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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-sixth Meeting
Montreal, 16-20 April 2012

PROJECT PROPOSAL: NIGERIA

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

Phase-out

- HCFC phase-out management plan (stage I, second tranche)

UNDP and UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Nigeria

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage I)	UNDP (lead), UNIDO

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2010	426.4 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2010	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-141b		60.2		105.6					165.7
HCFC-22				69.0	191.6				260.7

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	398.2	Starting point for sustained aggregate reductions:	398.2
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	308

(V) BUSINESS PLAN		2012	2013	2014	Total
UNDP	ODS phase-out (ODP tonnes)	15.3	9.2	9.2	33.7
	Funding (US \$)	899,254	541,616	541,616	1,982,486
UNIDO	ODS phase-out (ODP tonnes)	10.0	11.8		21.8
	Funding (US \$)	591,250	693,560	0	1,284,810

(VI) PROJECT DATA			2010	2011	2012	2013	2014	2015	Total
Montreal Protocol consumption limits			n/a	n/a	n/a	398.2	398.2	358.4	
Maximum allowable consumption (ODP tonnes)			n/a	n/a	n/a	398.2	398.2	358.4	
Agreed Funding (US \$)	UNDP	Project costs	855,603	836,515	503,829	503,829	299,974		2,999,750
		Support costs	64,170	62,739	37,787	37,787	22,498		224,981
	UNIDO	Project costs	550,000	550,000	645,172		193,908		1,939,080
		Support costs	41,250	41,250	48,388		14,543		145,431
Funds approved by ExCom (US \$)		Project costs	1,405,603	0	0	0	0		1,405,603
		Support costs	105,420	0	0	0	0		105,420
Total funds requested for approval at this meeting (US \$)		Project costs	0	1,386,515	0	0	0		1,386,515
		Support costs	0	103,989	0	0	0		103,989

Secretariat's recommendation:	For individual consideration
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PROJECT DESCRIPTION

1. On behalf of the Government of Nigeria UNDP, as the lead implementing agency, has submitted to the 66th meeting of the Executive Committee a request for funding for the second tranche of stage I of the HCFC phase-out management plan (HPMP) at a total cost of US \$1,490,504, consisting of US \$836,515 plus agency support costs of US \$62,739 for UNDP, and US \$550,000 plus agency support costs of US \$41,250 for UNIDO. The submission includes a progress report on the implementation of the first year of the HPMP together with a verification report on HCFC consumption in Nigeria, and annual implementation plans for 2012 and 2013.

Background

2. The HPMP for Nigeria was approved by the Executive Committee at its 62nd meeting, to reduce HCFC consumption in the country to a sustained level of 90 per cent of the baseline, at a total funding level in principle of US \$4,938,830, plus agency support costs of US \$370,412. This included US \$855,603 plus agency support costs of US \$64,170 for UNDP and US \$550,000, plus agency support costs of US \$41,250 for UNIDO for implementation of the first year of the HPMP.

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

3. The investment activities in the HPMP of Nigeria are focussing on the conversion of polyurethane (PU) foam blowing, both in the foam sector as well as in the insulation of commercial refrigeration equipment, to methyl formate (MF). Activities in both sectors have commenced. UNDP visited both of the country's systems houses, Vitapur and Komaj, and found Komaj questionable regarding its organizational, technical and financial capability to operate as a full systems house on the basis of MF. Komaj, which distributes pre-blended polyol to a number of downstream users, will instead purchase MF-based PU systems from Vitapur and act as a distributor in the market. In total four missions targeting both sectors had been undertaken to date. This included a mission by UNIDO in the commercial refrigeration sector visiting all 109 foaming operations in 15 cities to verify the eligibility of enterprises and to prepare the scope of equipment and services to be supplied.

4. The HPMP for Nigeria included a demonstration project on hydrocarbon production and distribution for the refrigeration and air conditioning sector. In 2011, two disbursements totalling US \$220,000 have been approved covering preparation, infrastructure and equipment parts for the planned demonstration units.

5. The Project Management Unit (PMU) is operational and has accompanied the implementing agencies on their respective missions to Nigeria. A verification of the 2010 consumption of HCFC was not foreseen, since there are no consumption targets in the Agreement for the years before 2013.

Annual plans for the second tranche of the HPMP

6. In the foam sector, Vitapur will install the MF capable blending equipment, the quality control and the development laboratory. The formulations to be developed will be tested in the enterprises own block, panel and spray foam facilities. Komaj will establish a quality control laboratory and develop, with UNDP assistance, a MF-based system for the downstream users, to be produced at the facility of Vitapur. A first group of downstream users of pre-blended polyol systems in miscellaneous applications such as panels, spray foam and thermal ware will convert their facilities during 2012.

7. In the commercial refrigeration sector, more than 30 enterprises manufacturing icemakers with low-pressure foam injection machines suitable for the use of MF-based systems will be converted; the pre-blended polyol will be sourced from the converted systems houses. The activities during 2012 will

include the delivery of the new equipment and spare parts and provision of technical assistance, as well as training of the staff.

8. The establishment of pilot facilities to produce hydrocarbon for refrigeration use will go into operation in the third quarter of 2012. The conversion kits for refrigeration equipment and the associated field testing is expected to be completed within the first three quarters of the year, with distribution of the conversion kits to the workshops taking place during the fourth quarter of 2012. Training of service technicians will commence in the third quarter to enable them to utilise the conversion kits.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

HCFC consumption

9. The HCFC baseline for compliance has been established at 398.2 ODP tonnes, based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010 as shown in the table below. The established baseline is 9.2 ODP tonnes lower than that of 407.4 ODP tonnes estimated at the time Nigeria's HPMP was approved.

HCFC consumption (Article 7)

HCFC	2006	2007	2008	2009	2010	Baseline
Metric tonnes						
HCFC-22	650.52	1,260.49	3,979.93	4,298.32	4,739.22	4,518.77
HCFC-141b	0	242.10	702.34	1,214.20	1,506.46	1,360.33
Total	650.52	1,502.59	4,682.27	5,512.52	6,245.68	5,879.10
ODP tonnes						
HCFC-22	35.8	69.3	218.9	236.4	260.7	248.5
HCFC-141b	0.0	26.6	77.3	133.6	165.7	149.6
Total	35.8	96.0	296.2	370.0	426.4	398.2

2011 progress report and 2012 annual plan

10. The Secretariat had entered into discussion with the implementing agencies regarding the shifting of funds from the two system houses already foreseen in the budget to one system house and one distributor. UNDP provided an updated budget accordingly, with increased expenditures at Vitapur, compared to the original plan, to enable the production of larger quantities and to cover the remaining activities at Komaj needed to allow it to fulfil its obligations as a distributor. The agency proposed, as an additional activity, a workshop for the customers of both enterprises to inform them of the changes in the pre-blended polyol they will be receiving. The total budget would remain unchanged. Based on the provision in paragraph 7 of the Agreement between the Government of Nigeria and the Executive Committee allowing the country flexibility in implementation, the Secretariat agreed to include the changes in the annual plan recommended for approval by this meeting, with a subsequent update to the overall plan.

11. The overall progress of the HPMP for Nigeria is essentially on schedule, despite a very demanding task of the conversion of more than 150 different enterprises in the country. The expenditures of US \$378,170 so far are equivalent to 26.9 per cent of the amount of US \$1,405,603 approved for the first tranche.

Revision to the Agreement of the HPMP

12. The HPMP for Nigeria was approved prior to the establishment of the HCFC baseline for compliance. Accordingly, in approving the HPMP the Executive Committee requested the Secretariat to *inter alia*, update Appendix 2-A (“The targets, and funding”) to the Agreement with the figures for the maximum allowable consumption, and to notify the Committee of the resulting levels accordingly (decision 62/58). Based on the data reported by the Government of Nigeria under Article 7 and its revised phase-out schedule, the relevant paragraphs of the Agreement have been updated, and a new paragraph has been added to indicate that the updated Agreement supersedes that reached at the 62nd meeting, as shown in Annex I to this document. The full revised Agreement will be appended to the final report of the 66th meeting.

RECOMMENDATION

13. The Executive Committee may wish to:

- (a) Note the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan (HPMP) in Nigeria;
- (b) Note that the Fund Secretariat has updated paragraph 1, Appendix 1-A “The substances” and Appendix 2-A: “The targets, and funding” of the Agreement between the Government of Nigeria and the Executive Committee, based on the established HCFC baseline for compliance, and a new paragraph 16 has been added to indicate that the updated Agreement supersedes the Agreement reached at the 62nd meeting, as contained in Annex I to the present document;
- (c) Note that the revised starting point for sustained aggregate reduction in HCFC consumption is 398.2 ODP tonnes, calculated using actual consumption of 370.0 ODP tonnes and 426.4 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol; and
- (d) Approve the second tranche of stage I of the HPMP of Nigeria, and the corresponding annual implementation plans, at the amount of US \$1,490,504, consisting of US \$836,515, plus agency support costs of US \$62,739 for UNDP, and US \$550,000, plus agency support costs of US \$41,250 for UNIDO.

Annex I

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF NIGERIA 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 Nigeria (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”) prior to 1 January 2015 in compliance with Montreal Protocol schedules to a sustained level of **358.4** ODP tonnes representing the maximum consumption allowed for 2015 under the Montreal Protocol reduction schedule.

16. This updated Agreement supersedes the Agreement reached between the Government of Nigeria and the Executive Committee at the 62nd 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	248.5
HCFC-141b	C	I	149.6
Total			398.2

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2010	2011	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)				398.2	398.2	358.4	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)				398.2	398.2	358.4	n/a
2.1	Lead IA UNDP agreed funding (US \$)	855,603	836,515	503,829	503,829	299,974	0	2,999,750
2.2	Support costs for Lead IA (US \$)	64,170	62,739	37,787	37,787	22,498	0	224,981
2.3	Cooperating IA UNIDO agreed funding (US \$)	550,000	550,000	645,172		193,908	0	1,939,080
2.4	Support costs for Cooperating IA (US \$)	41,250	41,250	48,388		14,543	0	145,431
3.1	Total agreed funding (US \$)	1,405,603	1,386,515	1,149,001	503,829	493,882	0	4,938,830
3.2	Total support cost (US \$)	105,420	103,989	86,175	37,787	37,041	0	370,412
3.3	Total agreed costs (US \$)	1,511,023	1,490,504	1,235,176	541,616	530,923	0	5,309,242
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)							10.6
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)							237.9
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)							79.5
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)							0
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)							70.1