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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninetieth Meeting
Montreal, 20-23 June 2022
Items 9(a) and (d) of the provisional agenda¹

PROJECT PROPOSAL: CHAD

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

Phase-out

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

¹ UNEP/OzL.Pro/ExCom/90/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

CHAD

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2021	10.10 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2021	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					10.10				10.10

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	16.10	Starting point for sustained aggregate reductions:	16.10
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	5.63	Remaining:	10.47

(V) BUSINESS PLAN		2022	2023	2024	Total
UNEP	ODS phase-out (ODP tonnes)	0.2	0.0	0.0	0.2
	Funding (US \$)	127,664	0	0	127,664
UNIDO	ODS phase-out (ODP tonnes)	1.1	0.0	1.1	2.2
	Funding (US \$)	101,695	0	101,695	203,390

(VI) PROJECT DATA		2022	2023-2024	2025	2026	2027	2028	2029	2030	Total	
Montreal Protocol consumption limits (ODP tonnes)		10.47	10.47	5.23	5.23	5.23	5.23	5.23	0	n/a	
Maximum allowable consumption (ODP tonnes)		10.47	10.47	5.23	5.23	5.23	5.23	5.23	0	n/a	
Project costs requested in principle (US \$)	UNEP	Project costs	128,500	0	208,500	0	198,000	0	0	104,000	639,000
		Support costs	16,146	0	26,198	0	24,879	0	0	13,067	80,290
	UNIDO	Project costs	204,500	0	0	0	196,500	0	0	0	401,000
		Support costs	14,315	0	0	0	13,755	0	0	0	28,070
Total project costs requested in principle (US \$)		333,000	0	208,500	0	394,500	0	0	104,000	1,040,000	
Total support costs requested in principle (US \$)		30,461	0	26,198	0	38,634	0	0	13,067	108,360	
Total funds requested in principle (US \$)		363,461	0	234,698	0	433,134	0	0	117,067	1,148,360	

(VII) Request for approval of funding for the first tranche (2022)		
Implementing agency	Funds requested (US \$)	Support costs (US \$)
UNEP	128,500	16,146
UNIDO	204,500	14,315
Total	333,000	30,461

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Chad, 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 \$1,148,360, consisting of US \$639,000, plus agency support costs of US \$80,290 for UNEP and US \$401,000, plus agency support costs of US \$28,070 for UNIDO, as originally submitted.² The implementation of stage II of the HPMP will phase out the remaining consumption of HCFCs by 2030.

2. The first tranche of stage II of the HPMP being requested at this meeting amounts to US \$363,461, consisting of US \$128,500, plus agency support costs of US \$16,146 for UNEP and US \$204,500, plus agency support costs of US \$14,315 for UNIDO, as originally submitted.

Status of implementation of stage I of the HPMP

3. Stage I of the HPMP for Chad was originally approved at the 62nd meeting³ and revised at the 70th meeting⁴ to phase out 5.63 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$560,000, plus agency support costs. At the 87th meeting, in approving the fifth and final tranche, the Executive Committee approved, on an exceptional basis, the extension of the date of completion of stage I of the HPMP to 31 December 2022, given the delay in implementing phase-out activities due to the COVID-19 pandemic, and noting that no further extension of project implementation would be requested.⁵

HCFC consumption

4. The Government of Chad reported a consumption of 10.10 ODP tonnes of HCFC in 2021, which is 37.3 per cent below the HCFC baseline for compliance. The 2017-2021 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Chad (2017-2021 Article 7 data)

HCFC-22	2017	2018	2019	2020	2021	Baseline
Metric tonnes (mt)	216.60	188.72	185.45	184.20	183.6	292.70
ODP tonnes	11.91	10.38	10.20	10.13	10.10	16.10

5. The use of HCFC-22 in Chad is mainly for servicing and maintenance of RAC equipment. The decreasing trend is due to the activities implemented under the HPMP, including control of HCFC and HCFC-based equipment imports; training technicians in good servicing practices; and the introduction of alternative technologies in air-conditioning and commercial refrigeration applications, mainly HFCs, and R-600a and ammonia on a smaller scale. While the HCFC-22 import trend is decreasing, the situation is the opposite for alternative refrigerants.

Country programme (CP) implementation report

6. The Government of Chad reported HCFC sector consumption data under the 2021 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

² As per the letter of 23 February 2022 from the Ministry of Environment of Chad to UNEP.

³ Decision 62/49 and document UNEP/OzL.Pro/ExCom/62/25.

⁴ Annex XIII of document UNEP/OzL.Pro/ExCom/70/59.

⁵ Blanket approval decision 87/28.

Status of progress and disbursement

Legal framework

7. The Government of Chad has had an established licensing and quota system that supports the country's HCFC phase-out activities since 2012, and the import/export of ODS-based equipment was included in the license system in 2014. The Government of Chad set the 2022 HCFC import quota at 10.09 ODP tonnes, which remains below the maximum allowed consumption of 10.47 ODP tonnes. The national ozone unit (NOU) has worked closely with customs to monitor the use of licenses and quotas. An offline ozone database has been created to register and record issued import permits, consignments verified by customs, and reports from importers. Development of an online tool for sharing information between customs and the NOU on the use of import quotas for HCFCs was approved under the fifth tranche of stage I; UNEP has reported that coordination with customs has begun and the activity will continue as part of the first tranche of stage II.

8. The Government of Chad has ratified the Kigali Amendment on 26 March 2019 and, through an interministerial order, issued a licensing system for HFCs as of 27 March 2019.

Refrigeration servicing sector

9. Four portable ODS identifiers were acquired and distributed to different customs posts of the country. Training was provided to 700 customs officers and other enforcement officers in identifying and controlling HCFCs and HCFC-based equipment, the licensing and quota system, ODS identification and illegal trade prevention.

10. Information and awareness campaigns have reached 33 importing traders and 75 end-users. Furthermore, a module on ODS was introduced into the curriculum of the customs training school.

11. Training on good servicing practices, including the safe handling of hydrocarbon (HC) refrigerants, was provided to 1,200 RAC servicing technicians and 25 trainers. Further training is planned for the fifth tranche and the refrigeration training centres will include an ozone module in their curriculum by the end of the year. Six centres of excellence were provided with tools and equipment⁶ to serve the RAC technicians in the performance of their tasks and for training purposes. Awareness and outreach activities were conducted, including mass-media interviews, press releases in newspapers, stakeholder meetings, and informative brochures on HCFC alternative substances including the risks of flammable and toxic refrigerants.

Level of fund disbursement

12. As at 1 February 2022, of the US \$560,000⁷ approved for stage I of the HPMP, US \$514,542 had been disbursed (US \$280,000 for UNEP and US \$234,542 for UNIDO). It is expected that the remaining US \$40,000 from the fifth tranche will be disbursed by the end of stage I, i.e., by 31 December 2022.

⁶ Includes recovery units, vacuum pumps, refrigerant identifiers, refrigerant charging stations, portable ODS identifiers, leak detectors, service manifolds, electronic scales, recovery cylinders, service tools, bottles of mineral/alkyl benzene oil, bottles of R-290/600, and safety goggles.

⁷ Of which US \$5,458 had been returned (US \$5,000 by UNEP and US \$458 by UNIDO).

Stage II of the HPMP

Remaining consumption eligible for funding

13. After deducting 5.63 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding in stage II amounts to 10.47 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

14. There are approximately 1,206 technicians and 135 workshops in the servicing sector, consuming HCFC-22 to service unitary and split systems, commercial refrigeration equipment (cold rooms, cabinets), industrial refrigeration equipment (ice production), and central air-conditioning equipment (AC), as shown in Table 2. Currently, HCFC-22 represents 7 per cent of the refrigerants used in the servicing sector, followed by HFCs (55 per cent), R-600a (25 per cent), and ammonia (14 per cent). Furthermore, the survey also showed that prices for HCFC-22 and HFCs in Chad have been increasing steadily over the past four years, while prices for natural refrigerants have been falling.

Table 2. Estimate of demand for HCFC-22 in the RAC servicing sector in Chad

Sector/Application	(a)	(b)	(c)	(a*b*c)
	Equipment Inventory	Average charge (kg)	Equipment recharged (%)	Annual need for servicing (mt)
Room AC (Monobloc)	148,971	1.2	33	59.0
Room AC (Split AC)	109,983	1.2	33	43.6
Room AC (Portable AC)	829	0.7	33	0.2
Central AC	726	18	33	4.3
Commercial refrigeration (Display cabinets)	3,976	0.86	20	0.7
Commercial refrigeration (Cold rooms)	5,291	67	20	70.9
Industrial refrigeration (Ice production)	1,235	16.8	20	4.1
Total	271,011			182.8

Phase-out strategy in stage II of the HPMP

15. Stage II of the HPMP will focus on strengthening the HCFC legal framework, reinforcing the capacity of customs officers, operationalizing the online tool to connect customs with the NOU for more efficient control of ODS imports, providing tools to the centres of excellence and establishing three reclaim centres, implementing legal instruments related to the safe use of new technologies, further strengthening the capacity of the servicing sector, establishing a certification scheme for technicians, and conducting targeted awareness-raising campaigns promoting the transition to low-global-warming-potential (GWP) technologies in the RAC sector.

Proposed activities in stage II of the HPMP

16. Stage II proposes the following activities:

- (a) *Strengthening of the legal and institutional framework:* Banning the import of HCFCs as of 1 January 2030 except for a servicing tail; banning HCFC-based equipment imports as of 1 January 2029; operationalizing the online tool to allow information exchange between

the NOU and customs on the use of import quotas for HCFCs in real time as of 1 January 2025 (UNEP) (US \$34,000);

- (b) *Strengthening national capacity to control HCFCs:* Conducting 40 training sessions for 1,000 customs officers and other law enforcement agents on *inter alia* control and identification of HCFCs and HCFC-based equipment, updated regulations, and the 2022 Harmonized System Codes; translating into the main languages of the country ODS law and regulations for the control of HCFCs and HCFC-based equipment; conducting at least 20 information and awareness-raising workshops for importing traders of refrigerants and RAC equipment on the revised Government procedures for issuing import licenses and granting annual quotas, and on the storage and handling of flammable or toxic refrigerants (UNEP) (US \$235,000); providing 10 portable ODS identifiers and spare parts (UNIDO) (US \$50,000);
- (c) *Strengthening the capacity of RAC technicians in good practices:* Establishing a certification scheme for RAC technicians as of 1 January 2027 by hiring an expert to conduct a comprehensive study to determine all aspects of the certification system; developing three certifying centres and testing the operation of the system by certifying 25 technicians in 2026; conducting 50 sessions to train 1,000 RAC technicians in good practices in refrigeration, including techniques for recovery, recycling and reuse, and the handling of new refrigeration equipment, with the support of the RAC association; adopting standards on the safe use of flammable and toxic refrigerants as of 1 January 2027; awareness-raising through workshops and brochures for end-users presenting zero/low-GWP technology, discouraging the use of HFC-based technology and informing on the risks associated with flammable or toxic refrigerants; conducting a targeted awareness campaign to encourage students, particularly young women, to study for professions in the RAC sector at vocational training schools, technical high schools and universities (UNEP) (US \$320,000); and
- (d) *Strengthening six centres of excellence:* Procuring one portable refrigerant identifier and four sets⁸ of equipment, tools and spare parts for managing HCFCs and alternative refrigerants per centre, and providing training on their use; enabling refrigerant recovery and reuse through the establishment of three reclaim centres; and certifying three trainers in HC technology in Vienna, Austria, who will subsequently train at least four RAC trainers and also contribute to the regular RAC technician training courses on good practices (UNIDO) (US \$351,000).

Project monitoring

17. The system established under stage I of the HPMP will continue into stage II, with the NOU reporting on progress and working with stakeholders to phase out HCFCs. The cost of those activities for UNEP amounts to US \$50,000 and includes: project staff and consultants (US \$30,000), domestic travel (US \$12,000), and meetings and workshops (US \$8,000).

⁸ A tentative list of each set of equipment and tools includes: a recovery machine and three units of 12-kg recovery cylinders; portable charging station for HC, zone 1 air blower, electronic leak detector for HC and detector replacement; CO₂ fire extinguisher; four-way digital manifold with hoses, valve manifold gauge sets with hoses and electronic leak detectors; vacuum pump and gauge; weighing scales; portable nitrogen blowing equipment with trolley for cylinder and nitrogen purge tool; and other small tools.

Gender policy implementation

18. In line with decision 84/92(d),⁹ stage II of the HPMP will promote the hiring of female personnel and the participation of women in all project components (capacity-building activities, project boards and steering committees). Gender mainstreaming will be evaluated in all aspects of the programme; the NOU will continue to collect data to produce gender-disaggregated indicators and include gender indicators in reporting; and project staff and stakeholders will be sensitized on gender mainstreaming.

Total cost of stage II of the HPMP

19. The total cost of stage II of the HPMP for Chad has been estimated at US \$1,040,000 (plus agency support costs), as originally submitted, to achieve a 67.5 per cent reduction from its HCFC baseline consumption by 2025 and a 100 per cent reduction by 2030.

Activities planned for the first tranche of stage II

20. The first funding tranche of stage II of the HPMP in the total amount of US \$333,000 will be implemented between October 2022 and June 2025 and will include the following activities:

- (a) *Strengthening of the legal and institutional framework:* Operationalizing the online tool to allow information exchange between the NOU and customs on the use of import quotas for HCFCs in real time as of 1 January 2025 (UNEP) (US \$11,000);
- (b) *Strengthening national capacity to control HCFCs:* Conducting at least eight training sessions for 200 customs officers and other law enforcement agents on *inter alia* control and identification of HCFCs and HCFC-based equipment, updated regulations, and the 2022 Harmonized System Codes; translating into the main languages of the country ODS law and regulations for the control of HCFCs and HCFC-based equipment; conducting at least five information and awareness-raising workshops for importing traders of refrigerants and RAC equipment on the revised Government procedures for issuing import licenses and granting annual quotas, and on the storage and handling of flammable or toxic refrigerants (UNEP) (US \$50,000);
- (c) *Strengthening the capacity of RAC technicians in good practices:* Developing a certification scheme for RAC technicians by hiring an expert to conduct a comprehensive study to determine all aspects of the certification system; conducting at least 10 sessions to train 200 RAC technicians in good practices in refrigeration, including techniques for recovery, recycling and reuse, and the handling of new refrigeration equipment, with the support of the RAC association; developing standards and protocols on the safe use of flammable and toxic refrigerants; awareness-raising through workshops and brochures for end-users presenting zero/low-GWP technology, discouraging the use of HFC-based technology and informing on the risks associated with flammable or toxic refrigerants; (UNEP) (US \$55,000);
- (d) *Strengthening six centres of excellence:* Procuring four sets¹⁰ of equipment, tools and spare parts for managing HCFCs and alternative refrigerants per centre, and providing training on their use; enabling refrigerant recovery and reuse through the establishment of one reclaim centre; certifying three trainers in HC technology in Vienna, Austria, who will

⁹ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

¹⁰ List of equipment and tools as described in footnote 6.

subsequently train at least four RAC trainers and contribute to the regular RAC technician training courses on good practices (UNIDO) (US \$204,500); and

- (e) *Project monitoring*: US \$7,500 for consultants, US \$3,000 for monitoring-related travel and US \$2,000 for coordination meetings (UNEP) (US \$12,500).

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 2022-2024 business plan of the Multilateral Fund.

Overarching strategy

22. The Government of Chad proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, and to maintain a maximum annual consumption of HCFCs in the period of 2030 to 2040 at a level consistent with Article 5, paragraph 8 ter(e)(i) of the Montreal Protocol.¹¹ The Government of Chad is committed to continuing to apply strict import and control methods to monitor the level of import and the uses of HCFCs during that period to ensure that they are limited to the conditions established by the Montreal Protocol.

23. In line with decision 86/51, to allow for consideration of the final tranche of its HPMP, the Government of Chad agreed to submit: a detailed description of the regulatory and policy framework in place to implement measures to ensure that HCFC consumption is in compliance with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol for the 2030-2040 period; and the expected annual HCFC consumption in Chad for the 2030-2040 period.

Regulations to support HCFC phase-out

24. During the project review process, the Secretariat asked why the online connection to operate the licensing system had not been completed even though the activity had been planned since 2018. UNEP explained that adopting the online system required the agreement of high-level authorities, which had been delayed by a major change in the Government. However, UNEP confirmed that the operationalization of the online system that interconnects the Ministry of Environment, the Ministry of Trade and customs authorities is expected by 1 January 2025, and that practical measures are already in place to exchange information on the licenses issued and the volume of imports.

25. The Secretariat discussed with UNEP the possibility of the Government of Chad establishing the ban on the import of HCFC-based RAC equipment at an earlier stage instead of starting 1 January 2029. UNEP indicated that the quantities of imported HCFC-22-based equipment have been showing a downward trend since 2013. Therefore, it is expected that this downward trend will continue in the coming years as the adoption of alternatives increases, and that the servicing needs in 2030-2040 would be covered by the consumption allowed in the servicing tail without significant difficulty. Furthermore, as RAC equipment import trends are closely monitored, swift action would be taken to ban imports earlier if necessary.

¹¹ HCFC consumption may exceed zero in any year so long as the sum of its calculated levels of consumption over the ten-year period from 1 January 2030 to 1 January 2040, divided by 10, does not exceed 2.5 per cent of the HCFC baseline.

26. Noting the leakage rate, the Secretariat enquired whether the Government could establish regulatory measures to control emissions or leak checking for larger RAC equipment (commercial refrigeration and chillers). UNEP responded that based on previous experience, the country understood that it is more prudent to emphasize practical training of RAC technicians on the mitigation of emissions rather than using a formal regulatory/legislative approach.

Technical and cost-related issues

27. At present, R-600a is used in domestic refrigeration and stand-alone commercial units in the country. However, there is a lack of safety standards. The number of trained technicians and specific tools is still insufficient to face the challenges of servicing equipment with flammable refrigerants. Among other activities, stage II proposes developing safety standards in consultation with primary stakeholders, establishing a certification scheme for technicians, and upgrading the regional centres of excellence to continue assisting RAC technicians in good and safe servicing practices, providing advice on technology questions, and lending equipment for maintenance. Furthermore, the training of RAC technicians will be adjusted to make sure that both formally and informally educated RAC technicians acquire a sufficient level of skills to enable them to fulfil the certification requirements, as necessary.

28. Regarding the proposed certified training programme for HC-based equipment for three trainers in Vienna, Austria, UNIDO explained that its aim is to build capacity of national trainers on the characteristics of HC-based refrigerants (mainly R-290), the safe installation and maintenance of equipment, and the monitoring of leakages.

29. Concerning the recovery and reclamation project to be implemented under the first tranche, UNIDO will assist the Government in developing a comprehensive business model for assessing the project's technical feasibility and financial viability. At the time of the second tranche request, UNIDO will report the outcome of the feasibility study. No investments in reclaiming equipment will take place before the assessment concludes. If the reclaim centre is not an option for Chad, UNIDO will propose strengthening the centres of excellence with additional appropriate equipment.

Sustainability of the activities proposed under stage II

30. UNEP reported that, to maintain the capacity of customs on HCFC control and ensure the sustainability of the HCFC phase-out, an ODS module had been introduced into the curriculum of the customs training school to train incoming officers on basic concepts related to ODS. Furthermore, the training and capacity building of customs and enforcement officers is an ongoing activity, implemented in cooperation with the NOU and customs authorities.

31. To ensure the sustainability of technician training, the RAC training centres will include an ozone module in their curriculum by the end of stage I of the HPMP, and a certification scheme of RAC technicians will be introduced during stage II. Furthermore, the training centres and centres of excellence will continue training technicians in good and safe servicing practices for RAC equipment, providing advice on technological issues, and lending tools to technicians for equipment maintenance.

Total project cost

32. The total cost for stage II of the HPMP amounts to US \$1,040,000, based on decision 74/50(c)(xii) on the eligible funding level for a low-volume consuming country. Initially, UNEP had proposed requesting the fourth and final tranche in 2029. In view of decision 62/17 on the last funding tranche of multi-year HPMPs, UNEP was requested to revise its proposal for the fourth tranche. UNEP confirmed that the fourth and final tranche will be submitted in 2030, with no change in the total amount submitted per implementing agency. However, there was a redistribution of funds between the third and fourth tranche for activities to be implemented by UNEP, as shown in Table 3.

Table 3. Original and revised tranche distribution for UNEP (US \$)

	First tranche	Second tranche	Third tranche	Fourth tranche	Total
As submitted	128,500	208,500	138,500	163,500	639,000
Revised	128,500	208,500	198,000	104,000	639,000

Impact on the climate

33. The activities proposed in the servicing sector, which include better containment of refrigerants through training and provision of equipment, will reduce the amount of HCFC-22 used for RAC servicing. Each kilogramme of HCFC-22 not emitted due to better refrigeration practices results in savings of approximately 1.8 CO₂-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Chad, including its efforts to promote low-GWP alternatives, as well as refrigerant recovery and reuse, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

34. The Government of Chad will provide in-kind contributions estimated at US \$100,000 in the form of office space, support facilities and logistics for training activities.

2022-2024 draft business plan of the Multilateral Fund

35. UNEP and UNIDO are requesting US \$1,040,000, plus agency support costs, for the implementation of stage II of the HPMP for Chad. The total requested value of US \$363,461 including agency support costs for the period from 2022 to 2024, is US \$32,407 above the amount in the business plan.

Draft Agreement

36. A draft Agreement between the Government of Chad and the Executive Committee for stage II of the HPMP is contained in Annex I to the present document.

RECOMMENDATION

37. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Chad, for the period from 2022 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$1,148,360, consisting of US \$639,000, plus agency support costs of US \$80,290 for UNEP and US \$401,000, plus agency support costs of US \$28,070 for UNIDO, on the understanding that no more funding from the Multilateral Fund would be provided for the phase-out of HCFCs;
- (b) Noting the commitment of the Government of Chad:
 - (i) To operationalize an online tool to allow information exchange between the national ozone unit and customs on the use of import quotas for HCFCs in real time as of 1 January 2025;
 - (ii) To establish a certification scheme for refrigeration and air-conditioning technicians and adopt standards on the safe use of flammable and toxic refrigerants as of 1 January 2027;

- (iii) To ban the import of HCFC-based equipment by 1 January 2029; and
 - (iv) To completely phase out HCFCs by 1 January 2030 and to ban the import of HCFCs after that date, except for those allowed for a servicing tail between 2030 and 2040, where required, consistent with the provisions of the Montreal Protocol;
- (c) Deducting 10.47 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Approving the draft Agreement between the Government of Chad 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;
- (e) That, to allow for consideration of the final tranche of its HPMP, the Government of Chad should submit:
- (i) A detailed description of the regulatory and policy framework in place to implement measures to ensure that HCFC consumption was in compliance with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol for the 2030-2040 period;
 - (ii) The expected annual HCFC consumption in Chad for the 2030-2040 period; and
- (f) Approving the first tranche of stage II of the HPMP for Chad, and the corresponding tranche implementation plan, in the amount of US \$363,461, consisting of US \$128,500, plus agency support costs of US \$16,146 for UNEP, and US \$204,500, plus agency support costs of US \$14,315 for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF CHAD 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 Chad (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of zero ODP tonnes by 1 January 2030 in compliance with Montreal Protocol schedule.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in 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;
- (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; 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.

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.

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

Non-compliance with the Agreement

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A (“Reductions in Funding for Failure to Comply”) in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 5 above.

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

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

Date of completion

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

Validity

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

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

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	16.10

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	10.47	10.47	10.47	5.23	5.23	5.23	5.23	5.23	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	10.47	10.47	10.47	5.23	5.23	5.23	5.23	5.23	0.00	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	128,500	0	0	208,500	0	198,000	0	0	104,000	639,000
2.2	Support costs for Lead IA (US \$)	16,146	0	0	26,198	0	24,879	0	0	13,067	80,290
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	204,500	0	0	0	0	196,500	0	0	0	401,000
2.4	Support costs for Cooperating IA (US \$)	14,315	0	0	0	0	13,755	0	0	0	28,070
3.1	Total agreed funding (US \$)	333,000	0	0	208,500	0	394,500	0	0	104,000	1,040,000
3.2	Total support costs (US \$)	30,461	0	0	26,198	0	38,634	0	0	13,067	108,360
3.3	Total agreed costs (US \$)	363,461	0	0	234,698	0	433,134	0	0	117,067	1,148,360

Row	Particulars	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)										10.47
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)										5.63
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)										0.00

*Date of completion of stage I as per stage I Agreement extended at the 87th meeting: 31 December 2022

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

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

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

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

- (a) A narrative report, with data provided by tranche, describing the progress achieved since the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include the amount of ODS phased out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes;
- (b) An independent verification report of the Plan results and the consumption of the Substances, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
- (c) A written description of the activities to be undertaken during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall Plan that are foreseen. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
- (d) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database; and

- (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).
2. In the event that in a particular year two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:
 - (a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and
 - (b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. Overall monitoring of the project activities and compliance with the country's obligations 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 of the status of implementation of the Plan to the Lead IA. The HCFC consumption will be monitored and determined from official data of the imports and exports of chemical substances as registered by the relevant Government departments. The verification of the achievement of the performance targets as per Executive Committee requirements will be assigned to an independent company or independent consultants, preferably selected on local bases and directly recruited by the Lead IA.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities, including at least the following:
 - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
 - (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;
 - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee, and should include the activities implemented by the Cooperating IA;
 - (f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should

be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;

- (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
- (h) Carrying out required supervision missions;
- (i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (j) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
- (k) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of the Lead IA and the Cooperating IA;
- (l) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (m) Providing assistance with policy, management and technical support when required;
- (n) Reaching consensus with the Cooperating IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and
- (o) Timely releasing funds to the Country/participating enterprises for completing the activities related to the project.

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

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY

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.