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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-sixth Meeting
Montreal, 26–30 May 2025
Item 9(d) of the provisional agenda¹

PROJECT PROPOSAL: GUINEA

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

Phase-down

- | | | | |
|---|--|----------------|-----------------------------|
| • | Kigali HFC implementation plan
(stage I, first tranche) | UNEP and UNIDO | Individual
consideration |
|---|--|----------------|-----------------------------|

¹ UNEP/OzL.Pro/ExCom/96/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Guinea

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

LATEST ARTICLE 7 DATA (Annex F)	Year: 2024	866.60 mt	1,836,016 CO ₂ -eq tonnes
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SECTORAL HFC CONSUMPTION DATA (CO ₂ -eq tonnes) AND ACTIVITIES									
	Aerosol	Foam	Fire-fighting	Air-conditioning and refrigeration				Solvent	Other
				Manufacturing			Servicing		
				Refrigeration	AC	Other			
Latest CP report (2024)							1,836,016		
KIP stage I activities as agreed (Y/N)	N	N	N	N	N	N	Y	N	N

AVERAGE 2020–2022 HFC CONSUMPTION IN SERVICING	*664.33 mt	1,343,386 CO ₂ -eq tonnes
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*Updated to 767.67 mt or 1,654,386 CO₂-eq tonnes in line with the revised 2020–2022 CP data submitted on 16 April 2025

BASELINE CONSUMPTION DATA (CO ₂ -eq tonnes)	2020	2021	2022	Average 2020–2022
HFC annual consumption	878,385	1,477,938	1,673,662	1,343,328
HCFC baseline (65%)				483,648
HFC baseline				1,826,976

HFC CONSUMPTION ELIGIBLE FOR FUNDING	
Starting point for sustained aggregate reductions	TBD
Previously approved HFC phase-down investment projects	no
Aggregate reductions from previously approved projects (CO ₂ -eq tonnes)	n/a

PROJECT DATA AS AGREED			2025*	2026	2027	2028	2029	Total
Consumption (CO ₂ -eq tonnes)	Montreal Protocol limits		1,826,976	1,826,976	1,826,976	1,826,976	1,644,278	n/a
	Maximum allowable		1,826,976	1,826,976	1,826,976	1,826,976	1,510,050	n/a
	Reductions from baseline (%)		0	0	0	0	17.3	n/a
Amounts recommended in principle (US \$)	UNEP	Project costs	222,400	0	210,000	0	67,600	500,000
		Support costs	28,912	0	27,300	0	8,788	65,000
	UNIDO	Project costs	189,000	0	120,000	0	16,000	325,000
		Support costs	13,230	0	8,400	0	1,120	22,750
	Total project costs		411,400	0	330,000	0	83,600	825,000
	Total support costs		42,142	0	35,700	0	9,908	87,750
	Total funds		453,542	0	365,700	0	93,508	912,750

*Recommended for approval at the present meeting

Reduction from remaining consumption eligible for funding in stage I (CO ₂ -eq tonnes)	316,926
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Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

1. The present document contains the following sections:
 - I. Summary of the proposal as submitted
 - II. Background: Status of implementation of the HCFC phase-out management plan and previous HFC-related activities
 - III. HFC consumption overview: HFC consumption levels, trends, and consumption by sector
 - IV. Stage I of the Kigali HFC implementation plan, as submitted: Regulatory framework, phase-down strategy, total stage cost, and implementation plan for the first tranche
 - V. Secretariat's comments, including the agreed cost of activities
 - VI. Recommendation

I. Summary of the proposal as submitted

2. On behalf of the Government of Guinea, UNEP 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 \$912,750, consisting of US \$500,000, plus agency support costs of US \$65,000, for UNEP, and US \$325,000, plus agency support costs of US \$22,750, for UNIDO, as originally submitted,² to meet the target of 17.3 per cent reduction from the country's HFC baseline consumption by 1 January 2029.

3. The first tranche of stage I of the KIP requested at this meeting amounts to US \$392,618, consisting of US \$217,250, plus agency support costs of US \$28,243, for UNEP and US \$137,500, plus agency support costs of US \$9,625, for UNIDO, as originally submitted, for the period of June 2025 to December 2027.

II. Background

Status of implementation of the HCFC phase-out management plan

4. Table 1 presents information on the HCFC phase-out management plan (HPMP) in Guinea as of April 2025.

Table 1. HPMP implementation status for Guinea

	Stage I*	Stage II
Meetings when HPMP was approved/updated	66 th (approved) 85 th (updated)	93 rd (approved)
Reduction from baseline	35% by 2020	100% by 2030
Total project cost (US \$)	530,000	420,000
Date of completion (actual/planned)	1 July 2022	1 January 2030

* At the 85th meeting, based on the results of the verification report submitted with the third and fourth tranches of stage I of the HPMP, the starting point for sustained aggregate reductions in HCFC consumption was revised from 22.6 to 7.51 ODP tonnes, and stage I funding was reduced from US \$647,000 to US \$332,500; the deduction of US \$117,000 was applied to stage I and US \$197,500 to stage II (decision 85/34(a)).

² As per the letter of 3 February 2025 from the Ministry of the Environment and Sustainable Development of Guinea to the Secretariat.

Status of implementation of previous HFC-related activities

5. Table 2 presents an overview of activities implemented in Guinea in the context of the Kigali Amendment that have been funded by the Multilateral Fund.

Table 2. Previously approved HFC-related activities in Guinea

Approval meeting	Project title	Implementing agency	Cost (US \$)	Date of completion
74 th	Survey of ODS alternatives	UNEP	109,890	Aug-2017
85 th	Enabling activities for HFC phase-down	UNEP	100,000	Dec-2022

III. HFC consumption overviewHFC consumption levels

6. Guinea only imports HFCs for use in the refrigeration servicing sector. The most consumed substances in 2024 were R-410A (40.5 per cent of total HFC consumption in CO₂-equivalent (CO₂-eq) tonnes), R-404A (23.0 per cent), HFC-134a (12.4 per cent), R-407C (8.5 per cent), and other HFCs (15.5 per cent). Table 3 presents the country's HFC consumption as reported to the Ozone Secretariat under Article 7 of the Montreal Protocol and the country's HFC baseline.

Table 3. HFC consumption Article 7 data (2020–2024) and HFC baseline for Guinea

HFC	GWP	2020	2021	2022*	2023	2024
Metric tonnes (mt)						
HFC-32	675	39.00	59.00	53.00	54.00	54.00
HFC-134a	1,430	77.00	356.00	133.00	148.00	163.20
R-404A	3,921.60	96.00	106.00	108.00	100.00	102.00
R-407A	2,107	0.00	0.00	0.00	35.00	38.50
R-407C	1,773.85	86.00	147.00	129.00	82.00	90.00
R-410A	2,087.5	102.00	121.00	381.00	331.00	364.90
R-422D	2,728.95	0.00	0.00	0.00	39.00	41.00
R-507A	3,985	0.00	0.00	0.00	12.00	13.00
Total (mt)		400.00	789.00	804.00	801.00	866.60
CO₂-eq tonnes						
HFC-32	675	26,325	39,825	35,775	36,450	36,450
HFC-134a	1,430	110,110	509,080	190,190	211,640	233,376
R-404A	3,921.60	376,474	415,690	423,533	392,160	400,003
R-407A	2,107	0	0	0	73,745	81,119
R-407C	1,773.85	152,551	260,756	228,827	145,456	159,647
R-410A	2,087.5	212,925	252,588	795,338	690,963	761,729
R-422D	2,728.95	0	0	0	106,429	111,887
R-507A	3,985	0	0	0	47,820	51,805
Total (CO₂-eq tonnes)		878,385	1,477,938	1,673,662	1,704,662	1,836,016
HFC baseline calculation (CO₂-eq tonnes)						
HFC average consumption in 2020–2022					1,343,328	
HCFC baseline (65%)					483,648	
HFC baseline					1,826,976	

*The calculated HFC consumption under Article 7 does not include 93 mt of unspecified substances reported in 2022

7. Guinea had initially reported provisional consumption data for 2020–2022, pending a survey conducted in 2023–2024. On 30 December 2024, based on survey results, the Government requested the Ozone Secretariat to revise the country's HFC baseline years data. Table 4 shows these revisions, including the adjustment of total HFC consumption in 2020 from 400 to 725 mt, and several smaller corrections made to 2021 and 2022 figures, due *inter alia* to some refrigerants not being recorded prior to the country's

adoption of the harmonized system (HS) codes in 2022, as well as to additional stakeholders included in the survey.

Table 4. Proposed revised HFC consumption data for Guinea based on survey results (2020–2024)

HFC	GWP	2020	2021	2022	2023	2024
Metric tonnes						
HFC-32	675	61.00	49.00	51.00	54.00	54.00
HFC-134a	1,430	125.00	181.00	128.00	148.00	163.20
R-404A	3,921.60	93.00	102.00	108.00	100.00	102.00
R-407A	2,107	30.00	38.00	32.00	35.00	38.50
R-407C	1,773.85	77.00	82.00	80.00	82.00	90.00
R-410A	2,087.5	286.00	298.00	310.00	331.00	364.90
R-422D	2,728.95	36.00	30.00	46.00	39.00	41.00
R-507A	3,985	17.00	18.00	25.00	12.00	13.00
Total (mt)		725.00	798.00	780.00	801.00	866.60
CO₂-eq tonnes						
HFC-32	675	41,175	33,075	34,425	36,450	36,450
HFC-134a	1,430	178,750	258,830	183,040	211,640	233,376
R-404A	3,921.60	364,709	400,003	423,533	392,160	400,003
R-407A	2,107	63,210	80,066	67,424	73,745	81,119
R-407C	1,773.85	136,586	145,456	141,908	145,456	159,647
R-410A	2,087.5	597,025	622,075	647,125	690,963	761,729
R-422D	2,728.95	98,242	81,869	125,532	106,429	111,887
R-507A	3,985	67,745	71,730	99,625	47,820	51,805
Total (CO₂-eq tonnes)		1,547,442	1,693,104	1,722,612	1,704,662	1,836,016
HFC baseline calculation (CO₂-eq tonnes)						
HFC average consumption in 2020–2022 based on proposed revised data					1,654,386	
HCFC baseline (65%)					483,648	
Estimated HFC baseline based on proposed revised data					2,138,034	

Country programme implementation report

8. The sectoral HFC consumption data provided by the Government of Guinea in its country programme (CP) implementation report for 2020–2023 is consistent with the data reported under Article 7 of the Montreal Protocol. The revised CP data for 2020 to 2022 were submitted on 16 April 2025.

HFC consumption trends

9. The growing trend in HFC consumption between 2020 and 2024 is attributed to gradual replacement of HCFCs by HFCs and to the importers' reaction to upcoming HFC control measures. Overall, HFCs account for about 70 per cent of refrigerant consumption in Guinea's refrigeration and air-conditioning (RAC) servicing sector. Alternatives with low global-warming potential (GWP) present in the local market include ammonia, R-290, R-600a and a small quantity of HFO-1234yf imported in 2023.

HFC consumption by sector

10. HFCs are mainly consumed for servicing in residential air-conditioning (AC) (39.2 per cent in mt and 34.9 per cent in CO₂-eq tonnes), followed by commercial refrigeration (18.6 per cent in mt and 24.6 per cent in CO₂-eq tonnes), commercial AC (19.9 per cent in mt and 16.8 per cent in CO₂-eq tonnes), and other subsectors, as shown in tables 5 and 6.

Table 5. HFC consumption in RAC servicing in Guinea in mt (2023)

Application	HFC-32	HFC-134a	R-404A	R-407A	R-407C	R-410A	R-422D	R-507A	Total	Share of total (%)
Refrigeration subsectors										
Domestic	0.00	28.42	0.00	0.00	0.00	0.00	0.00	0.00	28.42	3.5
Commercial	0.00	21.78	51.15	35.00	0.00	0.00	39.00	2.00	148.93	18.6
Industrial	0.00	21.52	48.85	0.00	0.00	0.00	0.00	10.00	80.37	10.0
Transport	0.00	21.28	0.00	0.00	0.00	0.00	0.00	0.00	21.28	2.7
Air-conditioning subsectors										
Residential	27.00	1.00	0.00	0.00	70.00	216.00	0.00	0.00	314.00	39.2
Commercial	27.00	5.00	0.00	0.00	12.00	115.00	0.00	0.00	159.00	19.9
Mobile	0.00	49.00	0.00	0.00	0.00	0.00	0.00	0.00	49.00	6.1
Total	54.00	148.00	100.00	35.00	82.00	331.00	39.00	12.00	801.00	100.0

Table 6. HFC consumption in RAC servicing in Guinea in CO₂-eq tonnes (2023)

Application	HFC-32	HFC-134a	R-404A	R-407A	R-407C	R-410A	R-422D	R-507A	Total	Share of total (%)
Refrigeration subsectors										
Domestic	0	40,641	0	0	0	0	0	0	40,641	2.4
Commercial	0	31,145	200,590	73,745	0	0	106,429	7,970	419,879	24.6
Industrial	0	30,774	191,570	0	0	0	0	39,850	262,194	15.4
Transport	0	30,430	0	0	0	0	0	0	30,430	1.8
Air-conditioning subsectors										
Residential	18,225	1,430	0	0	124,170	450,900	0	0	594,725	34.9
Commercial	18,225	7,150	0	0	21,286	240,063	0	0	286,724	16.8
Mobile	0	70,070	0	0	0	0	0	0	70,070	4.1
Total	36,450	211,640	392,160	73,745	145,456	690,963	106,429	47,820	1,704,662	100.0

Refrigeration and air-conditioning servicing sector

11. There are 4,748 technicians (360 or 7.6 per cent of them women) and 586 workshops consuming HFCs in Guinea; about 50 per cent of all technicians work in the informal sector. A certification scheme for handling flammable refrigerants, launched under stage II of the HPMP, will become mandatory in 2028, ensuring that contracts with government organizations can only be undertaken by qualified technicians. Stage I of the KIP proposes to build on this activity, focusing on the refrigeration and mobile air-conditioning (MAC) sectors and including female technicians.

12. One university offers a RAC bachelor's degree programme under the authority of the Ministry of Higher Education, Scientific Research and Innovation, and five vocational training institutes under the Ministry of Technical Education, Vocational Training, Employment and Labour provide technical training leading to the "brevet de technicien supérieur" diploma. In 2023, there were 44 students enrolled in the university programme and 316 technicians in training at the vocational institutes (21 per cent of them women). There are 14 RAC associations in Guinea, including one scientific association and 13 technicians' groups (one national, one for female technicians, and 11 regional), with a total of 3,493 members, or 72 per cent of all technicians.

Domestic, commercial, industrial and transport refrigeration servicing

13. There are an estimated 1.18 million domestic refrigeration units consuming HFC-134a in the country, including refrigerators, freezers, and water coolers. R-600a-based domestic refrigerators have also penetrated the market. Between 2021 and 2023, Guinea consumed around 180 mt of R-600a per year.

14. The commercial refrigeration consists of an estimated 33,236 stand-alone condensing units and centralized systems using HFC-134a, R-404A, R-407A, R-422D and small amounts of R-507A, together accounting for 24.6 per cent of total national HFC consumption in CO₂-eq tonnes, with stand-alone commercial refrigerators based on hydrocarbons (HCs) also present in the market. The appliances are mostly used in food processing enterprises, such as slaughterhouses, butcheries, supermarkets and large kitchens run by hotels, as well as hospital morgues. Regarding HFC use in the first charge of large commercial and industrial systems (local installation and assembly), Guinea plans to study this issue in detail at a later stage.

15. The industrial refrigeration sector consumes mainly HFC-134a, R-404A and R-507A. With an estimated 3,100 systems in operation, including chillers for cold stores and fisheries, the sector accounts for 15.4 per cent of national HFC consumption expressed in CO₂-eq tonnes. The fisheries sector also uses ammonia, both in vessels and in processing plants and cold stores; however, most of ammonia-based systems are designed and installed by foreign owners and contractors.

16. Transport refrigeration in Guinea only consumes 1.8 per cent of all HFCs, with a fleet of 5,880 HFC-134a-based refrigerated trucks used in the fish, dairy, poultry and canning industries. Most systems are HCFC-22-based, and no low-GWP technologies are available in the sector.

Residential and commercial air-conditioning servicing

17. Residential and commercial AC systems together account for 51.7 per cent of HFC consumption in CO₂-eq tonnes (34.9 and 16.8 per cent, respectively). R-410A is the most popular, followed by R-407C used as drop-in for HCFC systems, HFC-32, and HFC-134a. Most residential AC split units are imported from China, India, Japan, the United States, the European Union, and the United Arab Emirates. HFC-32-based residential AC split units, spare parts and refrigerant are available in the local market.

Mobile air-conditioning servicing

18. The MAC sector uses HFC-134a to serve about 115,355 vehicles a year, accounting for 4.1 per cent of national HFC consumption in CO₂-eq tonnes. Imported vehicles are usually second-hand, with built-in, HFC-based AC systems. MAC systems are frequently repaired using second-hand parts. Guinea recently started imports of vehicles using HFO-1234yf and consumed 1.2 mt of HFO-1234yf in 2023.

IV. Stage I of the Kigali HFC implementation plan as submitted

Institutional, policy and regulatory framework

19. The Ministry of the Environment and Sustainable Development oversees the implementation of the Montreal Protocol in Guinea, with the National Ozone Unit (NOU) managing obligations under the Protocol, including data reporting, licensing system operation, quota allocation, and project supervision. The National Ozone Committee, comprising representatives from various sectors, disseminates policies, monitors technologies, implements training programmes, maintains databases and supervises reporting. Other key stakeholders include the Directorate General of Customs, the Ministry of Trade, Industry, and Small and Medium-sized Enterprises, the Ministry for the Advancement of Women, Children and Vulnerable Persons, and the Guinean Institute of Standardization and Metrology.

20. In 2021, Guinea issued regulations for managing ozone-depleting substances (ODSs) and HFCs, introducing a licensing and quota system for HFCs. The first quotas were issued for 2024, with imports subject to authorization by the Ministries of Commerce and the Environment. In 2023, Guinea adopted the ECOWAS³ Common External Tariff 2022–2026, but codes for HFCs have yet to be included in the

³ The Economic Community of West African States (ECOWAS) is a key partner on trade, customs codes, energy-efficiency standards and labelling. Guinea is a suspended member.

SYDONIA system.⁴ The country lacks specific codes for the safe introduction of flammable and toxic technologies and energy performance standards. International codes in place ensure the safety of imported products, while training programmes safeguard local assembly and installation.

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

Overarching strategy

21. As submitted, stage I proposes to eliminate 316,926 CO₂-eq tonnes of HFCs, reducing the country's consumption by 17.3 per cent of the established baseline.

Proposed reductions

22. In UNEP's business-as-usual forecast, shown in table 7, the country's HFC consumption increases at an annual rate of 5.1 per cent, leading to non-compliance in 2025 based on the currently reported data, and in 2028 based on the revised data.

Table 7. HFC consumption forecast under the unconstrained scenario, Montreal Protocol limits, and proposed HFC reductions under stage I (CO₂-eq tonnes)

	2025	2026	2027	2028	2029
HFC consumption forecast annual growth rate of 5.1%*	1,905,081	2,012,167	2,124,150	2,241,281	2,363,822
Montreal Protocol HFC consumption limits	1,826,976	1,826,976	1,826,976	1,826,976	1,644,278
Proposed revised Montreal Protocol consumption limits	2,138,034	2,138,034	2,138,034	2,138,034	1,924,230
Proposed HFC consumption levels as submitted in KIP	1,826,976	1,826,976	1,826,976	1,826,976	1,510,050
Proposed reductions from the HFC baseline (%)	0	0	0	0	17.3

*Estimated in line with projected economic growth and including additional estimated consumption due to shifting away from HCFC-based equipment

Proposed activities

23. Activities in the servicing sector proposed for implementation under stage I and the first tranche and their cost breakdown are presented in table 8. The priority sectors will be those with the highest consumption of HFCs, i.e., residential AC and commercial/industrial refrigeration including fisheries, as well as sectors where low-GWP technologies will be promoted.

Table 8. Servicing sector activities and their costs in stage I and the first tranche of the KIP for Guinea (as submitted)

Activity	Agency	Cost (US \$)	
		Stage I	First tranche
Component 1: Regulatory framework and control mechanisms			
1.1 Establishment of an integrated e-licensing and quota system: Design and implement an e-licensing and quota system at all customs border points and provide related training to NOU personnel, customs officers and importers; develop guidelines for HFC imports; improve data quality and accuracy through updated customs codes and quarterly meetings to cross-check data and eliminate discrepancies in reporting	UNEP	55,000	35,000
1.2 Strengthening of record-keeping and reporting: Hold at least 1 yearly meeting with stakeholders and authorities to monitor the implementation of the licensing and quota system and provide guidance on HFC quota record-keeping; conduct annual visits to all 21 HFC importers to verify compliance with the record-keeping and reporting requirements, including post-visit analysis and follow-up; undertake a study on the identification and prevention of illegal	UNEP	55,000	25,000

⁴ Online collaboration platform for public and private administrations involved in customs clearance in Guinea.

Activity	Agency	Cost (US \$)	
		Stage I	First tranche
trade; and conduct a detailed survey of HFC consumption by substance and sector. (Following discussion, the proposed survey was replaced by a feasibility study for establishing a ban on the import of HFC-based domestic and stand-alone commercial refrigeration units by 31 December 2029)			
<i>1.3 Training of customs and other enforcement officers:</i> Train at least 250 customs and enforcement officers (increased to 350 upon discussion) in HFC-related regulations, control measures, and prevention of illegal HFC trade, with a 20 per cent target for women's participation	UNEP	60,000	25,000
Component 2: Capacity building			
<i>2.1 Strengthening the industry associations:</i> Support associations in promoting the enrollment of informal technicians and increasing their participation in training and capacity-building activities (12 meetings to reach 2,412 informal technicians, with a 40-50 per cent enrollment target)	UNEP	15,000	5,000
<i>2.2 Strengthening the women's technician refrigeration association:</i> Raise awareness among women working in the RAC sector and encourage their participation in the association (8 meetings for 360 women technicians)	UNEP	10,000	5,000
<i>2.3 Development of a code of practice and training curriculum:</i> Produce and disseminate standardized servicing procedures for MAC systems, with focus on promoting refrigerant recovery and recycling and safety issues regarding alternative technologies; and develop a training curriculum for the RAC and MAC training institutes	UNEP	20,000	10,000
<i>2.4 Training of refrigeration technicians:</i> Train at least 600 technicians (increased to 800 during discussions) in good servicing practices and the safe handling of low-GWP refrigerants	UNEP	120,000	45,000
<i>2.5 Extension of the certification scheme:</i> Expand the technician certification scheme developed under the HPMP to the MAC sector; inform technicians about the certification process; train 30 additional certifiers; and build a database of potential candidates for certification	UNEP	50,000	15,000
<i>2.6 Awareness-raising campaigns:</i> Organize targeted awareness-raising activities for stakeholders on project components (e.g., HFC e-licensing and quota system, reporting requirements for importers, codes of practice, certification, demonstration projects, recovery programmes, environmental impact of the KIP, and participation of women in the RAC sector)	UNEP	40,000	20,000
Component 3: Sectoral and cross-cutting			
<i>3.1 Provision of tools and equipment:</i> Procure 14 sets of equipment and tools ⁵ for vocational training institutes and technical workshops for training and refrigerant recovery and recycling	UNIDO	125,000	125,000
<i>3.2 Demonstration project in residential AC:</i> Demonstrate and promote the use of R-290-based mini-split air conditioners over those charged with higher-GWP alternatives by replacing 200 units (increased to 300, with additional 100 co-financed by the beneficiaries—see paragraphs 40-41) in designated locations, monitoring their performance, servicing needs and the energy efficiency of baseline and installed equipment, and assessing and raising awareness on project results	UNIDO	110,000	7,500
<i>3.3 Demonstration project in industrial refrigeration:</i> Assess, plan and demonstrate the installation, operation, servicing, performance and cost (investment and operational) of 2 (increased to 3 during discussions) HC-based 15 kW refrigeration units at cold stores in the fisheries sector, including training; monitor performance and energy consumption before and after the demonstration; assess and raise awareness on project results	UNIDO	90,000	5,000

⁵ Including *inter alia* recovery units, flushing kits, brazing sets, vacuum pumps, electronic scales, leak detectors, ventilators and cylinders.

Activity	Agency	Cost (US \$)	
		Stage I	First tranche
Project coordination and monitoring			
Project management and coordination activities	UNEP	75,000	32,250
Subtotal for UNEP		500,000	217,250
Subtotal for UNIDO		325,000	137,500
Total		825,000	354,750

Project implementation, coordination and monitoring

24. The HPMP and the KIP will be implemented by the same team to ensure coordination between the projects. The NOU will be responsible for the coordination and management of both projects, appointing full- and part-time staff as required. The total of US \$75,000 requested for this component includes the costs of hiring national consultants (US \$24,000), travel (US \$21,000), meetings with stakeholders, and other monitoring activities (US \$30,000).

Total cost of stage I of the Kigali HFC implementation plan

25. The budget for stage I has been proposed at US \$825,000. The costs of activities in the refrigeration servicing sector have been proposed in line with decision 92/37.

Implementation plan for the first tranche

26. The first funding tranche of stage I of the KIP was submitted at a total amount of US \$354,750, as shown in table 8 above, to be implemented between June 2025 and December 2027. A detailed description of planned activities, including adjustments to funding, is presented in paragraph 50.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

V. Comments

Implementation of stage II of the HCFC phase-out management plan

27. The Secretariat noted that stage I of the HPMP for Guinea was completed in June 2022, but the initiation of activities under stage II had seemed slow. UNEP reported that, while political instability and Government personnel changes had temporarily slowed down the implementation progress, the NOU remained fully operational, stage II funds were being duly disbursed, and the activities continued. On this basis, UNEP was confident that the Government of Guinea would be able to combine the implementation of both HPMP and KIP activities in the coming years.

Overarching strategy

28. In line with decision 92/44, the Government of Guinea has expressed a strong commitment to support reductions in HFC consumption in advance of the Montreal Protocol targets.⁶

⁶ As per the letter of 16 April 2025 from the Ministry of the Environment and Sustainable Development of Guinea to the Secretariat.

Changes to the HFC baseline

HFC component: revision of HFC consumption in baseline years

29. The Government of Guinea has submitted the revised HFC consumption data for baseline years (as explained in paragraph 7) to the Ozone Secretariat for consideration at the Meeting of the Parties (MOP). If approved, the average HFC consumption for the baseline years would be adjusted to 1,654,386 CO₂-eq tonnes, and the baseline to 2,138,034 CO₂-eq tonnes. However, in reviewing the data used to calculate the HFC baseline, the Secretariat noted that the HCFC component of the baseline would also need to be corrected, as explained below.

HCFC component: revision of the HCFC baseline

30. After the approval of the second tranche of stage I of the HPMP at the 72nd meeting, UNEP submitted an HCFC verification report indicating a consumption of 7.32 ODP tonnes in 2013, i.e. a three-fold reduction from the consumption of 22.19 ODP tonnes reported in 2012. At the 85th meeting, an additional verification report prepared for the submission of the third and fourth tranches of stage I of the HPMP corroborated the level of consumption revealed in the first verification. Based on the findings of the verification reports and an analysis of HCFC consumption data and socio-economic factors, the Government of Guinea, through the relevant agency, endorsed a revision of the starting point and funding for stage I of the HPMP. The starting point was adjusted from 22.6 to 7.51 ODP tonnes, which better reflected the actual HCFC consumption in the country. This revised value corresponds to 136.55 mt or 247,147 CO₂-eq tonnes of HCFCs.

31. While Guinea's HCFC starting point was corrected in line with the actual verified consumption, the HCFC consumption levels during the baseline years were not corrected. Had those been adjusted, the HCFC component of the HFC baseline would equal 160,646 rather than 483,648 CO₂-eq tonnes, and the HFC baseline would amount to 1,815,032 rather than 2,138,034 CO₂-eq tonnes, as shown in table 9.

Table 9: Comparison of HCFC and HFC baselines

Substance	Established HCFC and HFC baselines	HFC baseline if only HFC consumption is corrected	HFC baseline if both HFC consumption and HCFC baselines are corrected
<i>HCFC baseline</i>			
HCFC baseline (ODP tonnes)	22.6	22.6	7.51
HCFC baseline (mt)	411.09	411.09	136.55
HCFC baseline (CO ₂ -eq tonnes)	744,073	744,073	247,147
65% of the HCFC baseline (CO ₂ -eq tonnes)	483,648	483,648	160,646
Difference in the amount representing 65% of the HCFC baseline (CO ₂ -eq tonnes)			323,002
<i>HFC baseline (CO₂-eq tonnes)</i>			
Average HFC consumption 2020-2022	1,343,328	*1,654,386	*1,654,386
65% of the HCFC baseline	483,648	483,648	160,646
HFC baseline	1,826,976	2,138,034	1,815,032

*Revised consumption, subject to approval of the Implementation Committee and the MOP

32. Upon discussion of ways to account for this adjustment in HCFC consumption and noting that a revision of only HFC consumption data for baseline years would already result in a baseline change, the Government of Guinea agreed to request the Ozone Secretariat to correct its HCFC baseline as well. It was also agreed that, once the MOP considered the revisions requested by the Government of Guinea, if the HCFC baseline was not corrected, the 323,002 CO₂-eq tonnes that had been over-reported in the HCFC

baseline could be deducted from the starting point for sustained reductions in HFC consumption at no cost to the Multilateral Fund, once that starting point had been established. The Secretariat notes that such a deduction would be applicable if the Executive Committee establishes the starting point at the HFC baseline level (i.e., including both the HFC and HCFC components). However, if the Executive Committee establishes the starting point at a different level than the HFC baseline, the deduction will need to be adjusted accordingly, on the understanding that it should not be larger than 323,002 CO₂-eq tonnes.

33. The Secretariat notes that, if the MOP approves both the revision of HFC consumption in baseline years and the HCFC baseline, the revised HFC baseline would amount to 1,815,032 CO₂-eq tonnes, as shown in table 9 above, i.e. slightly lower than the established baseline of 1,826,976 CO₂-eq tonnes.

34. As per the established practice, the Secretariat has used the established HFC baseline as the basis for calculating HFC reductions. If the revised consumption data is approved, following the consideration of the Implementation Committee in July 2025 and the MOP in November 2025, the Secretariat and the implementing agencies will revise the Agreement for stage I of the KIP accordingly.

Institutional, policy and regulatory framework

Application of the HFC licensing and quota system in 2024

35. In line with decision 87/50(g), UNEP has confirmed that Guinea has an established and enforceable system of licensing and quotas for monitoring HFC imports/exports in place.

36. The Secretariat noted that, while the system was operational, the HFC import quotas issued for 2024 were based on the proposed revised HFC baseline of 2,138,034 CO₂-eq tonnes and not the established baseline of 1,826,976 CO₂-eq tonnes. UNEP explained that the Government of Guinea established the quotas at that level with the expectation that data revision would be accepted by the MOP. Subsequently, the Government of Guinea reported the 2024 HFC consumption at 1,836,016 CO₂-eq tonnes. While this consumption level is below the established quotas, it is above both the established baseline and the revised baseline, if the HFC consumption for baseline years and the HCFC baseline are revised. The Secretariat understands that at the time the country issued the 2024 import quotas, it did not consider that the HCFC baseline would need to be revised too, as this issue was only raised by the Secretariat during the KIP review.

37. Considering the complexities of determining Guinea's HFC consumption and baseline and given that HFC consumption in 2024 was above the established baseline, the Secretariat considers it important to start the implementation of the KIP as soon as possible and to continue improving the systems of recording and reporting the country's data. In line with precedent cases, the recommendation for approval of the KIP is without prejudice to the operation of the Montreal Protocol mechanism for addressing non-compliance.

38. During the discussion of the KIP, the Government of Guinea revised its HFC import quotas for 2025 to 1,736,497 CO₂-eq tonnes, which is below the established baseline and will ensure compliance in all scenarios discussed. UNEP informed the Secretariat that the quotas could and would be further adjusted later in 2025, if required, to comply with the revised baseline to be approved by the MOP.

Technical and cost-related issues

Component 1. Regulatory framework and control mechanisms

39. The Secretariat enquired about the feasibility of imposing a ban on both new and used HFC-based domestic refrigerators and stand-alone commercial refrigerators, considering the wide availability of appliances charged with R-600a and R-290 and the example of other countries in the region. UNEP confirmed that Guinea would enforce such a ban by 31 December 2029; however, in view of the accelerated

phase-down commitments, additional steps would be needed before aligning policies with other countries. Accordingly, UNEP allocated US \$15,000 to a feasibility study on the establishment of a ban on the import of HFC-based domestic refrigerators and stand-alone commercial refrigeration units and removed an HFC consumption survey initially proposed under this component, noting that a detailed survey had already been conducted during the KIP preparation (change reflected in table 8 under activity 1.2).

Component 3: Sectoral and cross-cutting

Demonstration project in the residential air-conditioning sector

40. Regarding the project to demonstrate and popularize the use of mini-split air conditioners charged with R-290, UNIDO explained that while HC-based AC units were not yet widely available and there were currently no MEPS or national standards established for the installation and operation of equipment based on A3 refrigerants in Guinea, local technicians had been trained under the HPMP to safely handle flammable alternatives. By replacing a great number of outdated units, the project will demonstrate the new systems' performance and help drive demand for R-290-based equipment, encouraging importers and distributors to stock up and develop the supply chain. Implementing agencies agreed to coordinate with relevant authorities to assist Guinea in adopting the ISO 5149-4:2022 or EN 378-4 standards.⁷

41. The Secretariat noted that it was important for local equipment suppliers to be directly involved in the project by providing co-financing and ensuring the development of a supply chain, as in other similar projects addressing end users. Following discussions, UNIDO agreed to increase the total number of AC units to be replaced in stage I of the KIP from 200 to 300, with 100 units co-financed by suppliers. Under the first tranche, 100 air conditioners would be procured, including 30 training units destined for training centres and vocational institutes. Importers would be able to evaluate the results of the first tranche before committing to providing co-financing, in the form of a 50 per cent rebate offered to buyers of the 200 units procured during the second tranche. To allow for the purchase of the first batch of R-290-based units, a portion of funds initially proposed under the second tranche was reallocated to the first.

Demonstration project in the industrial refrigeration sector

42. Regarding the project to replace HFC-based refrigeration condensing units (15 kW capacity) used in the fisheries' cold storage with R-290-based monoblocs, UNIDO explained that while the selected technology had been successfully implemented in other countries, it had not yet been introduced to the Guinean market. The beneficiary's co-funding will cover the infrastructure, civil works and safety adaptations, while the equipment will be funded from the project. Based on the type of equipment and the budget requested, UNIDO agreed to increase the number of units to be replaced from two to three. The project will also carry out a comparative analysis of the performance and energy usage of both the baseline and newly installed equipment, disseminating findings to fishery enterprises using similar cold storage facilities and other industrial refrigeration users and technicians.

43. Regarding the potential policies or bans to support this transition, UNIDO explained that the adoption of standards for the safe use of flammable refrigerants mentioned in paragraph 41 would facilitate the adoption of such technology across all sectors. UNIDO also pointed out that, as the penetration rate of the technology and the number of enterprises that could potentially transition to low-GWP alternatives in the industrial refrigeration sector were currently low, perhaps the consideration of bans was premature, and suggested that the Government could consider other regulatory measures in future stages of the KIP.

⁷ These standards set the requirements for the safe operation, maintenance, and repair of refrigeration systems and the recovery, reuse, and disposal of refrigerants and oils, with the goal of reducing the risks of injury, property damage, and environmental harm caused by improper handling or contamination leading to system failure and emissions.

44. In line with decision 92/36(g), the Secretariat requested UNIDO, upon completion of the two above projects addressing end users, to submit final reports on their implementation, including the HFC phase-out and energy-efficiency gains achieved.

Calculation of costs and HFC reductions in the servicing sector

45. Based on the cost of activities in the servicing sector, agreed at US \$750,000, as submitted, reductions from the remaining HFC consumption eligible for funding in the servicing sector amount to 316,926 CO₂-eq tonnes, as summarized in table 10.⁸

46. Accordingly, based on the established HFC baseline, the Government of Guinea has agreed to reduce its 2029 HFC consumption to 1,510,050 CO₂-eq tonnes, representing 17.3 per cent of the country's HFC baseline for compliance.⁹

Table 10. Agreed costs and reductions from HFC consumption eligible for funding and 2029 target

Servicing sector		
Average HFC consumption in the servicing sector in baseline years (revised CP data for 2020–2022)	mt	767.67
	CO ₂ -eq tonnes	1,654,386
Average GWP of all HFCs consumed in the sector		*2,155.08
Agreed funding	US \$	750,000
Agreed cost-effectiveness threshold	US \$/kg	5.10
Reductions from the remaining HFC consumption eligible for funding in the servicing sector	mt	147.06
	CO ₂ -eq tonnes	316,926
Reductions from all sectors		
Established HFC consumption baseline	CO ₂ -eq tonnes	1,826,976
<i>Reductions from the remaining HFC consumption eligible for funding in the servicing sector</i>	<i>CO₂-eq tonnes</i>	316,926
Target		
2029 target	CO ₂ -eq tonnes	1,510,050

*Value adjusted following the revision of 2020-2022 CP data

Project management unit

47. Funding for the project management unit (PMU) for stage I of the KIP was agreed as submitted at US \$75,000, amounting to 10 per cent of the project costs.

Total project cost

48. At a total cost of US \$825,000, stage I of the KIP for Guinea will result in a reduction of 316,926 CO₂-eq tonnes from the country's HFC consumption eligible for funding, as summarized in table 8 above. While no changes were made to the overall budget, the following reallocations or increases in the project's outputs were agreed:

- (a) *Component 1*: Reallocation of US \$15,000 from a proposed HFC survey to the feasibility study on the implementation of a ban on the import of HFC-based domestic and commercial stand-alone refrigerators; and an increase from 250 to 350 in the number of customs and enforcement officers to be trained;

⁸ Calculated in line with the methodology presented in annex I of document UNEP/OzL.Pro/ExCom/92/46.

⁹ This reduction would be equivalent to 14.8 per cent of the HFC baseline if the HFC consumption in baseline years were revised, or 17.5 per cent of the HFC baseline if both the HFC consumption and the HCFC baseline were revised.

- (b) *Component 2:* An increase from 600 to 800 in the number of technicians to be trained; and
- (c) *Component 3:* An increase from 200 to 300 in the number of mini-split air conditioners included in the demonstration project; and an increase from two to three in the number of monoblocs included in the demonstration project in industrial refrigeration.

49. Stage I of the KIP will be implemented in three tranches, as submitted, with an agreed reallocation of US \$56,650 from the second to first tranche (US \$51,500 in component 3 and US \$5,150 for the PMU) for the procurement of the first batch of AC units. Overall tranche distribution has been agreed at 50 per cent for the first tranche, 40 per cent for the second tranche in 2027, and 10 per cent for the third tranche in 2029.

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

50. The plan of action for the first tranche, agreed at US \$411,400, includes the following activities:

- (a) *Regulatory framework and control mechanisms:* Design and implementation of the e-licensing and quota system and annual meetings with stakeholders and authorities to monitor its implementation; annual visits to all 21 HFC importers to verify compliance with record-keeping and reporting requirements; training for at least 130 customs and other enforcement officers; and a feasibility study on the ban on the import and installation of HFC-based domestic refrigerators and stand-alone commercial refrigerators (UNEP) (US \$85,000);
- (b) *Capacity building:* Strengthening of industry associations (two meetings per year); strengthening of the women's industry association (one meeting per year); development of a code of practice for MAC and development of the training curriculum for RAC and MAC; training of at least 100 refrigeration and MAC technicians; extension of the certification scheme for MAC technicians; and awareness-raising campaigns (UNEP) (US \$100,000);
- (c) *Sectoral and cross-cutting:* Provision of 14 sets of tools and equipment for vocational training institutes; procurement and distribution of 100 AC units for the demonstration project in residential AC; selection of beneficiaries, coordination with stakeholders, building awareness, and laying the groundwork for training on the installation and servicing of R-290-based equipment for the demonstration project in industrial refrigeration (UNIDO) (US \$189,000); and
- (d) *Project monitoring:* Domestic travel (US \$10,000), consultants (US \$11,500), meetings (US \$10,000), and other expenses (US \$5,900) (UNEP) (total of US \$37,400).

Exemption for high-ambient temperature parties

51. Guinea is one of the countries operating under the high-ambient-temperature (HAT) exemption in line with decision XXVIII/2 of the Parties. The decision allows these countries to request exemptions for any specific subsector or use where suitable alternatives do not exist and in its paragraph 35 indicates that the amount of Annex F substances that are subject to the HAT exemption are not eligible for funding under the Multilateral Fund while they are exempted for that party. Guinea has not requested the HAT exemption.

Co-financing

52. The Government is seeking co-financing within its departments, including the provision of premises for training and refrigerant recovery. The funds requested under the KIP to strengthen associations and record-keeping are expected to serve as seed money for establishing self-sustained mechanisms to

continue these activities upon project completion. Beneficiary end users will co-finance site preparations for the demonstration projects.

2025–2027 business plan of the Multilateral Fund

53. UNEP and UNIDO are requesting US \$825,000, plus agency support costs, for the implementation of stage I of the KIP for Guinea. The total value of US \$819,242, including agency support costs, requested for the period of 2025–2027, is US \$543,520 above the amount in the business plan.

Gender policy implementation

54. Stage I of the KIP for Guinea was prepared taking into consideration the Multilateral Fund's gender mainstreaming guidelines. During project preparation, gender-disaggregated data was collected, revealing that women constituted 11.5 per cent of technicians in the RAC sector. Proposed activities include strengthening of the Association des Femmes Frigoristes de Guinée and vocational schools to enhance women's access to training and opportunities in the RAC industry.

Sustainability of the HFC phase-down and assessment of risks

55. Potential risks to the implementation of stage I of the KIP include delays or blockages in regional coordination due to Guinea's suspension from ECOWAS. Mitigation measures involve facilitating dialogue among ECOWAS member states and upgrading the technical capacity of customs and enforcement authorities.

56. To ensure sustainability of the HFC phase-down, the National Ozone Committee will continue to monitor the project's implementation. The Government will maintain effective control measures established during previous projects and strengthen cooperation with customs and industry associations through continuous training. Verifications of HFC consumption will be performed by an independent consultant, following guidelines similar to those for HCFCs. The technologies promoted under the KIP are accessible in Guinea, with importers and distributors participating in planned technology demonstration projects. The Government of Guinea has committed to place a ban on the import of HFC-based domestic and stand-alone commercial refrigeration units by 31 December 2029.

Impact on the climate

57. The activities proposed, including efforts to promote low-GWP alternatives, refrigerant recovery and reuse, developing codes of practice, capacity building for technicians, and demonstrations of low-GWP technologies in the residential AC and industrial refrigeration sector, indicate that the implementation of stage I of the KIP will reduce refrigerant emissions into the atmosphere, resulting in climate benefits. A calculation of the impact on the climate of the activities in the KIP indicates that, by 2029, Guinea will have reduced its emissions by approximately 316,926 million CO₂-eq tonnes of HFCs, calculated as the difference between the HFC baseline for compliance and the 2029 target, assuming that all consumed HFCs would eventually have been emitted.

Draft Agreement

58. A draft Agreement between the Government of Guinea and the Executive Committee for stage I of the KIP is contained in annex I to the present document.

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

59. The Government of Guinea will implement stage I of the KIP and stage II of the HPMP in a coordinated manner to avoid duplication of activities. Annex II summarizes the simultaneous implementation of activities under the HPMP and the KIP.

VI. Recommendation

60. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the Kigali HFC implementation plan (KIP) for Guinea for the period 2025–2029 to reduce HFC consumption by 17.3 per cent of the country's baseline, in the amount of US \$912,750, consisting of US \$500,000, plus agency support costs of US \$65,000, for UNEP and US \$325,000, plus agency support costs of US \$22,750, for UNIDO, on the understanding that the approval is without prejudice to the operation of the Montreal Protocol's mechanism for addressing non-compliance;
- (b) Noting:
 - (i) The strong commitment of the Government of Guinea to support reductions in HFC consumption in advance of the Montreal Protocol targets;
 - (ii) That the Government of Guinea has submitted to the Ozone Secretariat a request for revision of the country's HFC and HCFC baselines for consideration at the 74th meeting of the Implementation Committee;
 - (iii) That, if the HCFC baseline is not revised, an additional reduction of up to 323,002 CO₂-equivalent tonnes, associated with the adjustment of the HCFC component of the HFC baseline, will be deducted from the starting point;
 - (iv) That the Government of Guinea will put in place a ban on the import of HFC-based domestic and stand-alone commercial refrigeration units by 31 December 2029;
- (c) Further noting:
 - (i) That the Government of Guinea will establish its starting point for sustained aggregate reductions in HFC consumption based on guidance provided by the Executive Committee;
 - (ii) That, once the Executive Committee provides the guidance referred to in subparagraph (c)(i), reductions from the country's remaining HFC consumption eligible for funding will be determined in line with this guidance;
 - (iii) That the reductions from the country's remaining HFC consumption eligible for funding referred to in subparagraph (c)(ii) above will be deducted from the starting point referred to in subparagraph (c)(i);
 - (iv) That, upon completion of end-user projects in the residential air-conditioning and commercial refrigeration sectors included in stage I of the KIP, UNIDO will submit a final report on the implementation of these projects, including the HFC phase-out and energy-efficiency gains achieved, in line with decision 92/36(g);
- (d) Approving the draft Agreement between the Government of Guinea and the Executive Committee for the reduction in consumption of HFCs in accordance with stage I of the KIP, contained in annex I to the present document;
- (e) Requesting the Fund Secretariat, in the event that the country's baseline is revised, to update Appendix 2-A of the Agreement to include the revised figures for maximum allowable consumption, and to notify the Executive Committee of the resulting levels of

maximum allowable consumption, with any necessary adjustments being made at the 98th meeting; and

- (f) Approving the first tranche of stage I of the KIP for Guinea and the corresponding tranche implementation plan, in the amount of US \$453,542, consisting of US \$222,400, plus agency support costs of US \$28,912, for UNEP and US \$189,000, plus agency support costs of US \$13,230, for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF GUINEA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROFLUOROCARBONS IN ACCORDANCE WITH STAGE I OF THE KIGALI HFC IMPLEMENTATION PLAN (Period: 2025–2029)

Purpose

1. This Agreement represents the understanding of the Government of Guinea (“the Country”) and the Executive Committee with respect to the reduction of controlled use of Annex F substances set out in Appendix 1-A (“The Substances”) to a sustained level of 1,510,050 CO₂-equivalent (CO₂-eq) tonnes by 1 January 2029 in compliance with the Montreal Protocol schedule and the terms of this Agreement.
2. The Country agrees to meet the annual consumption limits of Annex F 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 Annex F 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 Annex F substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for Annex F substances specified in Appendix 1-A, and in respect to any consumption of Annex F substances that exceeds the level[s] defined in row[s] 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 stage I of the Kigali HFC implementation plan (“the Plan”) as approved. In accordance with subparagraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of Annex F substances 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 10 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 accordance with 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 accordance with Appendix 4-A covering each calendar year until and including the year for which the Funding Approval 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 approved funds, according to the evolving circumstances, to achieve the smoothest reduction of consumption and phase-down of Annex F substances specified in Appendix 1-A, in accordance with the following considerations:

- (a) Reallocations categorized as major changes must be documented in advance, either in a Tranche Implementation Plan as foreseen in subparagraph 5(d) above, or as a revision to an existing Tranche Implementation Plan to be submitted 10 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 that would modify any clause of this Agreement;
 - (iii) Changes in the annual levels of funding allocated to the individual bilateral or implementing agencies for the different tranches;
 - (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;
 - (v) Changes in alternative technologies, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact on the climate, and any differences in CO₂-eq tonnes to be phased down if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would accordingly decrease the overall funding level under this Agreement;
- (b) Reallocations not categorized as major changes may be incorporated into the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report; and

- (c) 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.

8. Specific attention will be paid to the execution of activities in the refrigeration servicing sector included in the Plan, in particular that the Country may use the flexibility available under this Agreement to address specific needs that might arise during project implementation.

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 UNIDO 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 coordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to the independent verification as per subparagraph 5(b). The Cooperating IA will support the Lead IA by implementing the Plan under the overall coordination 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 Targets in the Agreement

11. Should the Country, for any reason, not meet the Targets for the elimination of Annex F 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 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 CO₂-eq 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 subparagraph 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 subparagraphs 1(a), 1(b), and 1(d) 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 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

Substances	Starting point for aggregate reductions in consumption
To be determined	

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars		2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances	%	freeze	freeze	freeze	freeze	10	n/a
		CO ₂ -eq tonnes	1,826,976	1,826,976	1,826,976	1,826,976	1,644,278	n/a
1.2	Maximum allowable total consumption of Annex F substances	Reduction in %	0	0	0	0	17.3	n/a
		CO ₂ -eq tonnes	1,826,976	1,826,976	1,826,976	1,826,976	1,510,050	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)		222,400	0	210,000	0	67,600	500,000
2.2	Support costs for Lead IA (US \$)		28,912	0	27,300	0	8,788	65,000
2.3	Cooperating IA (UNIDO) agreed funding (US \$)		189,000	0	120,000	0	16,000	325,000
2.4	Support costs for Cooperating IA (US \$)		13,230	0	8,400	0	1,120	22,750
3.1	Total agreed funding (US \$)		411,400	0	330,000	0	83,600	825,000
3.2	Total support costs (US \$)		42,142	0	35,700	0	9,908	87,750
3.3	Total agreed costs (US \$)		453,542	0	365,700	0	93,508	912,750
4.	To be determined							

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 THE TRANCHE IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Tranche Implementation Report and Plans for each tranche request will consist of four 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-down of Annex F substances, how the different activities contribute to it, and how they relate to each other, including, where applicable, activities related to energy efficiency approved in the context of HFC phase-down pursuant to decision 91/65. The report should include the amount of Annex F substances consumption reduced as a direct result of the implementation of activities, by substance, the alternative technology used and the related phase in of alternatives, to allow the Secretariat to inform the Executive Committee on the resulting change in climate relevant emissions. The report should also include quantitative information on the activities implemented and further highlight the 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, use of flexibility for the 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 on the Plan's results and the consumption of Annex F substances, as per subparagraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification of consumption data must be provided with each tranche request, covering all relevant years for which a verification report has not yet been acknowledged by the Committee, as specified in subparagraph 5(a) of the Agreement;
- (c) A written description of the activities to be undertaken during the period covered by the requested tranche including quantitative information, 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 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 subparagraph 1(a) above; and
- (d) An Executive Summary of about five paragraphs, summarizing the information contained in subparagraphs 1(a) to 1(c) above.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. Overall monitoring will be provided by the Government, through the national ozone unit (NOU), with assistance from the Lead IA. The NOU will submit annual progress reports on the status of implementation of the Plan to the Lead IA.

2. Consumption will be monitored and determined based on the official data on the import and export of substances as registered by the relevant Government departments.

3. The NOU will compile and report the following data and information each year, on or before the relevant deadlines:

- (a) Reports on the consumption of substances to be submitted to the Ozone Secretariat in line with Article 7 of the Montreal Protocol; and
- (b) Reports on country programme data to be submitted to the Secretariat of the Multilateral Fund.

4. The monitoring of developments under the Plan and verification of the achievement of the performance targets will be assigned by Lead IA to an independent local enterprise or to independent local consultant(s). The enterprise or consultant(s) responsible for verification will have full access to relevant technical and financial information related to the implementation of the Plan.

5. The Government will be responsible for the sustainability of consumption reduction targets achieved through this Agreement.

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 Plan;
- (b) Assisting the Country in the 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 are reflected in the updates to the overall Plan and in the future Tranche Implementation Plans, consistent with subparagraph 1(c) of Appendix 4-A;
- (e) Fulfilling the reporting requirements of the Tranche Implementation Reports and Plans and of the overall Plan as specified in Appendix 4-A for submission to the Executive Committee, including 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 HFC consumption targets had been met;
- (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
- (h) Carrying out the required supervision missions;
- (i) Ensuring the presence of an operating mechanism to allow for an effective and transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (j) Coordinating the activities of the Cooperating IA and ensuring the 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 the Cooperating IA;
- (l) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (m) Providing assistance with the policy, management and technical support when required;
- (n) Reaching consensus with the Cooperating IA on any planning, coordination 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 Plan's results and of the consumption of Annex F substances mentioned in Appendix 1-A, as per subparagraph 5(b) of the Agreement and subparagraph 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 referring to the Lead IA to ensure a coordinated sequence of 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, coordination and reporting arrangements required to facilitate the implementation of the Plan.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY WITH THE TARGETS IN THE AGREEMENT

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$5.20 per CO₂-eq tonne 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. Where the country has failed to comply with the Agreement due to illegal trade, the reduction in funding would not be applied if the illegally traded controlled substances are seized and subsequently confiscated, destroyed, exported, or returned to the country of origin.

Annex II

**SIMULTANEOUS IMPLEMENTATION OF THE HCFC PHASE-OUT MANAGEMENT PLAN
AND THE KIGALI HFC IMPLEMENTATION PLAN IN GUINEA**

Stage II of the HPMP			Stage I of the KIP		Combined cost (US \$)
Strategic lines	Activities	Cost (US \$)	Activities	Cost (US \$)	
Policy and regulatory instruments	Enhance the online tool for the NOU-Customs information sharing on import permits; update the Customs training manual with 2022 HS codes	98,000	Design and implement an electronic system for issuing licences and quotas; train relevant stakeholders; develop a guide on HFC importation; strengthen the monitoring of HFC imports	55,000	268,000
	Update ODS regulations, including a ban on new and used HCFC-based equipment imports by 1 January 2027		Hold meetings with stakeholders on the monitoring of the licensing and quota system, maintaining HFC records, and quota usage review; perform compliance checks with HFC importers; study illegal trade; and carry out a feasibility study on the ban on HFC-based equipment for domestic and stand-alone commercial refrigeration	55,000	
	Train 600 customs and enforcement officers on HCFC control, related laws, and refrigerant identifiers; translate laws into local languages; organize 10 workshops and information campaigns for importers on the licensing and quota procedures and the safe handling of flammable refrigerants		Train at least 350 customs and other enforcement officers on HFC-related regulations and the prevention and control of illegal HFC trade	60,000	
Capacity building in the refrigeration servicing sector			Provide technical and institutional support to refrigeration associations to increase formalization of the sector, promote female technicians, and increase association participation in KIP activities	25,000	25,000
	Develop standards and protocols for flammable refrigerants for the complete chain of refrigerant handling, i.e. transport, storage, servicing, installation, leakage control and equipment decommissioning	10,000	Develop codes of practice for MAC systems, with focus on promoting recovery and recycling, reducing emissions of refrigerants and safety issues; and develop a training curriculum for both RAC and MAC technicians	20,000	30,000
	Establish and implement a national certification scheme for RAC technicians	50,000	Expand the technician certification scheme developed under the HPMP to the MAC sector; certify 30 additional certifiers and build a data base of potential candidates for certification	50,000	100,000
	Train at least 900 RAC technicians on good servicing practices, including refrigerant recovery and reuse and the safe handling of refrigerants and equipment	62,000	Train at least 800 technicians (mainly in the commercial and industrial refrigeration sectors) in good servicing practices and the safe handling of low-GWP refrigerants	120,000	182,000

Stage II of the HPMP			Stage I of the KIP		Combined cost (US \$)
Strategic lines	Activities	Cost (US \$)	Activities	Cost (US \$)	
	Carry out information campaigns to promote technician certification, recovery and recycling, and the pursuit of technical studies and careers by women in RAC	10,000	Organise awareness-raising activities for stakeholders on <i>inter alia</i> the HFC e-licensing and quota system, reporting requirements for importers, codes of practice, certification, demonstration projects, recovery and recycling programmes, the environmental impact of the KIP, and women's involvement in RAC sector	40,000	50,000
Sectoral and cross-cutting	Provide training, tools and equipment to 2 centres of excellence and 1 recycling centre; study on barriers to recovery and recycling; establishment of two new recycling centres, including provision of tools and equipment; procurement of 15 refrigerant identifiers; and intensive training on HCs provided to 5 trainers	163,000	Provide 14 sets of equipment and tools to vocational training institutes and technical workshops for training and supporting recovery and recycling activities	125,000	288,000
			Demonstrate and promote the use of R-290-based mini-split AC units over those charged with higher-GWP alternatives by replacing 300 units in selected locations, monitoring their performance, servicing needs and energy efficiency of baseline and installed equipment; assess and raise awareness on project results	110,000	110,000
			Assess, plan and demonstrate the installation, operation, servicing, performance and cost (investment and operational) of 3 HC-based refrigeration units of 15 kW capacity for cold stores in the fisheries sector, including training; monitor the performance and energy consumption before and after the demonstration; assess and raise awareness on project results	90,000	90,000
Project management and coordination		30,000	Project management and coordination	75,000	105,000
Total for stage II of the HPMP		423,000	Total for stage I of the KIP	825,000	1,248,000