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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: BENIN**

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/UNIDO

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

**Benin**

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2014	20.03 (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-123									
HCFC-124									
HCFC-141b									
HCFC-142b									
HCFC-22					20.03				20.03

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	23.8	Starting point for sustained aggregate reductions:	23.8
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	8.33	Remaining:	15.47

(V) BUSINESS PLAN		2016	2017	2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)	1.0		0.9		0.8	2.7
	Funding (US \$)	84,750		73,450		67,800	226,000
UNIDO	ODS phase-out (ODP tonnes)	0.7	0.0	0.5	0.0	0.5	1.7
	Funding (US \$)	53,750	0	37,625	0	37,625	129,000

(VI) PROJECT DATA			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	23.80	23.80	21.42	21.42	21.42	21.42	21.42	15.47	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	23.80	23.80	21.42	21.42	21.42	21.42	21.42	15.47	n/a
Agreed funding (US\$)	UNEP	Project costs	85,000	0	85,000	0	0	75,000	0	65,000	0	60,000	370,000
		Support costs	11,050	0	11,050	0	0	9,750	0	8,450	0	7,800	48,100
	UNIDO	Project costs	100,000	0	40,000	0	0	50,000	0	35,000	0	35,000	260,000
		Support costs	7,500	0	3,000	0	0	3,750	0	2,625	0	2,625	19,500
Funds approved by ExCom (US\$)	Project costs		185,000	0	125,000	0	0	0	0	0	0	0	310,000
	Support costs		18,550	0	14,050	0	0	0	0	0	0	0	32,600
Total funds requested for approval at this meeting (US\$)	Project costs		0	0	0	0	0	195,000*	0	0	0	0	195,000
	Support costs		0	0	0	0	0	18,750	0	0	0	0	18,750

\*UNIDO is requesting funding for the fourth (2018) and fifth (2020) tranches in addition to the third tranche submitted to the 76<sup>th</sup> meeting (i.e. funding request of US \$120,000 for UNIDO)

<b>Secretariat's recommendation:</b>	Individual consideration
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## PROJECT DESCRIPTION

1. On behalf of the Government of Benin, 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 \$213,750, consisting of US \$75,000, plus agency support costs of US \$9,750 for UNEP, and US \$120,000, plus agency support costs of US \$9,000 for UNIDO. 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 Benin reported a consumption of 20.03 ODP tonnes of HCFC in 2014 and estimated a consumption of 18.70 ODP tonnes for 2015, which is over 20 per cent below the HCFC baseline for compliance. The 2011-2015 HCFC consumption is shown in Table 1.

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

HCFC-22	2011	2012	2013	2014	2015*	Baseline
Metric tonnes	431.8	423.6	402.74	364.23	340.00	432.51
ODP tonnes	23.75	23.30	22.15	20.03	18.70	23.8

\*Estimated

3. HCFC consumption data shows a decreasing trend from 2011 to 2015. All HCFC-22 consumption occurs in the refrigeration servicing sector.

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

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

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

#### *Legal framework*

5. Decree of 8 January 2003 regulates imports of ODS and ODS-based equipment. It includes the list of ODS and ODS-based equipment controlled by the Montreal Protocol and indicates that imports of these are subject to a special permit issued by the Department in charge of Trade. The decree has been modified to take into consideration HCFC phase-out.

#### *Refrigeration servicing sector*

6. The main activities implemented include:

- (a) Three training workshops for 103 customs officers and environment inspectors on control and identification of ODS and ODS-based equipment, including HCFCs and HCFC-based equipment and an exchange of information between custom officers and the National Ozone Office on the quota system and control of HCFCs and HCFC-based equipment;
- (b) Two workshops for importers of refrigerants, refrigeration equipment and air-conditioning on the licensing and quota system;

- (c) One training workshop for 33 refrigeration technicians as trainers in good refrigeration practices, including the use of hydrocarbon technologies, and one training workshop for 84 participants as trainers on certification;
- (d) Purchase of two refrigerant identifiers, six sets of tools (e.g. manifold pressure gauges, portable recovery units, brazing units, vacuum pumps, recycling tools, hermetic compressor tester) and three R-290 air-conditioning units, for training purposes.
- (e) Five training workshops for 129 refrigeration technicians on good practices in refrigeration, safe handling of hydrocarbon and servicing of HCFC air-conditioning equipment with the assistance of the Refrigeration Association in Benin;
- (f) Four field visits in different marketplaces to control the quality of the refrigerants; and
- (g) Awareness-raising activities with one industrial refrigeration technicians and the National Committee on the problem of the ozone layer and available solutions.

*Project monitoring and evaluation*

7. The National Ozone Unit has been overseeing the implementation of the HPMP with the assistance of two consultants.

Level of fund disbursement

8. As of March 2016, of the US \$310,000 so far approved, US \$286,863 had been disbursed (US \$170,000 for UNEP and US \$116,863 for UNIDO), as shown in Table 2. The balance of US \$23,137 will be disbursed in 2016.

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

Agency	First tranche		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNEP	85,000	85,000	85,000	85,000	170,000	170,000
UNIDO	100,000	99,910	40,000	16,953	140,000	116,863
Total	185,000	184,910	125,000	101,953	310,000	286,863
<b>Disbursement rate (%)</b>	99.95		81.56		92.53	

Implementation plan for the third tranche of the HPMP

9. The Government's strategy consists of reinforcing the capacities of the customs and other enforcement officers and promoting good refrigeration practices including recovery and recycling as well as safe use of hydrocarbon refrigerants. On this basis, the following activities will be implemented:

- (a) Five training workshops for 100 customs officers on the control and identification of ODS and ODS-based equipment, (UNEP) (US \$25,000);
- (b) Five training workshops for 125 of refrigeration technicians on good practices in refrigeration and safe handling of hydrocarbon, standards and certification (UNEP) (US \$20,000);

- (c) Procurement and delivery of basic equipment and tools (e.g. recovery units, cylinders, brazing equipment, recycling and spare parts for existing tools) (UNIDO) (US \$120,000);
- (d) Awareness-raising activities regarding the enforcement of the legislation and regulatory measures on HCFC; production of awareness material; and meetings with main importers of ODS (UNEP) (US \$10,000); and
- (e) Monitoring and evaluation of the implementation of HPMP, and collecting relevant data (UNEP) (US \$20,000).

## **SECRETARIAT'S COMMENTS AND RECOMMENDATION**

### **COMMENTS**

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

##### *Legal framework*

10. The Government of Benin has already issued HCFC import quotas for 2016 at 17.05 ODP tonnes.

##### *Refrigeration servicing sector*

11. With regard to the long-term sustainability of the training programme for technicians, UNEP advised that it has developed collaborations and partnerships with the existing refrigeration training institutes to implement technician training programmes. Moreover, through the HPMP activities, a larger number of technicians will gain awareness on good refrigeration practices, thus contributing to the sustainability of the training programme.

12. Upon a request for information on whether retrofits to hydrocarbon are being promoted by the HPMP or taking place outside of the HPMP in Benin, UNEP indicated that there is no promotion of any retrofitting at this stage and that there are no regulations/codes on the use of hydrocarbon-based refrigeration and air-conditioning systems. The current approach of the servicing sector focuses on the promotion of good refrigeration practices, including recovery and recycling. Nevertheless, additional training on new refrigerants and the safe handling of hydrocarbon has been envisaged. Local availability of HC, R-410a and 407a-based equipment has been reported, at prices that remain high.

##### Revision of the HPMP Agreement

13. In reviewing the progress report, the Secretariat noted that under the second tranche, the shipping cost of the equipment accounted for approximately 30 per cent of the purchase orders, resulting in lower number of equipment sets for customs and technicians. Noting that only US \$260,000 is allocated to the investment projects for stage I of the HPMP and that larger purchase orders, in most cases, result in lower equipment and shipment cost, the Government of Benin is requesting that the funds allocated to UNIDO under the fourth and fifth tranches be approved with the third tranche, resulting in a total request of US \$120,000 for the third tranche for UNIDO. The Secretariat notes that this issue is not unique for Benin as other Article 5 countries could face the same challenges in procuring equipment and tools. Although the proposed approach for the procurement of equipment seems to be at the advantage of the beneficiaries, the request, if approved, should not be used as a precedent.

14. On this basis, a revised Agreement has been submitted by the Government of Benin for consideration by the Executive Committee to reflect the changes in tranche distribution, and paragraph 16 has been amended to indicate that the updated Agreement supersedes that reached at the 70<sup>th</sup> meeting, as

shown in Annex I to the present document. The full revised Agreement will be appended to the final report of the 76<sup>th</sup> meeting.

### Conclusion

15. The HPMP implementation is progressing and the country is in compliance with the Montreal Protocol and its Agreement with the Executive Committee. The country's import licensing and quota system is operational and customs officers and refrigeration technicians have been trained while equipment and tools have been distributed to training centres. For the procurement of the remaining equipment under stage I of the HPMP, the Government of Benin has requested the approval of the fourth and fifth tranches together with the third tranche thus allowing UNIDO to procure a larger number of equipment as a result of the savings generated from the lower shipping cost per unit. The level of fund disbursement is over 92 per cent. The activities implemented under the first and second tranches and those planned under the third tranche, will further strengthen the servicing sector and ensure the long-term sustainability of the activities proposed in stage I of the HPMP.

### **RECOMMENDATION**

16. The Executive Committee may wish to consider:

- (a) Noting:
  - (i) The progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan (HPMP) in Benin;
  - (ii) That the Fund Secretariat had updated Appendix 2-A of the Agreement between the Government of Benin and the Executive Committee, based on the reallocation of UNIDO's funding for the fourth (US \$35,000 in 2018) and fifth (US \$35,000 in 2020) tranches to the third tranche (US \$50,000) and that paragraph 16 had been amended to indicate that the updated Agreement supersedes that reached at the 70<sup>th</sup> meeting, as contained in Annex I to the present document; and
- (b) Approving the third tranche of stage I of the HPMP for Benin, and the corresponding 2016-2018 tranche implementation plan, at the amount of US \$213,750 consisting of US \$75,000, plus agency support costs of US \$9,750 for UNEP; and US \$120,000, plus agency support costs of US \$9,000 for UNIDO.

Annex I

**TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF BENIN 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)

16. This updated Agreement supersedes the Agreement reached between the Government of Benin and the Executive Committee at the **70<sup>th</sup>** meeting of the Executive Committee.

**APPENDIX 2-A: THE TARGETS, AND FUNDING**

		2011	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	n/a	23.80	23.80	21.42	21.42	21.42	21.42	21.42	15.47	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	23.80	23.80	21.42	21.42	21.42	21.42	21.42	15.47	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	85,000	0	85,000	0	0	75,000	0	65,000	0	60,000	370,000
2.2	Support costs for Lead IA (US \$)	11,050	0	11,050	0	0	9,750	0	8,450	0	7,800	48,100
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	100,000	0	40,000	0	0	<b>120,000</b>	0	<b>0</b>	<b>0</b>	<b>0</b>	260,000
2.4	Support costs for Cooperating IA (US \$)	7,500	0	3,000	0	0	<b>9,000</b>	0	<b>0</b>	<b>0</b>	<b>0</b>	19,500
3.1	Total agreed funding (US \$)	185,000	0	125,000	0	0	<b>195,000</b>	0	<b>65,000</b>	<b>0</b>	<b>60,000</b>	630,000
3.2	Total support costs (US \$)	18,550	0	14,050	0	0	<b>18,750</b>	0	<b>8,450</b>	<b>0</b>	<b>7,800</b>	67,600
3.3	Total agreed costs (US \$)	203,550	0	139,050	0	0	<b>213,750</b>	0	<b>73,450</b>	<b>0</b>	<b>67,800</b>	697,600
4.1.1	Total phase-out of HCFC-22 under this agreement (ODP tonnes)											8.33
4.1.2	Phase-out of HCFC-22 in previously approved projects (ODP tonnes)											0
4.1.3	Remaining eligible consumption for HCFC-22											15.47