



**United Nations
Environment
Programme**

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/83/33
4 May 2019

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-third Meeting
Montreal, 27– 31 May 2019

PROJECT PROPOSAL: MOZAMBIQUE

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

Phase-out

- HCFC phase-out management plan (stage I, third and fourth tranches) UNEP and UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Mozambique

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNEP (lead), UNIDO	66 th	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2017	5.03 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2017	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					5.01				5.01

(IV) CONSUMPTION DATA (ODP tonnes)				
2009 - 2010 baseline:		8.69	Starting point for sustained aggregate reductions:	8.69
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)				
Already approved:		3.04	Remaining:	5.65

(V) BUSINESS PLAN		2019	2020	Total
UNIDO	ODS phase-out (ODP tonnes)	0.54		0.54
	Funding (US \$)	81,750		81,750
UNEP	ODS phase-out (ODP tonnes)	0.44	0.22	0.66
	Funding (US \$)	67,800	33,900	101,700

(VI) PROJECT DATA*			2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
Montreal Protocol consumption limits			n/a	8.69	8.69	7.82	7.82	7.82	7.82	7.82	5.65	n/a	
Maximum allowable consumption (ODP tonnes)			n/a	8.69	8.69	7.82	7.82	7.82	7.82	7.82	5.65	n/a	
Agreed funding (US\$)	UNEP	Project costs	40,000	0	35,000	0	37,500	0	30,000	0	30,000	172,500	
		Support costs	5,200	0	4,550	0	4,875	0	3,900	0	3,900	22,425	
	UNIDO	Project costs	75,000	0	0	0	85,000	0	0	0	0	0	160,000
		Support costs	6,750	0	0	0	7,650	0	0	0	0	0	14,400
Funds approved by ExCom (US\$)		Project costs	115,000	0	35,000	0	122,500	0	30,000	0	30,000	332,500	
		Support costs	11,950	0	4,550	0	12,525	0	3,900	0	3,900	36,825	
Total funds requested for approval at this meeting (US\$)		Project costs	0	0	0	0	0	0	0	152,500**	0	152,500	
		Support costs	0	0	0	0	0	0	0	16,425**	0	16,425	

*As per the revised agreement to be approved at the present meeting.

** Comprises the third and fourth tranches that were due for submission in 2016 and 2018 respectively.

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. At its 73rd meeting, the Executive Committee considered the request for the second tranche of stage I of the HCFC phase-out management plan (HPMP) for Mozambique,¹ noting that the Government had requested the Twenty-sixth Meeting of the Parties to the Montreal Protocol to revise the HCFC consumption data for 2009 from 4.30 to 8.68 ODP tonnes which would result in the change of the HCFC baseline for compliance and the starting point for sustained aggregate reduction in HCFC consumption. Subsequently, the Executive Committee *inter alia* approved the second tranche of the (HPMP) on the condition that the Parties approved at their Twenty-sixth Meeting the change of the HCFC consumption for 2009; and noted that the revised starting point would be 8.69 ODP tonnes, calculated using the revised consumption data of 8.68 ODP tonnes for 2009 and 8.7 ODP tonnes for 2010 reported under Article 7 of the Montreal Protocol and that the revised level of funding for stage I of the HPMP would be US \$332,500, in line with decision 60/44(f)(xii); and requested the Secretariat to update the Agreement between the Government and the Executive Committee, based on the established HCFC baseline for compliance, and submit it together with the funding request for the third tranche of the HPMP, if the Parties approved the change in the HCFC consumption for 2009 at their Twenty-sixth Meeting.²

2. At their Twenty-sixth Meeting, the Parties approved the request by the Government of Mozambique for the revision of HCFC baseline data for 2009³.

3. On behalf of the Government of Mozambique, UNEP as the lead implementing agency, has submitted a request for funding for the third and fourth tranches of stage I of HPMP, at a total cost of US \$168,925, consisting of US \$67,500, plus agency support costs of US \$8,775 for UNEP, and US \$85,000, plus agency support costs of US \$7,650 for UNIDO.⁴ The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption for 2013 to 2018, and the tranches' implementation plan for 2019 and 2020.

Report on HCFC consumption

4. The Government of Mozambique reported a consumption of 5.03 ODP tonnes of HCFC in 2017, which is 42 per cent below the HCFC baseline for compliance. The 2014-2018 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Mozambique (2014-2018 Article 7 data)

HCFC-22	2014	2015	2016	2017	2018*	Baseline
Metric tonnes	130.00	130.00	128.00	91.58.00	73.0	158.00
ODP tonnes	7.15	7.15	7.04	5.03	4.02	8.69

*Data from the verification report on HCFC consumption.

5. Mozambique has made progress in the phase-out of HCFCs, which are mostly used in the refrigeration and air-conditioning (RAC) servicing sector. The significant consumption decrease since 2016 has been attributed to the enforcement of the licensing and quota system, the training of customs officers and of refrigeration technicians, and public awareness campaigns all of which have not only reduced HCFC imports, but also increased the uptake of low-GWP alternative technologies.

Country programme (CP) implementation report

6. The Government of Mozambique reported HCFC sector consumption data under the 2017 CP implementation report which is consistent with the data reported under Article 7 of the

¹ UNEP/OzL.Pro/ExCom/73/44

² Decision 73/61

³ Decision XXVI/14

⁴ As per the letter of 21 March 2019 from the Ministry of Land, Environment and Rural Development of Mozambique to the Secretariat.

Montreal Protocol. The 2018 CP data is expected by the end of April 2019.

Verification report

7. The verification report covered the period between 2013 and 2018. It confirmed that the Government of Mozambique was effectively implementing its licensing and quota system and that the verified consumption of HCFC-22 for 2018 was 4.02 ODP tonnes, about 54 per cent below the HCFC baseline for compliance. The verification highlighted some challenges such as the need to improve planning and communications in the reassignment of experienced customs and enforcement officers to limit disruptions to enforcement activities; to strengthen National Ozone Unit (NOU) engagement and transparency with ODS importers; and to encourage RAC servicing companies to use recovery units in the recovery of refrigerants.

Progress report on the implementation of the second tranche of the HPMP

Legal framework

8. The NOU is responsible for annual quotas, issuance of permits and records of licensed importers. The Customs Department, which is under the Ministry of Finance, and other law enforcement agencies, work closely with the NOU in enforcement of the licensing and quota system, which has been in force since 1 January 2013. Customs and other law enforcement officers have been trained in the identification and classification of ODS, and to monitor and report to NOU on annual imports.

9. The Ministry of Mineral Resource and Energy, which is a member of the Montreal Protocol Steering Committee, is responsible for energy efficiency regulations and policy, and highlights these issues in committee meetings.

10. Revised regulations provide for the import ban of HCFC-based equipment from 1 January 2020. Currently, the NOU is negotiating with the Ministry of Finance, which is responsible for procurement and the custom department, to remove import duties on low-GWP alternative technologies and increase them on HCFCs.

Refrigeration servicing sector

11. The main activities carried out include:

- (a) Training and capacity-building: 223 customs officers, 15 environmental inspectors, 30 economic activity inspectors, 52 administration and finance chiefs, 85 municipal police, 13 customs brokers and other law enforcement officers were trained through two training sessions on monitoring and enforcement of ODS policies and regulations;
- (b) Training of refrigeration technicians: 345 technicians were trained in good refrigeration practices, including the use of hydrocarbon technologies, and a meeting was organized with the RAC association during which a technicians' code of conduct was adopted for implementation and a certification scheme action plan adopted; and
- (c) Strengthening centres of excellence and supply of equipment: five advanced refrigerant identifiers, vacuum pumps, gauge manifolds, hydrocarbon charging stations, brazing stations, and leak detectors were purchased for distribution to three centres of excellence (Instituto Industrial e Comercial da Matola for south region, Instituto Industrial Comercial da Beira for central region, Instituto Industrial e Comercial da Nmapula for north region), and training focused on safe handling of low- and zero-GWP and flammable alternatives.

Project implementation and monitoring unit (PMU)

12. The NOU, which is under the National Environmental Directorate of the Ministry of Land, Environment and Rural Development, leads the implementation of ODS phase-out activities in Mozambique, and coordinates the implementation of ODS phase-out and monitoring HPMP activities. Other institutions involved in the implementation of the HPMP are the Ministries of Trade, and of Mineral Resource and Energy, Revenue Authority (Customs Department), National Ozone Committee, and the Association of Refrigeration Technicians.

Level of fund disbursement

13. As of April 2019, of the US \$150,000 approved so far, US \$135,000 had been disbursed (US \$100,000 for UNEP and US \$35,000 for UNIDO) as shown in Table 2. The balance of US \$15,000 will be disbursed between 2019 and 2020.

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

Agency	First tranche		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNEP	40,000	40,000	35,000	35,000	75,000	75,000
UNIDO	75,000	60,000	0	0	75,000	60,000
Total	115,000	100,000	35,000	35,000	150,000	135,000
Disbursement rate (%)	87		100		90	

Implementation plan for the third and fourth tranches of the HPMP

14. The following activities will be implemented between July 2019 and December 2020:
- Training of 200 customs officers and 100 environmental inspectors through five workshops on monitoring and enforcement of ODS policies and regulations, and strengthening regional customs training schools through provision of training materials (UNEP) (US \$25,000);
 - Training of 280 refrigeration technicians through six workshops on hydrocarbon technologies and safe handling of refrigerants, and providing them with basic toolkits for good servicing; and supporting the RAC association by organizing three meetings of the association (UNEP) (US \$32,500);
 - Strengthening regional centres of excellence by providing refrigerant recovery and reuse equipment; implementing an incentive programme for commercial and industrial refrigeration end-users to replace about 100 HCFC-22 self-contained commercial units with energy-efficient non-HCFC and low- and zero-GWP units; and developing a comprehensive programme for the reduction of HCFC and carbon emissions in the RAC sector (UNIDO) (US \$85,000 and funds from the previous tranche); and
 - Monitoring the implementation of the HPMP (UNEP) (US \$10,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION**COMMENTS**Verification report

15. UNEP indicated that it would support the NOU in addressing the challenges highlighted in the verification during the implementation of the HPMP and through the Compliance Assistance Programme.

The work plan for the third and fourth tranches have already taken into consideration the recommendations from the verification report.

Progress report on the implementation of the second tranche of the HPMP

Legal framework

16. The Government of Mozambique has issued an HCFC-22 import quota of 2.75 ODP tonnes for 2019 and 2.2 ODP tonnes for 2020, both of which are below the Montreal Protocol control targets.

Refrigeration servicing sector

17. Delays experienced in the implementation of the HPMP, including procurement and fund disbursement, have been satisfactorily addressed. Delivery of the equipment is expected by the end of May 2019, and the investment component of the HPMP would be fast tracked. With regard to the incentive programme for commercial and industrial refrigeration end-users, UNEP indicated that the scheme will cover the incremental costs of replacing self-contained HCFC-22-based commercial units for energy efficient non-ODS/low- or zero-GWP equipment (possibly on hydrocarbon-based refrigerants), to be implemented in the capital city Maputo. UNEP further confirmed that there was no retrofitting of HCFC-based RAC equipment to alternative flammable refrigerants; however, the training of RAC technicians included the use and safe handling of natural refrigerants as the Government was promoting the introduction of RAC equipment based on natural and other low-GWP-based refrigerants.

Draft Agreement

18. In line with decisions 73/61 and XXVI/14, the Secretariat has updated relevant paragraphs and Appendices of the Agreement between the Government of Mozambique and the Executive Committee as shown in Annex I to the present document. The full Agreement will be appended to the report of the meeting.

Conclusion

19. Despite that Mozambique has experienced delays in the implementation of its HPMP, the Government is currently implementing training of customs and enforcement officers, strengthening centres of excellence, training of technicians, and supporting the RAC association, which will ensure the sustainability of the HPMP activities. The country's verification report confirmed that the licensing and quota system is operational, but highlighted some challenges such as: improving planning and communications in the reassignment of experienced customs and enforcement officers to limit disruptions to enforcement activities; strengthening NOU engagement with ODS importers; opening the ODS Steering Committee membership to importers; and encouraging RAC servicing companies to use recovery units in the recovery of refrigerants. UNEP indicated it would support the NOU in addressing the verification recommendations through the CAP and through integrating relevant activities in the work plan of the third and fourth tranches. The progress report on activities undertaken and the planned activities suggest that Mozambique will meet its HCFC phase-out targets.

RECOMMENDATION

20. The Fund Secretariat recommends the Executive Committee:

(a) Notes:

(i) The progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan of (HPMP) for Mozambique;

- (ii) That the Fund Secretariat had updated the Agreement between the Government of Mozambique and the Executive Committee as contained in Annex I to the present document, specifically paragraph 1, Appendices 1-A and 2-A, based on decisions XXVI/14 and decision 73/61 that revised the HCFC baseline for compliance and the starting point for sustained aggregate reduction in HCFC consumption to 8.69 ODP tonnes and the level of funding for stage I of the HPMP for Mozambique to US\$332,500, plus agency support costs of US \$36,825, in accordance with decision 60/44(f)(xii), and that a new paragraph 16 had been added to indicate that the updated Agreement supersedes that reached at the 66th meeting.

21. The Fund Secretariat further recommends blanket approval of the third and fourth tranches of stage I of the HPMP for Mozambique, and the corresponding 2019-2020 tranche implementation plan, at the funding level(s) shown in the table below, on the understanding that:

- (a) Mozambique had consumption in the servicing sector only; and
- (b) That the end-user incentive programme would enhance the sustainability of the training of servicing technicians and that end-users would provide co-financing to participate in the programme.

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage I, third and fourth tranches)	67,500	8,775	UNEP
(b)	HCFC phase-out management plan (stage I, third and fourth tranches)	85,000	7,650	UNIDO

Annex I

**TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF MOZAMBIQUE AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS
(Relevant changes are in bold font for ease of reference)**

1. This Agreement represents the understanding of the Government of Mozambique (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 **5.65** ODP tonnes by 1 January 2020 in compliance with Montreal Protocol schedules.

16. **This updated Agreement supersedes the Agreement reached between the Government of Mozambique and the Executive Committee at the 66th meeting of the Executive Committee.**

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	8.69

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	8.69	8.69	7.82	7.82	7.82	7.82	7.82	5.65	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	8.69	8.69	7.82	7.82	7.82	7.82	7.82	5.65	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	40,000	0	35,000	0	37,500	0	30,000	0	30,000	172,500
2.2	Support costs for Lead IA (US \$)	5,200	0	4,550	0	4,875	0	3,900	0	3,900	22,425
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	75,000	0	0	0	85,000	0	0	0	0	160,000
2.4	Support costs for Cooperating IA (US \$)	6,750	0	0	0	7,650	0	0	0	0	14,400
3.1	Total agreed funding (US \$)	115,000	0	35,000	0	122,500	0	30,000	0	30,000	332,500
3.2	Total support costs (US \$)	11,950	0	4,550	0	12,525	0	3,900	0	3,900	36,825
3.3	Total agreed costs (US \$)	126,950	0	39,550	0	135,025	0	33,900	0	33,900	369,325
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)										3.04
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)										0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)										5.65