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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-ninth Meeting  
Bangkok, 3-7 July 2017

**PROJECT PROPOSAL: TOGO**

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 tranche)

UN Environment and  
UNIDO

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

**Togo**

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UN Environment (lead), UNIDO	62nd	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2016	15.4 (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	Servicing				
HCFC-22					15.4				15.4

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	20.0	Starting point for sustained aggregate reductions:	20.0
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	7.0	Remaining:	13.0

(V) BUSINESS PLAN		2017	2018	2019	2020	Total
UN Environment	ODS phase-out (ODP tonnes)	0.69	0.44	0	0.7	1.83
	Funding (US \$)	70,060	45,200	0	71,190	186,450
UNIDO	ODS phase-out (ODP tonnes)	1.67	0	0	0	1.67
	Funding (US \$)	161,250	0	0	0	161,250

(VI) PROJECT DATA			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	n/a	20.0	20.0	18.0	18.0	18.0	18.0	18.0	13.0	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	n/a	20.0	20.0	18.0	18.0	18.0	18.0	18.0	13.0	n/a
Agreed funding (US \$)	UN Environment	Project costs	70,000	0	0	45,000	0	0	62,000	0	40,000	0	63,000	280,000
		Support costs	9,100	0	0	5,850	0	0	8,060	0	5,200	0	8,190	36,400
	UNIDO	Project costs	200,000	0	0	0	0	0	150,000	0	0	0	0	350,000
		Support costs	15,000	0	0	0	0	0	11,250	0	0	0	0	26,250
Funds approved by ExCom (US \$)		Project costs	270,000	0	0	45,000	0	0	0	0	0	0	0	315,000
		Support costs	24,100	0	0	5,850	0	0	0	0	0	0	0	29,950
Total funds requested for approval at this meeting (US \$)		Project costs								212,000*				212,000
		Support costs								19,310*				19,310

\*The third tranche should have been submitted in 2016.

<b>Secretariat's recommendation:</b>	For blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of Togo, United Nations Environment Programme (UN Environment) as the lead implementing agency, has submitted to the 79<sup>th</sup> meeting a request for funding for the third tranche of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US \$231,310, consisting of US \$62,000, plus agency support costs of US \$8,060 for UN Environment, and US \$150,000, plus agency support costs of US 11,250 for UNIDO.<sup>1</sup> The submission includes a progress report on the implementation of the second tranche and the tranche implementation plan for 2017 to 2019.

### Report on HCFC consumption

#### *HCFC consumption*

2. The Government of Togo reported a consumption of 15.4 ODP tonnes of HCFC-22 in 2016, which was 23 per cent below the HCFC baseline for compliance and 14 per cent below the maximum allowable consumption in the Agreement with the Executive Committee for 2016. The 2012-2016 HCFC consumption is shown in Table 1.

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

HCFC-22	2012	2013	2014	2015	2016	Baseline
Metric tonnes	360.00	345.00	325.00	302.00	280.00	362.60
ODP tonnes	19.80	18.98	17.88	16.61	15.40	20.00

3. The decrease in consumption of HCFC-22 is attributed to improved servicing practices and a reduction in the import of HCFC-22-based equipment since 2012. In contrast, the import of R-410A-based equipment has been increasing.

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

4. The Government of Togo reported HCFC sector consumption data under the 2016 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol.

#### *Legal framework*

5. The HCFC licensing and quota system is operating effectively with quotas being established since 2013. The Economic Community of West African States Community sub-regional regulation on HCFC and HCFC-based equipment has been adopted by the Government of Togo. In addition, the Government is considering implementing a ban on the import of HCFC-based equipment.

#### *Refrigeration servicing sector*

6. The following activities were implemented during the second tranche of the HPMP: 25 customs officers, ten environment inspectors and five officers from the Department of Commerce received training on the identification and control of HCFCs, in particular new inspection techniques for HCFCs and HCFC-based equipment and monitoring of the licensing and quota system. 165 refrigeration technicians were trained on good refrigeration service practices, including leakage prevention and energy saving practises, and on safe practices for servicing and installing HC-290 RAC equipment. Also, three HC-based air-conditioning (AC) units were provided to the training institute for demonstration purposes and a training session on the safe installation, operation and maintenance of HC-based AC units was held

<sup>1</sup> As per the letter of 10 May 2017 from the Ministère de L'Environnement et des Ressources Forestières of Togo to the Secretariat.

using those demonstration units; and a survey to select potential beneficiaries of the financial incentive programme to convert HCFC-22-based commercial facilities, most likely refrigeration equipment used in cold chambers, to low-global warming potential (GWP) alternatives was undertaken in 2016. The details of the operation of the incentive programme are not yet available but will be based on the selection of the beneficiaries. The goal is to implement socially acceptable instruments and suitable incentive measures to encourage the gradual phase-out of HCFCs. The Environmental Department will encourage the importers of HCFCs to accelerate the transition to alternative refrigerants by importing the latter.

*Project implementation and monitoring unit (PMU)*

7. The national ozone unit (NOU) monitored the implementation of activities under the HPMP with the support of two consultants.

Level of fund disbursement

8. As of May 2017, of the US \$315,000 so far approved, US \$290,649 had been disbursed (US \$115,000 for UN Environment and US \$175,649 for UNIDO) as shown in Table 2. The balance of US \$24,351 will be disbursed during the implementation of the third tranche.

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

Agency	First tranche		Second tranche		Total	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UN Environment	70,000	70,000	45,000	45,000	115,000	115,000
UNIDO	200,000	175,649	0	0	200,000	175,649
<b>Total</b>	270,000	245,649	45,000	45,000	315,000	290,649
<b>Disbursement rate (%)</b>	91.0		100.0		92.3	

Implementation plan for the third tranche of the HPMP

9. The following activities will be implemented between 2017 and 2019:
- (a) Further training of 150 refrigeration technicians on good refrigeration service practices, including recovery and recycling and safe handling of HC refrigerants, and upgrade of the training manuals including on best practices and techniques in managing and handling low-GWP refrigerants (UN Environment) (US \$25,000);
  - (b) Further training of 80 customs and enforcement officers on the identification of HCFCs, HFCs, HCs or their mixtures and on the licensing and quota system to control illegal ODS trade (UN Environment) (US \$25,000);
  - (c) Payment of incentives to two or three commercial facilities to convert refrigeration systems from HCFC-22 to low-GWP alternative (US \$90,000); procurement of additional refrigeration and AC equipment, including refrigerant analysers, recovery machines and cylinders, leak detectors, vacuum pumps and other tools (US \$30,000); and development of guidelines, taking into account international experience, for installation and servicing of HC-290-based equipment, including maximum refrigerant charge, room area limits, and specific requirements for AC equipment operating with HCs and replacement of the air-conditioning equipment in a government owned or commercial building in Togo with approximately 40 to 50 HC-290 AC units purchased from previously used suppliers in China and India (UNIDO) (US \$30,000); and
  - (d) Monitoring and evaluation of the implementation of the HPMP (UN Environment) (US \$12,000).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

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

10. The request for the third tranche of the HPMP was expected to be submitted in 2016. However, the submission was delayed due to changes at the NOU with the appointment of the new staff in April 2016. Despite the delay in the submission, the Government, with the assistance of the implementing agency, was able to continue implementing activities resulting in reductions of HCFC-22 consumption below the allowable levels.

#### *Legal framework*

11. The Government of Togo has already issued HCFC import quotas for 2017 at 15.2 ODP tonnes, which are 2.8 ODP tonnes below the allowable level of consumption under the Montreal Protocol.

#### *Refrigeration servicing sector*

12. Noting that the HPMP includes training programmes for refrigeration technicians in the use of flammable refrigerants (HC) and that retrofitting of HCFC-22-based refrigeration and air-conditioning equipment was occurring in the country, the Secretariat enquired whether equipment was being retrofitted to flammable or toxic refrigerants and whether the Government was being informed on the relevant decisions of the Executive Committee on retrofits.<sup>2</sup> UN Environment confirmed that the Government is fully aware of those decisions, and confirmed that no equipment has been retrofitted to HCs within the HPMP. Moreover, UN Environment stated that it was not promoting retrofitting to flammable or toxic refrigerants and associated servicing practices. The country has identified some HC-based equipment in operation and therefore considered relevant to promote safe handling of HC refrigerants during the refrigeration training workshops. UN Environment is not associated with retrofit training and activities, which the Association of Refrigeration Technicians of Togo (AFRITO) is doing it at its own risks, and no funds from the HPMP are being used for that purpose. UN Environment is working with the NOU to raise awareness of the dangers associated with retrofitting equipment with flammable refrigerants that is not designed for that purpose.

13. In responding to the Secretariat's question on the availability and prices of HCFC alternatives, UN Environment indicated that the average price of R-404A, R-407C and R-410A is US \$14.0/kg; R-134a is US \$10.0/kg; and R-600a is US \$6.5/kg.

#### Implementation plan for the third tranche of the HPMP

14. On the incentives programme, UNIDO informed that the detailed technical assessment of the beneficiaries that have already been identified is underway. Although the replacement technology has not yet been selected, CO<sub>2</sub> and hydrocarbon-based technologies are among the most prominent technologies given that most of the potential beneficiaries are cold-room applications. The low-GWP technology would be selected once the final beneficiaries are determined.

15. With regard to the sustainability of the training programme for technicians, collaborations and partnerships with the refrigeration association and training institute to implement technician training programmes, and the larger number of technicians that will gain awareness on good refrigeration practices through the HPMP activities will contribute to the sustainability of the training programme.

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<sup>2</sup> Decisions 72/17 and 73/34.

Conclusion

16. The Secretariat notes that the HCFC consumption in 2016 was 23 per cent below the HCFC baseline for compliance and 14 per cent below the maximum allowable consumption in the Agreement with the Executive Committee for 2016, that an enforceable system of licensing and quotas for HCFC imports is in place, and that the quota issued for 2017 is below the allowable level of consumption under the Montreal Protocol. Despite the delay in submission of the request for the third tranche, the implementation of the HPMP is progressing, with the further training of refrigerating technicians and customs and enforcement officers held and equipment distributed to the training institute for demonstration purposes. Confirmation from the implementing agency was received indicating that the HPMP is not supporting the retrofit of HCFC-22-based equipment to flammable alternatives. The level of disbursement is at 92.3 per cent, and the activities so far implemented and those planned under the third tranche will further strengthen the servicing sector and ensure its long-term sustainability, and continue to help enable the country to meet its compliance obligations under the Protocol.

**RECOMMENDATION**

17. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan of (HPMP) for Togo; and further recommends blanket approval of the third tranche of stage I of the HPMP for Togo, and the corresponding 2017-2019 tranche implementation plan, at the funding levels shown in the table below:

	<b>Project title</b>	<b>Project funding (US \$)</b>	<b>Support cost (US \$)</b>	<b>Implementing agency</b>
(a)	HCFC phase-out management plan (stage I, third tranche)	62,000	8,060	UN Environment
(b)	HCFC phase-out management plan (stage I, third tranche)	150,000	11,250	UNIDO