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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-sixth Meeting  
Montreal, 9-13 May 2016

**PROJECT PROPOSAL: MALI**

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) UNEP/UNDP

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

**Mali**

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNDP, UNEP (lead)	63 <sup>rd</sup>	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2014	10.18 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2014	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					10.18				10.18

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	15.00	Starting point for sustained aggregate reductions:	15.00
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	5.20	Remaining:	9.80

(V) BUSINESS PLAN		2016	2017	2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)	0.7		0.5		0.3	1.5
	Funding (US \$)	90,400		58,760		31,640	180,800
UNDP	ODS phase-out (ODP tonnes)	0.9	0.0	0.0	0.0	0.3	1.1
	Funding (US \$)	98,900	0	0	0	30,100	129,000

(VI) PROJECT DATA			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	15.0	15.0	13.5	13.5	13.5	13.5	13.5	9.8	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	15.0	15.0	13.5	13.5	13.5	13.5	13.5	9.8	n/a
Agreed funding (US\$)	UNDP	Project costs	160,000	0	0	0	0	92,000	0	0	0	28,000	280,000
		Support costs	12,000	0	0	0	0	6,900	0	0	0	2,100	21,000
	UNEP	Project costs	65,000	0	55,000	0	0	80,000	0	52,000	0	28,000	280,000
		Support costs	8,450	0	7,150	0	0	10,400	0	6,760	0	3,640	36,400
Funds approved by ExCom (US\$)	Project costs	225,000	0	55,000	0	0	0.0	0.0	0.0	0.0	0.0	0.0	280,000
	Support costs	20,450	0	7,150	0	0	0.0	0.0	0.0	0.0	0.0	0.0	27,600
Total funds requested for approval at this meeting (US\$)	Project costs	0	0	0	0	0	<b>172,000</b>	0	0	0	0	0	172,000
	Support costs	0	0	0	0	0	<b>17,300</b>	0	0	0	0	0	17,300

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

1. On behalf of the Government of Mali, UNEP as the lead implementing agency, has submitted to the 76<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 \$189,300, consisting of US \$80,000, plus agency support costs of US \$10,400 for UNEP, and US \$92,000, plus agency support costs of US \$6,900 for UNDP. The submission includes a progress report on the implementation of the second tranche and the tranche implementation plan for 2016 to 2018.

### Report on HCFC consumption

#### *HCFC consumption*

2. The Government of Mali reported a consumption of 10.18 ODP tonnes of HCFC in 2014 and estimated a consumption of 10.18 ODP tonnes for 2015, which are below the maximum allowable consumption of 15.00 tonnes and 13.50 ODP tonnes, respectively. The 2011-2015 HCFC consumption is shown in Table 1.

**Table 1. HCFC-22 consumption in Mali (2011-2014 Article 7, 2015 estimate)**

HCFC-22	2011	2012	2013	2014	2015*	Baseline
<b>Metric tonnes</b>	320.00	302.00	187.00	185.00	185.00	272.3
<b>ODP tonnes</b>	17.60	16.61	10.29	10.18	10.18	15.00

\*Estimated

3. The HCFC consumption in Mali shows a decreasing trend since 2012 resulting from the promotion of recovery and recycling activities and to the political situation and military conflict in the country. All HCFC-22 consumption is limited to the refrigeration and air-conditioning servicing (RAC) sector.

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

4. The Government of Mali reported HCFC sector consumption data under the 2014 CP implementation report which is consistent with the data reported under Article 7. The 2015 CP report will be submitted by 15 April 2016.

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

#### *Legal framework*

5. The Government of Mali has regulations and a licensing and quota system in place. The Decree of 22 January 2007 regulates the import, trade, use and re-export of ODS including HCFCs and HCFC-based equipment. This is being done in a joint-ministerial effort in cooperation with the National Ozone Unit (NOU) and the Ministry of Environment and Sustainable Development.

#### *Refrigeration servicing sector*

6. The main activities implemented include:

- (a) One workshop for 20 customs officers on the identification and control of HCFCs and HCFC-based equipment, and enforcement of the quota system;
- (b) Five training workshops for 25 trainers and 95 refrigeration technicians on good practices in refrigeration servicing including recovery and recycling of HCFCs and safe handling of hydrocarbon-refrigerants;

- (c) Distribution of equipment under the pilot demonstration retrofit project to 12 large workshops and allowing access to this equipment by technicians registered with the Association of Refrigeration Technicians and equipment was also provided to two professional training centres. The list of equipment included *inter alia* refrigerant identifiers, portable electronic leak detectors, vacuum pumps, gauges, recovery/recycling units, and recovery cylinder, safety kits and accessories,; and
- (d) Implementation of the pilot demonstration end-user project in commercial enterprises, through which cold rooms of the professional and technical schools have been converted to hydrocarbons.

*Project implementation and monitoring unit (PMU)*

7. The NOU recruited two consultants to assist in the monitoring of the effective implementation of all HPMP activities.

Level of fund disbursement

8. As of March 2016, of the US \$280,000 so far approved, US \$249,977 had been disbursed (US \$96,380 for UNEP and US \$153,597 for UNDP) as shown in Table 2. The balance of US \$20,450 which takes into account balances returned under the first tranche, will be disbursed on 31 May 2016 (Table 2).

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

Agency	First tranche*		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNEP	65,000	61,830	55,000	34,550	120,000	96,380
UNDP	160,000	153,597	0	0	160,000	153,597
<b>Total</b>	<b>225,000</b>	<b>215,427</b>	<b>55,000</b>	<b>34,550</b>	<b>280,000</b>	<b>249,977</b>
<b>Disbursement rate (%)</b>	<b>96</b>		<b>63</b>		<b>89</b>	

\*Under the first tranche, UNEP returned US \$3,170 plus agency support cost of US \$412 to the 73<sup>rd</sup> meeting and UNDP returned US \$9,429 plus agency support cost of US \$707 to the 75<sup>th</sup> meeting. The amount returned by UNDP under the first tranche is higher than the funds balance for that tranche. This issue is being reviewed by UNDP's financial department in New York

Implementation plan for the third tranche of the HPMP

9. The following activities will be implemented:
- (a) Training of 160 customs officers, environment officers and other enforcement agents in monitoring and controlling the import and distribution of HCFCs (UNEP) (US \$35,000);
  - (b) Training of 250 refrigeration technicians on good practices in servicing air-conditioning equipment including the recovery and recycling of HCFCs and safe handling of hydrocarbon-refrigerants (UNEP) (US \$35,000);
  - (c) Providing equipment to a training centre for the demonstration of retrofitting techniques to hydrocarbon for air-conditioning service technicians and supplying retrofit equipment such as refrigerant identifiers, portable electronic leak detectors, vacuum pumps, gauges, recovery and recycling units, and recovery cylinder, safety kits and accessories to selected workshops. (UNDP) (US \$92,000); and
  - (d) Monitoring the implementation of the HPMP project activities (UNDP) (US \$10,000).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

#### Verification report

10. At the time of issuance of this document, the verification report of HCFC consumption for the years 2013, 2014 and 2015 was still underway. Therefore, in line with decision 72/19, funds approved under the third tranche will not be transferred until the Secretariat has reviewed the verification report and confirmed that the Government of Mali is in compliance with the Montreal Protocol and its Agreement with the Executive Committee.

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

##### *Legal framework*

11. The Government of Mali has already issued HCFC import quotas for 2016 at 9.90 ODP tonnes.

##### *Refrigeration servicing sector*

12. Overall, activities are being implemented as planned except for the training of customs and enforcement officers where only 20 of the 100 proposed had been trained due to the political situation in the country; however, the training of the remaining customs and enforcement officers is planned in 2016. In consultation with the Association of Refrigerant Technicians the pilot demonstration retrofit to non-HCFC-22 refrigerant project focused on the commercial sector (particularly on the central morgue in Bamako's main hospital, one hotel and the Central Bank of West African States (BCEAO)). Equipment, tools and refrigerants were purchased and distributed to the professional training centers and workshops. Currently, the technicians in each of the districts manage the repairs or maintenance at the workshops or centres provided that they are members of the Refrigeration Association.

13. As to the retrofitting activities to hydrocarbon, UNEP reported that the Government of Mali is fully aware of the relevant decisions of the Executive Committee on retrofitting<sup>1</sup>. Retrofitting equipment to hydrocarbon refrigerants were reported under the HPMP, including the conversion of all rooms of the professional and technical school. Additional equipment required for retrofit purposes will be provided to training centres for the demonstration of retrofitting techniques to hydrocarbon and the development of an incentive mechanism will be discussed with the National Ozone Office and the Association of Refrigerant Technicians. In addition to HCFC-22, the other refrigerants currently available in the local market are HFC-410A, HFC-407C and HC-290.

14. With regard to the long-term sustainability of the refrigeration training programme, UNEP advised that the curriculum of training centres will be updated and will include a module on certification of technicians; and the Government will continue implementing awareness activities among key stakeholders.

#### Conclusion

15. The implementation of the HPMP is progressing despite the political situation and military conflict in the country. The level of fund disbursed reaches 89 per cent. Mali is in compliance with the Montreal Protocol and its Agreement with the Executive Committee. The verification report is planned to be submitted by 30 July 2016. The country's import licensing and quota system is operational and will enable HCFC consumption reductions in line with the Montreal Protocol's phase-out schedule. The

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<sup>1</sup> Decisions 72/17 and 73/34.

activities implemented under the first and second tranches and those planned under the third tranche will further strengthen the refrigeration servicing sector and ensure the long-term sustainability of the activities proposed in stage I of the HPMP.

**RECOMMENDATION**

16. The Fund Secretariat recommends blanket approval of the third tranche of stage I of the HPMP for Mali, and the corresponding 2016-2018 tranche implementation plan, at the funding level shown in the table below, on the understanding that:

- (a) If Mali were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and air-conditioning equipment originally designed for non-flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols; and
- (b) The approved funds would not be transferred to UNEP and UNDP until the Secretariat had reviewed the verification report and confirmed that the Government of Mali was in compliance with the Montreal Protocol and the Agreement between the Government and the Executive Committee:

	<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)	80,000	10,400	UNEP
(b)	HCFC phase-out management plan (stage I, third tranche)	92,000	6,900	UNDP