technicians in good servicing practice as well as recovery and reuse of refrigerants, indicate that the implementation of stage I of the KIP will reduce the emission of HFCs into the atmosphere, resulting in climate benefits. A calculation of the impact on the climate of the activities in the KIP indicates that Kyrgyzstan will achieve an annual emission reduction of 45,038 CO_2-eq tonnes of HFCs when the final target in stage I of the KIP is achieved, calculated based on the difference between the HFC baseline and the final target set in stage I.

[16] UNEP/OzL.Pro/ExCom/90/9

Sustainability of the HFC phase-down and assessment of risks

44. UNDP provided information on the assessment of project implementation risks, which included the potential for illegal trade, possible lack of availability of low-GWP refrigerants and technology, possible delays in project implementation, and the effects of climate change. The activities under the KIP to strengthen the capacity of customs, including strengthened coordination, training, implementation of PIC procedures, and the 1 January 2024 ban on disposable cylinders will enable the country to detect and deter illegal trade. The commitment and activities under stage I of the KIP will be sustained over time with the implementation and strengthening of the licensing and quota system for HFCs; continuous consultations with importers and other stakeholders on promoting the adoption of low-GWP alternatives to HFCs; implementation of regulations to reduce import of HFC-based equipment in targeted high-volume sectors and the continuous monitoring of all implemented activities. Possible forthcoming bans on HFC-134a-based domestic refrigerators and HFC-based stand-alone commercial refrigeration equipment, restrictions on trade in used HFC-containing equipment, and strengthened refrigerant management regulations will help ensure the sustainability of the HFC phase-down. The timely implementation of activities, and the commitment and capability of key partners, will be ensured by the proven project management capability provided by the NOC and developing capability of its partners, all supported by a consistent, long-standing policy commitment from the Government.

2023-2025 business plan of the Multilateral Fund

45. UNDP and UNEP are requesting US $190,000, plus agency support costs, for the implementation of stage I of the KIP for Kyrgyzstan. The total value of US $84,490, including agency support costs, requested for the period of 2023–2025, is US $38,687 above the amount in the business plan.

Draft Agreement

46. A draft Agreement between the Government of Kyrgyzstan and the Executive Committee for stage I of the KIP has not been prepared as the Agreement template is still under consideration by the Executive Committee.

47. If the Executive Committee so wishes, the funds for stage I of the KIP for Kyrgyzstan could be approved in principle, and funds for the first tranche could be approved on the understanding that the Agreement would be prepared and presented at a future meeting, before the submission of the second tranche, and once the Agreement template has been approved.

RECOMMENDATION

48. The Executive Committee may wish to consider:

(a) Approving, in principle, stage I of the Kigali HFC implementation plan (KIP) for Kyrgyzstan for the period 2023-2029 to reduce HFC consumption by 10 per cent of the country's baseline in 2029, in the amount of US $209,500, consisting of US $130,000, plus agency support costs of US $11,700, for UNDP and US $60,000, plus agency support costs of US $7,800, for UNEP, as reflected in the schedule contained in annex I of the present document;

(b) Noting that the schedule of tranches contained in annex I of the present document was approved on an exceptional basis as Kyrgyzstan's HFC consumption in the servicing sector in the baseline years was below 360 metric tonnes and the country had already completed its HCFC phase-out management plan;

(c) Further noting that the next verification report to be submitted under the country's KIP would include verification of HFC and HCFC consumption, and that in the unlikely event of non-compliance by the Government with its HCFC Agreement with the Executive Committee, relevant actions to be taken will be considered by the Executive Committee;

(d) Approving the first tranche of stage I of the KIP for Kyrgyzstan, and the corresponding tranche implementation plan, in the amount of US $89,490, consisting of US $51,000, plus agency support costs of US $4,590, for UNDP and US $30,000, plus agency support costs of US $3,900, for UNEP; and

(e) Requesting the Government of Kyrgyzstan, UNDP, UNEP and the Secretariat to finalize the draft Agreement between the Government of Kyrgyzstan and the Executive Committee for the reduction in consumption of HFCs, including the information contained in the annex referred to in subparagraph (a) above, and to submit it to a future meeting once the KIP Agreement template has been approved by the Executive Committee.

PILOT PROJECT TO MAINTAIN AND/OR ENHANCE THE ENERGY EFFICIENCY OF REPLACEMENT TECHNOLOGIES AND EQUIPMENT IN THE CONTEXT OF HFC PHASE-DOWN (NON-INVESTMENT ACTIVITIES)

PROJECT DESCRIPTION

Background

49. On behalf of the Government of Kyrgyzstan, UNEP has submitted, in line with decision 91/65, a request for a pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities), in the amount of US $396,000, plus agency support cost of US $51,480, as originally submitted.[17]

Status of implementation of energy efficiency-related activities funded by the Multilateral Fund

50. At the 92nd meeting, US $100,000 was approved for UNEP for additional activities to maintain energy efficiency for the servicing sector under decision 89/6(b), which included two components: improving the coordination and collaboration between stakeholders, the relevant energy authorities, and the NOC through capacity-building on promoting energy efficiency and the use of low-GWP refrigerants in RACHP equipment; and implementing outreach and awareness activities to the public and consumers on energy efficient, low-GWP-based RACHP equipment. Table 5 summarizes the activities and associated funding approved at the 92nd meeting.

Table 5. Activities to maintain energy efficiency for the servicing sector for Kyrgyzstan approved at the 92nd meeting

Activity	Sub-activity description	Budget (US $)
Capacity building of key staff and stakeholders	Coordination and collaboration with relevant agencies through a study tour and capacity-building workshops	25,000
	Training of customs officers	8,000
	Update of training materials and training of RAC trainers and technicians	16,000
	Information session	3,000
	Activity total	**52,000**
Outreach and impact assessment	Development and dissemination of outreach materials	25,000
	Awareness-raising workshop for importers	8,000
	Consumer behaviour study	15,000
	Activity total	**48,000**

51. As of October 2023, of the US $100,000 approved at the 92nd meeting, funds have yet to be disbursed given that the small-scale funding agreement between the Government and UNEP was recently signed in September 2023.

Energy efficiency pilot project

52. Information on the country's status of ratification to the Kigali Amendment, the policy, regulatory and institutional frameworks for the implementation of the Montreal Protocol, HFC consumption and its distribution by sector, the established HFC baseline, and relevant activities from the request for stage I of the KIP and the first tranche submitted to the current meeting, is available in paragraphs 1 to 47 of the present document.

[17] The project proposal has originally been included in the KIP. See paragraph 1 above.

Project objective

53. The pilot project would develop minimum energy performance standards (MEPS) and energy efficiency labelling for small RAC systems up to 3 kW and for domestic RAC equipment, provide capacity-building to support the enforcement of the MEPS, and enhance coordination among national stakeholders to promote energy-efficient and low-GWP alternatives in the RAC sector.

Proposed activities

54. The pilot project recognizes that MEPS will help shift the market to more energy-efficient RAC equipment, and that energy-efficiency labelling will help consumers make informed decisions about the products they purchase, which will be complemented by a communication and outreach strategy. Capacity building will help ensure that customs, importers, RAC technicians, wholesalers and end users are aware of and comply with the MEPS and labelling requirements, and that equipment is maintained so that it can operate in an energy-efficient manner. Accordingly, the pilot project comprises five main components:

(a) *Pilot MEPS for small RAC systems up to 3 kW and domestic RAC equipment*: desk study on existing MEPS and sustainable public procurement in other countries by reviewing relevant publications such as those by United for Energy (U4E) (US $20,000); consultations on MEPS with stakeholders from Government agencies, local businesses, and consumers using a combination of surveys, online consultations and meetings (US $10,000); feasibility study/market assessment on MEPS and public procurement policies including data collection on the existing equipment stock and sales (considering equipment capacity, energy-efficiency rating, inverter or fixed speed, refrigerant type and charge, and other factors) (US $20,000); and supporting policies and legislation for MEPS, including defining MEPS energy-efficiency levels considering the recommendations of the U4E model regulations (analysis of global market trends, list of available technologies), and sustainable public procurement, including development of criteria for voluntary adoption and for integration into public procurement policies (US $30,000);

(b) *Pilot energy-efficiency labelling for small RAC systems up to 3 kW and domestic RAC equipment*: desk study on existing energy-efficiency labelling in other countries and review relevant publications such as U4E publications on ensuring compliance with energy labels, labelling guidance (US $20,000); consultations on energy-efficiency labelling with stakeholders from Government agencies, local businesses, and consumers using a combination of surveys, online consultations, and meetings (US $10,000); feasibility study/impact assessment on energy-efficiency labelling schemes in other countries including data collection on energy efficiency levels in the market compared with regional and international data, assessment of regional and international regulations and market trends (US $20,000), supporting policies and legislation for energy-efficiency labelling and defining such labelling levels considering the recommendations of the U4E model regulations (US $30,000);

(c) *Capacity building*: training of customs, importers, suppliers, wholesalers on MEPS, energy-efficiency labelling and sustainable public procurement policies (US $16,000), training of RAC service technicians on good servicing practices for energy efficiency (US $32,000), purchase of four sets of training equipment that could be handed to service workshops after completion of the training (US $40,000), and training of the competent entity to build capacities for the compliance mechanism, conformity assessment and reporting mechanism (US $16,000);

(d) *Stakeholder communication, awareness and outreach (in English, Kyrgyz, and Russian)*: develop and disseminate materials on energy efficiency such as a quick guide on servicing practices that promote energy-efficient operation of RAC systems (e.g., measuring system parameters, ensuring correct refrigerant charge, key maintenance operations) targeting RAC technicians (US $8,000); develop and distribute awareness-raising posters and brochures on MEPS, energy-efficiency labelling, sustainable public procurement targeting suppliers, vendors, and consumers (US $8,000); develop factsheets on how to operate small RAC equipment in an energy-efficient manner (defrosting, cleaning, predictive maintenance, measuring electricity consumption) for consumers and end users (US $8,000); promote cooperation among stakeholders from Government agencies, local businesses and consumers through a combination of surveys, online consultations, webinars, and meetings (US $24,000); and coordinate several communication and information sharing tools through a dedicated website, social media group, hotline on MEPS, energy-efficiency labelling and sustainable public procurement (US $24,000); and

(e) *Project management, monitoring and reporting:* hiring a project consultant to coordinate the activities of the pilot project including the day-to-day project management such as contracts for national experts and service providers (US $36,000), arranging logistics for project activities including studies, local travel, and meetings for stakeholders (US $12,000), and preparing project reports on progress and financial reports as part of monitoring and reporting (US $12,000).

Gender policy implementation

55. In line with decision 92/40(b), the pilot project includes the mandatory requirements and performance indicators contained in annex XXII to document UNEP/OzL.Pro/ExCom/92/56 that will be incorporated into the project implementation.

Coordination of energy efficiency activities funded outside the Multilateral Fund

56. In 2020, UNDP completed a project on regulatory frameworks to promote energy efficiency in countries of the EAEU, which included the development and introduction of modern standards on energy efficiency for inter alia household appliances and engineering equipment of buildings; establishment of laboratories' testing system and implementation of measures to protect the market from low-efficiency equipment; and inter alia awareness raising in consumers market on options and benefits of energy-efficient technologies.[18] The Secretariat sought clarification on the key outputs of the EAEU project in Kyrgyzstan, and how the proposed activities would complement and not duplicate the project outputs. As further detailed in annex II to the present document, UNDP clarified that the activities in Kyrgyzstan under the project focused on access to renewable energy and that there was no duplication with the activities planned under the pilot energy efficiency project to be funded under the Multilateral Fund.

Total cost of the pilot project

57. The total cost of the pilot project is US $396,000, as originally submitted. The project is expected to start in January 2024 and be completed by December 2026.

[18] https://www.undp.org/kyrgyzstan/projects/regulatory-framework-promote-energy-efficiency-countries-eurasian-economic-union

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

58. The Secretariat reviewed the project proposal in light of decisions 89/6 and 91/65.

59. In line with decision 91/65, UNEP confirmed that the NOC will coordinate with relevant energy-efficiency authorities and national standards bodies to facilitate consideration of refrigerant transition when developing energy-efficiency standards in the relevant sectors/applications; that, if Kyrgyzstan has mobilized or are to mobilize funding from sources other than the Multilateral Fund for energy-efficiency components when phasing down HFCs, the project will not result in the duplication of activities among those funded by the Multilateral Fund and those funded from other sources; that the information on project progress, results and key learning will be made available, as appropriate; and that the date of completion of the project will be set as no more than 36 months after the date of approval by the Executive Committee and a detailed project report will be submitted to the Executive Committee within six months of the date of completion of the project.

60. The Secretariat sought to better understand whether the country had MEPS, noting that in line with decision 91/65(b)(vi) if no MEPS exist, the country should consider priority projects in the servicing sector or that support the development of MEPS and initial awareness and capacity-building initiatives for their enforcement on the understanding that the conditions referred to in the decision would apply. Moreover, given the dependence of Kyrgyzstan on imported equipment, particularly from countries in the region that are members of the EAEU, and the size of Kyrgyzstan's RACHP market relative to that of other EAEU members, the Secretariat sought to better understand how MEPS for commodity equipment like small RAC systems up to 3 kW and domestic RAC equipment would be implemented for the country if other EAEU countries had different MEPS and timelines for the development of those MEPS. The Secretariat also sought to better understand how the proposed activities would build on and not duplicate those to be undertaken under the project approved under decision 89/6 at the 92nd meeting, and noted the scope of the activities proposed and the level of funding requested for the pilot project.

61. At the 92nd meeting, UNEP had indicated that countries in the EAEU did not have MEPS, nor was this a topic of coordination within the EAEU.[19] However, in 2019 the EAEU technical regulation (TR) 048/2019 on requirements for energy efficiency of energy-consuming devices was adopted, which applies to household refrigerating appliances (refrigerators, freezers, and combinations thereof) with a nominal voltage of up to 250 V and that have a useful volume of not more than 1,500 liters, electrical air-conditioners with a cooling/heating power not exceeding 12 kW (3.4 tonnes of refrigeration), and to electrical room fans with a power not exceeding 125 W, except for AC units using a different heat exchange medium than air. On 15 April 2022 the Council of the EAEU postponed the entry into force of TR 048/2019 to 1 September 2025.

62. Accordingly, it was agreed to reformulate the project to focus the development of MEPS and energy-efficiency labelling on RAC equipment up to 3 kW, which corresponds to a wider range of equipment than covered by TR 048/2019, such as small cold rooms for fruit and vegetable storage, milk and meat coolers, and refrigerated transport, and to include a component on building capacity in the country to monitor and enforce planned and the existing MEPS, i.e., TR 048/2019, including by setting up a competent authority to undertake conformity assessment, market inspections, establishing a reporting mechanism and product registration system to monitor equipment place on the market; and establishing an agreement with a foreign energy efficiency center to test selected types of equipment, given that establishing such a testing center in Kyrgyzstan would be expensive and difficult to sustain; and ensuring that MEPS and labelling requirements established under the pilot project are harmonized with those under the EAEU. In addition, the Secretariat and UNEP had detailed discussions on how activities and costs could

[19] Paragraph 14 of document UNEP/OzL.Pro/ExCom/92/30.

be rationalized given activities being undertaken under the project approved under decision 89/6 at the 92nd meeting and under the KIP, resulting in the following agreed adjustments:

Table 6. Agreed activities and costs for the pilot project on energy efficiency

Activity	Sub-activity description	Budget (US $)
Preliminary assessments and data collection	Market assessment analyzing the type of equipment that is being imported, assembled and used in the market, including equipment capacity, energy efficiency rating, and refrigerant	15,000
	Comparative assessment of energy-efficiency levels with regional and international market trends	5,000
Supporting policies / legislation and testing	Supporting policies and legislation for MEPS and energy efficiency labelling for refrigeration systems up to 3 kW, including defining MEPS and energy efficiency labelling levels*	25,000
	Setting up the competent authority and preparing the compliance mechanism plan of action for conducting the conformity assessment and market inspections, and for establishing the reporting mechanism and product registration system to monitor equipment placed on the market (also supporting the enforcement of TR 048/2019)*	32,000
	Harmonization of MEPS and labelling requirements with EAEU to enable subsequent adoption as EAUE technical regulations*	8,000
	Agreement for energy efficiency testing abroad for selected types of equipment*	5,000
Capacity building	Training and technical assistance for the competent authority to prepare the compliance mechanism plan, monitoring mechanism, and product registration system*	16,000
	Training of customs officers, environmental inspectors, importers, wholesalers on MEPS and energy efficiency labelling*	16,000
	Training of refrigeration service technicians on good servicing practices for energy-efficiency, building on basic training conducted in 2024 under the additional activities funded under decision 89/6*	8,000
	Purchase of three sets of training equipment for practical exercises demonstrating the impact of poor servicing and maintenance practices on energy efficiency. The training equipment will be handed over the three national educational bodies that trained the highest number of technicians (Ecoholod, Techno Training Center, and Kyrgyz-Uzbek University) after completion of the project	30,000
Stakeholder communication, awareness and outreach	Stakeholder consultations on MEPS and energy efficiency labelling with Ministry of Environment, Ministry of Energy, NOC, standards body, importers/suppliers, wholesalers, customs, end users, and consumers*	8,000
	Development of outreach and awareness-raising materials (posters, brochures, quick guides, factsheets) on energy efficiency, MEPS, labelling, product registration, and good servicing practices to maintain or enhance energy efficiency in English, Kyrgyz and Russian*	20,000
	Development of communication and information sharing tools through a dedicated website, social media group, and hotline on MEPS and energy efficiency labelling in English, Kyrgyz and Russian	18,000
Total		**206,000**

* To be undertaken in 2025-2026, after the completion of the additional activities for the introduction of alternatives to HCFCs with low- or zero GWP and for maintaining energy efficiency in the refrigeration servicing sector in Kyrgyzstan approved at the 92nd meeting under decision 89/6

Agreed cost of the pilot project

63. The agreed cost of the pilot project is US $206,000, plus agency support costs.

Sustainability of the pilot project and assessment of risks

64. The pilot project includes meaningful activities to build the capacity of Government to develop and enforce MEPS for a specific type of equipment; to strengthen the capacity of technician training centres to train technicians on the importance of good servicing practices on energy efficiency, and to build awareness on the benefits of energy efficient RAC equipment, including with customers and end users through the development of energy-efficiency labels. It is not clear how effectively the existing MEPS, TR 048/2019, was enforced. Planned activities will strengthen the enforcement capacity in the country. At the same time, preventing the import of equipment that does not meet the existing or planned MEPS will be an enduring challenge. The Secretariat considers it likely that the development and enforcement of MEPS will enhance the sustainability of the country's HFC phase-down; however, there is a risk that the HCFC phase-out and HFC phase-down in other countries could result in used, inefficient equipment that does not meet the country's MEPS being dumped in the country. Continued training of customs officers, awareness-raising, and other activities will likely be needed after the completion of the project to mitigate that risk.

65. As the country is dependent on imports of equipment, and has a negligible influence on international market developments, the ability of the country to import energy-efficient equipment depends in part on the choices of manufacturers in other countries. Similarly, the development of additional standards and labelling requirements in the EAEU will likely substantially influence the availability of energy efficient RAC equipment in the market. As such, efforts in other countries in the EAEU to improve energy efficiency of RAC equipment are likely to also benefit Kyrgyzstan.

RECOMMENDATION

66. The Executive Committee may wish to consider:

(a) Approving the pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities) for Kyrgyzstan, in the amount of US $206,000, plus agency support costs of US $26,780 for UNEP, noting:

(i) That the Government of Kyrgyzstan has committed to the conditions referred to in decision 91/65(b)(iv)b. to b(iv)d.; and

(ii) That the project would be operationally completed no later than 31 December 2026 and a detailed project report would be submitted to the Executive Committee within six months of the date of completion of the project.

Annex I

SCHEDULE OF HFC PHASE-DOWN AND HCFC PHASE-OUT COMMITMENTS AND FUNDING TRANCHES UNDER THE KIGALI HFC IMPLEMENTATION PLAN AND THE HCFC PHASE-OUT MANAGEMENT PLAN FOR KYRGYZSTAN

Kigali HFC implementation plan (stage I)

Row	Particulars	2023	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO_2-eq tonnes)	n/a	450,382	450,382	450,382	450,382	450,382	405,344	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO_2-eq tonnes)	n/a	450,382	450,382	450,382	450,382	450,382	405,344	n/a
2.1	Lead IA (UNDP) agreed funding (US $)	51,000	0	0	79,000	0	0	0	**130,000**
2.2	Support costs for Lead IA (US $)	4,590	0	0	7,110	0	0	0	**11,700**
2.3	Cooperating IA (UNEP) agreed funding (US $)	30,000	0	0	30,000	0	0	0	**60,000**
2.4	Support costs for Cooperating IA (US $)	3,900	0	0	3,900	0	0	0	**7,800**
3.1	Total agreed funding (US $)	81,000	0	0	109,000	0	0	0	**190,000**
3.2	Total support costs (US $)	8,490	0	0	11,010	0	0	0	**19,500**
3.3	Total agreed costs (US $)	89,490	0	0	120,010	0	0	0	**209,500**

HCFC phase-out management plan (stages I and II)

Row	Particulars	2023	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	2.67	2.67	1.33	0.00	0.00	0.00	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	0.10	0.10	0.10	0.00	0.00	0.00	0.00	n/a

Annex II

OUTCOMES OF THE UNDP PROJECT: REGULATORY FRAMEWORK TO PROMOTE ENERGY EFFICIENCY IN COUNTRIES OF THE EURASIAN ECONOMIC UNION

Background

1. The overarching goal of the regional project was to reduce emissions of greenhouse gases (GHG) by promoting energy efficiency in the countries of the Eurasian Economic Union (EAEU), namely: Armenia, Belarus, Kazakhstan and Kyrgyzstan. The project aimed to strengthen the national systems for standardization of energy-efficient appliances through facilitating harmonization of test procedures, standards and labels among EAEU countries. The project focused largely on capacity development and assisting governments, standardization institutions, manufacturing, distributing, retail, consumer and environmental stakeholders in the EAEU region to implement the most cost-effective energy-efficiency measures available.[1]

2. The project budget covered country components for Armenia and Kyrgyzstan, as well as the regional component for all four participating countries, to develop the following outputs:

(a) Development and introduction of modern standards on energy efficiency for lighting, household appliances and engineering equipment of buildings;

(b) Establishment of laboratories' testing system and implementation of measures to protect the market from low-efficiency equipment; and

(c) Awareness-raising for consumers on options and benefits of energy-efficient technologies, and assessment of GHG emissions reduction.

Outputs for Kyrgyzstan

3. Under the project, in 2019, Kyrgyzstan achieved the following: one legislation on renewable energy was adopted; trainings for 274 personnel in small and medium-sized enterprises (SMEs) took place; sixty-four were trained (17 women) on various green energy technologies; training on solar energy for 210 children at the Jetigen International children camp took place; discussions were conducted among stakeholders (RESCO energy providers among others) for introducing the Green Energy Access Platform and landscape analysis to select the most appropriate business partners; Bailyk Finance and Kompanion Bank were identified as main collaborators for the energy access fund; and solar hot water systems were installed in three public buildings: "Ak Shoola" public school in Jel-Aryk, a homeless children facility in Bishkek, and a facility for elderly and disabled people in Serafimvka.

4. The project, in turn led to the training of further on green energy technology and additional SMEs were supported (Texas Roadside Café and Health Committee of Svetlaya Poliyana). Aiyl Bank was identified as an additional collaborator for the energy access fund. Another eight public buildings were equipped with sustainable photovoltaic and heating systems. Further accessibility to green energy through small-scale technologies for 7,920 households was made possible. In October 2020, the Government also approved one policy "On the conditions and procedure for the implementation of activities for the generation and supply of electricity using renewable energy sources." Seven policy recommendations are still in progress. It is hoped that the SMEs selected for opportunities for green energy financing will be identified by the end of 2023.

[1] https://www.undp.org/kyrgyzstan/projects/regulatory-framework-promote-energy-efficiency-countries-eurasian-economic-union