



**United Nations
Environment
Programme**



Distr.
LIMITED

UNEP/OzL.Pro/ExCom/26/17
16 October 1998

ORIGINAL: ENGLISH

Executive Committee of
the Multilateral Fund for the
Implementation of the Montreal Protocol
Twenty-sixth Meeting
Cairo, 11-13 November 1998

OVERVIEW OF ISSUES IDENTIFIED DURING PROJECT REVIEW

Projects and activities presented to the 26th Meeting

Submissions by Agencies and Bilateral Partners

1. The total value of the projects and activities received by the Fund Secretariat from implementing and bilateral agencies for consideration at the 26th Meeting, is US \$89,496,242 (including agency support cost, where applicable). The total is comprised of:

- (a) Bilateral cooperation:
 - Thirty-nine project proposals were received from Canada, France, and Germany, with a total value of US \$6,502,488 as submitted;
- (b) Amendments to 1998 Work Programmes:
 - requests for amendments to 1998 Work Programmes have been submitted by UNDP and UNEP. The proposals include US \$1,609,274 for institutional strengthening projects and US \$525,450 for project preparation and US \$166,404 other activities;
- (c) UNEP's 1999 Work Programme:
 - UNEP has requested US \$2,952,752 for recurring costs in its core programme;
- (d) Advances against the 1999 Work Programmes of UNDP UNIDO and the World Bank
 - UNDP, UNIDO and the World Bank have each requested an advance of 15 percent of the anticipated costs of their 1999 Work Programmes with a total value of US \$687,040;
- (e) Investment projects:
 - 141 proposals for investment projects (including demonstration and investment projects for methyl bromide) were submitted to the 26th Meeting by UNDP, UNIDO and the World Bank with a total value, as submitted, of US \$77,052,834.

Secretariat's review of proposed projects and activities

2. The review of project proposals by the Fund Secretariat has resulted in the following:

- (a) Bilateral projects:
 - Thirty bilateral projects with a total value of US \$3,006,687 have been recommended for blanket approval;

- Three bilateral projects with a total value of US \$377,410 have been proposed for individual consideration;
- Six bilateral projects with a value of US \$520,661 have been withdrawn;
- (b) Activities included in amendments to 1998 Work Programmes:
 - Thirteen institutional strengthening projects with a total value of US \$1,405,196 have been recommended for blanket approval, 1 project valued at US \$90,400 is pending;
 - Six non-investment activities and project preparation activities with a total value of US \$160,573 have been recommended for blanket approval;
 - Six activities with a total value of US \$193,964 have been withdrawn.
- (c) 1999 UNEP Work Programme:
 - The 1999 Work Programme for UNEP has been recommended for blanket approval at US \$2,813,700, after withdrawal of four activities with a total value of US \$333,350.
- (d) 1999 Work Programme advances:
 - 1999 Work Programme advances for UNDP, UNIDO and the World Bank totalling US \$687,040 have been recommended for blanket approval;
- (e) Investment Projects (including methyl bromide):
 - 107 project proposals with a total value of US \$29,595,407 have been recommended for blanket approval;
 - Nineteen project proposals with a total value of US \$34,639,514 have been listed for individual consideration by the Sub-Committee on Project Review (see Annex I);
 - 15 project proposals with a total value of US \$8,591,259 have been withdrawn or deferred.

Status of the Fund

3. At the time of preparation of this paper, Multilateral Fund resources available for committal amount to some US \$25 million. If the recommendations of the Secretariat for blanket approval are taken up and projects and activities for individual consideration were to be approved with their values as submitted, there would be a shortfall of around US \$44 million.

Issues arising from Project Review

Determining ODS consumption in project proposals in the foam and refrigeration sectors

4. A significantly greater proportion of project proposals in the foam and refrigeration sectors are now requesting funding at the limit established by the cost-effectiveness threshold for the sector. In these circumstances, the funding limit for the project is directly proportional to the consumption of the enterprise. An increase of 1 ODP tonne in the claimed consumption would increase the level of grant by the following amounts for such projects, in the relevant sub-sectors, as follows:

Domestic refrigeration:	US \$13,760 (plus up to 35 percent for hydrocarbon safety)
Commercial refrigeration:	US \$15,210
Rigid PU foam	US \$7,830
Integral skin foam	US \$16, 860

5. This trend is likely to continue. Implementing agencies have acknowledged that verification of consumption can present problems. Therefore, there may be a need to pay increased attention to accurately determining the consumption of an enterprise and to providing corroboration of the consumption in project proposals submitted to the Executive Committee for approval.

6. A practice, which is already being used in some projects, especially in the refrigeration sector, may need to be formalised. In addition to reporting consumption since the ODS which is purchased by the enterprise (the most common procedure in previous projects), the ODS which is consumed in the products being produced can frequently be determined. For example, in the case of the production of refrigerators, the weight of foam used can be determined with some precision for each model of refrigerator and the total consumption calculated according to the annual production of the enterprise (as used in the calculation of incremental operating costs or savings). While this degree of precision may not be possible in all sectors, the principle can still be applied. The Executive Committee might consider requiring that in all relevant sectors, consumption be determined according to the quantities of ODS used in the relevant production process.

Eligibility of ODS consumption arising from losses during production

7. The above methodology may establish that there are losses of ODS during the production of foam. That is, the quantities of ODS purchased by the enterprise may be greater than the quantities consumed in the production process. This is best described through consideration of certain foam projects submitted to the 26th Meeting, as follows.

8. Ten projects in the foam sector submitted to the Twenty-sixth Meeting of the Executive Committee include in the consumption claimed for the enterprise an amount of CFC-11 corresponding to “evaporation losses.” This CFC-11 is not contained in the foam manufactured

by the enterprise but is lost through a variety of handling and mixing inefficiencies. The percentage of evaporation losses claimed in the 10 projects varies from 10 to 40 percent. Seven of the projects claim losses of 30 percent.

9. Evaporation losses have been mentioned either explicitly or implicitly in a number of previous projects going back to 1995, but the treatment has varied from agency to agency and according to the views of the consultant who prepared the project. This is the first time that evaporation losses have been claimed consistently. Nine of the ten projects have been submitted by UNDP.

10. Where evaporation losses have been claimed, incremental operating costs have been reduced to account for the savings in the replacement blowing agent (e.g. HCFC-141b, for which evaporation losses are not claimed). The issue is that when a project reaches the funding limit of the relevant threshold for the sub-sector, the eligible grant will be increased if the consumption increases. Thus, the Multilateral Fund will be providing compensation to enterprises, at the level of the cost-effectiveness threshold, for the additional CFC-11 claimed as being lost through bad practice. This potentially rewards activities, which have a negative impact upon the ozone layer, and penalises enterprises, which adopt conservation measures.

11. Concurrently, a much higher proportion of projects in the rigid and integral-skin foam sectors are now being submitted at the threshold funding level.

12. Foam of a reasonable standard cannot be made if the proportion of CFC-11 varies beyond about 5 percent. Thus, if substantial evaporative losses occur, the formulation needed to produce the foam will not be achieved unless additional CFC-11 is added, to restore the correct proportions. There are no explicit indications in the relevant projects about this additional activity.

13. Any substantial evaporative losses represent real costs for the enterprise. For example, for an enterprise purchasing 25 ODP tonnes of CFC-11 per year to make foam, an evaporative loss of 30 percent would represent a cost of over US \$1000 per month. The payback period for improvements to prevent any such losses, such as air conditioning of the mixing room, would appear to be less than six months. It is difficult to understand how such measures would not already have been taken by the enterprise. This example also raises the issue of whether a loss which can be easily and economically remedied should be eligible for reimbursement from the fund, potentially at between US \$8,000 and US \$17,000 per tonne of CFC-11 lost. As a further example, one project presented to this meeting includes an evaporative loss of 40 percent within a total claimed consumption of only 2 ODP tonnes, in which circumstances the viability of the enterprise itself appears questionable.

14. UNDP is of the view that as the CFC-11 is purchased by the enterprise and escapes to the atmosphere during the production of foam, it constitutes a part of the enterprise's phase-out and thus should be counted in the consumption for the purposes of funding.

15. The Executive Committee is invited to consider whether CFC-11 evaporation losses should be included in the stated consumption of an enterprise for the purposes of determining the eligible level of compensation to be provided.

16. The thirteen projects involving evaporation losses have been referred for individual consideration. The incremental costs for all the projects can be determined by the Fund Secretariat and the relevant implementing agency after the Executive Committee has taken a view on the issue.

Proposed increases in consumption of foam enterprise in Tanzania

17. A submission was received from UNDP for the funding of LCD technology in an enterprise in Tanzania manufacturing flexible foam. The consumption of the enterprise was stated to be 39.5 ODP tonnes. In accordance with Decision 24/58 UNDP was advised that compensation could not be provided for LCD technology because the consumption was less than 50 ODP tonnes. The enterprise was eligible to receive compensation for methylene chloride technology. The Secretariat agreed with UNDP that the Executive Committee's agreement might be sought for the enterprise to put any funds so approved towards the acquisition of LCD technology should the enterprise wish to do so.

18. UNDP later advised that, despite its efforts to persuade the enterprise, the enterprise wished to withdraw the project because its market was expanding. The enterprise envisaged that its consumption would soon exceed 50 ODP tonnes, at which time it would resubmit the project with LCD technology, which would then be eligible for funding.

19. The Executive Committee might wish to consider the priority to be accorded to this and any other future projects in which it is evident that the enterprises have delayed project preparation to benefit from anticipated increases in ODS consumption.

ANNEX I**PROJECTS FOR INDIVIDUAL CONSIDERATION**

Evaluation sheets containing the comments of the Fund Secretariat on the issues involved are included in the country project document.

Part 1: Foam projects involving evaporation losses:

<u>Country:</u>	<u>Project Title:</u>	<u>Agency:</u>
Indonesia	Phaseout of CFC-11 by conversion to HCFC-141b in the manufacture of insulated boxes at P.T. Polidaya Fiberindo Indah	UNDP
Indonesia	Phaseout of CFC-11 by conversion to HCFC-141b in the manufacture of rigid polyurethane foam (panels) at Irama Sejuk Santosa	UNDP
Indonesia	Phaseout of CFC-11 by conversion to HCFC-141b in the manufacture of rigid polyurethane foam at Indoklima Sarana Engineering	UNDP
Indonesia	Phaseout of CFC-11 by conversion to HCFC-141b in the manufacture of insulated panels at P.T. Panendra Sejati	UNDP
Indonesia	Phaseout of CFC-11 by conversion to water-based systems (FMF) and HCFC-141b (ISF) in the manufacture of polyurethane foam for automotive and furniture applications at P.T. Yoska Prima Inti	UNDP
Indonesia	Phaseout of CFC-11 by conversion to HCFC-141b in the manufacture of rigid polyurethane foam at Mentari Adi Fayar	UNDP
Pakistan	Elimination of CFC-11 through conversion to water-based technology in the manufacture of flexible molded polyurethane foam at Saleem Automotive Industries Ltd.	IBRD
Thailand	Conversion from CFC-11 to water based and HCFC-141b technology in the manufacture of polyurethane foam (flexible molded, integral skin) at World Plaster/Europlan Furniture Co.	UNDP
Thailand	Conversion from CFC-11 to water based and HCFC-141b technology in the manufacture of polyurethane foam at J.S. Industry Co. Ltd.	UNDP
Thailand	Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Sahakij Comos L.P.	UNDP

Part 2: Other projects

<u>Country:</u>	<u>Project Title:</u>	<u>Agency:</u>
Chile	Montreal Protocol implementation program, phase II, second tranche	IBRD
China	MAC ODS phaseout sector plan	IBRD
China	Halon sector 1999 annual programme	IBRD
Cuba	Phasing out methyl bromide in the tobacco sector	UNIDO
India	Elimination of CFCs in the manufacture of domestic refrigerators at Whirlpool of India Ltd.	IBRD
Malawi	Phaseout of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Robry Ltd.	UNDP
Tanzania	Phaseout of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at H.K. Foam Ltd.	UNDP
Tanzania	Phaseout of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Pan Africa Enterprises Ltd.	UNDP
Thailand	Program to reduce the usage of CFC-11 and CFC-12 in chiller servicing by replacing CFC-based chillers with HFC-134a and HCFC-123 chillers at Electricity Generating Authority (EGAT)	IBRD