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EXECUTIVE COMMITTEE  
OF THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Twenty-seventh Meeting  
Montreal, 24-26 March 1999

**OVERVIEW OF ISSUES IDENTIFIED DURING PROJECT REVIEW**

## **Projects and activities presented to the 27<sup>th</sup> Meeting**

### Submissions by Agencies and Bilateral Partners

1. The total value of requests associated with projects and activities (including those on the reserve list) received by the Fund Secretariat from implementing and bilateral agencies for consideration at the 27th Meeting, is \$ 45,659,094. The total is comprised of:

(a) Bilateral co-operation:

- 26 project proposals and 1 proposal for change of technology were received from Canada, France and Germany, with a total value of \$ 3,589,394 as submitted;

(b) 1999 Work Programmes:

- 1999 Work Programmes have been submitted by UNDP, UNIDO and the World Bank. The proposals include \$ 1,733,899 for institutional strengthening projects and \$ 4,837,530 for project preparation and \$ 220,864 for other activities;

(c) UNEP 1999 Work Programme amendments:

- UNEP has requested \$ 3,310,640 including \$ 465,436 for institutional strengthening projects, \$ 2,410,154 for RMPs and training programmes and \$ 435,050 for other activities;

(d) Investment projects:

- 70 proposals for investment projects (including demonstration projects for methyl bromide) were submitted to the 27th Meeting by UNDP, UNIDO and the World Bank with a total value, as submitted, of \$ 31,973,767.

### 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:

- 18 bilateral projects with a total value of \$ 2,286,937 have been recommended for blanket approval, including one project for change in technology;
- 8 bilateral projects with a value of \$ 572,045 have been withdrawn;

(b) 1999 Work Programmes:

- 4 institutional strengthening projects with a total value of \$ 648,210 have been recommended for blanket approval;
- 82 non-investment activities and project preparation activities with a total value of \$ 2,892,184 have been recommended for blanket approval;
- 25 activities with a total value of \$ 3,042,849 have been withdrawn.

(c) Amendments to UNEP's 1999 Work Programme:

- 26 activities with a total value of \$ 1,601,982 have been recommended for blanket approval, including 2 institutional strengthening projects with a total value of \$ 164,652.
- 7 activities with a total value of \$ 379,556 have been recommended for individual consideration;
- 8 activities with a total value of \$ 485,284 have been withdrawn or deferred.

(d) Investment Projects (including methyl bromide):

- 45 project proposals with a total value of \$ 11,991,309 have been recommended for blanket approval;
- 11 project proposals with a total value of \$ 11,784,849 have been listed for individual consideration by the Sub-Committee on Project Review (see Annex I);
- 4 project proposals with a total value of \$ 1,427,078 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 \$ 6.6 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 \$ 21 million.

### **Issues arising from Project Review**

#### The sterilants sub-sector

4. A project for conversion of an enterprise in Argentina which provides contract sterilisation services has been submitted to the 27<sup>th</sup> meeting. This is the first project in the

sterilants sub-sector. The cost-effectiveness as submitted is US \$25.44/kg and the funding sought is US \$526,260. One project involving sterilisation, for Hindustan Syringe in India, was approved at the 13<sup>th</sup> Meeting, but it was submitted as a solvent project with a cost effectiveness of US \$14.80/kg

5. As yet, there is no cost effectiveness threshold for sterilants' projects. They have little in common with solvents: the ozone depleting substance used is CFC-12. Some of the replacement technologies, including Asisthos, involve high capital costs and additional safety costs, since the sterilant gas, ethylene oxide, is highly flammable and toxic. However they can realise operating savings since the replacement gas is cheaper than the original. Drop-in replacements using HCFCs are available however these have very high operating costs, which in the case of this project, exceed the capital costs of the non-ODS technology.

6. Since the enterprise is providing a service, the consumption of CFC-12 is determined by the level of business achieved by the company. In this case, figures for the quantity of products sterilised and the corresponding consumption of CFC-12 are provided for two calendar years prior to the project. Consumption is also provided for the 12 months immediately prior to project preparation and this figure is used as enterprise consumption in the project proposal. The Committee might consider whether for enterprises providing a service, in which consumption may be variable, enterprise consumption needs to be based on a longer time period than 12 months.

7. Similarly, there is no guideline for using any duration for incremental operating costs other than the mandated 4 years. The project as proposed has incremental operating savings of some US \$40,000 per year and the World Bank has proposed that the savings be calculated for a period of 1 ½ years. In the absence of any substantial experience with sterilants projects, the Executive Committee might consider whether it wishes to adopt any period for the calculation of incremental operating costs or savings other than the four year limit.

8. The Committee might also consider whether it wishes to establish any interim cost-effectiveness threshold for this sub-sector, or alternatively, to continue to consider projects on a case by case basis.

#### Projects involving HCFCs

9. As requested in Decision 26/26, the Secretariat has scrutinised the explanations provided by implementing agencies for projects in which HCFC technology is proposed. After consultation with the relevant implementing agencies, the Secretariat has included the explanations and information provided by them in the project evaluation sheets prepared for this meeting. The projects have been recommended for blanket approval. A list of the projects is attached as Annex I to this paper.

#### The impact of projects on the remaining consumption in a sector

10. During the review process the Secretariat observed that sector background information in almost all projects was either out of date or contained inaccuracies. In some cases baseline information for the years 1995 to 1997 was not available. With consumption limits now in place

for Annex A Group I substances, the Executive Committee may consider that it needs to be informed as to the impact of a proposed project on the remaining consumption in the relevant sector. The Committee might consider requesting implementing agencies and countries submitting projects to ensure that accurate sectoral data derived from a country's 1995-97 baseline consumption is provided in all project proposals, together with an analysis of how approved projects in the sector, and the project being proposed, will contribute to country's ability to meet both its own phase-out programme and its Montreal Protocol obligations.

#### Resubmission of project for Whirlpool, India

11. In accordance with Decision 26/32, the project to convert the manufacture of domestic refrigerators by Whirlpool, India is resubmitted for the consideration of the Executive Committee. The World Bank has provided additional information on the reasons for the choice of technology and on production levels. It is annexed to the Secretariat's evaluation sheet and can be found on pages 20 to 22 of document UNEP/OzL.Pro/ExCom/27/25. Following a decision by the Executive Committee on the technology choice and on the figures for production levels the incremental operating costs will be calculated, to enable the Committee to approve the project should it wish to do so.

#### Retroactive compressor projects

12. Retroactive funding is being sought by UNIDO for conversion of a compressor factory in China. The equipment needed for production of HFC-134a compressors was added during 1998. Parallel production of these compressors commenced in late 1998, together with continued production of CFC-12 compressors. At this stage it appears that no conversion has taken place since there is no indication that the production of CFC-12 compressors will cease or will be reduced. The Committee might consider whether in this and any future similar cases, the proposal for retroactive funding should not be submitted until the factory had converted all its production to non-CFC compressors and destroyed the CFC-12-specific equipment. The project submitted by UNIDO has been referred for individual consideration.

#### Administrative costs in retroactive projects

13. Implementing agencies are funded to prepare retroactive projects through project preparation funding. There is no implementation activity to be undertaken in retroactive projects, because they have already been implemented by the enterprise. The Executive Committee might consider whether in these circumstances there is any need for support costs to be paid additional to the funds provided for project preparation.

#### Classification of low-volume-consuming countries (LVCs)

14. The consumption of methyl bromide reported under Article 7 of the Protocol is now include in the overall consumption of a country. This has changed the profile of the group of Article 5 countries with consumption of less than 360 ODP tonnes per year, that is, LVCs. The Executive Committee might confirm that the consumption figure to be taken in determining the status of an Article 5 country as an LVC should be the total consumption reported under Article 7 including the consumption of methyl bromide.

### Customs training

15. All the RMPs submitted to the 27th meeting contain a proposal to provide training for customs officers at an early stage in implementation of the RMP. Customs training is of limited use prior to the adoption of the appropriate legislative measures such as import controls. Proposals are now being received for additional training programmes in other circumstances where training has already been funded by the Multilateral Fund but was too early to be applied. To prevent this occurring with customs training, the Executive Committee might consider whether, like the recovery and recycling projects, no funds should be expended on customs training until the appropriate policy and legislative support measures are in place. The Committee might also reaffirm its action taken at the 25<sup>th</sup> Meeting to exclude chemicals identification equipment from customs training projects.

### Project for Change of Technology

16. As required by Decision 22/69, advice is provided that the Government of France submitted a request for change of technology for a project in the flexible slabstock foam sub-sector in the Lebanon. The project, for an enterprise named F.A.P., was approved at the 20<sup>th</sup> Meeting. The forced cooling technology in the original proposal has been changed to methylene chloride technology. The request complied with all the provisions of Decision 22/69 and was authorised by the Fund Secretariat after consultation with the Government of France.

### **Projects for individual consideration**

17. 11 investment projects have been referred for individual consideration. They are listed in Annex II to this paper.

**ANNEX I****Projects involving HCFC technology**

| <i>Country:</i> | <i>Sector:</i> | <i>Project Title:</i>  | <i>Agency:</i> |
|-----------------|----------------|--|----------------|
| Argentina       | FOA            | Phaseout of CFC-11 by conversion to HCFC-141b technology in the manufacture of rigid polyurethane foam in panels for thermal insulation at Arneg Raffo                         | World Bank     |
| Brazil          | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane boxfoam at Conter  | UNDP           |
| Brazil          | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Farage   | UNDP           |
| Brazil          | FOA            | Phaseout of CFC-11 by conversion to HCFC-141b technology in the manufacture of integral skin foams at Spandy   | UNDP           |
| Brazil          | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Posmovil   | UNDP           |
| Brazil          | REF            | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b technology (foam) and HFC-134a technology (refrigerant) in the manufacture of refrigerated truck trailers at Artica   | UNDP           |
| China           | FOA            | Phaseout of CFC-11 in the manufacture of rigid polyurethane foam through the use of HCFC-141b at Shanghai Haiou Electric Appliance General Factory                             | World Bank     |
| China           | FOA            | Phaseout of CFC-11 in the manufacture of rigid polyurethane foam through the use of HCFC-141b at Qingdao Changlong Commercial Machinery Co. Ltd.                               | World Bank     |
| China           | FOA            | Phaseout of CFC-11 in the manufacture of rigid polyurethane foam through the use of HCFC-141b at Zhenjiang Commercial Refrigeration Equipment General Plant                    | World Bank     |
| Costa Rica      | REF            | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial Refrigeration equipment at Refrigeracion Hermanos Gonzalez | UNDP           |
| Costa Rica      | REF            | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial refrigeration equipment at Refrigeracion Omega S.A.        | UNDP           |
| Costa Rica      | REF            | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial refrigeration equipment at Quena S.A                       | UNDP           |
| Costa Rica      | REF            | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial refrigeration equipment at Refrigeracion Wimmer Hnos, S.A. | UNDP           |
| India           | FOA            | Conversion from CFC-11 to HCFC-131b technology in the manufacture of rigid polyurethane foam insulation products at Baba Insulator   | UNDP           |
| India           | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam insulated thermoware at Bansal Plastic Industries                                 | UNDP           |
| India           | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam insulated thermoware at Ganga Thermoware  | UNDP           |
| India           | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam insitu and spray insulation at P.K. Construction Co.                              | UNDP           |
| India           | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam insulation at R.S. Insulators   | UNDP           |
| India           | FOA            | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam insulated thermoware at Shree Nath Plastics                                       | UNDP           |
| India           | REF            | Elimination of CFCs in the manufacture of domestic refrigerators at Whirlpool of India Ltd   | World Bank     |

| <u>Country:</u> | <u>Sector</u> | <u>Project Title:</u>  | <u>Agency:</u> |
|-----------------|---------------|--|----------------|
| Malaysia        | FOA           | Replacement of CFC-11 foam blowing agent by HCFC-141b in the manufacture of insulation panels at Yong Tuck Refrigerators Trading Co                              | UNIDO          |
| Thailand        | FOA           | Conversion from CFC-11 to water blown and HCFC-141b technology in the manufacture of rigid foam (spray) at Bangkok Integrated Trading Co                         | World Bank     |
| Thailand        | FOA           | Conversion from CFC-11 to water based and HCFC-141b technology in the manufacture of integral skin polyurethane foam and rigid moulded foam at Jennings Co. Ltd. | World Bank     |
| Thailand        | FOA           | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at P.E. Containers Supply Co. Ltd                                   | World Bank     |
| Thailand        | FOA           | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Plastmate Industry   | World Bank     |
| Thailand        | FOA           | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Siam M.P. Co. Ltd  | World Bank     |
| Thailand        | FOA           | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Siam Steel International PLC                                     | World Bank     |
| Thailand        | FOA           | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid foam at Willich Sales & Contracting Co. Ltd.  | World Bank     |
| Venezuela       | FOA           | Phasing out CFC-11 with HCFC-141b in the production of rigid PU panels at Fricava  | UNIDO          |

## ANNEX II

List of Projects for Individual Consideration

| <u>Country:</u> | <u>Sector</u> | <u>Project Title:</u>  | <u>Document No.</u>                                 | <u>Agency:</u> |
|-----------------|---------------|--|---|----------------|
| Argentina       | STE           | Elimination of CFCs in sterilization via ETO at Asisthos SRL   | UNEP/OzL.Pro/ExCom/27/21<br>(Pages 5-7)             | World Bank     |
| China           | REF           | Phasing out ODS at the Beijing Embraco Snowflake Compressor Co. Ltd. (BESCO) domestic refrigeration compressor factory   | UNEP/OzL.Pro/ExCom/27/23<br>(Pages 12-14)           | UNIDO          |
| Costa Rica      | REF           | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial Refrigeration equipment at Refrigeracion Hermanos Gonzalez       | UNEP/OzL.Pro/ExCom/27/24<br>(Pages 6-9 and Annex I) | UNDP           |
| Costa Rica      | REF           | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial refrigeration equipment at Refrigeracion Omega S.A.              | UNEP/OzL.Pro/ExCom/27/24<br>(Pages 6-9 and Annex I) | UNDP           |
| Costa Rica      | REF           | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial refrigeration equipment at Quena S.A                             | UNEP/OzL.Pro/ExCom/27/24<br>(Pages 6-9 and Annex I) | UNDP           |
| Costa Rica      | REF           | Phaseout of CFC-11 and CFC-12 by conversion to HCFC-141b and HFC-134a respectively in the manufacture of commercial refrigeration equipment at Refrigeracion Wimmer Hnos, S.A.       | UNEP/OzL.Pro/ExCom/27/24<br>(Pages 6-9 and Annex I) | UNDP           |
| India           | REF           | Elimination of CFCs in the manufacture of domestic refrigerators at Whirlpool of India Ltd   | UNEP/OzL.Pro/ExCom/27/25<br>(Pages 18-22)           | World Bank     |
| Iran            | REF           | Replacement of CFC-12 as refrigerant by HFC-134a at Iran Compressor Manufacturing Co. (ICMC)   | UNEP/OzL.Pro/ExCom/27/27<br>(Pages 2-4)             | UNIDO          |
| Thailand        | FOA           | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at P.E. Containers Supply Co. Ltd   | UNEP/OzL.Pro/ExCom/27/32<br>(Pages 2-6)             | World Bank     |
| Thailand        | FOA           | Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Siam M.P. Co. Ltd  | UNEP/OzL.Pro/ExCom/27/32<br>(Pages 2-6)             | World Bank     |
| Yugoslavia      | REF           | Replacement of CFC-11 with cyclopentane foam blowing agent and CFC-12 with HFC-134a -134a refrigerant in the manufacture of domestic refrigerators/freezers at Obod Electroindustjia | UNEP/OzL.Pro/ExCom/27/35<br>(Pages 2-4)             | UNIDO          |