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اللجنة التنفيذية للصندوق المتعدد الأطراف  
لتنفيذ بروتوكول مونتريال  
الاجتماع الثامن و الستون  
مونتريال، 3-7 ديسمبر/كانون الأول 2012

إضافة

التعاون الثنائي

صدرت هذه الوثيقة لإضافة المرفق التالي:

- مقترح مشروع: استراتيجية للتخلص من المواد المستنفدة للأوزون وتدميرها في ستة بلدان ذات الاستهلاك المنخفض في أفريقيا الوسطى (فرنسا/اليونيدو)



## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION



### PROJECT CONCEPT Technical Assistance

|                               |  |
|-------------------------------|--|
| <b>REGION:</b>                | Central Africa   |
| <b>IMPLEMENTING AGENCIES:</b> | UNIDO  |
| <b>PROJECT TITLE:</b>         | Strategy for disposal and destruction of ODSs for six LVCs Central African countries |
| <b>SECTOR:</b>                | Destruction - Technical assistance (TAS)   |
| <b>PROJECT DURATION:</b>      | 12 Months<br>Commencing: December 2012<br>Completion: December 2013                  |
| <b>TOTAL PROJECT COST:</b>    | France USD 100,000 ( <i>excluding PSC</i> )  |
| <b>SUBMITTED BY:</b>          | UNIDO  |

#### Executive Summary

The main objective of this technical assistance project is to address non-reusable and unwanted ODS stockpiles in the specific context of low volume countries (LVC) in the African region, since activities related to destruction need to be made simpler and more efficient. UNIDO and France will assist six LVC countries, namely Burundi, Cameroon, Central African Republic, Gabon, Republic of the Congo and Guinea to decide on the most cost-effective way to overcome barriers to the disposal and destruction of non-reusable and unwanted ODS either with a national approach, or within a regional approach. The expected outcome of the technical assistance project is the development of a comprehensive strategy on the options to consider in these specific circumstances and the corresponding requirements for the collection and disposal of non-reusable and unwanted ODS — legislation, collection, storage, transport and destruction. The study's results will be consigned in a report.

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## 1. ADDRESSING NON-REUSABLE AND UNWANTED ODS STOCKPILES IN LOW-VOLUME CONSUMING COUNTRIES IN AFRICA

Low volume consuming countries (LVCs) in the African region have expressed interest in addressing the issue of ODS stocks and the need to devise a strategy to safely dispose of, and destroy current and future unwanted ODSs. Six of them have specifically expressed an interest to work on a regional basis in order to design a coherent strategy. These are **Cameroon, Central African Republic, Burundi, Gabon, Republic of the Congo and Guinea**. These countries belong to the **Economic Community of Central African States (ECCAS)**<sup>1</sup> which was created in 1983 for the economic, social and cultural development of Africa, and all of them except Burundi are also part of the **CEMAC - Economic and Monetary Community of Central Africa**<sup>2</sup> which was signed in 1994 and aims to create an effective customs union and promotes sector policies. Both treaties intend to help develop a common market for goods, capital, and services.

The six countries of the project therefore share a common financial, regulatory, and legal structure; they also agree on a common external tariff on imports from non-member countries. These factors will facilitate the trans-boundary movements of ODS stocks amongst them.

More recently, this technical assistance project was presented to African countries which took part in the Ozone Officers Network meeting held in Djibouti in September 2012. Specific information on tonnages and location of unwanted stocks of ODS was then provided by at least two additional countries. Furthermore, the discussions showed that there was a growing concern as to how to deal with the disposal and destruction of non-reusable and unwanted ODS stocks in Africa in the future.

Other African countries will then be associated to this project through the African Ozone Officer Network meetings so that they can benefit fully from the lessons learned and the strategy, which the technical assistance project aims to propose.

## 2. BACKGROUND INFORMATION

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.

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<sup>1</sup> “Communauté Economique des Etats d’Afrique centrale (CEEAC)”

<sup>2</sup> « Communauté économique et monétaire de l’Afrique centrale (CEMAC) »

The Multilateral Fund was then not designed to finance the destruction of unwanted and non-reusable ozone depleting substances (ODS) as this activity is not necessary to comply with the Montreal Protocol.

However, ODS disposal and destruction was recognized as being an important issue for Article 5 countries lacking the necessary facilities to collect CFCs and destroy CFC stocks.

- Decision XX/7 of the Meeting of the parties (Nov. 2008) requested the organization of a workshop and request the Executive Committee of the Multilateral Fund “to consider as a matter of urgency commencing pilot projects that may cover the collection, transport, storage and destruction of ozone-depleting substances”.
- The Executive Committee Decision 58/19 (July 2009) approved interim guidelines for the funding of demonstration projects for the disposal of ODS in accordance with paragraph 2 of decision XX/7 of the Meeting of the Parties.
- Then decision XXI/2 (Nov. 2009) of the Meeting of the parties requested the Executive Committee of the Multilateral Fund “to continue its consideration of further pilot projects in Article 5 Parties pursuant to decision XX/7, and in that context, to consider the costs of a one-time window within its current destruction activities to address the export and environmentally sound disposal of assembled banks of ozone-depleting substances in low-volume-consuming countries that are not usable in the Party of origin”.
- And finally, ExCom decision 63/5 (c) (April 2011) decided “to set a window for ODS destruction for low-volume-consuming countries, pursuant to decision XXI/2 of the Twenty-first Meeting of the Parties, amounting to US \$3 million”

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. Projects funded by the Multilateral Fund have indeed taken recovery and recycling into account, but 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.

It is within this context that France and UNIDO initially submitted a demonstration project for LVC countries in Africa. This project could however not follow the demonstration project guidelines (decision 58/19) as it was basically one step behind, the six partner countries needing technical support in order to collect appropriate data, to formulate effective regulations, and to formulate the most appropriate ODS destruction strategy and ensure a sustainable solution for the disposal and destruction of non-reusable and unwanted ODS stockpiles.

France and UNIDO then presented an information document on the issue at the 67th meeting of the Executive Committee (UNEP/OzL.Pro/ExCom/67/Inf.2), which the representative of Belgian introduced.

This document proposed to develop a strategy for disposal and destruction of unwanted ODS for six LVC countries in the African region. Following discussions and support from a number of Executive Committee members, decision 67/39 approved for the submission of this technical assistance project on an exceptional basis at a level of US\$ 100 000, under the following conditions:

“(i) That the Executive Committee recognized that this technical assistance project would not fall within the Executive Committee guidelines for ODS disposal projects (decision 58/19) and was allowed only in line with decision 66/25, by which a project for Africa had been agreed for submission;

(ii) That no further projects of a similar nature for ODS disposal could be considered by the Executive Committee in future in line with decision 64/17.”

This technical assistance project will strengthen the countries’ current status in terms of data, collection efforts, policy and reporting, and will enable them to devise a strategy for the destruction of these stockpiles. In view of the importance of this technical assistance project for the type of countries concerned, France is willing to support the full costs through its bilateral contribution to the Multilateral Fund.

### 3. PROJECT CONCEPT

#### 3.1 Project justification

Conducting a TAS project is necessary as a first step since African LVC countries face hurdles in regards to ODS stockpiles. LVCs in general have greater difficulties managing their ODS stocks than countries with large quantities of consumption. Developing and implementing ODS destruction projects in LVCs involves several barriers, including the following:

- Individual banks of ODS in LVCs are small in quantity, which lowers the cost effectiveness of ODS destruction projects;
- ODS consumption is primarily restricted to servicing and maintenance of RAC equipment which is not a highly organized sector and thus recollection is difficult;
- Awareness of ODS and their harmful effects is low among the population in LVCs;
- Lower economies of scale, lower safety and health standards, lack of human and other resources at all levels;
- No ODS destruction facilities in LVCs;
- No quality analysis facilities as well as no knowledge of the same;
- Servicing of the RAC equipment has inflated the costs of recycled ODS to a large extent as there is no fresh supply to meet the demand;
- Weak national regulatory and policy measures on the import and export of ODS and on the collection and recovery of ODS.

#### 3.2 Justification for the Choice of Countries:

Six countries, namely Cameroon, Central African Republic, Burundi, Gabon, Republic of the Congo and Guinea expressed their concern on the issue of unwanted ODS and indicated their interest in participating in the project. Working with these countries has the following two main additional advantages:

- a. Existence of previous trade agreements between these countries:** these countries have already established legislation on trade and customs, making the eventual transportation of ODS from different countries to destruction sites more 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 could run more smoothly.  
Legal provisions already in place which can facilitate project activities:
  - i. The Treaty Establishing the Economic Community of Central African States (ECCAS)

- ii. The CEMAC international agreement- Economic and Monetary Community of Central Africa
- iii. Protocol on Non-Tariff Trade Barriers
- iv. Protocol on Transit and Transit facilities
- v. Protocol on Customs cooperation within the ECCAS
- vi. Protocol on Cooperation in Industrial development between member states of the ECCAS
- vii. Protocol on Cooperation in Transport and Communications between member states of the ECCAS
- viii. Protocol on Cooperation in Science and Technology between member states of the ECCAS
- ix. Protocol on the Simplification and Harmonization of Trade documents and Procedures within the ECCAS

**b. Proximity:** the proximity between these countries means that transportation costs will be minimized and communication between stakeholders will be easier, including the organization of meetings and seminars.

Quite a number of other countries also expressed their worries about not knowing what to do in this field during the Ozone Officers Network meeting held in Djibouti in September 2012. Substantive discussions followed, and one country where an ODS destruction is implemented offering to take part in the analysis of the export options from these countries to Ghana for a bulk export for destruction.

### **3.3 Needs of LVCs in the African region**

The definition of the objective of the TAS project is based on the following preliminary needs already expressed by the countries:

**Data collection and verification:** currently, data on the levels of ODS in each of the countries involved in the project cannot be assured. It is then 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 functional and able to be incorporated into a future destruction project.

**Verification of legal framework:** there is a pressing need to address the legal dimensions involved in the destruction of ODS in the six selected African countries. The existing legislation under the national frameworks and the Economic Community of Central African States must be scrutinized in order to assure that it fully covers the needs of a destruction project, including issues relating to the transport and export of unwanted ODS. 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 under the ECCAS 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:

- a) Update of the local legislation/guidelines in the six countries:
  - Ban on ODS emissions and ODS/F-gases containing appliances and their disposal in landfills;
  - Collection of end-of- life refrigerators and ACs/MACs
- b) 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:** One of the main aspects of the TAS project will be to analyse all economic aspects involved in the disposal and destruction of non-reusable and unwanted ODS in the specific context the six countries. Cost considerations will be presented concerning all stages of the project, which intends to respect the cost-efficiency approach of the Multilateral Fund. The project will develop a type of check-list that will be discussed with the NOUs as support for the collection exercise relating to facts and figures.

### **3.4 Objective of the project:**

The objective of this technical assistance project is to address non-reusable and unwanted ODS stockpiles in the specific circumstances of LVCs in the African region, since activities related to destruction need to be analysed and made simpler and more efficient. The outcome of the TAS project will be the development of a strategy, which will provide options for LVCs in the African region to address non-reusable and unwanted ODS stockpiles.

These six LVC countries must share this objective and the expected results in regards to an ODS destruction project strategy. With the assistance of UNIDO and France, they must provide inputs for and contribute to the development of the strategy. This will in turn enable them to be first to choose the most appropriate solution(s) for their own national and/or regional ODS disposal plan for overcoming barriers to the disposal of non-reusable and unwanted ODS.

### **3.5 Project outputs:**

In order to define the strategy, a number of activities will need to be carried out. Their results can be clustered in five outputs:

- Output 1: Data is collected in six LVC countries of the African region on non-reusable and unwanted ODS stockpiles.
- Output 2: The existing legal framework for the sound disposal of unwanted ODS is analysed with a national and a regional perspective.

- Output 3: The economic aspects of the collection and disposal options for non-reusable and unwanted ODS are assessed.
- Output 4: A report is drafted on options to dispose of, and destroy non-reusable and unwanted ODS in LVCs in the African region.
- Output 5: Other countries in the African region are informed about the lessons learned during the study and its results.

### 3.5.1 Data collection on non-reusable and unwanted ODS stockpiles

An important part of the preliminary work will concern information and data collection. Collection efforts can be done at a national level. It will need to be carried out as thoroughly as possible, because these elements will be the basis of the destruction strategy itself.

As a future consequence of the strategy which will be developed, it is hoped that specific quantities of unwanted ODSs which were identified in the subgroup of countries be effectively destroyed according to the most environmentally and economical technology approved by TEAP.

### 3.5.2 Analysis of the legal framework for the sound disposal of unwanted ODS with a national and a regional perspective

The successful implementation of a regional ODS destruction project will highly depend on the national regulatory measures and policies. Existing laws and regulations will be verified in relation to the collection and disposal of ODS in all six countries and in coordination among the countries. An assessment will be made on further policy needs for each of the countries. Activities undertaken here will help stakeholders better understand the need for regulations and measures can be enacted.

There are policies and regulations in place in the six countries for the collection and disposal of persistent organic pollutants (POPs) in general, formulated under the framework of the Stockholm Convention, which means that there is a general awareness about this topic among government officials. However, since the procedure for the collection and recovery of ODS in recovery and recycling centers is very specific, there must be further institutional strengthening and awareness raising to cover that area as well. Moreover, strengthening policy measures on the import and export for the sound disposal of ODS is indispensable for the success of the destruction project and none of the six countries involved has had any laws enacted or policies formulated for such purposes. The project will then serve to analyse if and how the linkages in between the Montreal Protocol and the Stockholm and Basel Conventions can be called upon.

### 3.5.3 Assessment of the economic aspects of the collection and disposal options for non-reusable and unwanted ODS

This output will be essential in order to determine the most viable option should ODS destruction activities take place in the future. Feasibility studies will be prepared in the six countries, which include important aspects such as collection issues, export options, transportation issues, applicability of other MEAs, ie the Basel Convention and funding opportunities. These studies will also provide step by step cost elements involved in each destruction option, indicate all advantages, setbacks and time frame of each option and suggest the most cost-effective approach.

This study is imperative in order to generate a model on how to deal with ODS destruction in LVCs in Africa, based on six national ODS destruction plans. Through this study NOUs will have a clear overview of the economic implications and practical aspects of dealing with non-reusable and unwanted ODS.

3.5.4 A report is drafted on options to dispose of, and destroy non-reusable and unwanted ODS in LVCs in the African region.

This will be the compilation of all studies conducted during the project as well as recommendations. It will summarize the findings of the project regarding the points above, namely: data issues; collection issues; transport issues; national and regional legal framework issues; economic aspects; applicability of other MEAs, i.e. the Basel Convention.; funding opportunities for ODS destruction in Africa; and lessons learned for future ODS disposal activities in LVCs.

Recommendation for future destruction activities in the region will subsequently be formulated and the lessons learned will be made available to other countries in Africa and to LVCs in other regions.

3.5.5 Information dissemination to other countries in the African region on the lessons learned during the study and on its results.

This output will allow all other African countries to benefit from the lessons of the project. Through information dissemination, the challenges and opportunities regarding the collection and disposal of non-reusable and unwanted ODS in LVCs of Africa are better understood and documented. Moreover, the NOUs will be aware of eventual financing options and potential partners for future destruction activities.

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To achieve all these outputs, UNIDO and France will analyze the following and provide the results to all LVCs in the region and other interested parties:

- All technological options and their respective feasibility and cost effectiveness for participating countries, as well as their environmental impact.
- Local collection options.
- The options to study will be probably include the following:

- a) Collection and transport of unwanted ODS to a neighbouring non-LVC where ODS destruction facilities are available.
  - b) Collection and export of unwanted ODS to established destruction facilities in Europe or Western Asia.
  - c) Collection and transport of unwanted ODS to an other African country where a pilot demonstration project exists, as for example Ghana, for a bulk transport.
- For all options, and even more if export is the most suitable, an in-depth analysis of the transportation and transaction costs.
  - Similarly, legal considerations will be analysed, including the ones related to export and trans-boundary movements of hazardous waste. If needed, development of specific legal and regulatory measures relating to destruction will be recommended.
  - Synergies with other chemical destruction projects in the countries and region. In particular, on going and future POPs destruction projects will be analyzed to strengthen cooperation.
  - Resource mobilization options, which would make it possible to implement an unwanted ODS destruction project either directly or by co-funding, for example the GEF, the French Fonds d'Etude et d'Aide au Secteur Privé (FASEP), other chemical management financing and local financing sources.

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. Finally, issues relating to future unwanted ODS stockpiling will also be addressed.

France and UNIDO will bring experiences from other countries, through the several destruction projects they are involved in (Mexico, Turkey, Nigeria, China and regional project for ECA) and through contacts with destruction companies. Expertise, contacts and experience will be gathered in order to define the best conditions for an appropriate handling of unwanted ODS stocks in the African region.

The final output of this TAS will be a report, which will summarize the research and show the lessons learned on how low volume countries of Africa can proceed with the entire process: data, collection, storage, transport, options for destruction, exports, articulation with other MEAs such as Basel, and identification of financing partners.

### **3.6 Activities and budget**

Outcome: The expected outcome of the TAS project is to assist LVCs of Africa to develop a comprehensive strategy on the requirements for the collection and disposal of non-reusable and unwanted ODS — legislation, collection, storage, transport and destruction.

| Outputs  | Activities and Results  |   |
|--|---|---|
|  | Activities  | Results   |
| <b>Data collection on non-reusable and unwanted ODS stockpiles</b>   | Prepare a consultancy study to verify data on non-reusable and unwanted amounts available for disposal in six LVCs in Africa.   | 1) The ToRs of the consultancy study are endorsed by the NOUs.<br>2) NOUs provide information on the usual major regions and town centres where ODS stockpiles are concentrated in each country;<br>3) NOUs better understand how to undertake future data collection efforts.<br>4) NOUs are able to update a database on non-reusable and unwanted ODS on a regular basis.<br>5) Data accuracy is verified. |
|  | Assist the country in identifying amounts, location and how substances are stored.  |   |
| <b>Analysis of the legal framework for the sound disposal of unwanted ODS with a national and a regional perspective</b> | Verify the existence of laws and regulations in relation to collection and disposal of ODS in all six countries and produce an assessment of the legal and policy needs for each of the countries.  | 1) Legal gaps/synergies are identified for each country and within the broader perspective of regional agreements;<br>2) Processes and legislation which need to be enacted for the proper collection and disposal of ODS are drafted.<br>3) A follow-up system is proposed for their enactment.  |
|  | Verify how the identified needs of the country overlaps or synergies with/complements the ongoing activities of HPMPs   |   |
|  | Assist countries to update the local legislation/ guidelines in the six countries and policies 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. |   |
| <b>The economic aspects of the</b>   | Activities  | Results   |
|  | Prepare feasibility studies in the six countries, which include the   |   |

| <p><b>collection and disposal options for non-reusable and unwanted ODS are assessed.</b></p>   | <p>following:<br/>                 1) <u>Common elements of the case studies:</u><br/>                 a) Collection issues<br/>                 b) Export options: considerations on existing destruction facilities operating outside Africa.<br/>                 c) Transportation issues<br/>                 d) Applicability of other MEAs, ie the Basel Convention.<br/>                 e) Funding opportunities.<br/>                 2) <u>Specific elements of the case studies:</u><br/>                 f) National context.<br/>                 g) Regional context.<br/>                 h) Provide step by step cost elements involved in each option.<br/>                 i) Indicate all advantages, setbacks and time frame of each option.<br/>                 j) Suggest the most cost-effective approach.</p> | <p>1) A general model on how to deal with ODS destruction in LVCs in Africa is available, based on six national ODS destruction plans;<br/>                 2) NOUs have a clear overview of the economic implications and practical aspects of dealing with non-reusable and unwanted ODS.</p> |   |  |  |  |   |
|---|---|---|---|--|--|--|---|
| <p><b>Other countries in the African region are informed about the lessons learned during the study and its results.</b></p>  | <table border="1"> <thead> <tr> <th data-bbox="391 869 834 905">Activities</th> </tr> </thead> <tbody> <tr> <td data-bbox="391 905 834 1073">                     Prepare a presentation document on the project concept on the occasion of an African network or thematic meeting.                 </td> </tr> <tr> <td data-bbox="391 1073 834 1266">                     1) Dissemination of the study to interested countries and/or entities;<br/>                     2) Consultation with potential partners and financing institutions.                 </td> </tr> </tbody> </table>   | Activities  | Prepare a presentation document on the project concept on the occasion of an African network or thematic meeting. | 1) Dissemination of the study to interested countries and/or entities;<br>2) Consultation with potential partners and financing institutions.  | <table border="1"> <thead> <tr> <th data-bbox="834 869 1443 905">Results</th> </tr> </thead> <tbody> <tr> <td data-bbox="834 905 1443 1266">                     1) The challenges and opportunities regarding the collection and disposal of non-reusable and unwanted ODS in LVCs of Africa are better understood and documented. The NOUs are aware of eventual financing options and potential partners for future destruction activities.<br/>                     2) The topic is further discussed during the African network or thematic meetings.                 </td> </tr> </tbody> </table> | Results  | 1) The challenges and opportunities regarding the collection and disposal of non-reusable and unwanted ODS in LVCs of Africa are better understood and documented. The NOUs are aware of eventual financing options and potential partners for future destruction activities.<br>2) The topic is further discussed during the African network or thematic meetings. |
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|   |   |  |
|---|---|--|
| <b>A report is drafted on options to dispose of, and destroy non-reusable and unwanted ODS in LVCs in the African region.</b> | unwanted ODS in African LVCs, which will summarize the findings of the project:<br>1) Data issues<br>2) Collection issues<br>3) Transport issues<br>4) National and regional legal framework issues<br>5) Economic aspects<br>6) Applicability of other MEAs, i.e. the Basel Convention.<br>7) Funding opportunities for ODS destruction in Africa.<br>8) Lessons learned for future ODS disposal activities in LVCs. | 2) The lessons learned are made available to other countries in Africa and to LVCs in other regions. |
|---|---|--|

| <b>Budget</b>   | US\$             |
|---|------------------|
| <b>Data collection on non-reusable and unwanted ODS stockpiles</b>  | \$30,000         |
| <b>Verification of the existing legal framework for the sound disposal of ODS stockpiles</b>                      | \$10,000         |
| <b>Assessment of economic aspects of the collection disposal and destruction of non-reusable and unwanted ODS</b> | \$50,000         |
| <b>Awareness Raising / Dissemination</b>  | \$0              |
| <b>Development of a Strategy</b>  | \$10,000         |
| <b>Total</b>  | <b>\$100,000</b> |

### **3.7 Timeline**

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

|  | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| <b>Data collection on non-reusable and unwanted ODS stockpiles</b>   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Assist the country in identifying amounts, location and how substances are stored.   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Prepare a consultancy study to verify data on non-reusable and unwanted amounts available for disposal in six LVCs in Africa.  |     |     |     |     |     |     |     |     |     |      |     |     |     |
| <b>Verification of the existing legal framework for the sound disposal of ODS stockpiles</b>   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Verify the existence of laws and regulations in relation to collection and disposal of ODS in all six countries and produce an assessment of the legal and policy needs for each of the countries. |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Verify how the identified needs of the country overlaps or synergies with/complements the ongoing activities of HPMPs.   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Assist countries to update the local legislation/ guidelines in the six countries and policies.  |     |     |     |     |     |     |     |     |     |      |     |     |     |
| <b>Assessment of economic aspects of the collection and disposal of non-reusable and unwanted ODS</b>  |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Prepare feasibility studies in the six countries   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| <b>Development of a Strategy</b>   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Produce a study on the collection and disposal of non-reusable and unwanted ODS in African LVCs.   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| <b>Awareness Raising / Dissemination</b>   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Prepare a presentation document on the project concept on the occasion of an African network or thematic meeting.  |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Dissemination of the study to interested countries and/or entities   |     |     |     |     |     |     |     |     |     |      |     |     |     |
| Consultation with potential partners and financing institutions.   |     |     |     |     |     |     |     |     |     |      |     |     |     |

#### **4. FOLLOW-UP PROJECT**

After the strategy on the collection and disposal of non-reusable and unwanted ODS in African LVCs has been developed through the technical assistance project, countries will be in a position to determine whether they wish to proceed with the actual destruction of ODSs and how to go about it. It is very likely that this strategy will enable them to prepare destruction project proposals within the framework of the GEF or other possible financing institutions.

The GEF would offer a strong funding opportunity for a follow-up destruction [demonstration] project because it 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.

A regional demonstration project for ODSs destruction would address the existing stocks of unwanted ODS and enable their collection and destruction by addressing the following activities for example:

##### **Refrigerant recovery and storage**

- Upgrade of the Recovery and Recycling Networks existing in each country of Region if necessary
- If necessary, update the inventory of unwanted ODS developed through the technical assistance project.
- Verify the storage of all kind of CFC refrigerants
- Increase the ODS storage capacity of the country
- Addressing unwanted future ODS stockpiling

##### **Refrigerant Destruction**

Based on the analysis made during the development of a strategy for the disposal and destruction of ODSs for six LVCs Central African countries, one of the following technical options could be implemented by of the [demonstration] project:

- Purchase of a small plasma unit
- Use of existing cement kiln

In addition, economical considerations of at least three options will have been considered, namely:

- Collection and transport of unwanted ODS to a neighbouring non-LVC where ODS destruction facilities are available
- Collection and export of unwanted ODS to established destruction facilities in Europe or Western Asia
- Collection and transport of unwanted ODS to an other African country where a pilot demonstration project exists, as for example Ghana, for a bulk transport.

### **Monitoring and Sustainability**

Activities to be considered under this item could be to:

- **Establish a monitoring system for ODS** to be destroyed which allows tracing the origin of the ODS and ensures that no virgin material is used to generate credits from voluntary carbon markets and possible report to the Secretariat.
- **Organize a 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.
- **Design and carry out e-training modules and/or leaflets** to develop the country capacity in dealing with ODS destruction, which suggest how to best approach other MEAs such as the Basel Convention.