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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-eighth Meeting
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DRAFT REPORT ON CRITERIA AND GUIDELINES FOR THE SELECTION OF ODS DISPOSAL PROJECTS (DECISION 57/6)

*The changes are shown in italics.

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Mandate

1. In decision 57/6 the Executive Committee requested the Secretariat to prepare a document containing criteria and guidelines for the selection of ODS disposal projects for the consideration of the Executive Committee at its 58th Meeting, taking into account decision XX/7 of the Twentieth Meeting of the Parties, and the contact group discussions on ODS disposal project selection held at the 57th Meeting.

2. Prior to the 57th Meeting of the Executive Committee, the Twentieth Meeting of the Parties adopted decision XX/7 regarding the environmentally-sound management of banks of ozone-depleting substances. In its second paragraph, the Parties had requested "the Executive Committee to consider as a matter of urgency commencing pilot projects that may cover the collection, transport, storage and destruction of ozone-depleting substances. As an initial priority, the Executive Committee might consider projects with a focus on assembled stocks of ozone-depleting substances with high net global warming potential, in a representative sample of regionally diverse Parties operating under paragraph 1 of Article 5." The Meeting of the Parties pointed out that it was understood that "this initial priority would not preclude the initiation of other types of pilot projects, including on halons and carbon tetrachloride, should these have an important demonstration value. In addition to protecting the ozone layer, these projects will seek to generate practical data and experience on management and financing modalities, achieve climate benefits, and would explore opportunities to leverage co-financing."

3. This document has been prepared in response to decision 57/6, taking into account decision XX/7 of the Meeting of the Parties and the discussions during the 57th Meeting of the Executive Committee.

Background

4. ODS are used in a broad range of applications. When the ODS no longer fulfil their purpose, or the equipment containing them reaches the end of its useful life, the ODS should be responsibly deposed of where technically and economically possible. Disposal in this context could lead either to destruction, or to recycling or reclamation.

5. The range of applications for ODS which can be considered for subsequent disposal include e.g. CFCs in refrigerators – both in the insulation foam as well as in the refrigeration cycle – CFCs in building insulation foams, seized ODS from illegal imports, CFC-containing residue from recycling, contaminated CFC refrigerant, CTC produced unintentionally as a by-product, halon fire extinguishers, and over-production of ODS which can no longer be placed on the market.

6. To operate a destruction facility, significant quantities of ODS need to be present in bulk to be fed into the process; such quantities would be in the order of tonnes of substance. However, many uses of ODS require only small amounts of ODS per application, and such ODS might be effectively trapped in the application, e.g. in an insulating foam. The decision of the Meeting of the Parties – pointing to collection, transport, storage and destruction - suggests the different steps needed to aggregate and subsequently destroy significant quantities. These steps translate into several different categories of activities in projects related to the disposal of ODS.

7. The Executive Committee has already approved funding for preparation of a number of demonstration projects for disposal of ODS; the distribution of the seven projects and the related estimates of agencies regarding their costs and impact are shown in the following table:

Country	Region	Agency	Total value of demonstration project (US $)	Total ODS (ODP tonnes)
Brazil	Latin America and the Caribbean	UNDP	753,000	75
Ghana	English-speaking Africa	UNDP	753,000	75
Indonesia	South East Asia and the Pacific	World Bank	0	60
Mexico	Latin America and the Caribbean	UNIDO	645,000	40
Philippines	South East Asia and the Pacific	World Bank	0	12
Turkey	Eastern Europe and Central Asia	UNIDO	538,000	14
Regional	Asia and the Pacific	Japan	200,000	Not available

8. Annex III in the report of the 57th Meeting (document UNEP/OzL.Pro/ExCom/57/69) contained both a list of ODS disposal projects removed from the business plans as well as explanations of those maintained in the business plans with respect to selection criteria.

Definitions and characterisation

9. For the purposes of this paper, "collection" will be defined as aggregating a *significant quantity* of ODS, in relatively uncontaminated liquid form, at a site usable for interim storage in suitable leak-tight containers/cylinders ready for transport. The Secretariat proposes to define the *significant quantity* of ODS to be aggregated under "collection" as the equivalent in terms of direct climate impact of 145 tonnes of CO_2. This is proposed on the basis of the mass of CFC-12 contained in a refrigerant cylinder of 13.6 kg (standard refrigerant container), multiplied by the GWP of CFC-12 of 10,720. The relation to climate change implied in this concept is based on decision XX/7 of the Meeting of the Parties which underlined the intention of achieving climate benefits. This translates into, e.g., 31.2 kg (metric) of CFC-11, 113.9 kg (metric) of halon 1211, 21.5 kg (metric) of halon 1301 or 105.7 kg (metric) of CTC. The definition of "Transport" will cover the aggregation of quantities required for destruction or economic long-distance transportation starting with quantities of no less than the equivalent of 145 tonnes of CO_2, the transportation itself, as well as arranging the necessary procedures. "Destruction" will cover the process from the arrival of bulk ODS at the facility to its physical destruction as defined in decisions IV/11, V/26, VII/35 and XIV/6,of the Meeting of the Parties. "Storage" will cover the storage of ODS in suitable containers at suitable locations beginning with quantities equivalent to 145 tonnes of CO_2 for the time required to arrange for suitable transport, destruction or recycling/reclamation.

10. In the following paragraphs, the Secretariat attempts to further illustrate the four categories of activities to make the requirements for each transparent. What activities are necessary and effective, and how they should be funded, is to be determined in each individual case.

Collection

11. Based on the above definition, "*Collection*" would include all efforts to extract ODS from an application or a product. In addition, for products that contain less ODS than specified as "significant", it would include aggregating the extracted ODS until the necessary quantity is reached. *Collection* would therefore cover, for example:

(a) The collection of refrigerators, their transport to a central disassembly or recycling site, and extracting the CFCs from the refrigerators, compressing and transferring them into a transport container;

(b) Similarly, it would cover the transport of foam, extraction of CFC-11 from it and transferring it into a suitable container; and

(c) It would also cover the collection of small halon cylinders and their refilling into transport containers, or the recovery of CFCs from a supermarket refrigeration system of 13.6 kg or more of CFC-12 content or a respective amount of other refrigerants with the same climate impact.

12. The effort necessary to collect ODS will depend on:

(a) The level of integration of ODS with the product, i.e. if the ODS can be recovered at the location of the product, or if the product needs to be transported to a central recovery facility; in the latter case, volume and weight of the product *vs.* the amount of recoverable ODS are also important factors;

(b) The geographical distribution of equipment containing ODS, and the amount of ODS contained in the equipment; and

(c) Its environmental impact, measured in ozone depletion potential (ODP) and greenhouse warming potential (GWP).

13. As defined here, *Collection* is the category of activity where the decisions are being made on whether the environmental impact of the ODS in the product surpasses the economical and/or ecological cost of its collection, *and whether specific approaches for collection would fit into the economics of a planned project or activity*. At the present point in time, ODS for some sub-sectors, e.g. building foams, are not collected systematically in any country because of economic and logistic considerations. In other cases, other considerations facilitate the collection of ODS, e.g. the need to collect and dispose of old refrigerators in the event of an energy-efficiency driven refrigerator replacement programme.

Transport

14. Based on the above definition for Collection, *Transport* would include the actual transportation of significant quantities, as defined above, in transport containers, both within a country as well as, where necessary, as transboundary transport. Furthermore, where applicable, necessary efforts to transfer ODS from containers for collection to potentially larger transport units, e.g. 13.6 kg cylinders of CFC-12 to 720 kg transport containers, and tests for substances contained for the purpose of labelling or to avoid undesired mixing will be needed. *Transport* would therefore cover, for example:

(a) The transportation of collected, contaminated refrigerant in cylinders from recovery/recycling centres in a country to a central location in the country for subsequent further transport;

(b) The transportation of halon 1301 in transport cylinders of 21.5 kg or above from building sites to destruction facilities; and

(c) Arranging of export/import and transit permits, where applicable consistent with the Basel convention, to prepare for transporting from a national storage site to a destruction facility in another country.

15. It should be mentioned in this regard that paragraph 6 of decision XX/7 specifically notes that "… any project implemented pursuant to the present decision when applicable should be done in conformity with national, regional, and/or international requirements, such as those mandated by the Basel Convention and Rotterdam Convention".

Destruction

16. Based on the definitions for Collection and Transport above, "*Destruction*" would cover preparation of ODS for destruction and the actual destruction itself, *using destruction technologies approved by the Meeting of the Parties and operating them taking into account the Code of Good Housekeeping as per the Annex III of the report of the Fifteenth Meeting of the Parties*. It would therefore cover, for example:

(a) The testing of ODS containers for *composition, determining the* exact content *and the* contaminants*. This could serve to identify impurities* in case of destruction facilities being sensitive to contamination, as well as necessary purification processes; *at the same time, this allows exact determination of the quantities of the different substances being destroyed, e.g. to serve the reporting needs under Article 7 of the Montreal Protocol, as well as other monitoring needs where exact quantification of substances may be of importance*;

(b) Destruction of CTC from by-production of other chloro-methanes on-line with the chloro-methane production process;

(c) *Minor changes to existing facilities*;

(d) Environmental assessments and application for permits, *including, where applicable and required, continuous monitoring of the environmental impact*; and

(e) Destruction of ODS and measurement of the effectiveness of destruction.

17. In the course of project review the Secretariat would need to pay particular attention to the assessment of the cost efficiency of destruction activities given that there appears to be a large amount of destruction capacity available at competitive prices. Agencies should therefore be encouraged to discuss related matters with the Secretariat early on during the project preparation phase to avoid a project design based on funding expectations which might not be seen as eligible once the project is assessed.

Storage

18. Based on the above definitions, "*Storage*" would include all requirements for proper storage such as e.g. suitable containers and storage sites, as well as the necessary supervision, storage permits, and environmental assessments where applicable.

Reuse

19. It should be noted that when ODS are moving from collection to destruction, it might be useful to assess at various stages in that process to what extent reuse of the ODS might be a better alternative to destruction. This could relate to, e.g., recovered halon that might be needed in essential applications in which it is difficult to replace (planes, ships), or refrigerants in recovery and recycling programmes where destruction of ODS might lead to undue retirement of refrigeration equipment due to the lack of refrigerant for servicing. However, decision XX/7 made clear that the Meeting of the Parties understood that such demonstration "[…] projects will seek to […] achieve climate benefits", which could be interpreted as physical destruction of ODS. The Executive Committee might wish to consider whether it wants to provide the flexibility to reuse collected substances.

Co-financing and the issue of income from ODS for destruction

20. A range of financing options has been explored by the Ozone Secretariat in its "Report on possible funding opportunities for the management and destruction of ozone-depleting substance banks" as a response to paragraphs 9 and 10 of decision XX/7. This report will be discussed by a "workshop on Management and Destruction of ODS banks and implications to Climate Change" provided for under that decision. The report contains a wealth of information on a variety of funding possibilities, as well as detailed background data. Given that this report will be discussed at the workshop, and that the report of the workshop will subsequently be discussed at the Open-ended Working Group meeting, it would be untimely for the Fund Secretariat to enter into an assessment of any funding possibilities external to the Multilateral Fund. Nevertheless, it should be noted here that there might be some income generated from the disposal of ODS. This could originate from the value of break-down products from destruction, these products being chiefly chlorine and fluorine containing substances. However, such income is expected to be at best, and depending on the substance, only slightly higher than the cost of operating the destruction plant.

21. Another source of income might be from carbon markets, as described in the above mentioned report from the Ozone Secretariat. There are, for example, possibilities at present to provide carbon credit incentives for ODS destruction through the Chicago Climate Exchange (CCX). The CCX would provide credits for ODS destruction projects undertaken on or after 1 January 2007, under certain rules and conditions. These rules demand that credit can be given only for ODS destruction not required by law, and for chemicals that have been subject to a phase-out. This effectively establishes a value for ODS destined for destruction, depending on the price achieved for the credits, and the GWP of the ODS. For CFCs in particular the value they represent as ODS for disposal might be higher than the original market price when these ODS were in use.

22. While this cost differential could be used to finance collection efforts, transport, storage and destruction, it could under some circumstances generate a net profit for easily reachable ODS (such as bulk CFCs from previous over-production e.g. in India and in the Bolivarian Republic of Venezuela) without benefit to destruction projects in general. This could give rise to a greater problem in the potential for illegal production of ODS for the purpose of destroying and selling the resulting carbon credits. The incentive for illegal production is significant since the value of, in particular, CFC-12 for destruction is above the previous price for CFCs, which in itself, already supported illegal production. Furthermore such proposed activity does not require a distribution network, since the ODS will be disposed of in bulk. Also, requirements for the purity of the product can be limited since it is not dedicated for any specific use and any contamination could be explained as resulting from use and collection.

23. Consequently, depending on the future of carbon funding for ODS destruction, it might be meaningful to consider establishing a tracking system for recovered ODS, leading to some kind of certification scheme. This would deter illegal production and add credibility to genuinely recovered

ODS. It would also potentially lead to an increase in the value of related emission rights in the voluntary carbon markets. There are a number of possibilities for operating such a system. One possibility would be a joint undertaking by implementing agencies and the Secretariat, whereby the implementing agencies would collect and verify information and the Secretariat would scrutinize and assess the related reports. This might be put into practice in a way similar to existing procedures for verification reports.

Criteria and guidelines for the selection of ODS disposal projects

24. Decision XX/7 of the Meeting of the Parties spells out a number of criteria for ODS disposal projects. These should lead to the destruction of ODS, generate practical data and experience on management and financing modalities, achieve climate benefits, and explore opportunities to leverage co-financing.

25. The guidance by the Meeting of the Parties suggests a focus an assembled stocks of ODS that would exclude at this point in time any activities for collection of ODS. The Secretariat suggests a slightly different approach, where participation in collection activities would be possible provided these are largely funded from sources not related to the demonstration project on disposal. This would allow for activities such as monitoring of a collection programme funded separately.

26. At the 57th Meeting, the Executive Committee included in the business plan an additional six demonstration projects for ODS disposal. Two of these foresaw that the actual project would be implemented without the need for further funds from the Multilateral Fund beyond project preparation. In the other four cases, the amount of funding estimated for the implementation of the actual project was provided. The weighted, average cost effectiveness of the four projects where funding requests are being planned is US $13.2/kg. The Secretariat proposes to establish a threshold at that level for funding to be provided from the Multilateral Fund for ODS disposal demonstration projects from countries that are not low volume consuming. This threshold would assume funding of transport, storage and destruction in one project. Projects which address less than all three categories of activities would receive a lower level of funding. Potential funding needs cannot presently be addressed for lack of project experience

27. The Parties requested in decision XX/7 that demonstration projects would be funded on the basis of a representative sample of regionally diverse Parties. The demonstration projects included in the business plan are to be implemented in all continents where Article 5 countries are located and include also island states. These demonstration projects encompass countries with CFC baseline consumption between 35.8 ODP tonnes and 10,525 ODP tonnes, with a population between 24 million and 240 million, and with a GDP per capita between US $1,350 and US $13,850. The Executive Committee may wish to consider whether the diversity requested by the Parties in decision XX/7 has been addressed, and if so to consider the possibility of adding a paragraph to the proposed decision to disallow further ODS disposal demonstration projects to be included in business plans.

28. The Parties expressed their desire for these demonstration projects to generate practical data and experience on management and financing modalities, and to explore opportunities for leveraging co-financing. Since projects, in particular with co-funding, tend to have long implementation times, the Secretariat suggests that reporting on progress should be on an annual basis commencing with the first Meeting of the Executive Committee in the year following project approval. It is the view of the Secretariat that only such a reporting requirement will ensure the desired collection of data in an acceptable time frame. Consequently, the proposed decision includes reporting requirements that allow the Executive Committee to benefit in a timely manner from the experience collected by the agencies. Timing and early action is also significant here in order to prevent further emissions from banks of ODS due to poor storage practices.

29. Finally, the Secretariat proposes a number of components in the decision to ensure that funding is only provided for projects where sufficient ODS will be available to enable its implementation. These

conditions target, in particular, projects for the collection of ODS requesting that the bulk of the collection effort is undertaken with resources outside the demonstration project. Also, since the Parties pointed out that the purpose of the projects should be the destruction of ODS, the decision proposes measures which are meant to ensure that the destruction itself is covered in the project proposal.

Recommendation

30. The Executive Committee might wish to consider:

(a) For each separate category of activities for ODS disposal, namely collection, transport, storage and destruction, the definitions set out in document UNEP/OzL.Pro/ExCom/58/19;

(b) Funding a limited number of demonstration projects under the following conditions:

(i) The funding would be limited to a maximum level of US $13.2/kg of ODS to be destroyed for non-LVC countries. Should the project not foresee activities related to all three areas (transport, storage and destruction), this threshold would be adjusted accordingly;

(ii) No funding would be available for demonstration projects for the collection of ODS except as a contribution to an already existing, separately funded, collection effort for CFCs, and only if the existing project also includes components related to transport;

(iii) Funding would be provided for a maximum of one demonstration project for the disposal of halon and one for the disposal of CTC, provided the respective projects have an important demonstration value;

(iv) That any further disposal demonstration project would be excluded from the Fund's business plan until project proposals, in line with the criteria in this decision, have been submitted for at least 80 per cent of those projects presently included in the business plans;

(c) Requesting bilateral and implementing agencies to report on progress and experiences gained in demonstration projects on disposal annually to the first meeting of the Executive Committee, 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;

(d) Requesting bilateral and implementing agencies, when submitting activities for funding which are related to the disposal of ODS, to provide:

(i) In the case of requests for project preparation funding:

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;

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

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;

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;

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

(ii) In the case of project submissions:

a. Updated information as required for project preparation funding, with more elaborated and firm data;

b. A detailed description of the foreseen management and financial set-up;

c. A clear indication how the project will secure co-funding; this co-funding should be available, at least partially, before the end of 2011. In case of activities of the collection type, any co-funding necessary in line with (b) (iii) above would need to be secured before the project is submitted to the Executive Committee;

d. For projects that do not cover the actual cost of destruction, the project proposal should include valid assurances that the amount of ODS mentioned in the proposal will be actually destroyed, and that agencies would submit proof of destruction with the financial closure of the project.

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