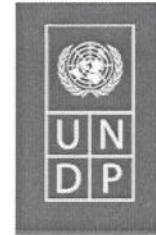




# Annual Work Plan 2007



## Terminal Phase-out Management Plan GHA/PHA/50/INV/24

**Expected CP Outcome(s):** Sustainable use of natural resources and good environmental management promoted

**Expected CP Output(s):** Establishment of regulatory framework for ensuring sustainable use of natural resources for improved livelihood

**Implementing partner:** Environmental Protection Agency

The Terminal Phase-Out Management Plan for Ghana will result in the complete phase-out of CFCs between 2006 and 2010. The project addresses 15% of the baseline consumption, which was 35.6 Tonnes. The project includes training, technical assistance and investment activities. The TPMP will allow the government to phase-out its CFCs consumption by January 2010. Because of the very nature of the project, it is essential to adopt a flexible approach in the implementation phase to allow the government to adapt and adjust the proposed strategy according to its needs.

The grant requested to the MLF by the government of Ghana for the complete and final phase-out of CFCs in the refrigeration sector is US\$ 344,894 (not including agency support costs).

Funds will be disbursed in line with the attached agreement. As a results oriented agreement, second tranche payment will be based on the achievement of the objectives, in respect of the conditions included in the agreement.

First tranche of funding approved by the ExCom for UNDP: US \$ 204,394

**Executing Agency:** Environmental Protection Agency

**Starting date:** January 2007

**Total Budget:** US \$ 344,894

Programme Period: January-December 2007	Estimated annualized budget: 204,394 USD
Programme Component: _____	Allocated resources: _____
Intervention Title: Terminal Phase-out Management Plan	• Government _____
Budget Code: _____	• Regular <u>204,394 (MLF)</u>
Duration: 1 year	• Other: _____
Source of Funds: Multilateral Fund (MLF)	

Agreed by (Government): YAW OKYERE-NYAKO

Agreed by (Implementing Partner): JONATHAN A. ALLOEY

Agreed by (UNDP):

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ACRONYMS

<i>CFC</i>	<i>Chlorofluorocarbon</i>
<i>HCFC</i>	<i>Hydrochlorofluorocarbon</i>
<i>HFC</i>	<i>Hydro fluorocarbon</i>
<i>IA</i>	<i>Implementing Agency</i>
<i>MAC</i>	<i>Mobile Air Conditioning (Systems)</i>
<i>MDI</i>	<i>Metered Dose Inhaler</i>
<i>MLF</i>	<i>Multilateral Fund</i>
<i>ODP</i>	<i>Ozone Depleting Potential</i>
<i>ODS</i>	<i>Ozone Depleting Substances</i>
<i>RMP</i>	<i>Refrigerant Management Plan</i>
<i>TPMP</i>	<i>Terminal Phase-Out Management Plan</i>

## SECTION I : Narrative

### PART I: Situational analysis

The Republic of Ghana ratified the Montreal Protocol on Substances that Deplete the Ozone Layer on 24 July 1989 and the London Amendment on 25 July 1992, the Copenhagen Amendment on 30 September 2000, the Montreal and Beijing Amendments on 24 May 2005. A country programme submitted at the 8<sup>th</sup> Meeting of the Executive Committee of the Multilateral Fund in October 1992 showed that there was a total ODS consumption of 101 ODP tonnes in 1991 of which 73 ODP tonnes were used in the refrigeration sector. According to official records, the consumption in this sector dropped to an average of 35.6 ODP tonnes representing the averages 1995 – 1997 annual consumptions (baseline).

Two sectors i.e. refrigeration and foam accounted for the most significant portion of total ODS consumption (73.1%) while the consumption of ODS in other sectors was negligible. It was also established that the consumption in the two large sectors was primarily for the servicing of refrigeration equipment and manufacturing of flexible foams respectively.

Ghana's annual CFC consumption reported to the Ozone and the Multilateral Fund Secretariats showed a considerable increase for the years 1998 and 1999 and were 50.33 ODP tonnes and 43.6 ODP tonnes respectively. This increasing consumption trend was alarming and called for additional activities to be urgently carried out in order to reduce Ghana's CFC consumption so as to fall into compliance with her obligations under the Montreal protocol for the 1999 freeze, 2005 50% reduction and the 2007 85% reduction.

While the approved RMP has contributed to the CFC phase-out through a mix of activities, the Terminal Phase-Out Management Plan stresses on the need for strengthening the capabilities of the service companies to meet the demands of the various new technologies being introduced. In addition to the current RMP activities, it is essential for Ghana to pursue a retrofit and other activities to ensure the reduction in the need for CFCs usage.

Funding is urgently needed and essential for Ghana to implement her TPMP and more importantly to meet her 2007 85% CFC reduction target and 2010 100% CFC reduction target as per the Montreal Protocol obligations.

The Executive Committee has approved this project with the following condition -- which is met, but must be taken into account during project implementation.

- ❖ *Approved in accordance with the Agreement between the Government and the Executive Committee. UNDP was urged to take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the TPMP.*

### PART II: Strategy

The TPMP will lead to the complete phase-out of CFCs in the refrigeration sector by 1<sup>st</sup> January 2010, according to the Montreal Protocol objectives and phase-out conditions.

The phase-out efforts will take place in parallel with the quota system, leading to a gradual phase-out schedule in the refrigeration.



The funds requested – US\$344,894 will help the country to build on and strengthen the national structure for the implementation of the activities required to meet the Montreal Protocol objectives. The funds disbursement criteria covering the years 2007 – 2008 are in the Agreement attached to the present document as annex 1.

Since the strategy is country-driven-approach Ghana has the flexibility to re-allocate the approved funding if so required. Regular monitoring and evaluation will also assist the NOU and UNDP to decide whether re-allocation is required at any stage of the implementation strategy.

Although the country had the option to phase out the major ODS i.e. CFCs by 2010, the Government decided to implement an accelerated phase-out well in advance of the Montreal Protocol schedule. This was deemed possible in part because the Government understood that alternative technologies and practises were already available in the refrigeration and foam sectors.

The phase-out strategies sought to achieve the most significant ODS reduction by targeting the largest consumption sectors first (refrigeration and foam) and minimize the costs to Ghanaian industries and consumers.

### **PART III: Management Arrangements**

The project will be managed as nationally executed project (NEX) by the Government of Ghana, Environmental Protection Agency through its National Ozone Unit.

A project monitoring unit will be put in place to carry out the day-to-day monitoring of all sub-projects under the TPMP. The unit will report to the National Ozone Unit and to UNDP on corrective measures to be adopted if required.

In accordance with standard UNDP procedures, all resources/ equipment gained through project support remains the property of UNDP until project closure when a decision will be taken as to how to dispose of these resources. It is standard practice to leave resources with DI after project closure as a contribution to the development of national capacity.

## **SECTION II: STRATEGIC RESULTS FRAMWORK**

All the activities to be implemented by UNDP under this TPMP are presented in the section 5.4 of the project document, attached to the present document as annex 1.

The funds disbursement criteria covering the years 2007 – 2008 are detailed in the Agreement attached to the present document as annex 1.

## **SECTION III: TOTAL BUDGET AND WORKPLAN**

The table below only covers the activities to be implemented by UNDP in 2007.

In case of implementation delays, the activities concerned will automatically be transferred to 2008 and the corresponding funds incorporated in the second funding tranche.

**GHA/PHA/50/INV/24 – Terminal Phase-out Management Plan**

MLF Outcome/Atlas Activity	Responsible Party	Source of Funds	ERP/ATLAS Budget Description	Amount 2007 (USD)	Dept. ID	Oper. Unit	Funds	Implementing Agency	Donor ID
<b>ACTIVITY 1:</b> Public Awareness and Information Dissemination to Stakeholders focusing on the phase-out of CFC-12 and the alternative options available.	Environmental Protection Agency	MLF	72100 Service contract - Baseline Survey of Level of Awareness in the Country by Sector and Preparation of National Communication Strategy	3,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Development of Communication Materials	3,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Dissemination of Information	6,000	B0336	GHA	63080	001390	10009
<b>ACTIVITY 2:</b> Training and Certification Programme for Refrigeration Technicians including Development of Code of Good Practices on a regional basis (for a better impact).	Environmental Protection Agency	MLF	72100 Service contract - Development of Code of Good Refrigeration Manual	1,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Printing and Distribution of Manual	3,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Printing of Certificates	1,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Logistics for Training	1,500	B0336	GHA	63080	001390	10009
			72100 Service contract - Travel/DSA Expenses & Honorarium for Trainers	3,500	B0336	GHA	63080	001390	10009
<b>ACTIVITY 3:</b> Development of a long-term strategy regarding how to sustain the training programme and update the Customs training curriculum.	Environmental Protection Agency	MLF	72200 Basic Training Tools	3,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Logistics for Training of 600 Customs Officers	13,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Travel and DSA for Trainers	2,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Honorarium for Trainers	3,000	B0336	GHA	63080	001390	10009
			72200 6 Refrigerant Identification Kits	1,000	B0336	GHA	63080	001390	10009
			72200 1 Multipurpose Identifier	7,200	B0336	GHA	63080	001390	10009
			72100 Service contract - Reproduction of Training Materials	3,500	B0336	GHA	63080	001390	10009
			72100 Service contract - Reproduction of Training Materials	1,000	B0336	GHA	63080	001390	10009
			72200 Equipment	17,700	B0336	GHA	63080	001390	10009
			72200 Consumables and Spares for above @ 10% of Total	18,040	B0336	GHA	63080	001390	10009
<b>ACTIVITY 4:</b> To bring most of the wayside mechanics into the fold of the National Refrigeration Association and give them education and training on ozone-friendly alternative refrigerant technology and good refrigeration practices.	Environmental Protection Agency	MLF	74500 Contingencies, Freight & Insurance	2,904	B0336	GHA	63080	001390	10009
			71200 International Consultant to write equipment specs, evaluate bids and recommend	3,000	B0336	GHA	63080	001390	10009
			71300 National Consultant for training in the use of the equipment	4,000	B0336	GHA	63080	001390	10009
			National Consultant for training in the use of the equipment	7,000	B0336	GHA	63080	001390	10009
				<b>34,944</b>					



MLF Outcome/Atlas Activity	Responsible Party	Source of Funds	ERP/ATLAS Budget Description	Amount 2007 (USD)	Dept. ID	Oper. Unit	Funds	Implementing Agency	Donor ID
<b>ACTIVITY 5:</b> Retrofit of Domestic and Small Commercial Refrigerators to Hydrocarbon.			71300 National Consultant (for training and monitoring)	2,000	B0336	GHA	63080	001390	10009
			72200 Approximately 1,500 Retrofit Kits @ \$15 per kit	22,500	B0336	GHA	63080	001390	10009
			72200 50 packs HC Blend complete with valve, 6 oz can R-290/ R600a (12 pack) @\$200 per pack	10,000	B0336	GHA	63080	001390	10009
<b>ACTIVITY 6:</b> Progressive phase-out of CFCs in the car air conditioning equipment.	Environmental Protection Agency	MLF	71300 National Consultant	34,500	B0336	GHA	63080	001390	10009
			72200 100 Retrofit Kits @ \$200 per Kit	20,000	B0336	GHA	63080	001390	10009
			72200 Required Quantity of HFC 134a	2,000	B0336	GHA	63080	001390	10009
			72200 Required Quantity of Polyester Oil	750	B0336	GHA	63080	001390	10009
<b>ACTIVITY 7:</b> Reduction of the use of CFC-12 in the 53 remaining cold storage facilities previously identified.	Environmental Protection Agency	MLF	71300 National Consultant	24,750	B0336	GHA	63080	001390	10009
			71600 Local Travel	3,000	B0336	GHA	63080	001390	10009
			74500 Administration and Advertisement	1,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Incentives	45,000	B0336	GHA	63080	001390	10009
<b>ACTIVITY 8:</b> Monitoring and Management of Refrigeration Sector Terminal Phase-out Management Plan.	Environmental Protection Agency	MLF	71300 A National Part-time Consultant \$2,500/annum	50,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Transportation and other logistical arrangement for the national consultant \$6,000/annum	2,500	B0336	GHA	63080	001390	10009
			72100 Service contract - Telecommunication \$1000/annum	6,000	B0336	GHA	63080	001390	10009
			71200 International consultant	1,000	B0336	GHA	63080	001390	10009
			72100 Service contract - Office Equipment to be used for database	10,000	B0336	GHA	63080	001390	10009
			74500 Contingencies	2,000	B0336	GHA	63080	001390	10009
			TOTAL UNDP 2007	23,500					
				204,394					