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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-eight Meeting
Montreal, 15-19 November 2021¹

PROJECT PROPOSAL: ETHIOPIA

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

Phase-out

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

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

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

ETHIOPIA

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2020	3.41 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2020	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					3.41				3.41

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:		5.5	Starting point for sustained aggregate reductions:
			5.5
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:		1.92	Remaining:
			3.58

(V) BUSINESS PLAN		2021	2022	2023	Total
UNEP	ODS phase-out (ODP tonnes)	0.08	0	0	0.08
	Funding (US \$)	58,500	0	0	58,500
UNIDO	ODS phase-out (ODP tonnes)	0.70	0	1.10	1.8
	Funding (US \$)	63,765	0	95,648	159,413

(VI) PROJECT DATA			2021	2022-2023	2024	2025	2026	2027-2029	2030	Total
Montreal Protocol consumption limits			3.58	3.58	3.58	1.79	1.79	1.79	0	n/a
Maximum allowable consumption (ODP tonnes)			3.58	3.58	3.58	1.79	1.79	1.79	0	n/a
Projects costs requested in principle (US \$)	UNEP	Project costs	137,000	0	100,000	0	98,000	0	63,000	398,000
		Support costs	17,810	0	13,000	0	12,740	0	8,190	51,740
	UNIDO	Project costs	60,000	0	90,000	0	37,000	0	0	187,000
		Support costs	5,400	0	8,100	0	3,330	0	0	16,830
Total project costs requested in principle (US \$)			197,000	0	190,000	0	135,000	0	63,000	585,000
Total support costs requested in principle (US \$)			23,210	0	21,100	0	16,070	0	8,190	68,570
Total funds requested in principle (US \$)			220,210	0	211,100	0	151,070	0	71,190	653,570

(VII) Request for approval of funding for the first tranche (2021)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNEP	137,000	17,810
UNIDO	60,000	5,400
Total	197,000	23,210

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Ethiopia, 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 \$653,570, consisting of US \$398,000, plus agency support costs of US \$51,740 for UNEP, and US \$187,000, plus agency support costs of US \$16,830 for UNIDO, 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 \$269,580, consisting of US \$145,000, plus agency support costs of US \$18,850 for UNEP, and US \$97,000, plus agency support costs of US \$8,730 for UNIDO, as originally submitted.

Status of implementation of stage I of the HPMP

3. Stage I of the HPMP for Ethiopia was approved at the 68th meeting³ to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$315,000, plus agency support costs to phase out 1.92 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector. The third and final tranche of stage I was approved at the 85th meeting; stage I will be completed by 31 December 2022 in line with decision 85/22(a).

HCFC consumption

4. The Government of Ethiopia reported a consumption of 3.41 ODP tonnes of HCFC in 2020, which is 38 per cent below the HCFC baseline for compliance. The 2016-2020 HCFC consumption is shown in Table 1.

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

HCFC-22	2016	2017	2018	2019	2020	Baseline
Metric tonnes (mt)	83.40	76.00	72.00	64.10	62.00	100.00
ODP tonnes	4.59	4.18	3.96	3.53	3.41	5.50

5. Ethiopia's only consumption is HCFC-22, which is used exclusively in the servicing sector. Consumption continues to decline with the implementation of the activities in the refrigeration servicing sector included in the HPMP, the enforcement of the licensing and quota system, and the introduction of non-HCFC-based RAC equipment, including HFC- and hydrocarbon-based equipment.

CP implementation report

6. The Government of Ethiopia reported HCFC sector consumption data under the 2020 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. Ethiopia's ODS regulations, gazetted in 2011, cover the imports and exports of ODS and ODS-based equipment, and provide for a licensing system for all ODS, including HCFCs. Draft revisions to those regulations have been prepared, which include new provisions to ban imports of HCFC-based

² As per the letter of 28 July 2021 from the Environment, Forest and Climate Change Commission of Ethiopia to the Secretariat.

³ Annex XV of UNEP/OzL.Pro/ExCom/68/53.

equipment by 1 January 2024 and imports of virgin HCFC refrigerants by 1 January 2030. The draft regulations were submitted to the council of ministers for review and presentation to Parliament; it is expected that the regulations will be approved by 31 December 2021.

8. The Environmental Protection Agency (EPA) is the focal point for the Montreal Protocol; it coordinates all activities to meet compliance, works closely with the Ethiopian Customs and Revenue Authority in the enforcement of the ODS regulations, and is responsible for the logistical and enforcement mechanisms for the ODS regulations and raising awareness of the importers and the general public on ozone issues.

9. The HCFC quota and licensing system is operational and is being enforced. The national ozone unit (NOU) keeps records of all importers that were granted the permit to import HCFCs; the permit is valid until 31 December in the year the permit was issued. Only registered importers may be granted a quota permit. Any controlled substances imported without a quota permit are confiscated by the Customs Department. In 2020, four importers were issued quotas totalling 3.56 ODP tonnes; the quota allocation for 2021 is 3.30 ODP tonnes, which is lower than the Montreal Protocol control target of 3.58 ODP tonnes for that year.

10. Substances listed under Annexes A, B, and E of the Protocol are banned except for methyl bromide for quarantine and pre-shipment. While the NOU is not aware of stocks of controlled substances that have been phased out in the country, some equipment based on such substances remains in use, and the NOU is seeking to ensure the safe disposal of such substances.

11. A total of 344 customs officers were trained between 2013 and 2020, and five refrigerant identifiers were distributed to custom entry points; an additional 32 customs officers are expected to participate in a training session planned for September 2021. In addition, 120 participants, including Government representatives, the private sector, and community representatives, attended awareness meetings on ODS regulations. The NOU, in collaboration with inspectors from the Environment Forest and Climate Change Commission, undertook two visits to markets, warehouses, and shops to inspect for illegal imports of ODS. In line with the recommendations of the verification report submitted to the 77th meeting, the website for importers to apply online for a quota was developed and is at a trial stage; the website will be finalized by January 2022.

Refrigeration servicing sector

12. Three training centres were provided with equipment (e.g., recovery units with cylinders, manifold gauge sets, gas detectors, fire extinguishers) and service technicians with tool kits (e.g., adjustable wrench, flaring set, swaging tools, brazing torch, tube bender, valves, fittings). A total of 325 refrigeration technicians and 20 trainers were trained on good servicing practices, emerging technologies, and safe servicing and maintenance of RAC equipment based on low-global warming potential (GWP) refrigerants. The NOU, in collaboration with the Chambers of Commerce of Ethiopia, visited six workshops to assess the implementation of the national refrigeration code of conduct, which was developed in 2014. Two meetings for the RAC association were held in July 2020 and January 2021 to strengthen the association and assist in drafting the association rules; a further meeting is planned for October 2021.

13. The delivery of additional training equipment (e.g., refrigerant identifiers, recovery units with cylinders, manifold gauge sets, gas detectors, hydrocarbon (HC) teaching units) for the vocational training centres and tools for servicing technicians (e.g., adjustable wrench, flaring set, swaging tools, brazing torch, tube bender, valves, fittings), which had been expected by August 2021, was further delayed due to the political unrest in the country and the COVID-19 pandemic and, at the time of finalization of the present document, had not yet been delivered; delivery was expected by 31 October 2021.

Level of fund disbursement

14. As of October 2021, of the US \$315,000 approved under stage I, US \$233,140 had been disbursed (US \$160,450 for UNEP and US \$72,690 for UNIDO⁴). An additional US \$57,583 will be disbursed upon delivery of the equipment indicated in paragraph 13; the balance of US \$24,277 will be disbursed by December 2022.

Stage II of the HPMPRemaining consumption eligible for funding

15. After deducting 1.92 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding in stage II amounts to 3.58 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

16. Each year approximately 100 technicians graduate from the vocational training centres, but it is difficult to estimate the number of technicians in the country given the high turn-over and substantial proportion of technicians in the informal sector. HCFC-22 is used to service domestic air-conditioning (AC) units, commercial refrigeration units (including stand-alone, condenser units, and centralized systems), and transport refrigeration equipment. There are approximately 230,000 RAC units in operation, of which 190,000 (about 82 per cent) are domestic AC units, 40,000 (about 17 per cent) are commercial refrigeration units, and the remaining are centralized systems and transport refrigeration (1 per cent).

17. HCFC-22 represents about half of the refrigerants used in the servicing sector, followed by HFC-134a, R-290, R-404A, and R-407C. HFC-134a is predominantly used in domestic refrigeration, R-290 and R-407C in stand-alone commercial refrigeration units, R-404A in stand-alone and centralized commercial refrigeration units, and R-600a in domestic and commercial refrigeration. Consumption of R-290 almost doubled between 2016 and 2020 given the increased uptake of R-290-based AC systems in the country. Ammonia is no longer consumed in the country following the closure of two breweries that had used it as a refrigerant. HFOs are not consumed in Ethiopia.

Phase-out strategy in stage II of the HPMP

18. Stage II of the HPMP proposes to completely phase out HCFCs by 2030 with a servicing tail up to 2040 in line with the Montreal Protocol. It will build upon the experience gained during implementation of stage I, and will focus on strengthening the HCFC licensing and quota system; implementing legal instruments related to the safe use of low-GWP technologies; and further strengthening the capacity of the servicing sector.

Proposed activities in stage II of the HPMP

19. Stage II proposes the following activities:

- (a) *ODS policy and regulations*: Develop national standards for the safe installation, transportation, storage, operation, and maintenance of energy-efficient, low-GWP RAC equipment in collaboration with the Ethiopian Standards Agency by 2024; build capacity for 100 standards officers and environmental and enforcement officers through 10 training workshops on monitoring and enforcement of the standards; conduct monitoring and inspections of imported equipment to ensure compliance with the standards; develop

⁴ Including US \$229 plus agency support costs of US \$21 for UNIDO returned to the Multilateral Fund at the 82nd meeting.

policies on procurement of energy-efficient low-GWP RAC equipment in public institutions by 2023; and train 80 procurement officers through four training workshops on those policies (UNEP) (US \$100,000);

- (b) *ODS customs and enforcement training:* Strengthen the enforcement of ODS regulations including capacity enhancement of customs officers, consumer protection officers, and other law enforcement officers by conducting border dialogues with neighbouring countries (Kenya, Somalia, and South Sudan) on preventing illegal trade of controlled substances and counterfeit refrigerants; updating the customs training curriculum, including through the use of UNEP OzonAction-developed training resources, and in line with the planned 2024 ban on the import of HCFC-based equipment; training 30 trainers and 150 customs and law enforcement officers in ODS regulations, and identifying ODS and counterfeit refrigerants (UNEP) (US \$113,000);
- (c) *RAC technician certification and training:* Update the national code of conduct for RAC technicians to address the safe handling of flammable refrigerants and servicing of low-GWP-based equipment, and update the technician training curriculum, accordingly, including through the use of relevant training materials developed by OzonAction; develop a fee-based certification scheme and train and certify 700 RAC technicians on good servicing practices;⁵ build the capacity of the RAC association on the certification process (UNEP) (US \$135,000); and
- (d) *Strengthen the vocational training centres and establish three reclamation centres:* Procure tools and equipment (e.g., charging station for HC, leak detector for HC, manifold gauges, brazing unit, compression fitting tools, recovery machines, safety related tools, miscellaneous tubing tools) for the six vocational training centres supported under stage I; develop a business model for the operation of and establish three reclamation centres, to be identified through a local competitive process, including procurement of necessary equipment (e.g., reclamation unit, refrigerant identifier, laboratory accessories, cylinders, storage tanks, scales, recovery units) (UNIDO) (US \$187,000).

20. In addition to the forthcoming 1 January 2024 ban on the import of HCFC-based equipment, the Government planned to implement the following by 31 December 2024: a regulation requiring recovery of HCFCs during the servicing of RAC equipment and a prohibition on venting of HCFCs during installation, servicing, and decommissioning of RAC equipment; a regulation requiring leak checking for larger equipment; and a prohibition on disposable cylinders.

Project implementation and monitoring

21. The system established under stage I of the HPMP will continue into stage II, where the NOU monitors activities, report progress, and work with stakeholders to phase out HCFCs; a consultant will be hired on an as-needed basis to support the HPMP implementation. The cost of these activities amounts to US \$50,000 (UNEP).

⁵ The Chambers of Commerce of Ethiopia will implement the RAC certification scheme, which will include theoretical and practical examinations, with the support of the RAC association and the NOU. The scheme's sustainability will be supported by a fee that will be determined during implementation, and by advising refrigerant importers to only sell refrigerants to certified technicians; institutions that own refrigeration equipment will be advised to only engage certified RAC technicians to service their equipment. Certification will be offered at different levels in light of the different expertise and level of academic qualifications of technicians in the country.

Gender policy implementation⁶

22. Ethiopia has implemented a national policy on women since 1994 that aims to institutionalize the political, economic, and social rights of women, and the development of gender equity, by structuring government offices and institutions in a way that allows for gender-responsive public policies and interventions. During implementation of stage II of the HPMP, there will be a focus on gender-balanced participation in training and capacity building activities, targeting a 35 to 45 percent female participation rate in the technician and customs officer trainings. Sessions on the importance of gender mainstreaming and women's empowerment will be incorporated into meetings and training workshops. Expertise on gender mainstreaming from national resources such as government agencies, community-based organizations, and women's associations will be applied to components of the HPMP. The NOU will continue collecting and reporting gender disaggregated data as in stage I.

Total cost of stage II of the HPMP

23. The total cost of stage II of the HPMP for Ethiopia has been estimated at US \$585,000 (plus agency support costs), as originally submitted for achieving 100 per cent reduction by 2030. The proposed activities and cost breakdown are summarized in paragraph 19.

Activities planned for the first tranche of stage II

24. The first funding tranche of stage II of the HPMP at the total amount of US \$242,000 will be implemented between January 2022 and December 2024 and will include the following activities:

- (a) *ODS policy and regulations*: Engage a consultant to develop national standards in the RAC sector for the safe use of energy-efficient, low-GWP RAC equipment, three stakeholder consultation workshops for 60 participants on the draft standards, and publication and dissemination of the standards; two training sessions for 100 standards officers and environmental inspectors on enforcement of the standards; monthly monitoring inspections on imported RAC equipment and refrigerants at 14 border checkpoints; and two workshops for 40 procurement officers on green procurement (UNEP) (US \$47,000);
- (b) *ODS customs and enforcement training*: Two border dialogues on counterfeit refrigerants and preventing illegal trade of controlled substances; updating the customs training curriculum; and training 15 trainers and 40 customs and law enforcement officers based on the updated curriculum (UNEP) (US \$45,000);
- (c) *RAC technician certification and training*: Update the national code of conduct for RAC technicians and the technician training curriculum; conduct consultations with 30 stakeholders from the vocational training centres, universities, the Environment Forest and Climate Change Commission, and the Standards Agency, and establish a mandatory certification scheme for service technicians by 31 December 2024; hold a training workshop on the certification scheme for approximately 30 stakeholders; and train and certify 70 technicians in good servicing practices (UNEP) (US \$43,000);
- (d) *Strengthen the vocational training centres and establish a reclamation centre*: Technical assistance to develop a business model for the operation of a reclamation centre, and procure tools and equipment for one centre (e.g., reclamation unit, refrigerant identifier, laboratory accessories, cylinders, storage tanks, scales, recovery units) and for six vocational training centres (e.g., charging station for HC, leak detector for HC, manifold

⁶ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

gauges, brazing unit, compression fitting tools, recovery machines, safety related tools, miscellaneous tubing tools); (UNIDO) (US \$97,000); and

- (e) Project monitoring and support (UNEP) (US \$10,000) (US \$4,000 for hiring consultants, US \$4,000 for coordination meetings, and US \$2,000 for monitoring travels).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

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

Conditions for submission of stage II

26. The third and final tranche of stage I was approved on the understanding that the Government of Ethiopia could submit stage II of the HPMP once 80 per cent of the total funds approved for UNIDO had been disbursed (decision 85/22(a)). The Secretariat noted that the delivery of additional training equipment planned for August 2021 was further delayed to 31 October 2021 due to the political situation and the pandemic, and that an additional US \$57,583 would be disbursed upon equipment delivery. In light of those exceptional circumstances, the Secretariat had submitted stage II of the HPMP to the 88th meeting on the understanding that the Treasurer would transfer the funding for the first tranche of the HPMP to UNEP and UNIDO only upon confirmation by UNIDO to the Secretariat that the equipment had been delivered and the disbursement level required in decision 85/22(a) had been achieved.

Overarching strategy

27. The Government of Ethiopia proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, and to maintain a maximum annual consumption of HCFC in the period of 2030 to 2040 consistent with Article 5, paragraph 8 ter(e)(i) of the Montreal Protocol.⁷ Noting that the Government planned to ban the import of HCFCs by 1 January 2030, UNEP clarified that the Government would issue a special order to allow imports of HCFCs in the 2030-2040 period that met the conditions specified in Article 5, paragraph 8 ter(e)(i) of the Protocol. The Government confirmed its commitment to establish criteria within its licensing system to monitor the levels of import and the uses of HCFCs during the 2030-2040 period to ensure that they are limited to the conditions set by the Montreal Protocol.

28. In line with decision 86/51, to allow for consideration of the final tranche of its HPMP, the Government of Ethiopia agreed to submit 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, and the expected annual HCFC consumption in Ethiopia for the 2030-2040 period.

Tranche distribution

29. The first tranche included US \$37,000 for the establishment of a reclamation centre. Reclamation schemes implemented under the Multilateral Fund have historically been most successful when complemented by policies that support the HCFC phase-out, such as a regulation requiring recovery of HCFCs during the servicing of RAC equipment, a prohibition on venting of HCFCs during installation,

⁷ 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.

servicing, and decommissioning of RAC equipment, and a regulation requiring leak checking for larger equipment; establishment of a code of practice for RAC technicians; and implementation of a mandatory certification scheme. Noting that the Government planned to implement such measures by 31 December 2024, the Secretariat suggested delaying the establishment of the reclamation centres until those planned policies and regulations had been implemented, i.e., after 2024, and to shift the US \$37,000 for the establishment of a reclamation centre from the first to the third tranche. Moreover, the tranche distribution as originally submitted provided 74 per cent of the HPMP funding by 2024, leaving only 26 per cent of the funds for the remaining six years. Given overlapping activities with stage I, challenges in implementation due to the COVID-19 pandemic and other circumstances prevailing in the country, the Secretariat proposed a more balanced tranche distribution, in line with decisions on this matter. UNEP agreed to delay the establishment of the reclamation centres, and shifted a further US \$8,000 associated with updating the customs training curriculum from the first to the third tranche, resulting in the tranche distribution shown in Table 2.

Table 2. Original and revised tranche distribution (US \$)

	First tranche	Second tranche	Third tranche	Fourth tranche	Total
As submitted	242,000 (41%)	190,000 (32%)	90,000 (15%)	63,000 (11%)	585,000
Revised	197,000 (34%)	190,000 (32%)	135,000 (23%)	63,000 (11%)	585,000

Total project cost

30. The total cost for stage II of the HPMP amounts to US \$585,000, based on decision 74/50(c)(xii) on the eligible funding level for a low-volume consuming country. The funding for the first tranche was adjusted in line with the changes described in paragraph 29 above.

Impact on the climate

31. The proposed activities 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. A calculation of the impact on the climate was provided in the HPMP. The activities planned by Ethiopia, including its efforts to improve the HCFC licensing and quota system, strengthen the servicing sector, and promote low-GWP technologies, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

32. The Government is working with the private sector to implement co-financing projects that will bring ozone and climate benefits. The Government's contribution to the project activities remains in-kind, with logistics and personnel support for the implementation of stage II of the HPMP.

2021-2023 draft business plan of the Multilateral Fund

33. UNEP and UNIDO are requesting US \$585,000, plus agency support costs, for the implementation of stage II of the HPMP for Ethiopia. The total requested value of US \$220,210, including agency support costs for the period of 2021-2023, is US \$2,297 above the amount in the business plan.

Draft Agreement

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

RECOMMENDATION

35. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Ethiopia for the period from 2021 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$653,570, consisting of US \$398,000, plus agency support costs of US \$51,740 for UNEP, and US \$187,000, plus agency support costs of US \$16,830 for UNIDO, 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 Ethiopia:
 - (i) To completely phase out HCFCs by 1 January 2030, and to ban the import of HCFCs by 1 January 2030 except for those allowed for a servicing tail between 2030 and 2040, where required, consistent with the provisions of the Montreal Protocol;
 - (ii) To ban the import of HCFC-based equipment by 1 January 2024;
 - (iii) To establish regulatory measures to control intended emissions of HCFCs during installation, servicing and decommissioning by 1 January 2024;
- (c) Deducting 3.58 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Approving the draft Agreement between the Government of Ethiopia 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 Ethiopia 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 Ethiopia for the 2030-2040 period; and
- (f) Approving the first tranche of stage II of the HPMP for Ethiopia, and the corresponding tranche implementation plan, in the amount of US \$220,210, consisting of US \$137,000, plus agency support costs of US \$17,810 for UNEP, and US \$60,000, plus agency support costs of US \$5,400 for UNIDO, on the understanding that the Treasurer would transfer the funding to UNEP and UNIDO only upon confirmation by the Secretariat that the equipment had been delivered and the disbursement from UNIDO under stage I of the HPMP specified in decision 85/22(a) had been achieved.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF ETHIOPIA 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 Ethiopia (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;
- (c) The Country agrees, in cases where HFC technologies have been chosen as an alternative to HCFCs, and taking into account national circumstances related to health and safety: to monitor the availability of substitutes and alternatives that further minimize impacts on the climate; to consider, in the review of regulations standards and incentives, adequate

provisions that encourage introduction of such alternatives; and to consider the potential for adoption of cost-effective alternatives that minimize the climate impact in the implementation of the HPMP, as appropriate, and inform the Executive Committee on the progress accordingly in tranche implementation reports; and

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

Considerations for the refrigeration servicing sector

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

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

Bilateral and implementing agencies

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

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). The Cooperating IA will support the Lead IA by implementing the Plan under the overall co-ordination of the Lead IA. The roles of the Lead IA and 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	5.5

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2021	2022-2023	2024	2025	2026	2027-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	3.58	3.58	3.58	1.79	1.79	1.79	0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	3.58	3.58	3.58	1.79	1.79	1.79	0	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	137,000	0	100,000	0	98,000	0	63,000	398,000

Row	Particulars	2021	2022-2023	2024	2025	2026	2027-2029	2030	Total
2.2	Support costs for Lead IA (US \$)	17,810	0	13,000	0	12,740	0	8,190	51,740
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	60,000	0	90,000	0	37,000	0	0	187,000
2.4	Support costs for Cooperating IA (US \$)	5,400	0	8,100	0	3,330	0	0	16,830
3.1	Total agreed funding (US \$)	197,000	0	190,000	0	135,000	0	63,000	585,000
3.2	Total support costs (US \$)	23,210	0	21,100	0	16,070	0	8,190	68,570
3.3	Total agreed costs (US \$)	220,210	0	211,100	0	151,070	0	71,190	653,570
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)								3.58
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)								1.92
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)								0.00

*Date of completion of stage I as per decision 85/22(a): 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. The national ozone unit will submit annual progress reports on the status of the Plan implementation to the Lead IA.
2. Monitoring of the Plan and verification of achievements of the performance targets specified in the Plan will be assigned to independent local companies 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 each Cooperating IA;
- (l) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (m) Providing assistance with policy, management and technical support when required;
- (n) Reaching consensus with the Cooperating IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and
- (o) Timely releasing funds to the Country/participating enterprises for completing the activities related to the project.

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.
