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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-eighth Meeting
Montreal, 15-19 November 2021[1]

PROJECT PROPOSAL: SENEGAL

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

<u>Phase-out</u>

- HCFC phase-out management plan (stage II, first tranche) UNEP and UNIDO

[1] Online meetings and an intersessional approval process will be held in November and December 2021 due to coronavirus disease (COVID-19)

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

SENEGAL

(I) PROJECT TITLE	**AGENCY**
HCFC phase-out plan (stage II)	UNEP (lead), UNIDO

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2020	13.20 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									**Year:** 2020
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22				13.20					13.20

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	36.15	Starting point for sustained aggregate reductions:	20.96
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	7.34	Remaining:	13.62

(V) BUSINESS PLAN		**2021**	**2022**	**2023**	**Total**
UNEP	ODS phase-out (ODP tonnes)	1.99	0	0	1.99
	Funding (US $)	74,999	0	0	74,999
UNIDO	ODS phase-out (ODP tonnes)	3.99	0	2.63	6.62
	Funding (US $)	372,579	0	245,672	618,251

(VI) PROJECT DATA			**2021**	**2022**	**2023**	**2024**	**2025**	**Total**
Montreal Protocol consumption limits			23.50	23.50	23.50	23.50	11.75	n/a
Maximum allowable consumption (ODP tonnes)			13.62	13.62	13.62	13.62	6.81	n/a
Project costs requested in principle (US $)	UNEP	Project costs	160,000	0	179,500	0	58,500	398,000
		Support costs	20,800	0	23,335	0	7,605	51,740
	UNIDO	Project costs	92,000	0	95,000	0	0	187,000
		Support costs	8,280	0	8,550	0	0	16,830
Total project costs requested in principle (US $)			252,000	0	274,500	0	58,500	585,000
Total support costs requested in principle (US $)			29,080	0	31,885	0	7,605	68,570
Total funds requested in principle (US $)			281,080	0	306,385	0	66,105	653,570

(VII) Request for approval of funding for the first tranche (2021)		
Agency	**Funds requested (US $)**	**Support costs (US $)**
UNEP	160,000	20,800
UNIDO	92,000	8,280
Total	252,000	29,080

Secretariat's recommendation:	Individual consideration

PROJECT DESCRIPTION

Background

1. On behalf of the Government of Senegal, UNEP as the lead implementing agency has submitted a request for stage II of the HCFC phase-out management plan (HPMP), at a total cost of US $663,912, consisting of US $407,152, plus agency support costs of US $52,930 for UNEP, and US $187,000, plus agency support costs of US $16,830 for UNIDO, as originally submitted.[2] The implementation of stage II of the HPMP will phase out 6.81 ODP tonnes of HCFCs and assist Senegal in meeting 81.1 per cent reduction in the HCFC baseline consumption and 67.5 per cent reduction in the starting point for aggregate reductions in HCFC consumption by 2025.

2. The first tranche of stage II of the HPMP being requested at this meeting amounts to US $357,571, consisting of US $203,576, plus agency support costs of US $26,465 for UNEP, and US $117,000, plus agency support costs of US $10,530 for UNIDO, as originally submitted.

Status of implementation of stage I of the HPMP

3. Stage I of the HPMP for Senegal was originally approved at the 65th meeting to phase out 12.65 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector and meet the 35 per cent reduction in the baseline by 2020, at a total cost of US $1,035,216, plus agency support costs.[3]

4. Based on the findings of the HCFC consumption verification report submitted to the 77th meeting, the Government of Senegal revised its starting point for sustained reductions in HCFC consumption from 36.15 ODP tonnes to 20.96 ODP tonnes. Accordingly, the Executive Committee approved an updated Agreement with the Government of Senegal with a revised funding of US $630,000, in line with decision 60/44(f)(xii) on funding levels for low-volume-consuming (LVC) countries, and a phase-out of 7.34 ODP tonnes of HCFCs to meet a 35 per cent reduction from the revised starting point by 2020.[4]

5. Subsequently, upon a request by the Government submitted to the 85th meeting, the Executive Committee approved an extension of the duration of stage I of the HPMP to 31 December 2021 and revised the updated Agreement.[5]

<u>HCFC consumption</u>

6. The Government of Senegal reported a consumption of 13.20 ODP tonnes of HCFC in 2020, which is 63 per cent below the HCFC baseline for compliance, and 37 per cent below the revised starting point of 20.96 ODP tonnes. The 2016-2020 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Senegal (2016-2020 Article 7 data)

HCFC-22	2016	2017	2018	2019	2020	Baseline
Metric tonnes (mt)	340.00	320.00	275.00	259.00	240.00	657.27
ODP tonnes	18.70	17.60	15.13	14.25	13.20	36.15

7. The reduction in the consumption of HCFC-22 is due to the implementation of HPMP activities, including the enforcement of the licensing and quota system, better servicing practices followed by technicians as a result of training, and technical assistance provided. The import of non-HCFC-based RAC

[2] As per the letter of 30 June 2021 from the Ministry of Environment and Sustainable Development of Senegal to UNEP.
[3] Decision 65/46, document UNEP/OzL.Pro/ExCom/65/47
[4] Decision 77/55, document UNEP/OzL.Pro/ExCom/77/61
[5] Decision 85/36(b) and (c), Annex XIII of document UNEP/OzL.Pro/ExCom/85/67

equipment has also contributed to the reduction in HCFC consumption.

Country programme (CP) implementation report

8. The Government of Senegal reported HCFC sector consumption data under the 2020 CP implementation report consistent with the data reported under Article 7 of the Montreal Protocol.

Status of progress and disbursement

9. In the course of implementation of the third and final tranche of the HPMP, the Government of Senegal continued controlling HCFC consumption through the operation of the electronic licensing and quota system (which was regularly maintained and updated) and the monitoring of illegal trade. Training continued to be provided to customs officers on the identification and control of HCFCs and HCFC-based equipment, and to refrigeration technicians on recovery and recycling and on good servicing practices.

10. In line with decision 85/36(e), the Government of Senegal implemented the recommendations made in the verification report: provided additional training to customs officers at the border on refrigerant identification and prevention of illegal trade of ozone depleting substances (ODS), continued implementing the licensing and quota system using the electronic integrated system established in 2017, created a group of media professionals to disseminate information on HCFC controls, provided additional training to technicians working in informal workshops, and revised the 2017 consumption reported under the CP implementation and the Article 7 data reports

11. The implementation of stage I of the HPMP resulted in:

(a) Training of 915 customs and 90 other law enforcement officers on the implementation of the licensing and quota system, monitoring of imports of HCFCs and HCFC-based equipment, identification of ODS and alternatives and control of illegal trade; distribution of 24 refrigerant identifiers to all ports of entry; and incorporation of ozone protection issues in the customs training curricula to ensure continuous training to future officers; and

(b) Training of 831 refrigeration technicians in good refrigeration practices and safe handling of flammable refrigerants; training of additional 240 technicians in refrigerant recovery and recycling; training of 20 trainers in preparation for a technician certification system; development of a technician database and a manual on good servicing practices, including handling of flammable refrigerants; and strengthening of 10 training centres through the distribution of servicing toolkits.[6]

12. As of July 2021, of the US $630,000 approved under stage I, US $535,348 had been disbursed (US $250,000 for UNEP and US $285,348 for UNIDO), as shown in Table 2. The balance of US $94,652 will be disbursed by the end of 2021 on continued training of technicians, procurement of five additional identifiers, and maintenance and operation of the e-licensing system database.

Table 2. Financial report of stage I of the HPMP for Senegal (US $)

Tranche		UNEP	UNIDO	Total	Disbursement rate (%)
First	Approved	100,000	200,000	300,000	100
	Disbursed	100,000	200,000	300,000	
Second	Approved	80,000	80,000	160,000	100
	Disbursed	80,000	80,000	160,000	
Third	Approved	120,000	50,000	170,000	44
	Disbursed	70,000	5,348	75,348	

[6] Including recovery units, vacuum pumps, cylinders, manifolds, leak detectors, hoses, pipe cutters, recovery bags, thermometers and other basic tools.

Tranche		UNEP	UNIDO	Total	Disbursement rate (%)
Total	Approved	300,000	330,000	630,000	85
	Disbursed	250,000	285,348	535,348	

Stage II of the HPMP

Remaining consumption eligible for funding

13. After deducting 7.34 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding amounts to 13.62 ODP tonnes of HCFC-22, 6.81 ODP tonnes of which will be phased out in stage II. The remaining consumption of 6.81 ODP tonnes eligible for funding, will be addressed in a future stage of the HPMP.

Sector distribution of HCFCs

14. There are approximately 2,850 trained refrigeration technicians, including 250 women, who have graduated from vocational training centres. Around 20 per cent of the technicians have graduated from vocational training centres and 80 per cent do not have formal training and are considered informal. HCFC-22 is consumed for servicing, repairs and installation of domestic air-conditioning (AC), commercial RAC and industrial RAC equipment, as shown in Table 3. HCFC-based equipment is imported new or used. HCFC-22 represents 21 per cent of all refrigerants used in the servicing sector, while HFC-134a represents 41 per cent, followed by R-404A (21 per cent), R-410A (9 per cent), and others (R-290, HC-600a, R-407C, R-32, and R-717) representing 8 per cent.

Table 3. Estimation of demand for HCFC-22 in the RAC servicing sector in Senegal

Applications	Equipment inventory	Average charge (kg)	Total charge (mt)	Leakage rate (%)	Consumption (mt)
Room AC (unitary and split)	700,000	1.50	1,050	15	158
Commercial RAC (stand-alone, condenser units, centralized systems, rooftop, multi-splits)	22,000	6.50	143	10	14
Industrial RAC (medium to large condensing units, centralized systems, refrigeration equipment in the fishing sector and chillers)	28,000	12.00	336	20	67
Total					**239**

Phase-out strategy in stage II of the HPMP

15. Stage II of the HPMP will focus on strengthening the monitoring and enforcement of the HCFC regulatory framework, promoting the transition to low-global-warming-potential (GWP) technologies in the RAC sector, developing standards for the safe use of new technologies, further strengthening the capacity of the servicing sector with training and equipment, and establishing a certification scheme for technicians. The lessons learned and infrastructure established during the implementation of stage I of the HPMP will be utilized in stage II.

Proposed activities in stage II of the HPMP

16. Stage II proposes the following activities:

(a) *Strengthening the enforcement of ODS regulations and capacity-building for enforcement officers:* Identifying gaps in existing regulations and undertaking relevant amendments; training of 20 trainers and 400 customs officers and other law enforcement officers (increased to 750 upon discussion with the Secretariat) on Montreal Protocol issues, including HCFC control measures and iPIC;[7] and preparation and dissemination of information to law enforcement officers on existing regulations and viable alternative technologies to HCFCs. Technical material and resources developed by OzonAction will be used to support the implementation of these activities[8] (UNEP) (US $130,000);

(b) *Capacity-building of RAC servicing technicians and establishment of a certification scheme:* Training of 400 technicians (adjusted to 1,200 technicians upon discussion with the Secretariat) on good servicing practices; initiation of the process of establishing a technician certification scheme and certification of the first 25 technicians in good practices and the safe handling of HCFCs; raising awareness among end-users about the need to phase out HCFCs and adopt low-GWP technologies; and providing support to 10 RAC associations in implementing training on low-GWP technologies and raise awareness about the certification scheme. Technical material and resources developed by OzonAction will be used to support the implementation of these activities[9] (UNEP) (US $227,152); and

(c) *Strengthening of the centres of excellence, establishment of a refrigerant recovery and reuse scheme, and raising end-users' awareness of low-GWP alternatives:* Provision of toolkits[10] to seven centres of excellence; establishment of a refrigerant recovery and reuse scheme, including the setting up of one reclaiming centre;[11] technical assistance and awareness-raising to promote the uptake of low-GWP alternatives in the country; and training of five trainers to become certified in equipment based on flammable refrigerants (HC) (adjusted to three trainers and two training events for 100 technicians upon discussion with the Secretariat (UNIDO) (US $187,000).

Project implementation and monitoring unit (PMU)

17. The PMU established under stage I of the HPMP will continue into stage II, where the national ozone unit (NOU) will assist in the implementation, monitoring and reporting of the activities. The cost for UNEP amounts to US $50,000 (US $30,000 for personnel and consultants, US $5,000 for domestic travel, and US $15,000 for meetings and workshops).

Gender policy implementation[12]

18. In line with decision 84/92(d), as well as the UNEP and UNIDO gender mainstreaming policies, stage II will support gender equality and women's empowerment in the project monitoring team, recruitment of consultants, training, and participation in stakeholder consultation workshops. The training sessions and meetings on ozone issues will further sensitize participants to the importance of gender

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[7] The informal Prior Informed Consent mechanism is a voluntary system of information exchange on the intended trade in substances controlled under the Montreal Protocol between the national authorities responsible for issuing import and export licenses of over 100 countries.

[8] Including *inter alia* a training manual for customs officers, a booklet on legislative and policy options to control HFCs, e-learning modules for customs officers, UNEP apps on refrigerant identification, and fact sheets on refrigerant designations and harmonized system codes.

[9] Including e-learning courses on refrigerant literacy and sound management of refrigerants, the Universal Training Kit, UNEP apps on refrigerant identification, and fact sheets, such as the update on new refrigerant designations and safety classifications and the quick guide for good servicing with flammable refrigerants.

[10] Including a charging station for flammable refrigerants, portable recovery and recycling units, vacuum pumps, manifolds, brazing unit, compression fitting tool, piercing pliers, tube cutters and safety accessories.

[11] Including one reclaiming unit for multiple refrigerants, refrigerant identifier, laboratory items, cylinders, storage tank, scale and recovery units.

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

mainstreaming and women's empowerment. Gender-disaggregated data will be collected throughout the implementation of the HPMP and reported on at the time of tranche request. The NOU will also continue to seek stakeholders' input on how to integrate gender-specific indicators in planning, implementation, and reporting processes for each component.

Total cost of stage II of the HPMP

19. The total cost of stage II of the HPMP for Senegal has been estimated at US $594,152 (plus agency support costs), as originally submitted, for achieving an 81.1 per cent reduction in HCFC baseline consumption and 67.5 per cent reduction in the starting point for aggregate reductions in HCFC consumption by 2025. The proposed activities and cost breakdown are summarized in Table 4.

Table 4. Total cost of stage II of the HPMP for Senegal as submitted

Activity	**Agency**	**Cost (US $)**
Strengthening the enforcement of ODS regulations and capacity-building for enforcement officers	UNEP	130,000
Capacity-building of RAC servicing technicians and establishment of a certification scheme	UNEP	227,152
Strengthening of the centres of excellence, establishment of a refrigerant recovery and reuse scheme, and raising end-users' awareness of low-GWP alternatives	UNIDO	187,000
Monitoring and reporting	UNEP	50,000
Total		**594,152**

Activities planned for the first tranche of stage II

20. The first funding tranche of stage II of the HPMP at the total amount of US $320,576 will be implemented between January 2022 and December 2023 and will include the following activities:

(a) *Strengthening the enforcement of ODS regulations and capacity-building for enforcement officers:* Training of 20 trainers and 200 customs officers and other law enforcement officers on Montreal Protocol issues, including HCFC control measures and iPIC; preparation and dissemination of information to law enforcement officers on the regulations and viable alternative technologies to HCFCs (UNEP) (US $65,000);

(b) *Capacity-building of RAC servicing technicians and establishment of a certification scheme:* Hiring of an expert to facilitate establishment of the technician certification scheme; stakeholder consultations on the formulation of the certification scheme; building the capacity of institutions selected to be involved in the certification process; training of 240 technicians in good servicing practices; one training workshop for end-users on the need to phase out HCFCs and adopt low-GWP technologies; and strengthening of the RAC associations by supporting their main meetings, awareness-raising activities on the certification scheme and training sessions on low-GWP alternatives for members in the local language (UNEP) (US $113,576);

(c) *Strengthening of the centres of excellence, establishment of a refrigerant recovery and reuse scheme, and raising end-users' awareness of low-GWP alternatives:* Provision of toolkits for good servicing practices to seven training centres; initiating the establishment of the refrigerant recovery and reuse scheme and setting up of the reclaiming centre; one workshop to promote low-GWP alternatives uptake in the country; and training of three trainers to become certified in HC-based equipment (UNIDO) (US $117,000); and

(d) *Project monitoring and evaluation* (UNEP) (US $25,000, including US $12,000 for personnel and consultants; US $2,000 for domestic travel; and US $11,000 for meetings and workshops).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

21. The Secretariat reviewed stage II of the HPMP in light of stage I, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decision 74/50), and the 2021-2023 business plan of the Multilateral Fund.

<u>Overarching strategy</u>

22. The Secretariat notes that the reduction target of 6.81 ODP tonnes of HCFC-22 proposed for 2025 is based on the revised starting point of 20.96 ODP tonnes, and corresponds to a reduction of 67.5 per cent of the revised starting point, and a reduction of 81.1 per cent of the HCFC consumption baseline.

<u>Technical and cost-related issues</u>

Strengthening the enforcement of ODS regulations and capacity-building for enforcement officers

23. During the project review process, UNEP explained that one of the main weaknesses in the operation of the licensing and quota system was the delay in validation of import requests, due to the involvement of various ministries. This issue was resolved with the introduction of an online system in 2017 that interconnects all trade, environmental and customs authorities involved in the process. Accordingly, the activities proposed in stage II will focus on identifying regulations that may be needed to further support HCFC phase-out. Upon further discussions UNEP reported that the Government agreed to introduce by 1 January 2024 measures to control HCFC emissions during servicing to support the recovery and reclaiming system. Other regulations being considered include *inter alia* a ban on the use of HCFC-141b for flushing (as a pre-emptive measure, tentatively by the end of 2023), and a ban on imports of second-hand HCFC-based equipment (tentatively by the end of 2024).

24. Regarding the import of new HCFC-based equipment, UNEP explained that the Government of Senegal already controls and records those imports through an authorization process that has applied to all importers since 2014. The Government will follow up with a future ban on the import of new HCFC-based equipment during the early years of stage III.

25. Noting the number of customs officers in the country (estimated at 1,830), out of which 600 were trained in stage I, UNEP agreed to increase to 750 the number of customs officers to be trained, within the available budget.

Capacity-building of RAC servicing technicians and establishment of a RAC certification scheme

26. Upon discussion of the expected impact of the project, UNEP agreed that priority would be given to ensuring that the technician certification scheme is properly established and operational by the end of 2024. The first pilot certification of 25 technicians will be completed in 2025, and technician certification will be implemented on a large scale during stage III. The Secretariat considers this approach realistic, noting that the process of establishing an appropriate technician certification system, supported by technical norms and a regulatory framework, can take several years. The certification will be provided by local institutions that will be able to continue certifying technicians in a self-sustained manner once the project is completed.

27. Noting the estimated number of 2,850 technicians in the country, UNEP agreed to increase the number of refrigeration technicians to be trained under stage II from 400 to 1,200 in order to ensure a larger impact and to take advantage of the capacity of 10 training centres being strengthened with training and equipment during stages I and II. To achieve this extended training programme, funds initially apportioned

to workshops for end-users were reallocated to technician training, noting that workshops for end-users were already being implemented under the UNIDO component.

Strengthening of the centres of excellence, establishment of a refrigerant recovery and reuse scheme, and raising end-users' awareness of low-GWP alternatives

28. In providing more details on the refrigerant recovery and reuse scheme including a reclaiming centre, UNIDO reported that the project aimed to strengthen the capacity of the existing businesses and servicing workshops to offer recovery, reclaiming, and recycling; however, no specific study had yet been conducted to collect data on HCFC-22 that could realistically be recovered and sent for reclamation in Senegal. The Secretariat considers that a feasibility study is critical to determine the technical and economic viability of a potential reclaim, recovery and recycling operation and to tailor the technical assistance, equipment needs, and operating capabilities of the reclaiming facilities. Accordingly, UNIDO agreed to include in the progress report associated with the implementation of the first tranche of stage II, the results of a comprehensive feasibility study for the establishment of a recovery and reclaiming system in Senegal, including the business model, the expected tonnage of refrigerant to be recovered, and the indication of the most suitable operator for the reclaiming centre. Accordingly, the first tranche of stage II will not include funds for the recovery and reclaiming equipment.

29. UNIDO confirmed that the recovery and reclaiming infrastructure to be introduced would also be used for other refrigerants consumed in the country, (i.e., HFC-134a, R-404A, and R-410A).

30. Regarding the promotion of low-GWP alternatives uptake proposed for end-users, UNIDO explained that rather than an end-user incentive programme, the objective of this component was to increase awareness among stakeholders (including end-users) about available technologies utilizing low-GWP alternatives. The project includes two main activities: approximately five workshops on the operation and servicing of residential AC units using low-GWP alternatives, including R-290, for key stakeholders such as associations, engineers, technicians, importers/distributors and national experts; and the installation of around five R-290 units in one of the training centres or a university training centre for training and demonstration purposes. Depending on the budget and the prices of these units, the Government and UNIDO could also include units operating with other low-GWP technology options.

31. Regarding the proposed certified trainer programme for hydrocarbon-based equipment for five trainers, the Secretariat noted that a much larger impact could be achieved with the allocated budget of US $25,000. UNIDO explained that the cost was due to the need to certify the trainers in Austria. Upon discussion, UNIDO adjusted the component to include, within the same budget, the certification of three trainers, followed by two training programmes in Senegal for 100 technicians, conducted by an international expert in cooperation with the newly certified trainers, covering *inter alia* the characteristics of HC-based refrigerants, safety, maintenance, and capacity-building.

Total project cost

32. The total cost for stage II of the HPMP as submitted amounted to US $594,152. However, based on decision 74/50(c)(xii) on the eligible funding levels for LVC countries, the eligible funding for stage II is US $585,000, which is US $9,152 below the submitted value. Accordingly, the capacity-building component for technicians was adjusted from US $227,152 to US $218,000, as presented in Table 5.

Table 5. Total agreed cost of stage II of the HPMP for Senegal

Activity	Agency	Cost (US $)
Strengthening the enforcement of ODS regulations and capacity-building for enforcement officers	UNEP	130,000
Capacity-building of RAC servicing technicians and establishment of a certification scheme	UNEP	218,000

Activity	Agency	Cost (US $)
Strengthening of the centres of excellence, establishment of a refrigerant recovery and reuse scheme, and raising end-users' awareness of low-GWP alternatives	UNIDO	187,000
Monitoring and reporting	UNEP	50,000
Total		**585,000**

33. The Secretariat notes that with the completion of stage I by 31 December 2021, the initiation of stage II would be needed to ensure the continuity of activities in Senegal. The plan as submitted allocated more than half of the funds to the first tranche, but many of the activities will be evenly distributed during the implementation period (i.e., training of customs officers and refrigeration technicians) and some equipment will only be procured during the second tranche. The Secretariat and the implementing agencies agreed on a more balanced tranche distribution, including the last tranche in 2025 as per existing policies, rather than in 2024. The agreed new tranche distribution is presented in Table 6.

Table 6. Submitted and agreed tranche distribution for stage II of the HPMP for Senegal

	2021	2022	2023	2024	2025
As submitted					
UNEP	203,576	0	0	203,576	0
UNIDO	117,000	0	70,000	0	0
Total	320,576	0	70,000	203,576	0
As agreed					
UNEP	160,000	0	179,500	0	58,500
UNIDO	92,000	0	95,000	0	0
Total	252,000	0	274,500	0	58,500

34. With the revised funding allocation for the first tranche, UNEP and UNIDO will aim to achieve the following specific targets in each of the main components of stage II: train around 450 customs officers and other law enforcement officers; undertake a revision of the existing regulations and draft new proposed measures for stage II; hold two workshops to disseminate the updated regulations; initiate the process to establish the technician certification scheme; train 425 technicians on good servicing practices; hold one national and 14 regional workshops with refrigeration associations to promote the HPMP activities; procure and distribute tools and equipment to seven training centres; complete the feasibility study for the establishment of the reclaiming centres and install two to four AC units using low-GWP alternatives (most likely R-290) in training centres to assess performance and support training on low-GWP alternatives.

<u>Impact on the climate</u>

35. The proposed activities in the servicing sector, which include better containment of refrigerants through training and the provision of equipment, will reduce the amount of HCFC-22 used for RAC servicing. Each kilogram of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO_2-equivalent tonnes. A calculation of the impact on the climate was provided in the HPMP. The activities planned by the Government of Senegal, including the efforts to promote low-GWP alternatives, as well as provide training on good servicing practices including the recovery and reclamation of refrigerants, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

36. UNEP reported that during stage II of the HPMP, the Government would provide in-kind contribution through logistics and personnel support as required during the implementation of the plan.

2021-2023 draft business plan of the Multilateral Fund

37. UNEP and UNIDO are requesting US $585,000, plus agency support costs, for the implementation of stage II of the HPMP for Senegal. The total requested value of US$ 587,465, including agency support costs for the period of 2021–2023, is US $105,785 below the amount in the business plan.

Draft Agreement

38. A draft Agreement between the Government of Senegal and the Executive Committee for the phase-out of HCFCs in stage II of the HPMP is contained in Annex I to the present document.

RECOMMENDATION

39. The Executive Committee may wish to consider:

(a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Senegal for the period from 2021 to 2025 to reduce HCFC consumption by 81.1 per cent of the country's baseline, in the amount of US $653,570, consisting of US $398,000, plus agency support costs of US $51,740 for UNEP, and US $187,000, plus agency support costs of US $16,830 for UNIDO;

(b) Noting the commitment of the Government of Senegal to establish regulatory measures to control the intended emissions of refrigerant during installation, servicing and decommissioning by 1 January 2024;

(c) Deducting 6.81 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;

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

(e) Approving the first tranche of stage II of the HPMP for Senegal, and the corresponding tranche implementation plans, in the amount of US $281,080, consisting of US $160,000, plus agency support costs of US $20,800 for UNEP, and US $92,000, plus agency support costs of US $8,280 for UNIDO, on the understanding that UNIDO will include in the progress report associated with the implementation of the first tranche the result of the feasibility study for the establishment of a recovery and reclaiming system in Senegal, including the business model, the expected tonnage of refrigerant to be recovered, and most suitable operator for the reclaiming centre.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF SENEGAL AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

Purpose

1. This Agreement represents the understanding of the Government of Senegal (the "Country") and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A ("The Substances") to a sustained level of 6.81 ODP tonnes by 1 January 2025 in compliance with Montreal Protocol schedule.

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

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

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

Conditions for funding release

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

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

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

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

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

Monitoring

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

Flexibility in the reallocation of funds

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

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

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

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

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

(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; and

(v) Changes in alternative technologies, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;

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

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

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

Considerations for the refrigeration servicing sector

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

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

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

Bilateral and implementing agencies

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. United Nations Environment Programme (UNEP) has agreed to be the lead implementing agency (the “Lead IA”) and United Nations Industrial Development Organization (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 co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). The Cooperating IA will support the Lead IA by implementing the Plan under the overall co-ordination of the Lead IA. The roles of the Lead IA and the Cooperating IA are contained in Appendix 6-A and Appendix 6-B, respectively. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

Non-compliance with the Agreement

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

Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 5 above.

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

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

Date of completion

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

Validity

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

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

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	20.96

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2021	2022	2023	2024	2025	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	23.50	23.50	23.50	23.50	11.75	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	13.62	13.62	13.62	13.62	6.81	n/a
2.1	Lead IA (UNEP) agreed funding (US $)	160,000		179,500		58,500	398,000
2.2	Support costs for Lead IA (US $)	20,800		23,335	0	7,605	51,740

Row	Particulars	2021	2022	2023	2024	2025	Total
2.3	Cooperating IA (UNIDO) agreed funding (US $)	92,000		95,000	0	0	187,000
2.4	Support costs for Cooperating IA (US $)	8,280		8,550	0	0	16,830
3.1	Total agreed funding (US $)	252,000		274,500	0	58,500	585,000
3.2	Total support costs (US $)	29,080		31,885	0	7,605	68,570
3.3	Total agreed costs (US $)	281,080		306,385	0	66,105	653,570
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)						6.81
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)						7.34
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)						6.81

*Date of completion of stage I as per stage I Agreement: 31 December 2021.

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

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

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

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

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

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

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

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

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

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

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

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

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The National Ozone Unit will submit annual progress reports on the status of implementation of the Plan to the Lead IA. The monitoring of the development of the Plan and the verification of the achievement of performance targets, specified in the Plan, will be assigned by the Lead IA to an independent local company or to independent local consultants.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

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

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

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

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

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

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

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

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

(h) Carrying out required supervision missions;

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

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

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

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

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

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

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

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

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCIES

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

(a) Providing assistance for policy development when required;

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

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

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

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

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

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