NACIONES UNIDAS

EP

Programa de las Naciones Unidas para el Medio Ambiente

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/66/24
16 de marzo de 2012

ESPAÑOL
ORIGINAL: INGLÉS

COMITÉ EJECUTIVO DEL FONDO MULTILATERAL
PARA LA APLICACIÓN DEL
PROTOCOLO DE MONTREAL
Sexagésima sexta Reunión
Montreal, 16 al 20 de abril de 2012

PROGRAMA DE TRABAJO DE LA ONUDI PARA 2012

OBSERVACIONES Y RECOMENDACIÓN DE LA SECRETARÍA DEL FONDO

1. La ONUDI solicita del Comité ejecutivo la aprobación de una suma de 100 000 $EUA para su Programa de trabajo correspondiente a 2012, más los costos de apoyo del organismo de 7 500 $EUA. El Programa de trabajo se adjunta al presente documento.

2. En la Tabla 1 siguiente se presentan las actividades propuestas en el programa de trabajo de la ONUDI:

Tabla 1: Programa de trabajo de la ONUDI

País	Actividad/Proyecto	Suma solicitada ($EUA)	Suma recomendada ($EUA)
SECCIÓN A: ACTIVIDADES CUYA CONSIDERACIÓN PARTICULAR SE RECOMIENDA			
A1: Actividades de destrucción:			
Región: AFR	Estrategia para desecho y destrucción de SAO en 6 países de bajo volumen de consumo	100 000	*
	Total parcial para A	100 000	
Costos de apoyo del organismo (7,5 por ciento para preparación de proyecto):		7 500	
Total:		107 500	

* Proyecto sometido a consideración particular o pendiente

SECCIÓN A: ACTIVIDADES CUYA CONSIDERACIÓN PARTICULAR SE RECOMIENDA

A1: Actividades de destrucción

Región de África: Estrategia para desecho y destrucción de SAO en 6 países LVC: 100 000 $EUA

Descripción del proyecto

3. La ONUDI presenta una solicitud de financiación para la preparación de un proyecto regional de demostración de desecho de sustancias que agotan la capa de ozono (SAO) en países de bajo volumen de consumo (LVC) en África. Este proyecto estaba incluido en el plan administrativo de la ONUDI correspondiente a 2011-2014. El objetivo de la propuesta consiste en elaborar una metodología y herramientas para seis países de bajo volumen de consumo en África (Burundi, Camerún, República Centroafricana, Congo, Gabón, Guinea Bissau) y para examinar sus reservas de desechos de SAO de forma efectiva y sistemática. Con el proyecto consiguiente se trata de lograr ya sea la adquisición de una dependencia de destrucción de plasma o el cambio de equipo de un horno de cemento en un país para proporcionar un centro regional de destrucción para esos seis países, y otros países de bajo volumen de consumo en África. La propuesta presentada por la ONUDI se incluye en el programa de trabajo adjunto a este documento. El nivel total de fondos solicitados para el ejercicio de preparación del proyecto es de 100 000 $EUA proporcionándose los detalles en la Tabla 2 siguiente:

Tabla 2: Total de fondos solicitados

Tipo de actividad	Costo ($ EUA)
Acopio de datos	
Preparar un estudio de consultoría para confirmar los datos de cantidades disponibles para su desecho/destrucción en países de bajo volumen de consumo en la región de África	25 000
Verificación y desarrollo del marco jurídico	
Actualización de la legislación /directrices locales en los 6 países e incentivos necesarios respecto a: a) Prohibición de emisiones de SAO y de electrodomésticos que contengan SAO/F y su eliminación en vertederos; b) Recolección de refrigeradoras al término de su vida útil y de equipos de aire acondicionado de vehículos (experto nacional)	20 000
Elaborar una estrategia incluidos los aspectos tecnológicos y legales para todos los países a fin de atender a las cantidades actuales y futuras de SAO no deseadas, con propuestas de opciones regionales y propias de cada país para la ejecución del proyecto de destrucción	25 000
Evaluación de aspectos económicos y legales	
Preparar informes de viabilidad de la destrucción de bancos de SAO de vertederos en los 6 países	10 000
Proporcionar asistencia técnica de consultores locales en la preparación de Planes nacionales de destrucción de SAO para los 6 países	10 000
Otros	
Divulgar los resultados a otros países de bajo volumen de consumo interesados de la región y fuera de ella, consultar a otros posibles socios y examinar oportunidades de cofinanciación	10 000
TOTAL SIN PSC	**100 000**
Tasas del organismo (7,5%) para la ONUDI	**7 500**
TOTAL incluidas las tasas del organismo	**107 500**

4. Entre las actividades principales indicadas en la presentación original se incluyen un ulterior análisis de los datos de SAO que estaban disponibles en esos seis países, verificación y desarrollo de un marco jurídico que prestará asistencia a los países para atender a cantidades actuales y futuras de SAO no deseadas y se propondrán opciones regionales y específicas de los países para la destrucción. Los aspectos financieros y económicos de la destrucción serán evaluados con miras a preparar planes nacionales de destrucción en esos seis países. En la propuesta se tratará de conseguir oportunidades de cofinanciación para el proyecto de desecho, posiblemente con el Fondo para el Medio Ambiente Mundial (FMAM), mediante vínculos con proyectos sobre contaminantes orgánicos persistentes (POP) en esos países.

Observaciones de la Secretaría

5. La Secretaría señaló que esta solicitud para preparación de proyecto se somete a consideración en la ventana de financiación de proyectos de demostración para la destrucción de SAO en países de poco volumen de consumo, en consonancia con la decisión XXI/2 de la vigésima primera reunión de las Partes en el Protocolo de Montreal, y con la decisión 63/5 c) del Comité Ejecutivo.

6. La Secretaría examinó la presentación en consonancia con la decisión 58/19 del Comité Ejecutivo y señaló que no se había proporcionado la información requerida para considerar la preparación de tal

proyecto. Señaló a la atención de la ONUDI la información necesaria para prestar apoyo a las solicitudes de preparación de proyectos de desecho de SAO que figura en la decisión 58/19, de la forma siguiente:

a) indicación de la categoría o las categorías de actividades para la eliminación de SAO (acopio, transporte, almacenamiento, destrucción) que se incluirán en la propuesta de proyecto;

b) indicación acerca de si los programas de destrucción de las sustancias químicas relativas a otros acuerdos ambientales multilaterales se están ejecutando en la actualidad en el país o han sido planificados para un futuro próximo y si será posible desarrollar sinergias;

c) un cálculo estimativo de la cantidad de cada SAO que se gestionará dentro del proyecto;

d) la base del cálculo estimativo de SAO; dicho cálculo se podría basar en las existencias conocidas ya acopiadas, o en las actividades de acopio que ya se encuentren en una etapa de preparación muy avanzada y bien documentada;

e) para las actividades de acopio, información respecto a esfuerzos y programas de acopio existentes o para el futuro cercano y creíbles que se encuentren en una etapa avanzada de preparación y con los que las actividades comprendidas en el proyecto estarían relacionadas; y

f) para las actividades que se centren por lo menos parcialmente en el CTC o halones, una de explicación de cómo el proyecto tendría un valor de demostración importante.

7. En conversaciones con la ONUDI, se informó a la Secretaría que en el proyecto de demostración se incluirán la recuperación, almacenamiento y transporte así como la destrucción de las SAO no deseadas. Se proporcionaron datos indicando que había 74,01 toneladas métricas (tm) de SAO no deseadas en reservas existentes ya acopiadas según se indica en la Tabla 3 siguiente:

Tabla 3: SAO no deseadas de reservas existentes acopiadas

País	**Anualmente recicladas**	**Cantidad acopiada anualmente de CFC-11 y CFC-12 (toneladas)**	**Cantidad almacenada de CFC-11 y CFC-12 (toneladas)**
Burundi	Datos no proporcionados, solicitados	Datos no proporcionados, solicitados	Datos no proporcionados, solicitados
Camerún	12,56	4,80	14,40
República Centroafricana	15,50	6,20	18,60
Gabón	1,07	0,43	1,29
Guinea Bissau	29,70	11,88	35,64
República del Congo	3,40	1,36	4,08
Total	**62,23**	**24,67**	**74,01**

8. La ONUDI informó a la Secretaría que los datos precedentes fueron proporcionados por los países una vez consultados. Al examinar estos datos, la Secretaría adoptó precauciones acerca de la información proporcionada para cada país, debido al hecho de que algunas de las cantidades que se creía estaban en reserva como SAO no deseadas eran superiores a las básicas de CFC de tales países. La Secretaría pidió también una explicación a la ONUDI acerca de como se hubieran explorado otras

opciones como la reutilización para servicio y mantenimiento. La ONUDI indicó que estas SAO no deseadas provenían de operaciones de recuperación y reciclaje (R&R) en África, establecidas en el marco de la ejecución del plan de gestión de refrigerantes/plan de gestión para eliminación definitiva (RMP/TPMP), eran cantidades contaminadas y no podían ser objeto de reciclaje ni de reutilización. En la propuesta se explicaba que no se tramitarían en el ámbito de este proyecto ni halones ni CTC.

9. En lo que atañe a un sistema establecido de recolección, en opinión de la ONUDI los centros de recuperación y reciclaje constituyen una de las formas de recolección en el país; sin embargo es necesario perfeccionarlos durante la ejecución total del proyecto y serán fortalecidos para que sean más eficientes en la recolección de desechos de SAO.

10. La Secretaría señaló también a la atención de la ONUDI el proyecto de Ghana de desechos de SAO y preguntó si esto se había tenido en cuenta en la actual presentación, cuáles elementos habían sido considerados mirando en particular al hecho de que el proyecto era para un país de escaso volumen de consumo en África. La ONUDI mencionó que el enfoque adoptado en el proyecto de Ghana no se consideraba adaptable a los requisitos de los seis países participantes, puesto que implicaba la exportación previa a la destrucción. Según la ONUDI, los países opinaban que era importante que alguna inversión en forma de instalación regional o nacional de destrucción era la solución óptima para gestionar los desechos de SAO en la región; por lo que no se exploró la opción de exportar para la destrucción.

11. En función de lo mencionado, la Secretaría manifestó sus inquietudes en el sentido de que el proyecto propuesto no satisfacía plenamente las directrices de la decisión 58/19, ni respondía claramente a lo indicado en la decisión XXI/2 de la vigésimo primera reunión de las Partes en el Protocolo de Montreal en la cual se pedía, entre otras cosas al Comité Ejecutivo que "considere los costos de una ventana de una sola vez en sus actuales actividades de destrucción para hacerse cargo de la exportación y la eliminación ambientalmente racional de los bancos acumulados de sustancias que agotan el ozono en países de bajo consumo que no son utilizables en la Parte de origen", puesto que la propuesta es más bien un estudio para observar cuáles son las cuestiones y problemas relacionados con la eliminación de desechos de SAO en esta región con miras a encontrar una solución futura que en este caso sería el establecimiento posible de una instalación de destrucción en uno de los países beneficiarios. La ONUDI respondió que se formulará un plan estratégico general para los seis países teniendo en cuenta la reglamentación y legislación que habría de establecerse para la destrucción de SAO así como la posibilidad de generar créditos de carbono. Opina que la instalación regional estaría a la altura de las normas que permitirán que en la destrucción de SAO se obtengan créditos de carbono según el sistema de normas verificadas de carbono (VCS).

12. La Secretaría señaló además que en base a la información proporcionada por la ONUDI en consonancia con la decisión 58/19, los países participantes no parece que tengan establecido un marco jurídico-normativo que permitiría la ejecución de un proyecto de desecho/destrucción de SAO.

13. En atención a lo mencionado, la Secretaría ha instado a la ONUDI a que considere presentar de nuevo esta solicitud de financiación. No obstante, puesto que la decisión 64/17 limita la consideración de proyectos de desecho de SAO para países de bajo volumen de consumo a la 66ª reunión, la ONUDI solicitó que este proyecto se sometiera a la consideración del Comité Ejecutivo.

Recomendación de la Secretaría

14. El Comité Ejecutivo pudiera considerar si aprueba o no la solicitud para la preparación del proyecto de desarrollo de una estrategia de desecho y destrucción de SAO para los seis países de bajo volumen de consumo en la región de África al nivel de financiación de 100 000 $EUA más los costos de apoyo del organismo de 7 500 $EUA para la ONUDI, en consonancia con la decisión 58/19.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

66th Executive Committee of the
Multilateral Fund for the Implementation
of the Montreal Protocol

UNIDO Work Programme

66th Ex.Com.

Introduction

The UNIDO Work Programme for the consideration of the 66th Ex.Com. of the Multilateral Fund has been prepared following the government requests as well as based on ongoing and planned activities. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2012-2014.

One activity addressing destruction related needs was prepared by UNIDO jointly with UNEP for 6 LVCs in the Africa region, having regarded the regions request.

The document comprises the following sections:

Section 1
Gives in a tabulated form for the preparatory funding request for destruction activities in LVC countries in Africa region.

Funding is requested as follows:

- preparatory funding for destruction activities in two regions amounting US $ 107,500 (including US $ 7,500 representing 7.5% UNIDO A.S.C.)

- **Total: 107,500 US $ including A.S.C.**

Section 2
Section 2 provides the corresponding project concepts indicating some details and funding requirements.

Section 1
Consolidated table giving project preparation
and non-investment projects in all countries and sectors

Country	Type	Subs-tance	Title of Project	Requested amount USD	A.S.C USD	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Destruction activities in LVCs									
Africa region	PRP	CFCs	CFC Strategy for disposal and destruction of ODSs for 6 LVCs in the Africa region	100,000	7,500	107,500	7.5	12	
			Grand TOTAL	**100,000**	**7,500**	**107,500**			

PROJECT CONCEPT

REGION:	Africa
IMPLEMENTING AGENCIES:	UNIDO
PROJECT TITLE:	CFC Strategy for disposal and destruction of ODSs for 6 LVCs in the African region
PROJECT IN CURRENT BUSINESS PLAN:	Yes
SECTOR:	Destruction - Project Preparation (PRP)
PROJECT DURATION:	12 Months Commencing: May 2012 Completion: March 2013
TOTAL PROJECT COST:	USD 100,000 (*excluding PSC*).
SUBMITTED BY:	UNIDO

Reference:
This individual project corresponds to the 'Preparation of a regional CFC disposal project for LVCs in Africa', which is part of the 2012 UNIDO Business Plans endorsed by the Executive Committee.

EXECUTIVE SUMMARY

This proposal aims at developing the project preparation for a demonstration project for the disposal and destruction of ODSs for 6 LVCs in the African region.

This project preparation aims at the development of a methodology and of tools for LVC countries in Africa to be able to precisely quantify and address their stocks of unwanted ODS in an effective and systematic approach. This strategy will also address the economic, environmental and legal dimensions involved in the destruction of ODS in the 6 selected African countries.

Project preparation is intended to be undertaken solely by UNIDO. However, it is possible that later under the demonstration project, there could be a joint cooperation between UNIDO and UNEP.

Table of Contents

1. RESPONSE TO DECISION 58/19 OF THE EXECUTIVE COMMITTEE: 5
2. BACKGROUND 5
3. PROJECT CONCEPT 7
   a. PROJECT PREPARATION 7
   b. DEMONSTRATION PROJECT 8
4. CO-FINANCING SCHEME AND THE GEF 9
   a. Project Objective 9
   b. Project Outcomes 10
   c. Economic considerations 10
   d. Options for Financing destruction 11
   e. Remote sensing data application for identification of ODS 13
   f. Project co-financing 14
   g. Project budget 14
5. JUSTIFICATION FOR CHOICE OF COUNTRIES 17
6. STRATEGY 17
7. ACTIVITIES 18
   a. PROJECT PREPARATION 18
   b. DEMONSTRATION PROJECT 19
8. EXPECTED RESULTS 20
9. TIMEFRAME 21
10. BUDGET FOR PROJECT PREPARATION: 21

ANNEX 1 - ESTIMATE OF TYPES OF STOCKS OF UNWANTED ODS IN THE REGION 22

1. RESPONSE TO DECISION 58/19 OF THE EXECUTIVE COMMITTEE:

ExCom considerations	African Region ODS destruction project
a. An indication of the category or categories of activities for the disposal of ODS (collection, transport, storage, destruction), which will be included in the project proposal;	**The demonstration project includes refrigerant recovery, storage, transportation and destruction.** (In some cases the ODS has been collected and stored and it is just ready for destruction.)
b. An estimate of the amount of each ODS that is meant to be handled within the project;	There is **74.01 ton of ODS** of known existing stocks already collected as referred to in annex 1.
c. The basis for the estimate of the amount of ODS; this estimate should be based on known existing stocks already collected, or collection efforts already in a very advanced and well documented stage of being set up;	**See annex 1**
d. For collection activities, information regarding existing or near-future, credible collection efforts and programmes that are in an advanced stage of being set up and to which activities under this project would relate;	One of the outcomes of the demonstration project is the upgrade of the Recovery and Recycling Networks existing in each country of Region. In each country a Recovery and Recycling Network was created (in some cases this network was established in the training centers, storage centers, refrigerant distributors, etc). The existing networks will be the base for the disposal and storage of unwanted refrigerants and will be upgraded with the following equipment: storage tanks for the different refrigerants, recovery machines or transfer pumps, device for cylinder cleaning, identifiers, among others. Training will be also carried out for the operators. For additional information on the stage of each of the programmes, funds will be needed under project preparation. Currently UNIDO only possesses the information which is provided by TPMPs.
e. For activities that focus at least partially on CTC or halon, an explanation how this project might have an important demonstration value.	**Not applicable**

2. BACKGROUND

The MOP requested the ExCom of the MLF in its decision XXI/2 to set a window for funding projects for disposal and destruction of ODS, although not directly required for compliance with the Montreal Protocol Fund. The rationale of this Decision provides the opportunity to look at **common solutions to address the question of disposal/destruction of stockpiles of unwanted ODS** in some Article 5 countries or in a region. It is also recommended to set up linkages with other chemicals (particularly POPs) destruction projects, which have to be developed especially in the countries where POPs destruction projects were approved.

The GEF has also re-structured its operational focus areas, following extensive discussions about fund replenishment (under GEF-5). GEF aims to bring together various chemical topics for increased coherence, including POPs (Stockholm convention), ODS (Montreal Protocol), sound chemicals management, mercury reduction, and pilot projects for SAICM priority areas,

e.g. e-waste, chemicals in products. Priorities for funding include integrated waste management projects dealing with multiple chemicals e.g. POPs, ODS, chemicals in e-waste.

While the Montreal Protocol has been very effective in reducing the production and consumption of ozone-depleting substances it does not control emissions from ODS banks or require the elimination of ozone-depleting substance banks. In the absence of legislation, or other incentives requiring or encouraging the capture or destruction of the substances contained in these banks, a high risk of gases leaking into the atmosphere is to be considered with dramatic consequences for the ozone layer and climate. ODS disposal was recognized as being an important issue for Article 5 countries lacking the necessary facilities to collect CFCs and destroy CFC stocks. Networks in Article 5 countries dealing with the recovery and recycling of CFCs from the banks, having the necessary equipment for CFC extraction and shredding operations and consequently with final CFC destruction at cement kilns or waste incineration plants need to be established.

In some cases, countries were also hesitant to commit themselves to specific co-financing options which could limit their ability to implement the project in an efficient manner as well as constrain their opportunities for gaining credits from carbon finance. In a similar manner, they were likewise cautious about identifying a specific method by which the waste ODS could be destroyed (i.e. through a cement kiln or plasma technology) and wanted to be able to make these decisions once the full project was developed. It was also observed that the requirements to explore the national policy and regulatory infrastructure in place and link the potential project with existing similar initiatives for chemical waste management was useful in developing synergies for the projects.

The Scientific Assessment of Ozone Depletion of 2006 found that ODS banks are a substantial problem for the ozone layer, contributing the largest ODS emissions to the atmosphere. The volume of ODS installed in equipment and products is difficult to quantify accurately. TEAP estimated that ODS banks installed in equipment/products were about 3,779,000 ODP tones in 2002 and would fall to about 2,110,000 in 2015. This means that the ODS emissions from banks, in the period from 2002 to 2015 alone, are expected to total about 1,669,000 ODP-tones.

Given these volumes, the recovery and recycling/reclamation or destruction of ODS banks also poses a serious and important challenge for Article 5 Countries. This is especially true because not all ODS contained in products and equipment are readily "accessible" for recovery; the technologies and levels of effort needed to capture ODS contained in products and equipment can vary significantly. Moreover, the costs associated with the recovery, recycling, reclamation, and destruction vary significantly depending on the type and quantity of ODS recovered.

Policy gaps and limitations result in insufficient recovery levels, adding to the challenge of recycling/ reclaiming or destroying ODS banks. There is no legislation to be implemented across the African region, and the technical and economic feasibility of recovering ODS from certain products and equipment (e.g., building insulation) is questionable.

All LVCs in the African region have expressed interest in addressing the issue of ODS stocks and the need to devise a strategy to address current and future stocks of unwanted ODSs. Six of these countries in the region have specifically expressed a particular will to work cooperatively on a regional basis in order to devise a coherent strategy addressing their stocks of unwanted ODSs (current and future). These are Cameroon, Central African Republic, Burundi, Gabon, Republic of the Congo and Guinea Bissau. The implementation of this demonstration project is also favorable in these countries because they have already developed an economic community amongst them. Through the establishment of the Economic Community of Central African

States (ECCAS), these countries share a common financial, regulatory, and legal structure, and maintain a common external tariff on imports from non-member countries. This factor will considerably facilitate the transaction of ODS stocks among the countries during the demonstration project. The other countries in the African Network will be associated to this project, although not formally part of it, so that they can benefit fully from the lessons and tool developed.

3. PROJECT CONCEPT

a. PROJECT PREPARATION

The main objective of the project preparation is to develop a strategy for a future demonstration project that will foster a sustainable and environmentally sound process for the destruction of ODS stocks in the African region.

Beneficiary countries must be aligned in their objectives and expected results in regards to the demonstration project. With UNIDO's assistance, they must develop their own common regional approach and strategy for overcoming barriers to the disposal of unwanted ODS. In order to achieve that, some aspects must be addressed:

(i) **Data collection and verification:** currently, exact data on the levels of ODS in each of the countries involved in the project cannot be assured. Prior to the implementation of the demonstration project, it is crucial to determine the exact levels of stockpiles of ODS to be destroyed in each country. It is also necessary to assure that ODS recovery centers are fully functional and able to be incorporated into the demonstration project.

(ii) **Verification of legal framework:** project preparation will also address the legal dimensions involved in the destruction of ODS in the 6 selected African countries. The existing legislation under the Economic Community of Central African States must be carefully scrutinized in order to assure that it fully covers the needs of the demonstration project. If that is not the case, UNIDO must assist these countries to build on or amend the existing laws and regulations in order for the project to be correctly implemented. Some protocols have already been identified, which will serve as starting point for the verification of the legal framework regarding the transportation of ODS amongst these countries:

- Treaty Establishing the Economic Community of Central African States (ECCAS)
- Protocol on Non-Tariff Trade Barriers
- Protocol on Transit and Transit facilities
- Protocol on Customs cooperation within the ECCAS
- Protocol on Cooperation in Industrial development between member states of the ECCAS
- Protocol on Cooperation in Transport and Communications between member states of the ECCAS
- Protocol on Cooperation in Science and Technology between member states of the ECCAS
- Protocol on the Simplification and Harmonization of Trade documents and Procedures within the ECCAS

(iii) **Assessment of economic aspects:** the strategy of the demonstration project must be

tightly linked with the economic aspects of the project. Cost efficiency of the demonstration project must be analyzed in order to ensure the cost criteria of the Multilateral Fund and to ensure the most environmentally and economically appropriate technology and destruction site.

Firstly, it is important to analyze if purchasing plasma units or upgrading cement kilns are feasible and each one is more appropriate for the identified levels of ODS.

Some cement kilns have already been identified in Cameroon, which could potentially be converted for the destruction project in case the latter option is found to be more appropriate. Under the project preparation, all these possibilities must be carefully examined in order for the most cost-effective solution to be selected. Below two examples of potential cement kilns in Cameroon:

a. Les Cimenteries du Cameroun (CIMENCAM) - Bonaberi
b. Les Cimenteries du Cameroun (CIMENCAM) - Figuil

It is important to note that TPMPs of each of the countries will be thoroughly analyzed. This ODS destruction project will build on to what has already been achieve in the countries in terms of ODS recovery and storage. Avoidance of duplication of efforts is assured, as this demonstration project is based on the development of a regional strategy of ODS waste management, which was never addressed under TPMPs.

Further evaluation of TPMPs will be conducted in the course of project preparation. However, this is not a straight forward process, since:

a. TPMPs and ODS waste management vary considerably from country to country;

b. TPMPs were implemented by different agencies, which makes the gathering of information more lengthy;

c. The demonstration project will look at each TPMP and scrutinize how which can be further developed.

b. DEMONSTRATION PROJECT

The main objective of the demonstration project is to foster environmentally sustainable growth in LVC countries in Africa by:

(i) Eliminating the risk of leakage of ODS banks by structuring economically feasible and legally possible means to dispose unwanted ODS.
(ii) Upgrading a destruction facility or purchase of plasma unit in one of the six beneficiary countries.

If possible, the upgrade should meet VCS standards in order for the beneficiaries to be able to generate carbon credits and thus ensure the sustainability of the project.

A more detailed concept for the demonstration project will be developed according to the results of the preliminary work under the project preparation. This site for destruction which will be identified under the project preparation, will serve all 6 countries involved in the project. Although still not clear, some sites have already been identified in Cameroon which could serve the purpose of the project, as mentioned in the previous point under project preparation (iii).

Flowchart: Preparation and demonstration Project

4. CO-FINANCING SCHEME AND THE GEF

After the project preparation stage, components for GEF eligibility will be further developed. A proposal will be submitted for the demonstration project, which will detail the funding breakdown of MLF and co-financing sources, including GEF. The section below details the approach for a GEF project submission:

a. Project Objective

The project proposal concept was prepared bearing in mind the resolution by the MP Secretariat on Funding Opportunities for the Management and Destruction of Banks of Ozone –Depleting Substances (UNEP/Ozl.Pro/Worshop.3/2Add.1).

The project runs a number of complementary activities in parallel, thus simultaneously producing initial concrete results on the ground and an analytical basis for proceeding on a wider scale. Its core elements are: pilot destructions, remote sensing data application for OFDS/POPs identification, a legal assessment of the feasibility of trans-boundary movements of ODS and POPs to central destruction facilities in the region versus local destruction using mobile destruction equipment, an economic and technical feasibility assessment, and preparation for destruction of ODS and POPs banks, taking into account inventories prepared

under National Implementation Plans of the Stockholm Convention and ODS inventories carried out under national ozone programmes. If project appears to be successful, it has the potential to become a pilot programme for other parts of Africa, and ultimately a building block for a global strategy on disposal of ODS and POPs banks.

b. Project Outcomes

(i) Feasibility study of destruction of ODS and POPs Banks in a synergistic way done. The project aims at assessing the feasibility of the destruction of ODS banks in six LVC countries in Africa. This will include an institutional, technical and cost analysis study, which will be carried out to ensure that the collection, transportation and destruction can take place economically and in an environmentally sound manner. The project will also assess the feasibility of the destruction of POPs banks in four countries, and it will evaluate possible coordination and synergies with existing or planned POPs disposal procedures and the conditions for such coordinated approach;
(ii) Remote sensing surveys made for detection of unknown obsolete refrigerators, air-conditioners and building foam panels dumpsites in landfills and monitoring of illegal dumpsites;
(iii) Establishing a network of obsolete EOL refrigerators and air conditioners collection units in the Six Countries including ODS recovery, collection, storage and transportation;
(iv) To prepare National Destruction Plans of ODS and POPs for Six countries. It includes cost estimates of collection, transportation and destruction of ODS and POPs banks.
(v) To establish a new process and facility for de-manufacturing ODS and F-gases-containing equipment as well as for the destruction of recovered ODS and F-gases and POPs at a regional recycling center (stationary or mobile de-manufacturing plants need to be assessed);
(vi) To modify/improve local legislation in 6 countries with regard to the ban on ODSs and F-gases emissions and initiate a producer/distributor responsibility programme to assist in collecting ODS and F-gases containing equipment for its consequent destruction and disposal of;
(vii) To achieve 20.0 M tons CO2eq. per annum by reduction in emissions of ODS and F-gases from the banks in the region.

The project intends to identify those sectors, locations, and ODSs and F-gases that can be gathered and destroyed in a cost-effective manner. It will also describe the work needed to identify the policies, technologies, logistics and systems needed, and the projected costs to do so. It is believed that this regional project proposal is a real opportunity to demonstrate to Africa through the concept proposed that ODS and F-gases destruction could be self-sustained and moreover self-financed through the carbon trading credits. It expected that through this component it would be even allowed to expand electrical appliances de-manufacturing and disposal facilities set up by this project in the region. If this approach proves to be viable, various other payment mechanisms for de-manufacturing equipment, establishment of ODS and F-gases collection networks in the 6 countries, transportation, etc. will be debated.

c. Economic considerations

There is a limited window of opportunity for collecting and destroying unwanted ODS and hence achieving these important climate benefits, a fact which was a critical impetus for developing ODS project protocols or methodologies under carbon trading component in the first

place. To this end it is concerned that some of the conservative assumptions, which we certainly appreciate for credibility purposes, mean that deductions from the total amount of ODS destroyed are so significant that the project developers will not be able to recoup costs, particularly in the foams sector. Any preliminary calculations of sample projects based on TEAP Report will show deductions as high as nearly 70-80 % for building foam projects.1

This means that even for a low cost building foam recovery project, credits would have to be near to US$ 100/tCO_{2e} under the Climate Action Reserve (CAR) to turn a profit, an unlikely scenario. This high threshold for profitability in the foams sector threatens the usefulness of such an ODS project protocol for effectively dealing with unwanted ODS around the world and the technical and economic feasibility of recovering ODS from certain products and equipment (e.g., building insulation) makes such a project questionable. This is especially problematic given that foams are projected to account for more than half of all ODS banks by 2015, on both a per ton and GWP-weighted basis.

Therefore, there is a sole solution in diminishing deductions, i.e. to establish a national or preferably regional ODS destruction center equipped with the most expensive refrigeration an well as foam processing machine-a shredder and an incinerator to directly destroy ODSs. Since the quantity of ODS to maintain three working shifts of the incinerator work is insufficient, the POPs destruction in the same incinerator will be definitely value added.

Voluntary carbon markets provide an opportunity of generating financing for ODS destruction as they are not bound to compliance markets and because ODS, that can have extremely high GWPs, would be an attractive source of emission reduction credits. To date, three markets issue credits for ODS destruction: the Chicago Climate Exchange (CCX); the Voluntary Carbon Standard 2007 (VCS); and Carbon Action Reserve (CAR) - not for Article 2 countries. These markets are not necessarily restricted to the six (6) Kyoto gases and therefore could potentially become markets for destruction of unwanted ODS. The methodology for CFCs destruction has been just approved by VCS. However, since the major element of any ODS destruction project is to upgrade local legislation to be implemented in the countries selected for the regional project, the level of enforcement and compliance with current EC Directives (see Annex 1) related to waste and waste handling has been used as a basis for development of legislation. Therefore, when implemented the ODS destruction project will not meet the Voluntary Carbon Trade criteria for *additionality*. Therefore, additional options for project co-financing (given below) need to be carefully considered by project authorities to make eh project profitable and sustainable.

The operating costs vary greatly from country to country, depending on the recovery technology and throughput. The cost of recovering refrigerant from appliances can vary by a factor of 3-5, depending on the amount of ODS charge remaining in the appliance. Mechanical recapture/recycling refrigerator facilities handled appliances at a net cost of $15 – $20/appliance in the early stages. This cost reduced to about $10/appliance several years later.

d. Options for Financing destruction

Existing ODS recovery/destruction activities are mainly paid for by Extended Producer Responsibility (EPR) programmes (operated by equipment manufacturers/importers), consumer recycling fees, taxes or levies, and general government funds. These could be expanded to cover additional equipment sectors, particularly in the context of waste reduction/recycling programmes and producer responsibility programmes. Several other existing funding sources are

1 (http://ozone.unep.org/Assessment_Panels/TEAP/Reports/TEAP_Reports/teap-october-2009-decisionXX-7-task-force-phase2-report.pdf)

relatively small at present, but have the potential to provide significant resources, e.g. voluntary carbon markets, and auctions of carbon emission allocations in regulated carbon markets. In practice, a single project may be financed by a combination of several financial sources.

Extended Producer Responsibility (EPR) schemes operate in many countries, such as those in the EU and Japan. In the EU, EPR extends to producers who must finance the collection, recovery, treatment and disposal of waste household RAC appliances, medical freezers, automatic dispensers, and other specified equipment. In Japan, EPR has been embodied in national legislation that makes it mandatory for industries that produce RAC equipment to finance all the activities related to waste collection, re-use, recycling, destruction and disposal.

A number of governments have placed taxes or levies on the production and import of pollutants such as ODS. The revenue is usually used for ozone protection work or other environmental projects, and often adopted under a *polluter-pays* policy. In Australia, an industry body collects a levy from more than 700 importers of refrigerants/equipment. This levy pays technicians to recover and hand over refrigerants to wholesalers, and pays wholesalers to pass on the refrigerants to an industry-run body. The levy pays for the cost of refrigerant transport, storage and destruction. Other examples are provided in the report of many countries that have applied similar taxes and levies.

Some countries collect a fee from consumers when EOL appliances need to be disposed. In other cases, consumer fees are collected when new appliances are purchased. These fees may be intended to cover all or part of the cost of waste collection, recycling facilities and special treatments (such as recovery of ODS and other hazardous materials). Consumer fees at the time of disposal often act as a disincentive to appropriate disposal. It is much more effective to collect consumer fees for recycling (waste management) only when new appliances are purchased. The fees paid by consumers may be collected by individual companies and/or managed and disbursed by government or by industry groups. Examples of the application of disposal fees are provided in the report for Japan, Belgium and the USA.

A number of municipal government authorities manage waste collection and recycling facilities for domestic and other EOL equipment. These services are often funded by local or national taxpayers. In some cases, ODS and HFCs are also recovered from the appliances. A few electric utility companies (with appliance manufacturers/importers) operate programmes to encourage consumers to replace old appliances with new energy-efficient models. Early retirement of old RAC equipment can bring significant reductions in energy consumption. The old equipment is usually collected and recycled, providing an opportunity for ODS recovery. Brazil has successfully implemented such an incentive programme. In some instances, governments have provided subsidies which have the effect of encouraging the recovery and/or destruction of ODS. In other cases, governments have provided tax-breaks or other incentives when purchasing equipment that is free from ODS or high-GWP substances, which avoids future ODS banks and minimizes the impact of any future HFC banks.

Government auctions of carbon emission allocations can raise revenues which may be used for ODS destruction in some cases. For example in Germany and within the EU Emission Trading System, Member States are allocated carbon emission allowances equivalent to the total permitted emissions. These allowances may be auctioned, and at least 50% of the revenue gained through auctions can be used for the purpose of mitigating climate change. This may include ODS destruction activities. Germany has used some of its auction revenues to financially support the implementation of refrigerator recycling facilities in Brazil.

The destruction of CFCs is eligible for carbon credits in voluntary carbon markets where ODS destruction is considered 'additional', i.e. not a regulatory requirement. ODS recovery and destruction projects can be funded by proceeds from the sale of carbon emission reduction credits, with a bank or finance company often providing up-front loans or financing until ODS destruction takes place and the carbon credits are received. Such projects are generally viable when the price of carbon is at least $5–10 per tonne CO2-eq.
Several organisations have adopted ODS destruction methodologies (protocols) for creating voluntary carbon credits from ODS destruction. For example, the Chicago Climate Exchange and the Climate Action Reserve have adopted protocols for ODS destruction in US facilities that meet the US EPA's Clean Air Act standards. Safeguards need to be put in place to assure the buyer of the "quality" or reliability of the credits.

e. Remote sensing data application for identification of ODS

The study and understanding of the fate of Persistent Organic Pollutants (POPs) in the environment is nowadays necessary to manage their risk of adverse effect to humans or to the ecosystem). POPs are generally able to be bio-accumulated in the food chain and affect living organisms due to their long persistence and toxicity. Recent publications showed that forests play a key role in the environmental distribution of POPs, since they act as filters of these chemicals, trapping them in the air compartment and transferring to forest soils consequently decreasing their atmospheric half-lives. Therefore it is necessary to include the vegetation compartment in multimedia models, to understand and predict the fate of these substances in the environment.

Many persistent organic pollutants are known as global contaminants because they have been detected in air, water, vegetation and fauna of the most remote pristine regions reached by a longrange transport process. These compounds are semi-volatile and therefore able to volatilize from soils and move through the atmosphere towards areas which can be considerably far away from the sources. PCBs (polychlorobiphenyls), DDTs, HCHs (hexachlorocyclohexanes), PCDDs/Fs (dioxins and furans) are in fact characterized by a low water solubility and low degradability in the environment. Their low solubility results in higher affinity for the organic phases such as organisms or organic carbon rich phases such as vegetation. Multimedia environmental models were developed in an attempt to describe the environmental fate of POPs between different compartments at regional scale.

Remote sensing can be to identify vegetation characteristics necessary to assess the fate of Persistent Organic Pollutants (POPs) in the environment. RS for ODS research and further develop a EOL refrigerators identification methodology using satellite imagery to a scale practical for regular use in the Article 5 countries. To improve the methodology and determine the feasibility of using satellite imagery to find unknown waste refrigerators and air-conditioners and building foam panels disposal sites, the project will cooperate with RS centers in four countries. An appropriate imagery will be selected for analysis for its cost effectiveness and higher spatial resolution. Another possible application of this with imagery purchased for unknown waste refrigerators and air-conditioners and building foam panels surveys is the detection or monitoring of illegal dumpsites.

A similar problem exists for fluorinated greenhouse gases (F-gases), which have largely replaced ODS in products and equipment in the refrigeration/air-conditioning (AC), foams, and fire extinguishing sectors. ODS include a part of CFCs and HCFCs. Although emissions of some of F-gases do not deplete the ozone layer, they do contribute to global climate change and are covered under the Kyoto Protocol. F-gases include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), hydrofluorethers (HFEs), and can have

GWPs as high as 23,900 times that of CO2.

f. Project co-financing

UNIDO is fully committed to continue its support to facilitate the integration into the world economy along the lines of UNIDO three areas of focus: poverty alleviation through productive capacity, trade capacity building, energy and environment. The focus is placed on strengthening productivity and competitiveness of economic sectors, capacity building and institutional support, as well as promoting transfer of environmentally, friendly technologies within the Climate Change Agenda. UNIDO assistance has been implemented in the form of global forum activities and technical cooperation (TC) programmes and projects. The majority of UNIDO assistance concentrates in the field of Energy and Environment with dominating programmes addressing the issue of phasing out ozone depleting substances (ODS) and POPs destruction. The Global Environment Facility (GEF) Ozone Focal Area was developed specifically for the support of Countries to achieve ozone depleting substances (ODS) phase out and bring countries into compliance, as the Multilateral Fund of the MP does provide assistance to Article 2 countries.

g. Project budget

The project cost estimate is given in the table below:

			Funding Request			
No	Project component	Cost estimate	MLF	GEF	Co-Financing by UNIDO	Co-Financing
1	To formulate a PFF project document and Full Scale Project Proposal for GEF funding	200,000		150,000	50,000	
1	Feasibility reports on destruction of ODS banks and POPs from dumpsites in 6 countries prepared	200,000		200,000		
2	Preparation of National Destruction Plans of ODS and POPs for 6 countries. It includes cost estimates of collection, transportation and destruction of ODS and POPs banks	100,000	25,000	50,000		25,000
3	Technical assistance from local consultants in preparing National Destruction Plans of ODS and POPs for 6 countries	100,000	25,000	60,000		15,000

			Funding Request			
No	Project component	Cost estimate	MLF	GEF	Co-Financing by UNIDO	Co-Financing
4	To formulate new legislation/guidelines in the 6 countries and necessary incentives concerning a) ban on ODS emissions and ODS/F-gases containing appliances disposal in landfills; b) collection of end-of- life refrigerators and ACs/MACs and POPs in some established places for their further destruction by the new project facilities, and c) introduction of a Producer/Distributor Responsibility Programme in the Africa - International experts	100,000		100,000		
5	Update of the local legislation/guidelines in the 6 countries and necessary incentives concerning a) ban on ODS emissions and ODS/F-gases containing appliances and their disposal in landfills; b) collection of end-of-life refrigerators and ACs/MACs and POPs – Local consultants	100,000		70,000		30,000
6	Unknown waste refrigerators and air-conditioners and building foam panels GIS surveys in 6 countries for detection and monitoring of illegal dumpsites; purchase of satellite data and its processing - International Contract	250,000		250,000		
7	Monitoring of POP-NIPs implementation in 6 countries	200,000		50,000		150,000

			Funding Request			
No	Project component	Cost estimate	MLF	GEF	Co-Financing by UNIDO	Co-Financing
8	Conduction of awareness campaign and local training of technicians	250,000		25,000		225,000
9	Two buildings constructed for accommodation of the regional center and collection/storage of the CFCs and POPs in 6 countries	1,500,000		500,000		1,000,000
10	Two years operating (IOC) and maintenance costs (MC) including technical and managerial support from local consultants, materials, energy and labor	900,000	200,000	500,000		200,000
11	Policy management support for implementation of this regional project in 6 countries including international consultants, international meetings, workshops , etc.	100,000	20,000	70,000		10,000
12	Establishing a regional center for ODS/F-gases and POPs collection in 6 countries for destruction including ODS transportation and transportation of POPs from the storage places. Also a supply of PCB is possible through the implementation of separate investment projects for PCB recovery in 6 countries in the region. Vehicles and transportation cylinders, storage cylinders – International consultants	100,000	20,000	70,000		10,000
13	Cost of the 6 CFC-12 recovery units with separation of oil and gas and with a liquefaction	800,000	200,000	600,000		

No	Project component	Cost estimate	Funding Request			
			MLF	GEF	Co-Financing by UNIDO	Co-Financing
	stage					
14	Cost of one shredding plant with CFC-11 for a extraction and with a liquefaction stage, one for regional center	2,500,000		2,500,000		
15	Cost of one plasma-arc incineration plant (Plascon type)*	2,200,000		1,500,000		700,000
	Sub-total	9,600,000	490,000	6,695,000	50,000	2,365,000
	Project total	9,600,000				

* Potential cement kilns in Cameroon

The total project cost of U$ 9,600,000 for GEF funding is associated with the procurement of the project equipment. The contribution from the six countries will be covering mostly the expenses needed for establishing infrastructure and logistics as well as local consultancy.

5. JUSTIFICATION FOR CHOICE OF COUNTRIES

The selected countries, besides having explicitly expressed their interest in participating in the destruction project, were selected due to two main reasons:

a. **Existence of previous trade agreements between these countries**: as it was previously mentioned, these countries have already established legislation on trade and customs, making the transportation of ODS from different countries to destruction sites considerably easy. It is also expected that these countries maintain frequent relations and communication among them, which means that negotiations for the development of a common strategy for ODS destruction will run smoothly.
b. **Proximity**: the proximity between these countries means that transportation costs will be minimized and communication between stakeholders will be easier.

6. STRATEGY

A strategy to deal with stock of unwanted ODSs will be developed. The objective is to ensure the preliminary work (including data collection) in order to launch destruction projects that will destroy the quantities of ODSs identified in the subgroup of countries for which destruction is judged achievable as per the cost criteria of the Multilateral Fund and to ensure the most environmentally and economically appropriate technology.

The means that to achieve this objective UNIDO will analyze the following and provide the results to all LVCs in the region regarding:

- The technological options and their respective feasibility/cost effectiveness for participating countries, as well as their environmental impact. The two main options will be either transportation to a neighboring non-LVC where ODS destruction facilities are available; or development of destruction strategies at the local level in case such options may exist or could be developed at the national level for a participating LVC.
- The legal dimensions (including the ones related to potential transportation of hazardous waste) and the development of the legal and regulatory setting for destruction.
- Synergy with other chemical destruction projects in the region and in participating LVCs. In particular, projects of POPs destruction will be analyzed to explore this potential cooperation
- Best practices for implementation at the national level will be sought, for example possibilities for development of joint awareness tools and methods for the stakeholders involved
- Financing components to seek possibilities of co-financing to the Multilateral Fund (national participation, GEF, carbon markets like VCS, other chemical management financing).

UNIDO will bring experiences from other countries, through the several destruction projects it is involved in (Turkey, Nigeria, China, Mexico and regional project for ECA for example), will provide their expertise, contacts and experience in order to set the best conditions for appropriate handling of unwanted ODS stocks in the African region.

7. ACTIVITIES

a. PROJECT PREPARATION

During the project preparation stage, the following activities will be undertaken:

Data collection

- Prepare a consultancy study to confirm data on amounts available for disposal/destruction in LVCs in African Region;

Verification and development of legal framework

- Update of the local legislation/guidelines in the 6 countries and necessary incentives concerning:
  a) Ban on ODS emissions and ODS/F-gases containing appliances and their disposal in landfills;
  b) Collection of end-of- life refrigerators and ACs/MACs (National Expert)
- Develop a strategy, including technology and legal aspects, for all countries to address current and future quantities of unwanted ODSs, proposing regional and country specific options for destruction project implementation;

Assessment of economic aspects

- Prepare feasibility reports on destruction of ODS banks from landfills in 6 countries;
- Provide technical assistance from local consultants in preparing National Destruction Plans of ODS for 6 countries;

Other

- Produce a presentation during a meeting with concerned parties on the occasion of an African regional network meeting or thematic meeting;
- Dissemination of results to other interested LVCs in the region and beyond, consultation with all other potential partners and co-financing opportunities.

b. DEMONSTRATION PROJECT

The regional demonstration project for ODSs destruction will address the existing stocks and create the capacity for collection of unwanted ODS and other refrigerants to be disposed by addressing the following activities, per country were applicable:

(i) Refrigerant recovery and storage

- **Upgrade of the Recovery and Recycling Networks existing in each country of Region:** In each country a Recovery and Recycling Network was created (in some cases this network was established in the training centers, storage centers, refrigerant distributors, etc). The existing networks will be the base for the disposal and storage of unwanted refrigerants and will be upgraded with the following equipment: storage tanks for the different refrigerants, recovery machines or transfer pumps, device for cylinder cleaning, identifiers, among others. Training will be also carried out for the operators.
- **Development of an inventory of unwanted ODS:** will be carried out by local experts and for that purpose they will approach the main consumers in every country such as big service providers and new equipment installers, mall centers, supermarket chains, importers and/or distributors among others. The survey will provide information on unwanted refrigerants to be processed and at the same time will advertise the services offered by the recovery and recycling network.
- **Storage of all kind of CFC refrigerants:** the owner of unwanted refrigerants is expected to have also refrigerants (non-ODS) to be processed for reuse, like recycle or reclaim. The objective is that at the time the refrigerants are taken for reprocess, the non-ODS refrigerants can also be brought for storage. In some cases the unwanted refrigerants can be reclaimed and reused avoiding the consumption of new refrigerant.
- **Increase the ODS storage capacity of the country:** establish the necessary infrastructure to increase the capacity of the countries for further, subsequent storage of ODS which are expected to be collected
- **Establish the issues of unwanted future ODS stockpiling**

(ii) Refrigerant Destruction

Two destruction options will be taken into account during project preparation. One of the below possibilities will be undertaken during implementation of the demonstration project:

- **Purchase one small plasma unit** to be transported between countries within the Region. This study will be based on the project concept already developed for Ecuador: a small plasma unit purchased for the NPP in Ecuador is planned to be installed in parallel with a reclaiming facility and the service for refrigerant reclaim and sale will cover the costs of destruction.
- **Use of cement kiln ovens of the country** with big cement producer facilities. In this case, non-LVC counties can provide the service.

Upgrade of national legislation to support destruction activities taking into account the new phase out schedule for HCFC in the Montreal Protocol. The respective permissions will have to be obtained.

(iii) Search for Funds in the Alternative Funding mechanisms

- Identification of co-funding for ODS disposal in each country: establishing how to use alternative funding mechanisms to obtain ODS destruction credits, such as voluntary carbon market, CDM, GEF, or other financial instruments.
- Establishing the necessary institutional infrastructure to allow subsequent access for the countries in the region. For this reason to include HFCs will be an asset.

(iv) Monitoring and Sustainability

- **Establishing a monitoring system for ODS** to be destroyed which allow tracing the origin of that ODS to ensure that no virgin material is used to generate credits from voluntary carbon markets and possible report to the Secretariat;
- **Provide an exchange workshop at the end of the project to** ensure the transfer of the insights gained during the projects, and the necessary steps to be followed by the countries for future disposal of ODS.
- **Carry out training programmes** to develop the country capacity in dealing with ODS destruction, particularly the Basel Convention.

The Six countries which will participate in the project are LVC which require particular support to appropriately handle surplus of ODS for disposal. The local NOUs in cooperation with the respective authorities will be responsible for implementing the regulations, including the management and monitoring of the disposal of the waste appliance and only the authorized enterprises can conduct the disposal of the waste appliances.

(v) Additional Activities

- Forming a steering group for the project which will be constituted of all the NOUs participating in the regional strategy and UNIDO, and other stakeholder that these members agree to invite to participate. This steering group will use the opportunities offered by the meetings of the African Regional ozone network to meet and follow the progress of the project.
- Defining the details of the Terms of Reference for the development of the outputs. This should include a confirmation for each participating country of the quantities actually available for the collection/storage/transportation and the proposed options to destroy these quantities.
- Determine the modalities of the project preparation process (ToR for a consultancy including private partners) including a detailed schedule to allow for the outputs to be available by March 2013.
- Contacting potential partners/stakeholders such as:
    - The GEF secretariat
    - Private sector
    - Stockholm, Rotterdam and Basel Convention Secretariats
    - Voluntary Carbon Market - VCM
- Compare and review other approved projects or proposals in preparation to learn from best practices, and from the most recent reports of the TEAP/TOC.

The Implementing agencies will plan to provide lessons learnt to the ExCom by its 68th Meeting, as was indicated as an objective in document UNEP/OzL.Pro/ExCom/64/49 (“Report on the experience gained in the implementation of disposal projects (decision 58/19)”).

8. EXPECTED RESULTS

The expected result of the demonstration project is to avoid emissions into the atmosphere of ODS that are contained in reachable banks/stocks in the LVCs of the African region, since these emissions represent both a large ozone-depleting and global-warming potentials.

9. TIMEFRAME

The timeframe for the preparation project would be 12 months, commencing in May 2012.

10. BUDGET FOR PROJECT PREPARATION:

Preparation funds are requested for 6 LVC countries; Cameroon, Central African Republic, Burundi, Gabon, Republic of the Congo and Guinea Bissau. The amount requested is US$ 100,000 for UNIDO.

Activity Type	Cost
Data collection	
Prepare a consultancy study to confirm data on amounts available for disposal/destruction in LVCs in African Region	25,000
Verification and development of legal framework	
Update of the local legislation/guidelines in the 6 countries and necessary incentives concerning: a) Ban on ODS emissions and ODS/F-gases containing appliances and their disposal in landfills; b) Collection of end-of- life refrigerators and ACs/MACs (National Expert)	20,000
Develop a strategy, including technology and legal aspects, for all countries to address current and future quantities of unwanted ODSs, proposing regional and country specific options for destruction project implementation	25,000
Assessment of economic aspects	
Prepare feasibility reports on destruction of ODS banks from landfills in 6 countries	10,000
Provide technical assistance from local consultants in preparing National Destruction Plans of ODS for 6 countries	10,000
Other	
Produce a presentation during a meeting with concerned parties on the occasion of an African regional network meeting or thematic meeting	0
Dissemination of results to other interested LVCs in the region and beyond, consultation with all other potential partners and co-financing opportunities	10,000
TOTAL WITHOUT PSC	**100,000**
Agency fee (7,5%) for UNIDO	**7,500**
TOTAL including agency fee	**107,500**

ANNEX 1 - ESTIMATE OF TYPES OF STOCKS OF UNWANTED ODS IN THE REGION

Country	recycled annually	Collected CFC 11 & 12 annually amount (ton)	Stored CFC 11 & 12 amount (ton)
Cameroon	12.56	4.80	14.40
CAR	15.50	6.20	18.60
Gabon	1.07	0.43	1.29
Guinea Bissau	29.70	11.88	35.64
ROC	3.40	1.36	4.08
Burundi	Data Has been requested	Data Has been requested	Data Has been requested
Total	**62.23**	**24.67**	**74.01**