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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-seventh Meeting
Bangkok, 16-20 July 2012

PROJECT PROPOSAL: GHANA

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, first tranche) UNDP/Italy

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

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2011	30.71 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2011	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b									
HCFC-142b					5.9				5.9
HCFC-22					24.8				24.8

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	57.3	Starting point for sustained aggregate reductions:	57.3
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	20.05	Remaining:	37.25

(V) BUSINESS PLAN		2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Italy	ODS phase-out (ODP tonnes)		0.8		0.9		0.8		0.8		3.3
	Funding (US \$)	0	67,800	0	79,100	0	73,450	0	67,800	0	288,150
UNDP	ODS phase-out (ODP tonnes)	0.0	2.6	0.0	2.4	0.0	2.5	0.0	1.6	1.5	10.5
	Funding (US \$)	0	215,000	0	204,250	0	209,625	0	134,375	130,409	893,659

(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	57.30	57.30	51.57	51.57	51.57	51.57	51.57	37.25	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	n/a	57.30	57.30	51.57	51.57	51.57	51.57	51.57	37.25	n/a
Agreed Funding (US\$)	Italy	Project costs	70,000		60,000		70,000		65,000		60,000			325,000
		Support costs	9,100		7,800		9,100		8,450		7,800			42,250
	UNDP	Project costs	200,000		200,000		190,000		195,000		125,000	121,311		1,031,311
		Support costs	15,000		15,000		14,250		14,625		9,375	9,098		77,348
Funds approved by ExCom (US\$)	Project Costs	270,000	0	0	0	0	0	0	0	0	0	0		270,000
	Support Costs	24,100	0	0	0	0	0	0	0	0	0	0		24,100
Total funds requested for approval at this meeting (US\$)	Project Costs	0	0	260,000	0	0	0	0	0	0	0	0		260,000
	Support Costs	0	0	22,800	0	0	0	0	0	0	0	0		22,800

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Ghana UNDP, as the lead implementing agency, has submitted to the 67th 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 \$282,800, consisting of US \$200,000 plus agency support costs of US \$15,000 for UNDP, and US \$60,000 plus agency support costs of US \$7,800 for the Government of Italy. The submission includes a progress report on the implementation of the first year of the HPMP, and annual implementation plans for 2012 and 2013.

Background

2. The HPMP for Ghana was approved by the Executive Committee at its 61st meeting to reduce HCFC consumption by 35 per cent of the baseline by the end of 2019, at a total funding level in principle of US \$1,356,311, plus agency support costs of US \$119,598. Also at the 61st meeting, the Executive Committee approved US \$200,000 plus agency support costs of US \$15,000 for UNDP, and US \$70,000 plus agency support costs of US \$9,100 for the Government of Italy for implementation of the first year of the HPMP.

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

3. The following activities have been implemented in the refrigeration and air-conditioning servicing sector: the registration and certification of all importers and distributors of HCFCs and HCFC-based equipment; the establishment and enforcement of HCFC import quotas; the establishment of an import quota for used refrigeration equipment; consultation on regulatory harmonization and the drafting of guidelines on the safe use of hydrocarbon refrigerants, with follow-up activities planned for 2012-2014. Three technicians who received training in Italy will train local refrigeration technicians in Ghana; the quick-reference manual was updated to include information on hydrocarbon technology; basic equipment and tools were purchased, and will be used during implementation of the second tranche; and public awareness and information dissemination activities have been initiated in part in collaboration with the Energy Commission under the energy efficiency programme funded through the Global Environment Facility (GEF).

4. As of May 2012, of the US \$270,000 in funds approved for the first tranche, US \$245,617 had been disbursed or committed. The balance of US \$24,383 will be disbursed in 2012.

Annual plans for the second tranche of the HPMP

5. The main activities to be implemented between 2012 and 2014 include:

- (a) Strengthening the legal framework for management of HCFCs by allowing the safe use of hydrocarbon-based refrigerants and establishing a certification system for technicians who will handle natural refrigerants. Activities will also include the training of 50 customs officers and enforcement officers who will train an additional 450 officers; the provision of 45 ODS identifier kits for customs officers; and consultative workshops for relevant authorities, ODS importers and distributors, and refrigeration associations to promote the safe handling and use of natural refrigerants (Italy, US \$60,000);
- (b) A technical assistance programme for the refrigeration servicing sector, including the training and certification of 700 refrigeration technicians in good service practices; the upgrading of the existing refrigeration training centre by providing service tool kits and basic equipment; and the implementation of three recovery/retrofit workshops (UNDP, US \$139,150); and

- (c) A project monitoring unit, featuring the implementation of a paperless monitoring system (UNDP, US \$60,850).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

HCFC consumption

6. The HCFC baseline for compliance has been established at 57.3 ODP tonnes, based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010 as shown in Table 1. At the 61st meeting, the Government of Ghana agreed to establish its starting point for aggregate reduction in HCFC consumption based on the average consumption forecast for 2009 and 2010 of 49.5 ODP tonnes, which is 7.8 ODP tonnes lower than the established baseline.

Table.1 HCFC consumption in Ghana (2006-2010 Article 7)

HCFC	2006	2007	2008	2009	2010	2011	Baseline
Metric tonnes							
HCFC-22	296.5	324.4	335.4	961.9	587.9	451.63	774.9
HCFC-142b	73.9	24.5	49.2	375.7	74.4	90.31	225.1
Total (mt)	370.4	348.9	384.6	1,337.6	662.3	541.94	1,000.0
ODP tonnes							
HCFC-22	16.3	17.8	18.4	52.9	32.3	24.84	42.6
HCFC-142b	4.8	1.6	3.2	24.4	4.9	5.87	14.7
Total (ODP tonnes)	21.1	19.4	21.6	77.3	37.2	30.71	57.3

7. Between 2009 and 2011, HCFC-22 consumption decreased from 961.9 mt (52.9 ODP tonnes) to 451.63 mt (24.84 ODP tonnes), while for HCFC-142b it decreased from 375.7 mt (24.4 ODP tonnes) to 90.31 mt (5.87 ODP tonnes), i.e., a reduction of 46.6 ODP tonnes over a two-year period. The estimated consumption of 30.71 ODP tonnes in 2011 was already 26.59 ODP tonnes below the established baseline for compliance of 57.3 ODP tonnes. As explained by UNDP, the reduction in consumption was achieved through the Government establishing the maximum HCFC consumption quota based on the 2008 import level, subject to higher demand in the market. As there have not been any requests for additional imports of HCFCs, the quota was maintained at that level. In the years following HPMP preparation, some companies embarking on expansions of their HCFC-based refrigeration systems appear to have made the decision driven by their suppliers to change over to the use of non-HCFC refrigerants. The ongoing GEF/UNDP refrigerator energy efficiency project and the imminent ban on imports of second-hand refrigerators and freezers also seem to have had an effect on the level of HCFC consumption.

8. With regard to the HCFC import quota for 2012 and subsequent years, UNDP advised that the Government of Ghana had decided to establish an import quota of 35.3 ODP tonnes for 2012, which is 22.0 ODP tonnes below the baseline of 57.3 ODP tonnes. The import quota could be maintained in 2013 and 2014 depending on the actual amounts imported in 2012.

9. UNDP further explained that the initial objective of the technical assistance programme for the retrofit of refrigeration equipment would be to introduce and promote the conversion of HCFC-based residential air-conditioners to R-290 (propane) refrigerant and instill customer confidence in their efficiency and safe use. It is also to be noted that the price per kilogram of R-290 ranges from US \$2.60 to US \$3.50, which is lower than the US \$5.15/kg for HCFC-22.

Revision to the HPMP Agreement

10. The HPMP for Ghana 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 61/42(e)). Based on the data reported by the Government of Ghana 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 61st meeting, as shown in Annex I to the present document. The full revised Agreement will be appended to the final report of the 67th meeting.

RECOMMENDATION

11. The Fund Secretariat recommends that the Executive Committee notes:

- (a) The progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan of (HPMP) in Ghana;
- (b) 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 Ghana and the Executive Committee, based on the established HCFC baseline for compliance, and that a new paragraph 16 has been added to indicate that the updated Agreement supersedes the Agreement reached at the 61st meeting, as shown in Annex I to the present document; and
- (c) That the revised starting point for sustained aggregate reduction in HCFC consumption is 57.3 ODP tonnes, calculated using actual consumption of 77.3 ODP tonnes and 37.2 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol.

12. The Secretariat recommends blanket approval of the second tranche of stage I of the HPMP for Ghana, and the corresponding 2012 and 2013 annual implementation plans, at the funding level shown in the table below:

	Project Title	Project Funding (US \$)	Support Cost (US \$)	Implementing Agency
(a)	Stage I of the HPMP (second tranche)	200,000	15,000	UNDP
(b)	Stage I of the HPMP (second tranche)	60,000	7,800	Italy

Annex I

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF GHANA 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 Ghana (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”) to a sustained level as set out in Appendix 2-A (the “Targets and Funding”). This would correspond to **37.25** ODP tonnes prior to 1 January 2020 in compliance with Montreal Protocol schedules.

2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (the “Targets and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances which exceeds the level defined in row 1.2 of Appendix 2-A as corresponding to the reduction step under this agreement for all ODS specified in Appendix 1-A, and in respect to any consumption of the substances which exceeds the level defined in rows **3.3 and 3.6**.

16. This updated Agreement supersedes the Agreement reached between the Government of Ghana and the Executive Committee at the 61st 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	42.6
HCFC-142b	C	I	14.7
Total			57.3

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2010	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	n/a	57.30	57.30	51.57	51.57	51.57	51.57	51.57	37.25	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	n/a	57.30	57.30	51.57	51.57	51.57	51.57	51.57	37.25	n/a
2.1	Lead IA (UNDP) agreed funding (US \$)	200,000	0	200,000	0	190,000	0	195,000	0	125,000	121,311	0	1,031,311
2.2	Support costs for Lead IA (US \$)	15,000	0	15,000	0	14,250	0	14,625	0	9,375	9,098	0	77,348
2.3	Cooperating IA (Italy) agreed funding (US \$)	70,000	0	60,000	0	70,000	0	65,000	0	60,000	0	0	325,000
2.4	Support costs for Cooperating IA (US \$)	9,100	0	7,800	0	9,100	0	8,450	0	7,800	0	0	42,250

Row	Particulars	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
2.5	Total agreed funding (US \$)	270,000	0	260,000	0	260,000	0	260,000	0	185,000	121,311	0	1,356,311
2.6	Total support costs (US \$)	24,100	0	22,800	0	23,350	0	23,075	0	17,175	9,098	0	119,598
2.7	Total agreed costs (US \$)	294,100	0	282,800	0	283,350	0	283,075	0	202,175	130,409	0	1,475,909
3.1.1	Total phase-out of HCFC-22 under this agreement (ODP tonnes)												5.35
3.1.2	Phase-out of HCFC-22 in previously approved projects (ODP tonnes)												0.00
3.1.3	Remaining eligible consumption for HCFC-22												37.25
4.1.1	Total phase-out of HCFC-142b under this agreement (ODP tonnes)												14.70
4.1.2	Phase-out of HCFC-142b in previously approved projects (ODP tonnes)												0.00
4.1.3	Remaining eligible consumption for HCFC-142b												0.00
