



**United Nations  
Environment  
Programme**

Distr.  
GENERAL

UNEP/OzL.Pro/ExCom/91/41  
15 November 2022

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Ninety-first Meeting  
Montreal, 5-9 December 2022  
Item 9(d) of the provisional agenda<sup>1</sup>

**PROJECT PROPOSAL: ERITREA**

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

<sup>1</sup> UNEP/OzL.Pro/ExCom/91/1

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**

**ERITREA**

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

<b>(II) LATEST ARTICLE 7 DATA (Annex C Group I)</b>	Year: 2021	0.61 (ODP tonnes)
---	------------	-------------------

<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)</b>								<b>Year: 2021</b>	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					0.61				0.61

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009 - 2010 baseline:	1.09	Starting point for sustained aggregate reductions:	1.08
<b>CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)</b>			
Already approved:	0.38	Remaining:	0.71

<b>(V) ENDORSED BUSINESS PLAN</b>		<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Total</b>
UNEP	ODS phase-out (ODP tonnes)	0.1	0.0	0.0	0.1
	Funding (US \$)	59,250	0	0	59,250
UNIDO	ODS phase-out (ODP tonnes)	0.1	0.0	0.1	0.2
	Funding (US \$)	95,000	0	95,000	190,000

<b>(VI) PROJECT DATA</b>			<b>2022</b>	<b>2023-2024</b>	<b>2025</b>	<b>2026-2029</b>	<b>2030</b>	<b>Total</b>
Montreal Protocol consumption limits (ODP tonnes)			0.71	0.71	0.35	0.35	0	n/a
Maximum allowable consumption (ODP tonnes)			0.67	0.60	0.35	0.35	0	n/a
Project costs requested in principle (US \$)	UNEP	Project costs	115,000	0	135,000	0	75,000	325,000
		Support costs	14,950	0	17,550	0	9,750	42,250
	UNIDO	Project costs	105,000	0	110,000	0	0	215,000
		Support costs	9,450	0	9,900	0	0	19,350
Total project costs recommended in principle (US \$)			220,000	0	245,000	0	75,000	540,000
Total support costs recommended in principle (US \$)			24,400	0	27,450	0	9,750	61,600
Total funds recommended in principle (US \$)			244,400	0	272,450	0	84,750	601,600

<b>(VII) Request for approval of funding for the first tranche (2022)</b>		
<b>Implementing agency</b>	<b>Funds recommended (US \$)</b>	<b>Support costs (US \$)</b>
UNEP	115,000	14,950
UNIDO	105,000	9,450
Total	220,000	24,400

<b>Secretariat's recommendation:</b>	Individual consideration
--------------------------------------	--------------------------

## PROJECT DESCRIPTION

### Background

1. On behalf of the Government of Eritrea, 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 \$601,600, consisting of US \$325,000, plus agency support costs of US \$42,250 for UNEP and US \$215,000, plus agency support costs of US \$19,350 for UNIDO, as originally submitted.<sup>2</sup> 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 \$277,100, consisting of US \$115,000, plus agency support costs of US \$14,950 for UNEP and US \$135,000, plus agency support costs of US \$12,150 for UNIDO, as originally submitted.

### Status of implementation of stage I of the HPMP

3. Stage I of the HPMP for Eritrea was originally approved at the 67<sup>th</sup> meeting<sup>3</sup> and revised at the 77<sup>th</sup> meeting<sup>4</sup> to phase out 0.38 ODP tonnes of HCFC used in the refrigeration and air-conditioning (RAC) servicing sector, starting in 2012, and to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$210,000, plus agency support costs. Stage I of the HPMP was completed in December 2021, as stipulated in the Agreement between the Government of Eritrea and the Executive Committee.

### HCFC consumption

4. The Government of Eritrea reported a consumption of 0.61 ODP tonnes of HCFC in 2021, which is 44 per cent below the HCFC baseline for compliance. The 2017-2021 HCFC consumption is shown in table 1.

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

HCFC-22	2017	2018	2019	2020	2021	Baseline
Metric tonnes (mt)	16.30	14.80	13.80	11.20	11.00	19.70
ODP tonnes	0.90	0.81	0.76	0.62	0.61	1.09

5. Eritrea has experienced a declining trend in HCFC-22 consumption since 2017 due to implementation of a licensing and quota system, implementation of the HPMP activities and market fluctuations. The lower level of consumption in 2020 and 2021 is attributed to the economic challenges caused by the global COVID-19 pandemic. The import quota for 2022 is 12.01 mt.

### *Country programme (CP) implementation report*

6. The Government of Eritrea 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.

### Status of progress and disbursement

#### *Legal framework*

7. The Government of Eritrea has enacted a regulation (Legal Notice 117/2010) banning the import of ODS-based equipment, requiring registration of ODS importers and establishing import quotas on an

<sup>2</sup> As per the letter of 15 August 2022 from the Ministry of Land, Water and Environment of Eritrea to the Secretariat.

<sup>3</sup> Decision 67/27, document UNEP/OzL.Pro/ExCom/67/39.

<sup>4</sup> Annex XI of UNEP/OzL.Pro/ExCom/77/76.

annual basis. An effective licensing and quota system for HCFC imports and exports has been in place since 2013. The Government has initiated the process for ratification of the Kigali Amendment. Two portable ODS identifiers were provided to the customs department. Training was provided to 145 customs and other law enforcement officers on the amended ODS regulations, monitoring, and enforcement, including on the use of refrigerant identifiers and the prevention of illegal trade.

8. In response to recommendations in the verification report submitted to the 85<sup>th</sup> meeting, ODS regulation and enforcement has been enhanced through: two annual meetings held between the national ozone unit (NOU) and HCFC importers on quota assignation and the cross-checking of import data; a re-signed memorandum of understanding on enforcing ODS regulations between the NOU and the customs department; the sharing of copies of import licences with the customs department; and regular meetings between the NOU and enforcement agencies to share information, including import data.

#### *Refrigeration servicing sector*

9. Thirty trainers were trained in good refrigeration practices and received European Union certification. Six workshops were held for 236 RAC technicians in good refrigeration practices including the safe use of hydrocarbon (HC)-based refrigerants. The RAC sector was strengthened by the adoption of a code of conduct and the registration of all technicians, thus facilitating information flow and training follow-up. Furthermore, the NOU supported the organization of two meetings of the RAC association on energy-efficient and low-GWP alternative technologies.

10. One reclamation centre was established, and four regional centres of excellence received equipment, different types of gauges, and servicing tools,<sup>5</sup> including one ODS identifier. One expert was trained in the reclamation of refrigerants to provide technical support, and more than 120 technicians and 40 Government officials were trained in identifying potential counterfeit refrigerants.

11. Awareness-raising activities were conducted through print and electronic media, and through three meetings for importers, suppliers, refrigeration practitioners, technicians and the general public. Furthermore, refrigeration experts have been fully involved in raising awareness about environmentally-friendly refrigeration technologies.

#### *Project implementation and monitoring*

12. Implementation of the HPMP is monitored by the NOU with the support of a consultant, and includes monitoring, reporting and national inspections. Expenditures for stage I were US \$19,000 (i.e., US \$10,500 for staff and consultant expenses, US \$2,500 for travel, US \$4,000 for meetings and US \$2,000 for miscellaneous expenses).

#### *Level of fund disbursement*

13. As of December 2021, 100 per cent of the total approved funds for stage I of the HPMP (US \$210,000) had been disbursed and the project completed.

---

<sup>5</sup> One HCFC/HFC reclaiming unit, 36 electronic vacuum gauges, 34 vacuum pumps, 30 recovery machines, 70 cylinders for refrigerant recovery and two 100-lb cylinders for storage, 30 electronic scales, 30 sets of servicing tools (e.g., manifolds, pliers, wrenches, charging and refrigerant release hoses, tube cutter, flaring set, swaging tools, tube bender, socket sets, valves, fittings, spare needles, safety goggles and protection gloves), six multimeters, six Penta thermometers, six MAPP welding kits and four leak detectors.

## Stage II of the HPMP

### Remaining consumption eligible for funding

14. After deducting 0.38 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding in stage II amounts to 0.71 ODP tonnes of HCFC-22.

### Sector distribution of HCFCs

15. There are approximately 300 technicians and 83 workshops in the servicing sector, consuming HCFC-22 to service domestic air-conditioning (AC) units (unitary and split), commercial cold stores (stand alone, condenser units, and central system), and transport refrigeration (refrigerated trucks and vehicle AC), as shown in table 2. HCFC-22 represents 11 per cent of the refrigerants used in the servicing sector, while HFC-134a represents 34 per cent, R-404A and R-507 represent 29 per cent, and R-410A represents 12 per cent. The use of HCs is incipient, at 3 per cent for R-600A and 1 per cent for R-290.

16. Consumption of HCFC-22 persists in the commercial refrigeration sector, which can be attributed to industry growth and infrastructure development in the country.

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

Sector/ Application	Equipment inventory	(a)	(b)	(c) = (a)*(b)	(d)	(c)*(d)
		Equipment served (number of units)	Average charge (kg)	HCFC bank (mt)	Estimated bank refilled during servicing (%)	Annual need for servicing (mt)
Room AC (unitary and split)	450,700	10,700	2	21.4	15	3.21
Commercial/industrial refrigeration (stand alone, condensing units, and centralized system)	45,256	556	80	44.5	15	6.68
Transport refrigeration	2,325	240	50	12.0	10	1.20
<b>Total</b>						<b>11.09</b>

### Phase-out strategy in stage II of the HPMP

17. Stage II of the HPMP will focus on strengthening the HCFC licensing and quota system, promoting the transition to low-GWP technologies in the RAC sector, implementing legal instruments related to the safe use of new technologies, further strengthening the capacity of the servicing sector, and establishing a certification scheme for technicians. Implementation of stage II will utilize the lessons learned and infrastructure established during the implementation of stage I.

### Proposed activities in stage II of the HPMP

18. Stage II proposes the following activities:

- (a) *Updating ODS legislation and strengthening enforcement of regulations:* Implementation and maintenance of the licensing and quota system; update of current ODS regulations to include HFCs in the import licensing system as of 1 January 2024, and to ban imports of HCFCs (except for the servicing tail) as of 1 January 2030; adoption of the 2022 Harmonized Commodity Description and Coding System (HS 2022) as of 1 January 2024; training of 200 customs and enforcement officers on legislation updates, prevention of illegal trade and recognizing counterfeit refrigerants; hiring an expert to review the customs training manual with updated information, including the HS 2022 tariff codes for Montreal

Protocol controlled substances; and facilitating three border dialogues with representatives from neighbouring countries to exchange information on potential illegal trade in HCFCs (UNEP) (US \$105,000);

- (b) *Strengthening the capacity of RAC servicing technicians:* Development of a voluntary RAC certification scheme as of 1 January 2024 and certifying 250 servicing technicians; conducting six workshops for the training of 150 technicians in good refrigeration servicing practices; revising the national technicians' code of practice, and updating the technician training manual to include HFC-related issues and good practices for HCs; conducting a workshop for 40 stakeholders on the code of practice and administering the certification scheme; and conducting information outreach on new refrigerants (UNEP) (US \$100,000);
- (c) *Developing national technical standards and promoting green procurement:* Development of technical standards in RAC servicing that incorporate energy efficiency and the safe use of low-GWP technologies in the country as of 1 January 2024, followed by two capacity-building workshops for 40 standards officers, environmental inspectors and other relevant stakeholders on the enforcement of these standards; and development of a "green procurement plan" for both public and private RAC systems as of 1 January 2026, followed by two capacity-building workshops for 50 procurement officers aimed at promoting the procurement of environmentally-friendly technologies (UNEP) (US \$70,000); and
- (d) *Technical assistance and strengthening the centres of excellence:* Provision of toolkits for three centres of excellence according to their needs;<sup>6</sup> procurement of eight refrigerant identifiers; technical assistance to promote the uptake of R-290 in the country; and development of a refrigerant recovery and reuse (RR) infrastructure by establishing two additional reclamation centres, including acquiring reclaiming and recovery equipment, cylinders, and other items<sup>7</sup> (UNIDO) (US \$215,000).

#### *Project implementation and monitoring*

19. The system established under stage I of the HPMP will continue into stage II, where the NOU and UNEP monitor activities, report on progress, and work 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 \$22,000), travel for monitoring (US \$5,000), meetings and workshops (US \$21,000), and miscellaneous expenses (US \$2,000).

#### *Gender policy implementation<sup>8</sup>*

20. The Government of Eritrea and UNEP remain committed to implementing the Fund's gender policy and plan to incorporate gender equality into the activities and management of stage II of the HPMP; the Government's own gender policy, the National Gender Policy of Eritrea, will serve as a guideline. Gender disaggregated data will be collected and reviewed during project monitoring, and outreach activities will target a gender balance. The NOU will seek input from stakeholders on how to incorporate gender-specific

---

<sup>6</sup> The preliminary list of procurement includes vacuum pumps, manifold gauges and standard hoses (HCFCs, HCs, and HFCs), portable leak detectors for HCs, charging station for HC, brazing unit, compression fitting tool, portable recovery and recycling machines, piercing pliers and tube cutters, multi-metres, and safety-related servicing tools.

<sup>7</sup> Two reclaim units for multiple refrigerants (non-flammable); nine vacuum pumps, manifold gauges and standard hoses (HCFCs, HCs, and HFCs); laboratory items for rough test, quality check of reclaimed refrigerant; 20 cylinders (100 lb) and 50 cylinders (30 lb); a 1000-lb storage tank for unintended mixtures with a scale; 10 recovery units and hoses; and spare parts for the reclaiming units.

<sup>8</sup> In line with decision 84/92(d), decision 90/48(c) encouraged bilateral and implementing agencies to continue ensuring that the operational gender mainstreaming policy was applied to all projects, taking into consideration the specific activities presented in table 2 of document UNEP/OzL.Pro/ExCom/90/37.

indicators into the planning, implementation, and reporting process of each component of stage II, and will focus on supporting gender-balanced participation in training and capacity-building activities by reserving quotas for women.

#### Total cost of stage II of the HPMP

21. The total cost of stage II of the HPMP for Eritrea has been estimated at US \$540,000 (plus agency support costs), as originally submitted, for achieving a 67.5 per cent reduction from its HCFC baseline consumption by 2025 and a 100 per cent reduction by 2030. The proposed activities and cost breakdown are summarized in paragraphs 18 to 20 above.

#### Activities planned for the first tranche of stage II

22. The first funding tranche of stage II of the HPMP in the total amount of US \$250,000 will be implemented between January 2023 and December 2025 and will include the following activities:

- (a) *Updating ODS legislation and strengthening enforcement of regulations:* Implementation and maintenance of the licensing and quota system; update of current ODS regulations to include HFCs in the import licensing system as of 1 January 2024, and adoption of the HS 2022 as of 1 January 2024; training of 40 customs and enforcement officers on legislation updates, prevention of illegal trade and recognizing counterfeit refrigerants; hiring an expert to review the customs training manual with updated information, including the HS 2022 tariff codes for Montreal Protocol controlled substances; and facilitating two border dialogues with representatives from neighbouring countries to exchange information on potential illegal trade in HCFCs (UNEP) (US \$35,000);
- (b) *Strengthening the capacity of RAC servicing technicians:* Hiring an expert to support the development of a voluntary RAC certification scheme<sup>9</sup> and certifying 50 servicing technicians; revising of the technician training manual; conducting a workshop to train 30 technicians in good refrigeration servicing practices; conducting a workshop for 40 stakeholders on the code of practice and administering the certification scheme (UNEP) (US \$35,000);
- (c) *Developing national technical standards and promoting green procurement:* Hiring a consultant to develop technical standards in RAC servicing that incorporate energy efficiency and the safe use of low-GWP technologies in the country as of 1 January 2024; conducting one capacity-building workshop for 20 standards officers, environmental inspectors and other relevant stakeholders on the enforcement of these standards (UNEP) (US \$25,000);
- (d) *Technical assistance and strengthening the centres of excellence:* Supporting the development of the refrigerant RR infrastructure by providing technical assistance for a business model, and establishing one reclamation centre; providing technical assistance to promote the uptake of R-290; and procure and distribute tools and equipment<sup>10</sup> for three centres of excellence (UNIDO) (US \$135,000); and
- (e) *Project implementation and monitoring:* Coordination, monitoring, evaluation, and reporting of activities of the HPMP, including six monitoring visits (UNEP) (US \$20,000).

<sup>9</sup> This includes a procedure for the certification process, identification of subjects to be examined through either theory or practice, and establishing the required level of knowledge.

<sup>10</sup> The procurement list will be defined after the needs of each centre have been evaluated.

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

23. 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.

#### HCFC phase-out

24. The Secretariat discussed the phase-out targets for 2022 to 2030 keeping in mind the HCFC-22 consumption reduction trend reported from 2017 to 2021, and the 2022 HCFC quota issued for 0.67 ODP tonnes (38.5 per cent reduction from the baseline). Subsequently, UNEP indicated that the Government of Eritrea agreed to revise the phase-out schedule with the accelerated reduction steps of 38.5 per cent, 45 per cent, 67.5 and 100 per cent by 2022, 2023, 2025 and 2030, respectively.

#### Overarching strategy

25. The Government of Eritrea proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, and to maintain a maximum annual HCFC consumption in the period 2030–2040 at a level consistent with Article 5, paragraph 8 ter(e)(i) of the Montreal Protocol.<sup>11</sup> The Government of Eritrea is committed to continue establishing strict import and control measures to monitor the levels of import and the uses of HCFCs during that period to ensure compliance with the Montreal Protocol.

26. In line with decision 86/51, to allow for consideration of the final tranche of its HPMP, the Government of Eritrea 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 period 2030–2040, and with the expected annual HCFC consumption in Eritrea for the same period.

#### Regulations to support HCFC phase-out

27. The Secretariat asked UNEP and the Government of Eritrea to consider issuing a ban on HCFC-22-based equipment imports at an early stage. UNEP responded that the current legal framework (Legal Notice 117/2010) prohibits the import and export of ODS-based equipment unless that equipment is exempted by the Ministry of Environment, which has established criteria for such exemptions.<sup>12</sup> Furthermore, the report on imports did not show any HCFC-based equipment in the last three years. The Secretariat asked about imports of second-hand RAC equipment, and UNEP responded that those imports had been discouraged by customs tariffs. UNEP highlighted that the Government would ban imports of HCFCs for uses other than the servicing tail as of 1 January 2030.

#### Technical and cost-related issues

28. The Secretariat expressed concern since, at present, imports of HFCs in Eritrea represent 85 per cent, while imports of HCs account for 4 per cent of the refrigerant market. Consequently, the Secretariat asked which were the main barriers to a broader adoption of zero/low-GWP alternatives in the RAC sector. UNEP responded that there were safety concerns associated with flammability and toxicity: the country has not yet adopted safety standards for managing flammable alternatives, and the number of

---

<sup>11</sup> 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.

<sup>12</sup> The Ministry may exempt ODS-based equipment until effective and sustainable alternatives are available and where the ODS-based equipment is not phased out at the time of granting import or export exemption.

trained technicians and the specific tools available are still insufficient to face the challenges of servicing equipment with flammable refrigerants; the implementation of stage II will address those challenges. Furthermore, UNEP highlighted that the Government of Eritrea has committed to modifying the green procurement policy to ensure that public institutions acquire low-GWP, energy-efficient RAC equipment, and that awareness initiatives encouraging influential buyers in the market to adopt a green procurement policy would reduce the current demand of HFCs.

29. Regarding the certification scheme, UNEP reported that, initially, it would be applicable on a voluntary basis and a fee would be set to sustain the programme and cover costs associated with the process. However, requiring only certified technicians to be allowed to provide services in Eritrea would remain an aspirational goal until additional capacity had been built in the servicing sector. In the meantime, end-users and the public would be made aware of the need to contract only certified technicians, thus encouraging technicians to apply for certification.

30. In the discussions with UNIDO on the procurement of additional equipment, the Secretariat noted that one reclamation station and 34 recovery units were to be distributed among four centres of excellence, which was insufficient to establish a refrigerant RR scheme in the country. Given that, it was decided that UNIDO would support Eritrea in developing a business model for redesigning an appropriate RR scheme as part of the first tranche. If the study conducted to develop the business model concludes that adding new reclamation stations is not necessary, the procurement of other training equipment, such as refrigeration system simulators, would be proposed in the submission for the second tranche. Furthermore, UNIDO confirmed that support to the centres of excellence includes training on the use of tools and equipment.

31. The initial plan for the first tranche included acquiring an additional reclamation station, while the procurement of ODS identifiers was planned for the second tranche. However, there is an urgent need to acquire the ODS identifiers, since those currently installed in the country are out of service. This required a redistribution of the first and second tranche allocations for more cost-effective implementation. The redistribution includes a decrease of US \$30,000 for the first tranche and a corresponding increase in the second tranche.

32. The Secretariat consulted with UNIDO on the possibility of expanding the scope of technical assistance for the uptake of R-290 in Eritrea to cover all low-GWP alternatives, including flammable refrigerants. As a result, UNIDO accepted the change and indicated that they would hire an international expert to conduct theoretical and practical training for 80 RAC trainers in the country's two principal cities.

#### Sustainability of the HCFC phase-out and assessment of risks

33. The Secretariat discussed with UNEP, as the lead implementing agency in Eritrea, risks to the successful total phase-out of HCFCs and the sustainability of the HPMP achievements. From that analysis, the primary risks identified were external causes, such as a new pandemic/epidemic, potential internal political conflicts, and illegal trade due to the porous border of the country. Therefore, the implementing agencies will be attentive to potential political or health crises in the country so that they can adjust project implementation, just as they have done in response to the COVID-19 pandemic. Furthermore, the implementing agencies will report to the Executive Committee and seek decisions on managing critical situations where needed.

34. Regarding the detection of potential illegal trade, joint market monitoring activities are undertaken by customs and the NOU as part of the institutional strengthening project implementation. Moreover, there is good collaboration between border police officers and customs officers stationed at the entry points to ensure the prevention of illegal trade in all environmentally-sensitive goods. UNEP reported that 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.

35. To ensure the sustainability of technician training, the RAC training centres are encouraged to incorporate good servicing practices into their syllabus courses, and the development of a certification scheme for RAC technicians is planned under stage II. Furthermore, the centres of excellence will provide advice on technological issues, and lend tools to technicians for equipment maintenance, which are challenges faced by the RAC sector to implement good practices and reduce leakages. The centres of excellence will also be empowered to take ownership of the RR process and put in place commercial programmes to sustain that process over the long term.

#### Total project cost

36. The total cost of stage II of the HPMP amounts to US \$540,000, based on decision 74/50(c)(xii) on the eligible funding level for a low-volume-consuming country. In reference to the redistribution of the first and second tranche allocations referred to in paragraph 31, the funding for the first tranche was agreed at US \$220,000 plus project support costs of US \$24,400, and the second tranche at US \$245,000 plus project support costs of US \$27,450.

#### Impact on the climate

37. The activities proposed 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 kilogramme of HCFC-22 not emitted due to better refrigeration practices results in savings of approximately 1.8 CO<sub>2</sub>-equivalent tonnes. A calculation of the impact on the climate has been provided in the HPMP. The activities planned by Eritrea, including its efforts to promote low-GWP alternatives, good refrigeration servicing practices, and refrigerant RR, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

#### **Co-financing**

38. The Government of Eritrea will provide personnel and logistical support through the NOU as in-kind support for stage II of the HPMP.

#### **2022-2024 draft business plan of the Multilateral Fund**

39. UNEP and UNIDO are requesting US \$540,000, plus agency support costs, for the implementation of stage II of the HPMP for Eritrea. The total requested value of US \$244,400, including agency support costs, for the period 2022–2024 is US \$4,850 below the amount in the business plan.

#### **Draft Agreement**

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

#### **RECOMMENDATION**

41. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Eritrea for the period from 2022 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$601,600, consisting of US \$325,000, plus agency support costs of US \$42,250 for UNEP and US \$215,000, plus agency support costs of US \$19,350 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 Eritrea to reduce HCFC consumption by 38.5 per cent of the country's baseline by 2022, 45 per cent per cent by 2023, 67.5 per cent by 2025 and to phase out HCFCs completely by 1 January 2030, and that HCFCs would not be imported 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 0.71 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Approving the draft Agreement between the Government of Eritrea 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 Eritrea 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 period 2030-2040;
  - (ii) The expected annual HCFC consumption in Eritrea for the period 2030–2040; and
- (f) Approving the first tranche of stage II of the HPMP for Eritrea, and the corresponding tranche implementation plan, in the amount of US \$244,400, consisting of US \$115,000, plus agency support costs of US \$14,950 for UNEP, and US \$105,000, plus agency support costs of US \$9,450 for UNIDO.



## Annex I

### **DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF ERITREA 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 Eritrea (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; 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; 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.

### **Bilateral and implementing agencies**

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNEP has agreed to be the lead implementing agency (the “Lead IA”) and UNIDO has agreed to be the cooperating implementing agency (the “Cooperating IA”) under the lead of the Lead IA in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA and/or Cooperating IA taking part in this Agreement.

10. The Lead IA will be responsible for ensuring 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	1.09
Total			1.09

### APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2022	2023-2024	2025	2026-2029	2030	Total	
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	0.71	0.71	0.35	0.35	0	n/a	
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	0.67	0.60	0.35	0.35	0	n/a	
2.1	Lead IA (UNEP) agreed funding (US \$)	115,000	0	135,000	0	75,000	325,000	
2.2	Support costs for Lead IA (US \$)	14,950	0	17,550	0	9,750	42,250	
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	105,000	0	110,000	0	0	215,000	
2.4	Support costs for Cooperating IA (US \$)	9,450	0	9,900	0	0	19,350	
3.1	Total agreed funding (US \$)	220,000	0	245,000	0	75,000	540,000	
3.2	Total support costs (US \$)	24,400	0	27,450	0	9,750	61,600	
3.3	Total agreed costs (US \$)	244,400	0	272,450	0	84,750	601,600	
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)							0.71
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)							0.38
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)							0

\*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 of status of implementation of the Plan to the Lead IA.
2. Monitoring of development of the Plan, and verification of the achievement of performance targets specified in the Plan, will be assigned with a preference to independent local enterprises or independent local consultants 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 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.

---