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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eightieth Meeting
Montreal, 13-17 November 2017

PROJECT PROPOSAL: CAMEROON

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, fourth tranche) UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Cameroon

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNIDO (lead)	64 th	20% by 2017

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2016	65.84 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2016	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Serviceing				
HCFC-22				2.85	62.99				65.84

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	88.80	Starting point for sustained aggregate reductions:	77.56
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	20.50	Remaining:	57.06

(V) BUSINESS PLAN		2017	Total
UNIDO	ODS phase-out (ODP tonnes)	1.02	1.02
	Funding (US \$)	63,571	63,571

(VI) PROJECT DATA			2011	2012	2013	2014	2015	2016	2017	Total
Montreal Protocol consumption limits			n/a	n/a	88.8	88.8	79.9	79.9	79.9	
Maximum allowable consumption (ODP tonnes)			n/a	n/a	82.4	82.4	74.2	74.2	65.9	
Agreed funding (US\$)	UNIDO	Project costs	884,453		180,000		59,136		59,136	1,182,725
		Support costs	66,334		13,500		4,435		4,435	88,704
Funds approved by ExCom (US\$)		Project costs	884,453	0	180,000	0	59,136	0	0.0	1,123,589
		Support costs	66,334	0	13,500	0	4,435	0	0.0	84,269
Total funds requested for approval at this meeting (US\$)		Project costs							59,136	59,136
		Support costs							4,435	4,435

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Cameroon, UNIDO as the designated implementing agency, has submitted to the 80th meeting a request for funding for the fourth and final tranche of stage I of the HCFC phase-out management plan (HPMP), at the amount of US \$59,136, plus agency support costs of US \$4,435¹. The submission includes a progress report on the implementation of the third tranche, the verification report on HCFC consumption for 2015 and 2016 and the tranche implementation plan for 2018.

Report on HCFC consumption

HCFC consumption

2. The Government of Cameroon reported a consumption of 65.84 ODP tonnes of HCFC in 2016 which was 26 per cent below the baseline level and 11 per cent below the maximum allowable consumption of 74.2 ODP tonnes in the Agreement between the Government and the Executive Committee. The 2012-2016 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Cameroon (2012-2016 Article 7 data)

HCFC	2012	2013	2014	2015	2016	Baseline
Metric tonnes (mt)						
HCFC-22	1,228.10	1,221.00	1,222.50	1,222.50	1,197.0	1,213.83
HCFC-141b	56.70	138.00	9.30	0.00	0.00	200.43
Sub-total (mt)	1,284.80	1,359.00	1,231.80	1,222.50	1,197.0	1,414.26
HCFC-141b in imported pre-blended polyols*	88.27	0.00	11.72	0.00	0.00	
ODP tonnes						
HCFC-22	67.54	67.15	67.24	67.24	65.84	66.80
HCFC-141b	6.24	15.18	1.02	0.00	0.00	22.00
Sub-total (ODP tonnes)	73.78	82.33	68.26	67.24	65.84	88.80
HCFC-141b in imported pre-blended polyols*	9.71	0.00	1.29	0.00	0.00	

*Country programme data.

3. The consumption of HCFC-22 in the manufacturing sector decreased from 5.01 ODP tonnes in 2014 to 2.85 ODP tonnes in 2016 because of adoption of HFC-based equipment at affordable prices. However, consumption in servicing refrigeration and air-conditioning equipment did not decrease because of ageing equipment resulting in higher levels of servicing consumption and increase in import of HCFC-22-based equipment. Consumption of HCFC-141b has decreased to nil due to the implementation of the conversion projects and technical assistance activities in the foam sector. No license was issued for HCFC-141b imports in 2015 and 2016.

4. The starting point for aggregate reductions in HCFC consumption of Cameroon was revised at the 71st meeting from 88.80 ODP tonnes to 77.56 ODP tonnes based on the revised 2009 HCFC consumption resulting from a survey and the HCFC consumption reported under Article 7 of the Montreal Protocol for 2010. While there was no change in HCFC-22 consumption in the revised starting point, HCFC-141b (pure) consumption was reduced from 22.0 ODP tonnes to 10.8 ODP tonnes; no consumption of HCFC-141b in imported pre-blended polyol was included in the starting point.

¹ As per letter dated 20 September 2017 from the Ministry of Environment, Protection of Nature and Sustainable Development.

Country programme (CP) implementation report

5. The Government of Cameroon reported HCFC sector consumption data under the 2016 CP implementation report which is consistent with the data reported under Article 7.

Verification report

6. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and that the total HCFC consumption levels for 2015 and 2016 were 67.24 ODP tonnes and 65.84 ODP tonnes, respectively. The verification concluded that Cameroon has been in compliance with the 2015 and 2016 maximum allowable consumption established in its Agreement with the Executive Committee, and noted that the country has strong mechanism for monitoring and reporting.

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

Legal framework

7. The licensing and quota system for HCFC imports is operational and has ensured compliance with the Protocol control targets for 2015 and 2016. A ban on imports of HCFC-141b pure or contained in pre-blended polyols was established from 1 January 2015. Consultative meetings took place for the introduction of a ban on import of equipment containing HCFCs while a draft text on a ban on manufacturing or installation of new HCFC-based refrigeration and air-conditioning equipment is under review.

8. A total of 52 customs officers and environmental inspectors have been trained in HCFC control, and proper labelling requirements, and the use of ODS identifiers have been integrated into the code of practice for HCFC imports. Under new procedures to be implemented, importers will ensure inspection and quality certification of HCFC consignments before their distribution and commercialization.

Polyurethane (PU) foam manufacturing sector

9. Seven enterprises manufacturing insulation foam for pipes have been successfully converted to methyl formate technology resulting in the phase-out of use of HCFC-141b in insulation foam; the equipment suppliers provided technical support to PU foam end-users. Training, demonstration and awareness-raising activities on the use of methyl formate were also undertaken to ensure sustainability of the phase-out.

10. As part of technical support approved in stage I, equipment for safety in manufacturing operations for three flexible foam manufacturing enterprises using methylene chloride were purchased and delivered for avoiding use of HCFC-141b. Additional technical assistance on available alternatives and on required safety standards when dealing with methylene chloride technology was organized during 2014 and 2015. Additional technical assistance activities for adoption of HCFC-free technologies in foam applications for small and medium enterprises (SMEs) were also implemented. These activities resulted in the full phase-out of 10.8 ODP tonnes of HCFC-141b.

Refrigeration servicing sector

11. During the period 2016 to 2017, a total of 274 technicians have received training on good service practices in the refrigeration and air-conditioning sector and were also certified. Procurement of additional equipment including refrigerant recovery unit, service tools, vacuum pump and other servicing tools, for upgrading facilities is in progress; international bidding process was conducted by UNIDO and the commercial evaluation process is underway.

Project implementation and monitoring unit (PMU)

12. The responsibility of the PMU was undertaken by the national ozone unit (NOU) since the NOU had full capacity for project monitoring and coordination, including mobilization of the expertise needed for project implementation.

Level of fund disbursement

13. As of September 2017, of the US \$1,123,589 approved so far, US \$1,065,820 had been disbursed as shown in Table 2. The balance of US \$57,769 is expected to be disbursed by the first quarter of 2018.

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

Agency	First tranche		Second tranche		Third tranche	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNIDO	884,453	872,135	180,000	172,245	59,136	21,440
Disbursement rate (%)	98.61		95.69		36.30	

Implementation plan for the fourth and final tranche of the HPMP

14. The following activities will be implemented in 2018:

- (a) Follow-up on the approval of legal measures, and development of a national system for logbook keeping and mandatory inspection of leakages of refrigeration equipment containing an amount of refrigerant over certain threshold; additional training for 50 custom officers on enforcement of regulations and monitoring of HCFC import/export and provision of refrigerant identifiers (number to be determined based on remaining budget) (US \$10,000);
- (b) Additional 150 technicians to be trained on good service practices, recovery and reclamation; certification of technicians and registration in the database; supply of recovery and recycling equipment kits including *inter alia* recovery unit, cylinder, manifold, hoses, vacuum pumps (number to be determined based on ongoing assessment) and procurement of six identifiers (US \$40,000); and
- (c) Continued implementation, monitoring and reporting on activities implemented under stage I of the HPMP (US \$9,136).

SECRETARIAT'S COMMENTS AND RECOMMENDATION**COMMENTS**Progress report on the implementation of the third tranche of the HPMP*Legal framework*

15. The Government of Cameroon has already issued HCFC import quotas for 2017 at 57 ODP tonnes, which is lower than the Montreal Protocol and the targets in its Agreement with the Executive Committee; this quota would be given to 24 importers.

16. UNIDO confirmed that a draft text of regulations on the complete ban on import of HCFC-141b including pre-blended polyols has been submitted for approval. The NOU did not issue any import license for HCFC-141b in 2016.

PU foam manufacturing sector

17. The activities relating to HCFC-141b phase-out in PU foam and flexible foam were completed by 2015; UNIDO explained that to ensure sustainability of adoption of HCFC-free technologies and to strengthen awareness on safety requirements, technical assistance workshops were undertaken for operations with new chemicals and processes.

Refrigeration servicing sector

18. On the status of introduction of HCFC alternatives in the refrigeration and air-conditioning sector, UNIDO indicated that HFC-134a, R-404A, R-407C and R-410A are the most commonly used alternatives by the refrigeration sector because of price, know-how and availability. R-600a use is limited to domestic refrigeration; ammonia technology is used to a limited extent in industrial refrigeration.

19. The Secretariat requested clarification on whether the Government of Cameroon is fully aware of the safety requirements and safeguards associated with use of flammable refrigerants². UNIDO clarified that use of hydrocarbons in air-conditioning applications is nil; though training activities included information on flammable refrigerants, it does not include retrofits of equipment with flammable refrigerants, as it is not considered safe in the country. UNIDO also clarified that stage I of the HPMP would be completed by December 2018, and stage II is expected to be submitted during 2018.

Conclusion

20. The Government of Cameroon has been in compliance with the Montreal Protocol and its Agreement with the Executive Committee. The consumption of HCFCs in 2016 was 11.2 per cent below the Montreal Protocol consumption target for the year. The Government with the assistance of UNIDO has completed implementation of HCFC-141b phase-out activities, has taken steps to ensure sustainable and safe conversion through technical assistance to the users of alternative technologies in the foam sector, and has implemented measures to eliminate use of HCFC-141b in foam applications. The country continues to successfully implement activities relating to strengthening regulations, continued training of customs authorities and service technicians including certification which will ensure sustainability, and project management and coordination. Stage II of the HPMP will be submitted to the first meeting of 2018. The fourth and final tranche will help the country in completing their HCFC phase-out activities in stage I.

RECOMMENDATION

21. The Fund Secretariat recommends that the Executive Committee:

- (a) Takes note of the progress report on the implementation of the third tranche of stage I of the HCFC phase-out management plan of (HPMP) for Cameroon; and
- (b) Requests the Government of Cameroon and UNIDO to submit the project completion report to the first meeting of the Executive Committee in 2019.

22. The Secretariat further recommends blanket approval of the fourth tranche of stage I of the HPMP for Cameroon, and the corresponding 2018 tranche implementation plan, at the funding level shown in the table below:

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage I, fourth tranche)	59,136	4,435	UNIDO

² Decisions 72/17 and 73/34.