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EXECUTIVE COMMITTEE OF
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REPORT ON PROGRESS AND EXPERIENCES GAINED IN DEMONSTRATION PROJECTS FOR THE DISPOSAL OF UNWANTED ODS (Decision 64/50)

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

Background

1. At the 64th meeting, the Secretariat provided a report to the Executive Committee summarizing information on the experience gained in the implementation of pilot ODS disposal projects using reports submitted by bilateral and implementing agencies. Based on this report, the Executive Committee would consider whether to review the interim guidelines contained in decision 58/19 in light of these experiences gained, and on any additional information and guidance available (decision 58/19 (c) and (d)).

2. The report submitted by the Secretariat concluded that as at the 64th meeting, there was very little experience in the implementation of the full pilot projects. In line with this, the Executive Committee requested the implementing agencies to provide an update to the Secretariat on how those guidelines were used in carrying out the approved ODS disposal pilot projects as their implementation progresses, no later than the 69th meeting. These inputs would enable the Secretariat to prepare a report for consideration at the 70th meeting. The Executive Committee further decided to request the Secretariat to continue using the interim guidelines and applying them also to pilot projects for low-volume-consuming countries until the Committee had considered this updated report (decision 64/50 (b) and (d)).

3. This document was prepared in line with paragraphs (b) and (d) of decision 64/50 summarized in paragraph 2 above. The implementing agencies provided material on their use of the guidelines in implementing their ODS disposal projects which the Secretariat had considered in preparing this report.

Progress since the 58th meeting

4. Between the 58th to the 69th meetings, the Executive Committee approved 20 ODS disposal projects, for a total funding level of US $8,693,918. These consisted of project preparation funding, fully developed pilot demonstration projects, technical assistance and regional projects. In choosing the countries and approaches for which project preparation funding was approved, the Executive Committee selected those that would cover a representative geographical spread and allow the results of the pilot projects to be easily replicable in similar countries within the same region, with comparable circumstances. The Executive Committee also set aside a US $3 million funding window for ODS disposal projects in low-volume consuming (LVC) countries at its 63rd meeting in light of decision XXI/2 of the Twenty-first Meeting of the Parties. Annex I provides a list of the pilot ODS disposal projects approved up until the 69th meeting.

5. Out of the project preparation funding approved, there are five remaining full projects that need to be submitted for consideration of the Executive Committee (Algeria, Brazil, India, Lebanon, and the Philippines). At the 69th meeting, the Executive Committee, in decision 69/5(i), allowed the submission of these outstanding ODS disposal projects where project preparation had already been approved in accordance with the approved guidelines no later than the 72nd meeting.

Decision 58/19 and the project approval process

6. From the 59th meeting onward, the implementing agencies used the interim guidelines contained in decision 58/19 to provide information to support the funding requested for pilot projects on ODS disposal. The full text of decision 58/19 is attached as Annex II.

7. The Secretariat also applied the same guidelines in the review of these submissions. Through this process, the Secretariat ensured that there was consistent information provided in the proposals. It made certain that the project preparation request and the submission of the full project included the basic aspects of the ODS destruction process from collection, storage, transport and the destruction process itself. Co-financing options were considered an essential element of the proposal to ensure sustainability without additional future funding from the Executive Committee.

8. During the review of project preparation submissions, certain difficulties were faced by implementing agencies in providing the information required to support the request for funding. The problems identified as gathered during the review process included the following:

(a) Data collection for amounts of ODS to be destroyed were often based on temporary estimates as agencies were dependent on countries to provide the figures needed and there was no possibility of confirming these on the ground;

(b) Information on ODS waste collection efforts were not consistent across countries, and while some had more robust systems, others had simpler ones linked to their recovery and recycling activities and were often random activities rather than institutionalized systems;

(c) Some countries were cautious about identifying a specific manner 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;

(d) There were also difficulties encountered in examining the national policy and regulatory infrastructure in place, and to link the potential project with existing similar initiatives for chemical waste management to develop synergies for the projects; and

(e) 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.

9. When project preparation funding was approved for the selected countries, it was envisaged that the full projects would be submitted within 12 months of the approval, as was the usual practice. However, this was not the case for ODS disposal projects which took an average of 18-24 months before the full proposals were submitted for the review of the Secretariat. In discussing with the agencies the delays in the submission of the full project proposals, the common reasons mentioned included the following:

(a) Countries gave priority to completing HCFC phase-out management plans (HPMPs) instead of the ODS disposal project as the former was needed for compliance with the HCFC control measures;

(b) Getting an expeditious agreement with the country with respect to the approach for ODS disposal was often not easy, resulting in delayed contracting of a consultant;

(c) For larger countries, the survey of already collected ODS waste was more complex than expected.

(d) Some experienced difficulties in identifying sources of co-financing the project as required by decision 58/19; and

(e) Some projects appear to explore carbon markets as co-financing options and the downturn in these markets made it more difficult than originally anticipated to conceptualize related approaches.

10. It was observed further that when the full demonstration project proposals were submitted, many contained far more complete information as compared to earlier submissions during the preparatory funding request phase. Since the guidelines required that the initial information that had been provided be verified, agencies confirmed that the preliminary funding approved allowed them to validate the data

submitted and confirm or change the approaches initially envisaged for the disposal project. There were a few cases where data validation proved difficult even during the project preparation exercise. Discussions between the Secretariat and the implementing agencies during the review process provided an opportunity to understand further the requirements of decision 58/19 and its challenges. This exercise often resulted in an agreement to revise the submissions in order for the project to move forward. In a few instances, some projects were deferred for submission to the next meeting if the data and information provided needed further work. In addition to data requirements, the interim guidelines also required that details be provided for each of the activities on the disposal of ODS (collection, transport, storage, destruction) in the project proposal.

11. The most common approach taken in some (four) pilot ODS disposal demonstration projects approved by the Executive Committee was the option of exporting ODS waste for destruction. In reviewing these submissions, specific situations in each country were taken into account. Due diligence was also exercised to ensure that each project, despite using a similar approach of exporting for destruction, would contain an element that would have a demonstration value unique to the project to ensure that decision 58/19 was fully complied with. For instance, one project aimed to demonstrate its strong links to co-financing with the Global Environment Facility (GEF). The GEF covered the costs of ODS waste collection in the country through an appliance replacement programme intended to promote the use of new energy-efficiency refrigeration equipment, while the Multilateral Fund covered the costs of the other aspects of destruction. The results of this approach could potentially encourage and stimulate further collaboration with other financial institutions that may be sources of co-financing for an aspect of the disposal process. In this case, the guidelines very clearly indicated that waste collection efforts were not eligible costs, therefore funding for this component if required, needed to be sought from other sources.

12. Three projects approved (China, Colombia and Cuba) examined the approach of domestic destruction, linked to strong national regulations that mandated ODS and other waste collection efforts and standards. Each of these projects described and examined the various aspects of the domestic destruction process from collection, transport, storage and their eventual destruction, as well as the validation of the destroyed amounts of ODS. These three projects also contained specific features that had high demonstration value. For Colombia, an important aspect was the establishment of protocols for the local destruction facilities in order to meet international standards, using different testing methodologies. The project in Cuba was approved to show how a cement kiln could be retrofitted to allow for ODS destruction, taking into account emission standards and other regulations. The ODS demonstration project in China on the other hand showed how the process could be done in a large country with high potential ODS waste streams. The project developed smaller pilot activities in provinces with similar conditions with the intention of replicating these in other provinces in the future. The China project is also very closely linked to its own national legislation requiring that ODS waste be collected and destroyed in acceptable local facilities in the country.

13. The specific needs of countries in Africa where the general situation in the region with regard to unwanted ODS made it very difficult for the countries to meet the information requirements of decision 58/19 were also recognized by the Executive Committee. An exception was made to the guidelines with the approval of a technical assistance project. The project is envisaged to develop a regional strategy that would provide options for LVCs in the African region to address non-reusable and unwanted ODS stockpiles. The strategy would propose solutions to the issues of collection, transport, storage and destruction of unwanted ODS in a manner that is strategic and cost-effective and most importantly, appropriate to the circumstances of the countries in the African region. A salient feature of this regional project is that it is designed to open opportunities for follow up activities to be funded from other sources, hence making it self-sustaining. The GEF is anticipated as a possible source of this funding following its interest in similar projects in the past, as well as its experience in projects looking at integrated waste management.

14. Overall, the use of the guidelines in the review of submissions for both project preparation funding and the final full proposals have enabled the approval of projects with significant demonstration value among a cross-section of Parties to the Montreal Protocol, including LVC countries.

Experience in the use of the guidelines for implementing ODS disposal projects

15. The implementing agencies provided the Secretariat with an update on how the guidelines were used in carrying out the approved ODS disposal pilot projects as their implementation progresses, in line with decision 64/50(b). These are summarized below, based on the reports submitted by the agencies:

UNDP

16. UNDP received funding for the preparation of pilot ODS disposal projects in six countries. Four of these had been submitted for full project funding and approved by the Executive Committee (Colombia, Cuba, Georgia and Ghana). The projects for Brazil and India are yet to be submitted. In the case of Brazil, the delays are due to the pending implementation of the Government's plan for refrigerator replacement and de-manufacturing. This plan would put in place a systematic waste collection system that would ensure a waste stream of unwanted ODS which would contribute to making the proposed project sustainable. As this plan is currently on hold, the submission of the full demonstration project is likewise delayed.

17. With regard to India, the project delays appear to be due to the high complexity of the project and the importance of ensuring that due consideration is given to all elements that would make it self-sustainable.

18. All four projects approved are progressing quite well. Cuba and Ghana are in more advanced stages of implementation as these were approved over 12 months ago. The agreement for the project in Colombia has already been signed, and activities are starting, while that for Georgia, which was approved only at the 69th meeting, is still under preliminary processing.

19. In the case of Ghana, the project has progressed closely with the UNDP-GEF project on appliance replacement. As part of the GEF project, a mobile recovery unit had been delivered and training is underway on how ODS waste will be collected using this equipment. The Refrigerator Recovery and Dismantling Facility was launched in September 2012, and this facility will manage the collection of the waste ODS. It is envisaged that a volume of ODS waste that will be sufficient for one shipment for ODS waste export for destruction will be collected by the end of 2013. This will enable the next phase of the project which includes shipment of the waste to a facility will commence.

20. UNDP indicated that the Ghana project has already drawn some lessons with regard to its demonstration aspect that may be used in other countries. These are summarized as follows:

(a) The use of small portable destruction units are not economically feasible in countries like Ghana where there are small waste streams and a lack of investments for such domestic disposal activities;

(b) The approach of aggregating wastes from nearby countries appears to be a good approach as it ensures sufficient quantity is reached at a shorter period;

(c) Close coordination among the different people responsible for elements of the project as well as all stakeholders is essential to ensure that the project activities are implemented efficiently;

(d) More efficient collection, dismantling and recovery of the refrigerant lowers transaction and operational costs considerably; and

(e) Public awareness is an important aspect of the success of the project, particularly in this case where it is important that the public is made aware of the appliance replacement programme to encourage more owners to come forward.

21. It also identified some issues that surfaced during the implementation process, and these included the following:

(a) Ownership of the waste generated and where the proceeds will go needs to be identified at the project preparation stage, if possible. This will reduce any complex discussions over this issue during project implementation; and

(b) While co-financing continues to be pursued, the currently low price of carbon credits and the downturn in the carbon markets have made it difficult to search for co-financing options.

22. In its report, UNDP had summarized the ways by which the guidelines contained in decision 58/19 were useful in implementing the full projects, and these were as follows:

(a) Provided opportunities for exploring synergies with other multilateral environmental agreements (MEAs), in particular with those that relate to climate change and chemical management; and

(b) Integrated ODS disposal issues within a broader strategy of waste management, and linked it with other aspects such as energy efficiency.

UNEP

23. UNEP is implementing two ODS disposal projects, one for Nepal and one jointly with UNIDO for the regional project in Europe and Central Asia (ECA). The regional project for the ECA had been approved only at the 69th meeting and is still at its initial phase. A start-up workshop is planned, and the development of a detailed implementation plan between the participating countries is being done. This will be finalised between July and September 2013, for immediate implementation.

24. The project for Nepal was approved by the Executive Committee at the 59th meeting to allow Nepal to explore two options for destroying a small amount of unwanted ODS that had been collected and stored through the national ozone unit. Thus ODS could not be sold in the market as it had been brought in above the country's allowable CFC consumption and was considered unwanted. As Nepal had a restriction for ODS re-export, the country had no option but to explore destruction possibilities.

25. UNEP provided an update on the progress of the implementation of the Nepal project, where specific timelines and target outputs achieved were listed. The selected approach that the destruction project used was to export the ODS for destruction to the United States of America. This was done through a broker, EOS Climate, who organised the transfer to a licensed facility for destruction. UNEP reported that the shipment reached the United States of America in November 2012, and subsequently has been reported as destroyed as of February 2013. The amount of ODS handled in this project was 10 ODP tonnes (107,000 CO_2-equivalent tonnes).

26. UNEP further reported that in March 2013, the Nepal project was submitted to the Climate Action Reserve (CAR). This has subsequently been listed in CAR with a reserve project identification number of CAR955. Upon further verification with the CAR website, the Secretariat noted the project has now changed status with CAR as registered, as of 24 May 2013. It has met final verification requirements of the CAR, and Climate Reserve Tonne (CRTs) may now be issued[1].

27. In summarizing the demonstration value of the Nepal project, UNEP indicated that the work on this provided an opportunity to link ODS destruction to the carbon market and explore the possibility of other financial mechanisms to support ODS destruction activities. The project's registration with the CAR is a good example for other countries who are pursuing this track for their ODS disposal projects. UNEP has prepared a short summary of the achievements of the Nepal project attached as Annex III. It also reported that one of the challenges that was faced during project implementation was the lengthy process to get approval for the export of the ODS to the United States of America, because of the legal impediments that required Parliamentary clearance. However, this was also an important lesson learned for the project as it allows UNEP to use the same approach for similar issues in the future.

UNIDO

28. The Executive Committee had approved four individual country pilot ODS disposal demonstration projects for UNIDO (China, Nigeria, Turkey and Mexico), one regional project for the ECA for joint implementation with UNEP, and a second regional technical assistance project for countries in Africa to be implemented jointly with the Government of France. UNIDO also has two outstanding projects (Algeria and Lebanon) which had received project preparation funds and would need to be submitted to the Executive Committee no later than the 72nd meeting.

29. In summarizing the achievements made by these approved projects so far, UNIDO grouped them into specific components, namely collection, training and awareness raising, storage, and destruction. In addition to the achievements, UNIDO also identified the main challenges faced in the implementation of the above components. These are summarised in a table below:

Table 1: UNIDO: achievements and challenges in implementing ODS disposal projects

Activity	Main achievements	Main challenges
Collection/Training and awareness	• Although the project does not fund collection, it contributes to the monitoring of the collection efforts in the country • Easier verification of ODS waste • Awareness and training promotes linkages with other issues like health, chemical waste management, etc • Provides policy makers with information required to strengthen regulations on ODS waste destruction	• Verification is time consuming and costly • Collection activities fall outside the project boundary as it is not funded • Some owners of ODS waste may prefer to destroy their waste for personal benefit and not necessarily most cost-effective for the country • Limited storage capacity for generated ODS wastes competing with other wastes with higher economic value

[1] Project developers submit a project by uploading the necessary forms and supporting documents to the Climate Action Reserve online software. The Reserve staff pre-screen projects for eligibility. Eligible projects are posted on the Reserve site with a status of "listed." The next step is verification by an independent, accredited verification body. Once completed, Reserve staff review the verification documentation, and if the project passes this final review process, it is labeled "registered" and CRTs are issued. Project developers submit a project by uploading the necessary forms and supporting documents to the Reserve online software. The Reserve staff pre-screen projects for eligibility. Eligible projects are posted on the Reserve site with a status of "listed." The next step is verification by an independent, accredited verification body. Once completed, Reserve staff review the verification documentation, and if the project passes this final review process, it is labeled "registered" and CRTs are issued.

Activity	Main achievements	Main challenges
Storage	• Identification of most suitable and cost-effective storage facilities • Optimization of storage through aggregation of waste • Development of electronic database to monitor waste movement and storage • Procedures for purity testing now in place	• How to close the gaps identified in the data bases particularly in ensuring the coordination of data between local and country-wide authorities.
Destruction	• Project stakeholders are introduced to concepts of carbon market project handling, documentation, etc • Finalization of criteria for selection of appropriate destruction facility • Development of procedures for the monitoring and verification of ODS destroyed	• Limited options for destruction facilities may incur higher transport and operational costs

30. In its report, UNIDO also indicated that, based on its experience, the guidelines established in decision 58/19 had a more direct impact during project design and preparation and less during project implementation. It was of the view that the guidelines focused more on the information and data requirement for the projects to be considered for approval, rather than on project implementation itself. UNIDO reported that the indirect ways by which the guidelines were useful in implementing the full projects, included the following:

(a) The establishment of a cost-effectiveness threshold encouraged countries and agencies to set a baseline by which project activities and components could be measured;

(b) In exploring synergies with other MEAs, UNIDO had taken into account activities and components, which may not have been identified without this specific mandate;

(c) Defining the financial set-up and sustainability of the project contributed to a more detailed design of these elements during project preparation; and

(d) Other elements of the guidelines served as a checklist by which UNIDO could ensure that the information is complete.

31. In summarizing the demonstration value of the projects being implemented, UNIDO indicated that three of the projects are exploring export of ODS waste for destruction, linking this with the carbon market to enable co-financing for future ODS destruction activities. Depending on the country, the carbon revenue will be used as follows:

(a) Mexico: development of a national waste management system and destruction activities;

(b) Nigeria: establishment of an appliance replacement project that will involve replacing the existing domestic refrigerators and air conditioners with more energy efficient ones; this project will be designed in such a way that it becomes self-sustainable within a short time; and

(c) Turkey: development of local destruction capacity and establishment of a sustainable and integrated business model for an efficient waste management system of ozone-depleting substances over 4 years.

32. The demonstration value of the project in China is summarized as follows:

(a) For each of the technologies applied, the project aimed to draw conclusions relevant to various aspects of the practical implementation of ODS waste disposal, which can be replicated in similar facilities throughout the country after the conclusion of the project;

(b) Comparison between different management and disposal strategies for CFC-11 contained in foams, based on cost-effectiveness, logistic aspects and technology-related issues;

(c) Development of a suitable sampling and chemical analysis protocol to determine the amount of CFC-11 destroyed by direct foam destruction; and

(d) Analysis of the impact of combining persistent organic pollutants (POPs) and CFCs destruction using the incremental costs associated to the latter, and technical aspects where potential synergies between both activities can be found.

World Bank

33. The World Bank received funds for project preparation for two pilot ODS disposal projects for Indonesia and the Philippines at the 57th meeting, as well as a global project to develop a strategy/methodology for ODS disposal at the 55th meeting. At the 61st meeting, the final report on the Study on Financing the Destruction of Unwanted ODS was submitted to the Executive Committee as an information paper (UNEP/OzL.Pro/ExCom/61/Inf.2). The study found that significant opportunity exists for destroying ODS through the voluntary market. It went on to identify whether there are markets for ODS destruction, how the Montreal Protocol institutions/infrastructure could be used for this and what are the challenges and gaps that would be faced by relying on the voluntary market. It concluded that while there is a potential market for ODS destruction the following challenges were identified:

(a) ODS are not covered by the voluntary market;

(b) Article 5 countries generally have very little volumes of ODS waste; and

(c) Countries have limited carbon finance capability.

34. The pilot demonstration projects where preparation funding had been approved (Indonesia and the Philippines) have not yet been submitted for consideration by the Executive Committee up to the current meeting. The World Bank did not provide a separate update on the status of these projects and its experience on how the guidelines had been used. It relied instead on the information already submitted as part of their annual progress and financial reporting to the Multilateral Fund, also to be considered at this meeting. In that report, it was indicated that the reasons for the continuing delay in the submission of the full proposal was the fact that the recruitment of a qualified consulting firm proved lengthy and complicated given specialized ozone and climate knowledge/expertise required for developing the project, and the low level of associated funding for the project preparation. The World Bank however indicated that a firm was engaged during the fourth quarter of 2012, and the business models for both countries are being prepared. Activities such as data collection, development of an inventory system for unwanted ODS and preparation of guidelines for collection, handling, packaging, transport, and procedure of final disposal consistent with existing protocols and criteria of the major voluntary carbon markets will be done during the first and third quarter of 2013.

35. It is to be noted that the project preparation funding for these two ODS disposal projects provided for the World Bank were approved prior to decision 58/19 hence their submission and subsequent approval were not subject to the rigorous information requirements needed by the guidelines. However,

since the full projects have not yet been submitted, these will be considered in line with the guidelines contained in decision 58/19 once received by the Secretariat.

Conclusions

36. The experience with the use of the interim guidelines for the preparation of pilot ODS disposal projects and in developing full demonstration projects has been positive. Based on the experiences shared by the implementing agencies both during the preparation of the project and during their implementation, the following conclusions may be drawn:

(a) The guidelines have enabled the approval of projects with significant demonstration value among a cross-section of Article 5 countries, including LVCs;

(b) The guidelines have had a direct impact on both project preparation by meeting information requirements required by the decision, and during implementation where its application allowed for the comprehensive coordination between the essential elements of ODS destruction identified during preparation to contribute to a successful completion of the project;

(c) The full demonstration projects approved by the Executive Committee are showing considerable progress in their implementation, and are meeting the needs for pilot projects on ODS disposal as requested by decision XXI/2 of the Twenty-first Meeting of the Parties;

(d) The approved projects have established a high potential for synergy between the Montreal Protocol and other environmental agreements on chemical management; and

(e) Based on their status of implementation, some of the pilot ODS disposal projects approved by the Executive Committee could serve as a model for other countries in leveraging co-financing for carbon credits through the voluntary market.

Secretariat's recommendation

37. In light of the information given above, the Secretariat recommends that the Executive Committee:

(a) Notes the report contained in document UNEP/OzL.Pro/ExCom/70/54 on the use of the interim guidelines for the funding of demonstration projects for the disposal of unwanted ODS as approved by decision 58/19; and

(b) Requests the Secretariat to continue using the interim guidelines and applying them to the remaining demonstration projects for the disposal of unwanted ODS due for submission no later than the 72nd meeting.

Annex I

Approvals for ODS disposal demonstration projects

Country	Region	Agency	Meeting	Funds approved (US$)	Project type
Approvals for Project preparation for ODS disposal demonstration projects					
Algeria	Africa	UNIDO	59	85,000	Project preparation
Brazil	LAC	UNDP	57	40,000	Project preparation
China	South Asia	UNIDO	59	85,000	Project preparation
Colombia	LAC	UNDP	59	40,000	Project preparation
Cuba	LAC	UNDP	59	40,000	Project preparation
Georgia	ECA	UNDP	64	30,000	Project preparation
Ghana	Africa	UNDP	57	30,000	Project preparation
India	South Asia	UNDP	61	80,000	Project preparation
Indonesia	SEAP	World Bank	57	50,000	Project preparation
Lebanon	West Asia	UNIDO	61	85,000	Project preparation
Mexico	LAC	UNIDO/World Bank	57	100,000	Project preparation
Nigeria	Africa	UNIDO	60	60,000	Project preparation
Philippines	SEAP	World Bank	57	50,000	Project preparation
Turkey	ECA	UNIDO	57	60,000	Project preparation
Regional: Europe and Central Asia	ECA	Czech Republic/UNIDO	65	70,000	Project preparation
Regional: Asia and the Pacific	ASP	Japan	54	30,000	Project preparation
Approvals for ODS disposal demonstration project implementation					***Approach used in the project***
China	South Asia	UNIDO/Japan	67	2,127,885	Domestic destruction with three components: (1) destruction of CFC-12 (2) destruction of CFC-11 (3) synergies between ODS and POPs destruction
Colombia	LAC	UNDP	66	1,195,000	Using existing domestic incineration facilities and ensure compliance with international standards through development of testing protocols
Cuba	LAC	UNDP	62	525,200	Retrofitting a cement kiln for destruction

Country	Region	Agency	Meeting	Funds approved (US$)	Project type
Approvals for ODS disposal demonstration project implementation					***Approach used in the project***
Georgia	ECA	UNDP	69	55,264	Pilot demonstration project on ODS waste management and disposal
Ghana	Africa	UNDP	63	198,000	Export for destruction
Nigeria	Africa	UNIDO	67	911,724	Export for destruction
Turkey	ECA	UNIDO	66	1,076,250	Export for destruction
Mexico	LAC	UNIDO/France	63	1,427,915	Export for destruction
Regional: Europe and Central Asia	ECA	UNEP/UNIDO	69	364,480	Demonstration of a regional strategy for ODS waste management and disposal
Approvals for technical assistance projects					
Global	GLO	World Bank	55	250,000	Development of strategy/methodology for ODS disposal
Region: African countries	Africa	France	68	80,000	Develop a regional strategy that will provide options for LVC countries in the African region to address non-reusable and unwanted ODS stockpiles
Nepal (TAS)	SA	UNEP	59	157,200	Use of small portable plasma machine or export for destruction
TOTAL				**9,303,918**	

Annex II

Decision 58/19

1. Following the report of the contact group, the Executive Committee decided:

   (a) To approve the following 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:

      (i) For each separate category of activities for ODS disposal, namely collection, transport, storage and destruction, the definitions are as set out in Annex VIII to the present report;

      (ii) The Multilateral Fund will fund a limited number of demonstration projects under the following conditions:

         a. No funding would be available for the collection of ODS, except as a contribution to the monitoring of the sources of the ODS for an already existing, separately funded, collection effort for CFCs;

         b. A limited number of demonstration projects for ODS disposal related to paragraph 2 of decision XX/7, covering aspects not yet covered by other demonstration projects, will be considered only at the 59th Meeting for project preparation funding;

         c. The funding would be limited to a maximum level of up to US $13.2/kg of ODS to be destroyed for non-low-volume-consuming countries, on the understanding that this would be based on expectation of high start-up costs for these new activities, and would not constitute a precedent. Should the project not foresee activities related to all of the following areas (transport, storage and destruction), this threshold would be adjusted accordingly;

         d. For the disposal of halon and for the disposal of carbon tetrachloride (CTC), funding would be provided for a maximum of one demonstration project each, provided the respective projects have an important demonstration value;

      (iii) Bilateral and implementing agencies are requested to report annually to the first meeting of the Executive Committee on progress and experiences gained in demonstration projects on disposal, commencing in the first year after project approval. These reports should cover the amounts of the different ODS collected or identified, transported, stored and destroyed, as well as financial, managerial and co-funding arrangements, and any other relevant issues;

      (iv) Bilateral and implementing agencies are requested, when submitting activities for funding that are related to the disposal of ODS, to provide:

a. In the case of requests for project preparation funding:

   i. 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;

   ii. An indication whether disposal programmes for chemicals related to other multilateral environmental agreements are presently ongoing in the country or planned for the near future, and whether synergies would be possible;

   iii. An estimate of the amount of each ODS that is meant to be handled within the project;

   iv. 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 at a very advanced and well-documented stage of being set up;

   v. For collection activities, information regarding existing or near-future, credible collection efforts and programmes that are at an advanced stage of being set up and to which activities under this project would relate;

   vi. For activities that focus at least partially on CTC or halon, an explanation of how this project might have an important demonstration value;

b. In the case of project submissions:

   i. Updated and more detailed information for all issues mentioned under project preparation funding contained in all sub-paragraphs of (iv) a. mentioned above;

   ii. A detailed description of the foreseen management and financial set-up; this should include details such as the total cost of the disposal activity including costs not covered by the Multilateral Fund, the sources of funding for covering these costs, description of the sustainability of the underlying business model, and an identification of time-critical elements of the implementation, which subsequently might be used to monitor progress;

   iii. A clear indication how the project will secure other sources of funding; these other sources of funding should be available, at least partially, before the end of 2011. In case of activities of the collection type, any other sources of funding necessary in line with sub-paragraph (iv) a. iv. above related to collection would need to be secured before the project is submitted to the Executive Committee;

   iv. A concept for monitoring the origin of recovered ODS for future destruction, with the objective of discouraging the declaration of virgin ODS as used ODS for destruction. This concept should include or at least allow for external verification of the amounts destroyed, and the

costs for its operation should be covered sustainably;

v. The project proposal should include valid assurances that the amount of ODS mentioned in the proposal will actually be destroyed, and the agencies should submit proof of destruction with the financial closure of the project;

vi. An exploration of other disposal options for the used ODS such as recycling and reuse opportunities;

(b) To consider at its 60th Meeting any decision taken by the Parties at their Twenty-first Meeting that might relate to these interim guidelines and definitions;

(c) To request the Fund Secretariat to provide, to the second Meeting of the Executive Committee in 2011, a report on the experience gained in the implementation of the disposal projects, using reports from bilateral and implementing agencies and other relevant sources of information; and

(d) To consider whether to review the interim guidelines and related definitions at the 64th Meeting in light of the experience gained and any additional information and guidance available at that time.

Annex III

REPORT ON IMPLEMENTATION PROCESS OF NEPAL ODS DISPOSAL PROJECT

(Prepared by UNEP)

BACKGROUND

In the year 2004, 74 ODP tons of CFCs were confiscated in Nepal. 8 MT of CFCs were in stocks at Birgunj, Nepal. In the 20th Meeting of Parties, Nepal requested guidance from Parties on continued use of these CFCs post 2010. In this context, Nepal proposed to consider options for destruction of this quantity of CFCs. If destroyed, it would also achieve twin benefits of compliance and Green House Gas (GHG) emission reduction; otherwise the ODS would slowly be released into the atmosphere from the cylinders in which they are stored.

Such a scenario in Nepal is a classic representative of a Low Volume Consumption Country (LVC) in the Asian and the Pacific region, where there is no guidance on how to treat such unwanted CFC stocks (collected or seized). Thereafter, based on the guidance of the Meeting of Parties to the Montreal Protocol on encouraging ODS destruction in Article 5 Parties, Multilateral Fund (MLF) approved a pilot project on destruction of Nepal ODS stock at its 57th meeting. United Nations Environment Program (UNEP) is spearheading the Nepal ODS Destruction Project as an important step to explore various options for destruction of small stocks in LVCs. The project is in its final stages of completion and it could provide us with a model for replication with other LVCs.

THE PROCESS: EXPERIENCE AND LEARNINGS FOR OTHER LVCs

Inventorisation of the ODS Stock

The seized ODS in cylinders were stocked in a single well-maintained warehouse in the Nepal-India border.

Inventorisation and effective maintenance of ODS stock is very critical as absence of this could result in accelerated and unintended emissions because of the following problems

- Storage is typically in form of 13.6 kg cylinders, which are difficult to manage;
- Average leakage rate from such cylinders is approximately 10-12% per annum especially in case of high ambient temperatures;
- If its government seized stock, various parties (Customs dept., Ozone office) are involved in maintenance of the stock, resulting in issues relating to co-ordination and storage facilities;

Testing of the ODS Stock

Quality analysis is also critical for to get precise information for obtaining approvals from appropriate authority to further process.

ODS testing infrastructure typically consists of the following:

- Gas Chromatograph (GC) or Gas Chromatograph – Mass spectrometer (GC-MS) could be used for testing – Nepal used this method

- If Gas Chromatograph (GC) is used, a pure sample of ODS and GC chart for specific ODS is required for calibration

Policy Review

Various government policies need to be analysed which can affect the outcome of the project. In the case of Nepal, the government has put a regulation to ban on exports of CFCs.

However, the most feasible option for destruction of Nepal stock was found to be to export ODS to US/Japan for destruction, therefore, discussions were held with the Department of Commerce and also Customs Department to seek exemption considering the peculiar nature and urgency for destruction. The process is long and complicated, diligent effort from both NOU and IA would be required.

Moreover, for getting an exemption, the destination country for the destruction of the stock was supposed to be clearly specified

Stakeholder Consultation

At the onset of the project, it was identified that various stakeholders would be involved and their keen participation is vital for successful implementation.

A stakeholder meeting was held at Kathmandu at the start to debrief various stakeholders on their role and requesting their co-operation

NoUs in other LVC's should also look at involving following stakeholders:

- Government departments like Department of Customs, Ministry of Commerce, Climate Change Focal Points
- Private Sector companies like Importers & retailers of RAC equipment, Transporters, freight forwarders, RAC technicians
- Industry Associations like manufacturers, retailers, Refrigeration & Air-conditioning Training Centre
- UNEP and international partners

Techno-economic analysis of the destruction technologies and the facilities

There were many options which Nepal could choose from among the destruction technologies and the destruction facilities, both within and outside the country.

All options both in and outside the country including the mobile destruction equipment, retrofitting local cement kiln, and export to neighbour countries for destruction or link the destruction with carbon market were evaluated with consideration of the capital cost when applicable, operational cost, the technically and economical accessibility of the technologies, the possible financial returns, and the stakeholder agreements etc. The evaluation concluded that only VCS Protocol was applicable in this scenario.

- Within the country, the possibilities included the cement kiln, a dedicated destruction unit and the mobile destruction systems, among which the mobile system proved best suited;
    - The cement kiln authorities were apprehensive of the by-products from the destruction activity, and did not agree to allow the modification of their facility for this activity;
    - The dedicated destruction facility would cost millions of dollars and thus was ruled out;

- The mobile destruction system could be brought in, and although the rate of destruction was low, this system proved to be both technologically and economically suited;

- For destruction outside the country, the major evaluation parameters included government regulations to import the gases for destruction, cost and rate of destruction, transportation costs and the carbon market returns among other:
  - Outside the country, the options included destruction in the US or in Saudi Arabia or in Indonesia or in Europe or in Japan
  - Destruction in Saudi Arabia and in Europe was also possible, but the returns from VCS was very low. Moreover in Europe, the cross-boundary movement of ODSs is not feasible. In Saudi Arabia, the cost of destruction was very high compared to the US in addition to very low returns from VCS. So both options were ruled out.
  - Destruction in Indonesia and Japan is also impossible, since the regulations in both countries have banned the import of ODSs, even for destruction;
  - Destruction in the US was technically feasible and was economical too, with possibilities of higher returns from the Carbon Action Reserve (CAR) protocol, facilitated by the government regulations, and was finally chosen over the others.

Selection of carbon market protocol

The selection of carbon protocol was governed by the choice of the destruction facility and its location. However a detailed study was conducted on various protocols and it was found that only VCS and CAR allow credits to be generated for ODS destruction.

VCS is applicable for destruction in any country in any facility, provided it meets all the necessary requirements. CAR is applicable only when the materials are destroyed in the US. Both of them are voluntary protocols which don't mandate ODS destruction, but the returns from the latter was found to be higher. Also CAR fitted into the destruction option chosen for Nepal.

Appointment of Project Developer

To assist the handle of the following activities, a project developer needs to be identified and contracted to:

- Coordination of the ODS containers shipment and receive approval for the import of ODS to US.
- Receive the ODS including customs clearance and ship the ODS to the identified destruction plant;
- Contract for the destruction and receive certification;
- Submission of project to CAR following the CAR protocol;
- Appointment of a third party verification body to conduct Project validation and site verifications;
- Receive carbon credit and market the carbon credit upon the project is "registered" by CAR after successful validation.
- Sale the carbon credit and share part of return with Nepal.

EOS Climate was contracted through UNOPS following the bidding procedure.

THE FLOWCHART OF THE PROJECT ACTIVITIES