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**REPORT OF THE TWELFTH MEETING OF THE SUB-COMMITTEE ON  
PROJECT REVIEW**

Introduction

The Sub-Committee on Project Review of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol met at the Conference Centre at Hotel du Parc, Montreal, on 10 and 11 November 1997.

The meeting was attended by representatives of India, Peru, Senegal, Switzerland (Chairman), the United Kingdom and the United States of America, as well as by representatives of the implementing agencies and the Ozone Secretariat.

The meeting was also attended by representatives of Australia, China and Japan as observers, and by an observer from Greenpeace International.

**AGENDA ITEM 1: OPENING OF THE MEETING**

1. The meeting was opened by the Chairman of the Sub-Committee, Mr. Blaise Horisberger (Switzerland), at 10 a.m. on Monday, 10 November 1997.

**AGENDA ITEM 2: ADOPTION OF THE AGENDA**

2. The Sub-Committee adopted the following agenda on the basis of the provisional annotated agenda contained in document UNEP/OzL.Pro/ExCom/SCPR/12/1 and Corr.1.

1. Opening of the meeting.
2. Adoption of the annotated agenda.
3. Introductory remarks by the Chief Officer on the Sub-Committee's programme of work, on submissions to the Twenty-third Meeting of the Executive Committee and on resource availability.
4. Organization of work.
5. Halon Sector Phase-out Plan for China.
6. Draft 1998 business plans of the implementing agencies.
7. Overview of issues identified during project review.
8. Guidelines for the preparation of Refrigerant Management Plans (RMPs).
9. Policy papers requested by the Executive Committee including one which affects projects submitted to the Twenty-third Meeting.
10. Projects and activities recommended for blanket approval by the Twenty-third Meeting of the Executive Committee.
11. Projects for individual consideration.
12. Work Programmes and Work Programme Amendments.
13. Resource allocation.
14. Carry-over of implementing agencies' 1997 shares.
15. Other matters.

16. Closure of the meeting.

**AGENDA ITEM 3: INTRODUCTORY REMARKS BY THE CHIEF OFFICER ON THE SUB-COMMITTEE'S PROGRAMME OF WORK, ON SUBMISSIONS TO THE TWENTY-THIRD MEETING OF THE EXECUTIVE COMMITTEE AND ON RESOURCE AVAILABILITY.**

3. The Chief Officer said that the Executive Committee had decided that, in 1997, the planning level for the submission of projects and activities for funding from the Fund would be US \$220 million. Submissions to the current meeting gave effect to that requirement and would come close to completing the 1997 business plan in terms of the value of projects and activities submitted. The Executive Committee's decision to allocate the entire carry-over from the 1994-96 replenishment to the 1997 programme, in order to assist Article 5 countries to meet the 1999 freeze, had been instrumental in achieving such a high level of project preparation activity in 1997.

4. All submissions had been reviewed and the great majority recommended for blanket approval. Some 16 projects had been referred for individual consideration, several of which had common issues that were raised in the overview paper (UNEP/OzL.Pro/ExCom/23/17/Rev.1 and Add.1). Of the projects under discussion at the time documentation was sent out, only seven projects - as listed in Annex II to the overview paper - remained pending. The issues with those projects were essentially technical in nature, and their outcome had a bearing on project eligibility and cost. In each case, the Fund Secretariat was suggesting that the project be deferred, so that the technical issues could be resolved.

5. With regard to resource availability, projects and activities on which the Sub-Committee might make positive recommendations totaled some US \$85 to 95 million, to which would be added any provision recommended for the halon sector phase-out plan for China. Contributions to the Multilateral Fund currently stood at some US \$62 million, and the Secretariat was proposing that projects in excess of currently available resources be cleared for approval, with funding to be authorized by the Fund Secretariat as soon as it became available.

**AGENDA ITEM 4: ORGANIZATION OF WORK.**

6. Following the suggestion of the Chairman, the Sub-Committee decided on the order in which it would discuss the items of the agenda.

**AGENDA ITEM 5: HALON SECTOR PHASE-OUT PLAN FOR CHINA.**

7. The Sub-Committee considered this subject on the basis of document UNEP/OzL.Pro/ExCom/23/11, which consisted of three parts: Sector Plan for Halon Phase-out in China (revised); Structure of an Agreement Regarding the Implementation of a Sector Phase-out of Halon in China; and The Halon Sector; 1998 Annual Programme (funding request).

8. The representative of the World Bank introduced the document and reported on the audit carried out of the production facilities in China, as well as on the action taken by the Bank to meet the request by the Sub-Committee at its 11th meeting (UNEP/OzL.Pro/ExCom/23/10, paragraph 7 (e) and (f)) to account for various items in the technical audit and in the finalization of the sectoral plan. The Bank had circulated the Executive Summary of the final report of the audit to the Executive Committee members and the full report was also available on request.

9. The Sub-Committee then proceeded to an examination of document UNEP/OzL.Pro/ExCom/23/11.

**Part I - Sector Plan for Halon Phase-out in China**

10. The Sub-Committee agreed that, once the Executive Committee had approved a plan for halon phase-out in China and agreed on how that programme would be funded, China and the implementing agency, acting together as implementers, should be allowed a great deal of flexibility in how the funds were disbursed.

**Part II - Structure of an Agreement Regarding the Implementation of a Sector Phase-out of Halon in China**

11. There was general acceptance of the World Bank's view that, rather than an "agreement between the Executive Committee and the Government of China" as such, it would be sufficient for the conditions of approval to be set out in a decision of the Executive Committee.

**Part III- The Halon Sector - 1998 Annual Programme**

12. The representative of the World Bank said that Part III followed from the overall programme and was the type of document that would be used each year in requesting funding in accordance with the approved programme.

13. The Sub-Committee agreed that any programme that was developed must focus on China's consumption as well as its production of halons.

14. Following the preliminary exchange of views, the Sub-Committee agreed that an informal contact group would finalize a text that the Sub-Committee could use as a basis for its recommendation to the Executive Committee.

15. The contact group produced a paper containing a draft decision (UNEP/OzL.Pro/ExCom/SCPR/CRP.1/Rev.5). The text of that paper is attached to the present report as Annex I. The Sub-Committee recommended that the Executive Committee adopt a decision on “conditions of approval” along the lines contained in that paper.

**AGENDA ITEM 6. DRAFT 1998 BUSINESS PLANS OF THE IMPLEMENTING AGENCIES.**

16. It was agreed that the discussion of this agenda item would be referred to the Executive Committee.

**AGENDA ITEM 7: OVERVIEW OF ISSUES IDENTIFIED DURING PROJECT REVIEW (UNEP/OzL.Pro/ExCom/23/17/Rev.1)**

**(a) Installation of additional ODS capacity after an enterprise had received Multilateral Fund funding.**

17. Installation of additional ODS capacity after an enterprise had received Multilateral Fund funding. The Secretariat drew attention to paragraph 4 of the overview paper (UNEP/OzL.Pro/ExCom/23/17/Rev.1) which noted that proposals were being received for enterprises which had already had earlier projects approved. Following a discussion, the Sub-Committee decided not to recommend that the Executive Committee make a general ruling, but to recommend that, in the specific case which had raised the issue, the enterprise which had installed additional 50% reduced-CFC production capacity after receiving funding for an initial project applying the same technology was eligible for funding to convert the additional capacity to non-CFC technology.

18. In response to an inquiry from the Sub-Committee, the Secretariat stated that there were six other projects in which a conversion to 50% reduced-CFC had been approved, and which potentially might be resubmitted for conversion to non-CFC technology.

**(b) Review of the boundary between domestic and commercial refrigeration sub-sectors**

19. The Secretariat drew attention to paragraphs 5-9 of the overview paper which recalled Decision 22/26, on guidelines for incremental operating costs for compressors, which stated that “the guidelines would apply independently to domestic and commercial projects” and that “further work may need to be done to accurately define domestic and commercial refrigeration”. In that context, it was necessary to differentiate between the “domestic” and “commercial” refrigeration sub-sectors, as well as between domestic and commercial applications of compressors.

20. Following the discussion, the Sub-Committee recommended that, in order to facilitate the operationalization of Decision 22/26, the Executive Committee request the Fund Secretariat, together with the implementing agencies, (i) to take into account the discussion on the item at the current meeting and to produce a document to differentiate between the domestic and commercial refrigeration sub-sectors, as well as between domestic and commercial applications of compressors, for submission to the Executive Committee, and (ii) to agree to a specific methodology for determining what incremental cost will be used for defining the eligible costs, as required by Decision 22/26, paragraph (d)(iv).

**(c) Compressor prices**

21. The Secretariat drew attention to paragraph 10 of the overview paper, pointing out that the incremental cost of the compressor itself represented a significant factor in the calculation of incremental operating costs.

22. Following the discussion, the Sub-Committee decided to recommend that the Executive Committee request the Secretariat to prepare a document on a methodology for establishing compressor prices, taking into account the views expressed by the members of the Sub-Committee, for submission to the Executive Committee.

**(d) Ownership by enterprises in countries reclassified as Article-5**

23. The Secretariat drew attention to paragraphs 11 and 12 of the overview paper, pointing to two projects submitted to the present meeting for funding which involved companies in China, partially owned by enterprises based in Singapore, which had been reclassified as operating under Article 5. Recalling that Decision 20/5 stated that projects involving transnationals owned by enterprises in countries that had been reclassified as Article-5 countries should be considered on a case-by-case basis, taking into account paragraph (e) of decision VI/5 of the Parties, the Secretariat sought guidance on whether project costs should be discounted for ownership by enterprises and/or interests which were not recognized transnationals, but which were also based in countries reclassified as Article 5.

24. Following an exchange of views on the subject, the Sub-Committee decided to recommend to the Executive Committee that the projects in question should be recommended for funding on the basis of the proportion of local ownership.

**(e) MAC projects where CFC-filling is the only activity.**

25. The Secretariat drew attention to paragraph 13 of the overview paper which recalled Decision 17/60, in which the Executive Committee had decided, *inter alia* that project proposals in the MAC sector should emanate from the manufacturers of MAC units themselves, not the manufacturers of component parts. The Secretariat also explained that a project proposal had been submitted for companies that receive fully assembled MAC systems and charge them with

CFCs. Although the project had been withdrawn, the issues which it raised might constitute precedents for future ones.

26. The Sub-Committee noted that it did not appear that the project in question fell under the heading of servicing of MAC units, for which operating costs had not been provided in the past. The member of the Sub-Committee who had originally submitted the proposal said that he would discuss the issues with the Secretariat with a view to resubmitting it at a later date.

#### **(f) Methyl bromide demonstration projects**

27. The Secretariat drew attention to paragraphs 14 and 15 of the overview paper, recalling that the Executive Committee at its Twentieth Meeting had adopted interim guidelines on methyl bromide projects and allocated US \$100,000 for preparation of project proposals on alternatives to methyl bromide. Since the salaries for consultants could range from 51 to 75 percent of the total project costs, the Secretariat was seeking guidance as to whether the implementing agencies concerned should continue with the preparation of similar demonstration projects with the same cost structure.

28. After a discussion of the issues involved, the Sub-Committee recommended that, owing to the low number of projects involved so far, it would be premature to attempt to establish general procedures for methyl bromide demonstration projects, in particular with regard to salary costs, and that the implementing agencies should prepare further projects similar to those so far approved, but using, where possible, more local experts with the objective of enhancing local expertise and reducing costs.

#### **AGENDA ITEM 8: GUIDELINES FOR THE PREPARATION OF REFRIGERANT MANAGEMENT PLANS (RMPs).**

29. The representative of UNEP/IE introduced document UNEP/OzL.Pro/ExCom/23/52, which contained draft guidelines for the preparation of refrigerant management plans (RMPs) elaborated in accordance with Decision 22/23.

30. Following an exchange of views, the Sub-Committee recommended that the Executive Committee note that the focus of guidelines for refrigerant management plans was on low-volume-consuming countries (LVCs), but that those guidelines were sufficiently flexible to allow them to be used by larger countries.

31. The Sub-Committee decided to recommend that, on the above basis, the guidelines for refrigerant management plans be approved, subject to the insertion of a new section before Section 3 - Principles and Steps in Formulating RMPs - reading as follows:

**x. OVERALL OBJECTIVE**

The overall objective of a Refrigerant Management Plan is to develop and plan a strategy that will manage the use and phase-out of virgin CFC refrigerants for servicing refrigeration and air-conditioning equipment.”

32. One representative noted that countries, when developing RMPs, should seriously consider the advantage of also taking into account how to manage the use of HCFC refrigerants, with the aim of preparing the ground for the final elimination of the use of virgin HCFC refrigerants, in line with the Montreal Protocol requirements.

33. On the general question of refrigerant recovery and recycling projects, the Sub-Committee agreed to recommend to the Executive Committee that paragraph (a) of Decision 22/23 should be amended to read:

“That future refrigerant recovery and recycling projects should be prepared within the context of a refrigerant management plan or of an equivalent strategy of the country concerned, but that small demonstration projects designed to inform a larger country could be considered.”

**AGENDA ITEM 9: POLICY PAPERS REQUESTED BY THE EXECUTIVE COMMITTEE INCLUDING ONE WHICH AFFECTS 9 PROJECTS SUBMITTED TO THE TWENTY-THIRD MEETING.**

**Baseline equipment**

34. The Secretariat drew attention to document UNEP/OzL.Pro/ExCom/23/53, which discussed issues of baseline equipment in enterprises, in particular the impact which the condition of the baseline equipment could have on the eligible incremental costs of conversion projects, and on their cost-effectiveness levels. Proposals for the use of the baseline concept were contained in paragraphs 23 and 24 of the document.

35. The Sub-Committee agreed to recommend to the Executive Committee that it postpone consideration on the issue of baseline equipment until its Twenty-fifth Meeting, noting that informal consultations between members of the Sub-Committee could take place before then. It was also agreed that the Secretariat would endeavour to provide concrete examples of projects in which the baseline concept had been applied.

**Safety-related costs of hydrocarbon technology**

36. The Secretariat drew attention to document UNEP/OzL.Pro/ExCom/23/54, recalling that in its Decision 22/76, the Executive Committee had requested the Sub-Committee and the Secretariat to deal urgently with the question of safety-related costs of hydrocarbon technology

so that certain related projects could go forward. Recommendations for dealing with safety-related costs were contained in paragraphs 12 and 13 of the document.

37. Considering that paragraph 12 (b) simply restated what was the current practice in project approval process, the Sub-Committee decided to recommend that the Executive Committee adopt the Recommendations contained in paragraphs 12 (a) and 12 (c).

Draft guidelines for cost-effectiveness thresholds in the tobacco sector

38. The Secretariat draw attention to document UNEP/OzL.Pro/ExCom/23/55, recalling that in its Decision 21/8, the Executive Committee had decided to request the Secretariat and the implementing agencies to consider new guidelines for cost-effectiveness thresholds in the tobacco sector. On the basis of the data presented in the document, the Secretariat was proposing a new threshold of US \$10/kg.

39. The representative of UNIDO expressed its views on the subject and provided further technical clarification leading to different results with regard to the calculation of the cost-effectiveness threshold figure. After consideration of the issues, the Sub-Committee recommended that at the present time the equipment used for CO<sub>2</sub>-based tobacco fluffing was currently so expensive that the Executive Committee should not be considering tobacco-fluffing projects in the foreseeable future.

Draft guidelines for liquid carbon dioxide technology in foam projects

40. Due to the late issue of the document on this subject (UNEP/OzL.Pro/23/66), the Sub-Committee decided to defer consideration on the item until the Twenty-fourth Meeting.

AGENDA ITEM 10: PROJECTS AND ACTIVITIES RECOMMENDED FOR BLANKET APPROVAL BY THE TWENTY-THIRD MEETING OF THE EXECUTIVE COMMITTEE.

41. The Sub-Committee recommended that the projects and activities listed in Annex II to the present report should be approved for funding by the Executive Committee at its Twenty-third Meeting, subject to the conditions appearing in the Secretariat's recommendations in the project evaluation sheets and to the following conditions for specific projects:

- (a) Bahamas: Refrigerant management plan : Implementation of a national programme for recovery and recycling of refrigerant (UNDP). The project was approved taking into account that the accompanying measures necessary for successful implementation were already or would be in place before implementation began and that the project had been prepared on the basis of in-depth discussions with the national authorities and trade associations.

- (b) China: Elimination of ODS used in the production lines at Irico (Caihong) Colour Picture Tube Factory (UNDP). It was agreed that approval of this project should be deferred until a later date, as it required commitment of a significant amount of funding for phase-out of ODS over a four-year period, funding which the Sub-Committee considered could be better used at present for projects contributing directly to attainment of the 1999 freeze.
- (c) India: Elimination of CFCs in the manufacture of flexible cold-cured molded PU foam at K. J. Polymers P. Ltd. and at Siddhi Polymer P. Ltd.; and in the manufacture of flexible molded cold-cured and integral skin PU foam at Venus Auto P. Ltd.; and in the manufacture of cold-cured molded and integral skin at Shri Krishna Polyurethane Industries P. Ltd. It was agreed that a final recommendation would need to remain pending, until advice from India had been received.

42. In addition to its consideration of projects submitted for blanket approval at the current meeting, the Sub-Committee agreed to recommend to the Executive Committee:

- (a) That it request the Fund Secretariat to produce a paper containing figures on and an analysis of what projects were being submitted for funding using HCFC technologies, to see whether there existed any trend towards or away from HCFC use in specific sectors, particularly the foam sector;
- (b) That it request the Secretariat to incorporate the following elements in the project evaluation sheets and, in the case of (i) below, in the list of projects and activities presented to the Committee for approval:
  - (i) information on the conversion technology to be used;
  - (ii) a comprehensive outline of the reasons for selection of the HCFC technology, if used; and, where possible,
  - (iii) an indication of how long an enterprise intended to use a transitional HCFC technology.

43. Following a discussion, and noting the need for a project proposal to provide the best possible information on how the project contributed to attaining the 1999 freeze, the Sub-Committee also agreed to recommend to the Executive Committee:

- (a) That, in order to allow members to have confidence in the data contained in projects put forward for funding by the implementing agencies, it stress the critical need for those agencies to assume responsibility for the accuracy of the data they provided in such project proposals;

- (b) That, with regard to proposals for renewal of institutional strengthening projects, in line with a previous decision of the Executive Committee, the proposal should contain a history of what the ozone unit had done since its inception, together with a plan for its future activities, and the renewal requests should be forwarded to the Executive Committee for its consideration.
- (c) That the Executive Committee reinforce the need for compliance with Decision 22/63 regarding the conditions for project approval when counterpart funding was involved.

#### AGENDA ITEM 11: PROJECTS FOR INDIVIDUAL CONSIDERATION.

44. The Sub-Committee took up for individual consideration the projects listed in Annex 1 to document UNEP/OzL.Pro/ExCom/23/17/Rev.1 and 14 flexible polyurethane foam projects using LCD technology listed in document UNEP/OzL.Pro/ExCom/23/66, Annex II.

##### Lebanon: Bilateral request: Conversion of refrigeration industrial facilities in Lebanon - Total sector phase-out (UNEP/OzL.Pro/ExCom/23/18)

45. The Sub-Committee agreed to recommend approval of this project, at a reduced level of funding which met the parameters of Decision 19/32 on terminal umbrella projects, and on the understanding that France and Lebanon could still implement the project at the allowable level.

46. The Sub-Committee further agreed to recommend that the Executive Committee review at a later meeting action to be taken with respect to Decision 19/32, which had been adopted for a trial period of 18 months, which period had now expired.

##### Cameroon: Phasing out of CFC-11 at Sonopol (UNEP/OzL.Pro/ExCom/23/26)

##### Cameroon: Phasing out CFC-11 at Scimpos (UNEP/OzL.Pro/ExCom/23/26)

47. The Sub-Committee agreed to recommend approval of the above two projects, contingent upon the ability of UNIDO to certify the ODS consumption of the enterprises and that the enterprises converted back to using CFCs before 25 July 1995.

##### 14 flexible polyurethane foam projects using LCD technology

48. Noting that these 14 projects - as well as those listed in paragraph 49 above - would make use of liquid carbon dioxide technology, and that a decision on the issue of guidelines for the use of such technology in foam projects had been deferred to the Twenty-fourth Meeting, the Sub-Committee agreed to recommend that the 14 projects be approved, but that no further

projects utilizing that technology be submitted for approval before the Executive Committee had approved the applicable guidelines.

China: Elimination of ODS (CFC-113) used in the production line at Fujian Putian Vikay Electronics Co. Ltd (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

49. The project was recommended for funding at the level corresponding to the 70 per cent local ownership.

China: Conversion of refrigerator manufacture to HFC-134a refrigerant and cyclopentane foam blowing agent at Henan Xinfei Electric Co. Ltd. (UNEP/OzL.Pro/ExCom/23/27)

50. The project was recommended for funding on the basis of costs which took into account the expanded level of production using 50 per cent CFC reduced foam, and on the basis of funding only the local ownership component.

China: Revision of technical standards for non ODS products at Hefei General Machinery Research Institute (GMRI) (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

China: Licensing and Quality Control at Hefei General Machinery Research Institute (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

China: Conversion of test equipment at GMRI Hefei (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

China: Technology transfer and support to projects on phase-out of CFCs in Chinese industrial & commercial refrigeration industry at Hefei General Machinery Research Institute (HGMRI) (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

51. The Sub-Committee agreed to recommend approval of the above four projects at a total combined level of funding of US \$692,400 including US \$422,400 for optical measuring equipment.

China: Conversion of CFC-12 MACs condenser to HFC-134a at Hubei Jingsha Electric Group (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

China: and machining line to HFC-134a at Mudanjiang Automotive Air Conditioning Factory (MDAFC) (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

China: Conversion of CFC-12 compressor assembly line to HFC-134a Huada Zexel Automotive Air Conditioning Ltd. (UNEP/OzL.Pro/ExCom/23/27 and Corr.1)

52. Action on these projects was deferred, with the World Bank, Secretariat and China being requested to re-examine them in the light of Decision 17/6 and taking into account the views

expressed during the present discussion, with a view to submitting the projects again to the Twenty-fourth Meeting.

Guyana: Phasing out ODS at Guyana Refrigerator Ltd., Guyana (GRL) (UNEP/OzL.Pro/ExCom/23/31 and Corr.1)

53. The representative of the Secretariat presented document UNEP/OzL.Pro/23/31 and Corr.1 describing a project in Guyana. He explained that the cost-effectiveness figure was far higher than the threshold for the sub-sector. Guyana was a LVC, and the project represented a sectoral phase-out.

54. The Sub-Committee decided to recommend to the Executive Committee that the project should be approved.

Iran: Phasing out ODS at Iran Compressor Manufacturing Company (ICMC) (UNEP/OzL.Pro/ExCom/23/34 and Corr.1)

55. The representative of the Secretariat introduced document UNEP/OzL.Pro/23/34, describing a project in Iran. He explained that the methodology for implementation of Decision 22/26 which was necessary to determine the eligible incremental costs of the project was not yet in place. The Sub-Committee decided to recommend to the Executive Committee that consideration of the project should be deferred to the next Executive Committee Meeting.

Thailand: Building chiller replacement program to reduce the usage of CFC-11 and CFC-12 in chiller servicing at Electricity Generating Authority of Thailand (EGAT) (UNEP/OzL.Pro/ExCom/23/46 and Corr.1)

56. The representative of the Secretariat introduced document UNEP/OzL.Pro/23/46 and Corr.1, describing a project in Thailand. He explained that the project involved replacement of chillers by new ones which were so energy-efficient that the investment would be recouped within very few years. He also explained that the World Bank was preparing a paper on concessional loans.

57. The Sub-Committee noted that important issues of this nature should be dealt with through consideration of the policy first, and decided to recommend to the Executive Committee that:

- (a) the World Bank be requested to consider how innovative funding could be applied to this or a similar project; and
- (b) that any project along these lines should be considered in the context of the paper on concessional loans currently being prepared by the World Bank.

Turkey: Conversion to non-CFC foam blowing agents in the production of polyurethane (PU) insulation panels, spray/in situ foam and one component foams at Izopoli Yapi Elementari Taahhuet Sanayii ve Ticaret Ltd. Sti. (UNEP/OzL.Pro/ExCom/23/49)

58. The representative of the Secretariat introduced document UNEP/OzL.Pro/23/49, describing a project in Turkey. He explained that the project involved the funding of production capacity which had been installed to replace facilities destroyed in a serious fire.

59. The Sub-Committee decided to recommend to the Executive Committee that the implementing agency should do further research into the extent of the fire damage and the insurance payout and should resubmit the project only if it could establish the conditions necessary to determine eligible incremental costs and that no additional CFC capacity had been added subsequent to July 1995.

Projects not yet resolved

60. The representative of the Secretariat introduced document UNEP/OzL.Pro/23/17/Rev.1/Add.1, listing a number of projects which were still under discussion between the Secretariat and the World Bank and which involved technical issues but no policy issues.

61. The Sub-Committee decided to recommend to the Executive Committee that consideration of the projects should be deferred in order to permit the technical issues to be resolved.

AGENDA ITEM 12: WORK PROGRAMMES AND WORK PROGRAMME AMENDMENTS.

UNIDO 1998 (Work Programme Advance)

62. The representative of UNIDO introduced document UNEP/OzL.Pro/ExCom/23/21, saying that UNIDO was requesting approval from the Executive Committee for an advance on its 1998 work programme that would enable it to continue its programme of project development until its work programme was approved by the Executive Committee at its Twenty-fourth Meeting in 1998.

63. The Sub-Committee agreed to recommend to the Executive Committee approval of UNIDO's request in the amount of US \$200,000 and US \$26,000 for agency fees. In so doing, the Sub-Committee noted that there was a possibility of overlap between certain projects being undertaken by UNIDO vis-à-vis projects being undertaken by UNDP, UNEP and the World Bank, and requested UNIDO to defer disbursing funds for such projects until the possibility of overlap had been cleared.

UNDP

64. The representative of UNDP presented document UNEP/OzL.Pro/ExCom/23/19, containing UNDP's work programme amendments and explained that all the items described in the document involved either non-investment projects or extensions to institutional strengthening, and that all of them had been recommended by the Secretariat for approval.

65. The Sub-Committee decided to recommend to the Executive Committee that all of UNDP's work programme amendments should be approved.

66. The Sub-Committee also decided to recommend to the Executive Committee that an amount equivalent to 20 per cent of the project preparation funding indicated in their 1998 business plans should be made available to UNDP and to the World Bank for project preparation purposes.

67. The Sub-Committee also stressed the importance which it attached to close coordination among the implementing agencies in the preparatory stages in order to avoid duplication.

UNEP

68. The representative of UNEP introduced document UNEP/OzL.Pro/ExCom/23/20, containing UNEP's 1998 work programme. He explained that the main focus of activities in 1998 would be on assisting countries to meet the 1999 freeze. He also said that the country programme for Libya had been withdrawn owing to the United Nations sanctions imposed on that country. The refrigerant management plan for Algeria had also been withdrawn, as that was being handled by UNIDO.

69. After a discussion of the work programme, the Sub-Committee decided to recommend to the Executive Committee that it approved the amended UNEP work programme for 1998. The work programme, as amended, is contained in Annex III to the present report.

**AGENDA ITEM 13: RESOURCE ALLOCATION.**

70. The Chief Officer said that available resources in the Fund currently totaled \$62 million and that approvals of projects and activities for funding recommended by the Sub-Committee totaled \$100 million. The Sub-Committee decided to recommend that the Executive Committee use the funds currently available to allocate money to the most cost-effective projects first and request the Fund Secretariat to instruct the Treasurer to transfer money to the remainder of the projects as soon as the balance became available.

**AGENDA ITEM 14: CARRY OVER OF IMPLEMENTING AGENCIES' 1997 SHARES.**

71. The Sub-Committee agreed to recommend to the Executive Committee that it authorize implementing agencies to submit to the Twenty-fourth Meeting project proposals emanating from their 1997 business plans with funding requests amounting to the unused portion of their 1997 shares.

**AGENDA ITEM 15: OTHER MATTERS.**

72. No other matters were raised for discussion.

**AGENDA ITEM 16: CLOSURE OF THE MEETING**

73. The Chairman declared the meeting closed at 7:30 p.m. on Tuesday, 11 November 1997.

## Annex III

## UNEP 1998 WORK PROGRAMME

## RECURRING ACTIVITIES

## CLEARING HOUSE

## INFORMATION EXCHANGE

• Collect prioritized sectoral data from worldwide sources	112,000
• Update the OAIC diskette version	66,000
• Disseminate awareness materials, technical and policy information	340,0000
• Provide direct query-response service	80,000
• Publish the <i>OzonAction</i> newsletter and special supplements	347,000
• Deliver the <i>OzonAction</i> newsletter and other information through World Wide Web home page site	25,000
• Maintain contact data base of experts and mailing list for <i>OzonAction</i> programme publications	42,000
• Provide International Halon Bank Management Information Clearinghouse services	89,000
	<b>SUB-TOTAL</b>
	<b><u>1,101,000</u></b>

## NETWORKING

• Asia Regional Networks (SEAP and East Asia)	209,000
• Latin America Region Network (LAC South, LAC Central, LAC Caribbean)	399,000
• Africa Region Network (French-speaking, English-speaking)	431,000
• West Asian Region Network	115,000
	<b>SUB-TOTAL</b>
	<b><u>1,154,000</u></b>

## TOTAL FOR RECURRING ACTIVITIES

2,255,000

## NON-RECURRING ACTIVITIES

• Translate and print three guidelines and training modules into Arabic, Chinese, French, and Spanish	360,000
• Handbook for NOUs: reducing reliance on methyl bromide	100,000
• Technical sourcebook of methyl bromide alternatives	100,000
• Regional workshop on monitoring and control of ODS consumption for the Caribbean region	85,000
• Country programme preparation/RMP: Burundi	40,000
• Assistance for formulation of RMP Plans for Gambia, Syria, Uruguay, and Viet Nam and the plans for Gambia and Syria should be coordinated with UNIDO	120,000
• Conduct outreach at conference and workshops	50,000
• Support to national activities	30,000
• Advisory and expert group meetings	75,000
• Travel budget (1998)	75,000
	<b>SUB-TOTAL</b>
	<b>3,290,000</b>
Agency Fee	427,700
	<b>GRAND TOTAL</b>
	<b>3,717,700</b>

## Annex I

### CONTACT GROUP ON CHINA'S HALON SECTOR STRATEGY

#### Conditions for Approval

**NOTE FROM SECRETARIAT:** *Text in bold represents changes from Rev. 4.*

The Executive Committee decides to approve in principle a total of US \$62 million in total funding for the implementation of the China Halon Sector Strategy. That funding would be paid out in annual increments in the amounts specified in paragraphs (B) and (C), and on the basis of the following understanding:

#### General Conditions

(A) By this approval, China agrees that in exchange for the funding level agreed in paragraph (B), it will be bound to reduce its production and consumption of halons to the following levels in accordance with the following schedule:

- (i) China will reduce its halon 1211 production (as defined in the Montreal Protocol) to the following levels in the following years: 7960 tonnes in 1998; 5970 tonnes in 1999; 3980 tonnes in 2000; 3317 tonnes in 2001; 2654 tonnes in 2002; **1990 tonnes in each of the years 2003 through 2005**; and, to 0 tonnes in 2006.
- (ii) China will reduce its halon 1211 consumption (as defined in the Montreal Protocol) to the following levels in the following years: 7160 tonnes in 1998; 5370 tonnes in 1999; 3580 tonnes in 2000; 3117 tonnes in 2001; 2654 tonnes in 2002; 1890 tonnes in each of the years 2003 through 2005; and, to 0 tonnes in 2006.
- (iii) China will reduce its halon 1301 production (as defined in the Montreal Protocol) to: 618 tonnes in each of the years 1998 through **2001**; 600 tonnes in each of the years **2002** through 2005, **150** tonnes in each of the years 2006 through 2009, and 0 tonnes in 2010.
- (iv) China will limit its halon 1301 consumption (as defined in the Montreal Protocol) to the following levels in the following years: 300 tonnes in each of the years 1998 through **2001**; **150** tonnes in each of the years **2002** through 2005; **100** tonnes in each of the years 2006 through 2009; and 0 tonnes in 2010.

The above agreement assumes that 1211 and 1301 are the only halons produced in China, and that total halon production and consumption in China (including halon 2402, or any other halons that may be produced in the country) would be limited to the aggregate 1211/1301 levels listed above for the years given. Halon 1202, a by-product of halon production, will also be phased out.

(B) In order to facilitate China in meeting their first reduction targets in accordance with the above noted schedules, the Executive Committee decides at its 23rd Meeting to approve US \$12.4 million in funding for 1998. The Executive Committee has also agreed in principle that it will continue to provide funds on the basis of annual programmes submitted in accordance with the following schedule, subject to the conditions set out in paragraph (C):

Annual Programme	Actual amounts (US \$ millions) to be paid in the year prior to the annual programme
1998	12.4
1999	9.7
2000	10.6
2001	4.5
2002	3.7
2003	5.9
2004	1.2
2005	1.8
2006	11.4
2007	0.4
2008	0.3
2009	0.1
<b>TOTAL</b>	<b>62.0</b>

(C) The payments in respect of each annual programme (other than the initial tranche for 1998) are conditional on:

- adequate progress being maintained in phasing out halon in accordance with the schedule in paragraph (A) and the requirements of paragraph (F);

and from 2000 onwards,

- (ii) the Executive Committee receiving **satisfactory** confirmation that reductions have been made in accordance with the schedule in paragraph (A) and the requirements of paragraph (F) for the year two years prior to the year to which the annual programme relates (e.g. confirmation of the 1998 level to determine funding for the year 2000).
- (D) China agrees to establish a system to ensure accurate monitoring of the import, export and production (including in free trade zones), and to report regularly, consistent with the reporting and monitoring regime outlined in Part I, Chapter V of the proposal contained in UNEP/OzL.Pro/ExCom/23/11. China also agrees to allow for annual independent technical audits administered as directed by the Executive Committee to verify that annual halon production and consumption levels agreed in paragraph (A) and (E) are actually being met.
- (E) China agrees that it will use all funds provided to it by the Executive Committee through this decision to implement its halon sector strategy. In using the funds provided in this initial US \$12.4 million tranche being approved at the 23rd Meeting of the Executive Committee, and subsequent tranches China understands, consistent with Executive Committee rules, that it has a responsibility to ensure that it will not use Fund resources to build aggregate capacity for the production of substitute chemicals or substitute extinguishers that exceeds that capacity (for halon 1211, 17,800 tonnes; for halon 1301, 1000 tonnes; and for halon fire extinguisher production capacity of 7.71 million units). China also agrees that, after full conversion, that at least 3.59 million extinguishers<sup>1</sup> produced in China will, in 2005, be either CO2 extinguishers or extinguishers using a technology that is at least as expensive. If that is not the case, funding will be requested to be refunded based on a rate of US \$3.08 per unit shortfall of CO2 or equivalent fire extinguishers.
- (F) China agrees that if it does not meet an annual **production** reduction requirement it has agreed to meet in paragraph (A) above, it will decrease its following year's allocation by an equivalent amount. If this should happen for a second year, in addition to reducing the subsequent year's allocation by an equivalent amount, China understands that the Multilateral Fund will withhold the subsequent tranche of funding outlined in paragraphs (B) and (C) until such time as the required reduction has been met. In addition, China understands that the Multilateral Fund

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<sup>1</sup> 65 per cent of 1995 production of halon extinguishers plus 1995 production of CO2 extinguishers.

will reduce the subsequent tranche and, therefore, total funding for the Halon Sector Strategy, on the basis of US \$5510/tonne for halon 1301 and US \$486/tonne for halon 1211 of reductions not achieved per year.

- (G) In light of the fact that this project is expected to fund an extensive recycling capability, and that related funds for such capability are being provided solely to allow China to meet its reduction obligations, China will endeavour to prevent export to developed countries of recovered/reclaimed halon.
- (H) In accordance with the strategy, China will propose technical assistance in its annual programme and agrees to carry out any technical assistance performed with Fund money in accordance with terms of reference as agreed with the implementing agency.

### Special Conditions

- (I) The Executive Committee wishes to provide China with maximum flexibility in using the agreed funds to meet China's reduction requirements and alternative fire safety needs. Accordingly, while the strategy included estimates of specific funds that may be needed for specific items, the Executive Committee is of the understanding that during implementation, as long as it is consistent with this agreement, the funds provided to China may be used in the way China believes will achieve the smoothest possible phase-out.
- (J) To carry out its responsibilities as outlined in Part I, Chapter V of UNEP/OzL.Pro/ExCom/23/11, the World Bank has agreed to be the implementing agency for this project at a fee of 10 per cent of project costs **for 1998. The fee for future years will be agreed between the Executive Committee and the implementing agency.** Funds for the independent technical audit will be approved separately from the agency fee.
- (K) China agrees that the funds being agreed in principle in paragraphs (B) and (C) by the Executive Committee at its 23rd Meeting for implementation of the China Halon Sector Strategy is the total funding that will be available to China to enable its full compliance with the halon reduction requirements of the Montreal Protocol (as at the time of this agreement) and the undertakings as promised under the halon sector strategy. It is also understood that, aside from the agency fee referred to in paragraph (J) **above**, China and the Multilateral Fund and its implementing agencies and bilateral donors will neither provide nor request further Multilateral Fund-related funding for the accomplishment of the total phase-out of halons in accordance with the schedule noted above and the terms of the strategy being approved. This includes but is not limited to funding for actions that China will

take regarding conversions of fixed systems, any retrofits of any equipment using halons, and all technical assistance including training. As halon destruction is not part of the Protocol, it is not part of the programme.

### Other Conditions

- (L) If the Executive Committee believes that China has demonstrated a persistent delay in implementation of the agreed phase-out targets included in paragraph (A), China, at the call of the Executive Committee, agrees to repay any funds advanced to it in excess of US \$0.40/kg ODP production and consumption that has been verified as being eliminated. A call for repayment on the part of the Executive Committee would signal the end of obligations under this agreement.
- (M) The funding components of this decision shall not be modified on the basis of future Executive Committee decisions that may affect the funding of the halon sector.
- (N) The Executive Committee recalls its decision 22/75 and understands that this decision and the China Halon Sector Strategy embody a specific agreement with the Government of China. In the context of that agreement, several factors that are specific to China have been taken into account. In that regard, and while the Executive Committee welcomes this innovation for phasing out production and consumption of halons in China, the Executive Committee agrees that this agreement establishes no specific precedent in terms of audits and eligibility or ineligibility of funding for specific levels or specific items.

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**LIST OF PROJECTS AND ACTIVITIES RECOMMENDED FOR APPROVAL**

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>ALGERIA</b>						
<b>FOAM</b>						
<b>Flexible</b>						
Phasing out CFC-11 at La Mousse du Sud flexible polyurethane foam plant	UNIDO	95.0	\$553,480	\$71,952	\$625,432	5.82
<b>Total for Algeria</b>			<b>95.0</b>	<b>\$553,480</b>	<b>\$71,952</b>	<b>\$625,432</b>
<b>ARGENTINA</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Elimination of the use of CFCs in the manufacture of sandwich polyurethane panels and spray foams at Bonano	UNDP	72.0	\$456,500	\$59,345	\$515,845	6.34
Elimination of the use of CFCs in the manufacture of rigid foam blocks for insulated trailers at Fruehauf	UNDP	27.0	\$175,000	\$22,750	\$197,750	6.48
<b>Integral skin</b>						
Conversion to non CFC technology in the manufacture of integral skin and flexible molded foam at Strapur	UNDP	15.0	\$212,500	\$27,625	\$240,125	14.17
Conversion to non CFC technology in the manufacture of molded foam at Cifor S.A.	UNDP	8.2	\$132,000	\$17,160	\$149,160	16.10
<b>FUMIGANT</b>						
<b>Methyl bromide</b>						
Demonstration Project - Open and closed circuit non-soil cultivation as main alternatives to the use of methyl bromide in tomato, cut flowers and strawberry production	UNIDO		\$481,800	\$62,634	\$544,434	
<b>REFRIGERATION</b>						
<b>Domestic</b>						
Elimination of CFCs in 1 manufacturing plant of domestic refrigerators of enterprise Whirlpool Argentina S.A.	IBRD	90.6	\$863,879	\$112,304	\$976,183	9.53
Elimination of CFCs in the manufacturing plant of domestic refrigerators of Frare S.A., Buenos Aires	UNIDO	32.0	\$514,384	\$66,870	\$581,254	10.45
Elimination of CFCs in the manufacturing plant of domestic refrigerators of Bambi S.A., Santa Fe	UNIDO	30.6	\$515,258	\$66,984	\$582,242	10.94
Elimination of CFCs in the manufacturing plants of domestic refrigerators at Gepasa S.A. and Gesal S.R.L.	IBRD	26.0	\$550,400	\$71,552	\$621,952	13.76
Elimination of CFCs in the manufacturing plant of domestic refrigerators at Lobato San Luis S.A.	IBRD	19.4	\$410,683	\$53,389	\$464,072	13.76
<b>Commercial</b>						
Elimination of the use of CFCs in the manufacture of display cabinets and polyurethane panels for cold stores and walk-in coolers at Eurofrio	UNDP	26.0	\$377,350	\$49,056	\$426,406	14.51

**LIST OF PROJECTS AND ACTIVITIES RECOMMENDED FOR APPROVAL**

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
Elimination of the use of CFCs in the manufacture of commercial refrigerators and display cabinets at Trevi	UNDP	3.5	\$53,850	\$7,001	\$60,851	15.21
<b>Preparation of project proposal</b>						
Preparation of an investment project in the refrigeration sector for phasing out ODS at the enterprise Gepasa (Buenos Aires)	UNIDO		\$10,000	\$1,300	\$11,300	
		<b>Total for Argentina</b>	<b>350.4</b>	<b>\$4,753,604</b>	<b>\$617,969</b>	<b>\$5,371,573</b>
<b>BAHAMAS</b>						
<b>REFRIGERATION</b>						
<b>Recovery/recycling</b>						
Implementation of the refrigerant management plan: Implementation of a national programme for recovery and recycling of refrigerant	UNDP	12.6	\$151,400	\$19,682	\$171,082	
<i>Project was approved taking into account that the accompanying measures necessary for successful implementation were already or would be in place before implementation began and that the project had been prepared on the basis of in-depth discussions with the national authorities and trade associations.</i>						
Implementation of the refrigerant management plan: Training in monitoring and controlling of ODSs	UNEP		\$26,500	\$3,445	\$29,945	
Implementation of the refrigerant management plan: Training the trainers of technicians in the refrigeration sector	UNEP		\$50,000	\$6,500	\$56,500	
		<b>Total for Bahamas</b>	<b>12.6</b>	<b>\$227,900</b>	<b>\$29,627</b>	<b>\$257,527</b>
<b>BRAZIL</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Conversion to CFC-free technology in the manufacture of polyurethane foam at Fast Frio	UNDP	14.5	\$72,000	\$9,360	\$81,360	4.96
Conversion to CFC-free technology in the manufacture of polyurethane foam at Bernini	UNDP	22.9	\$135,150	\$17,570	\$152,720	5.90
Conversion to CFC-free technology in the manufacture of polyurethane foam at Polistecom	UNDP	42.6	\$303,000	\$39,390	\$342,390	7.11
Conversion to CFC-free technology in the manufacture of polurethane foam at Bulltrade	UNDP	30.8	\$223,000	\$28,990	\$251,990	7.24
Conversion to CFC-free technology in the manufacture of polyurethane foam at Zenimont	UNDP	38.1	\$298,300	\$38,779	\$337,079	7.83
<b>Integral skin</b>						
Conversion to CFC-free technology in the manufacture of polyurethane foam at Espumatec	UNDP	64.6	\$372,000	\$48,360	\$420,360	5.76

**LIST OF PROJECTS AND ACTIVITIES RECOMMENDED FOR APPROVAL**

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Project Title	Agency	ODP Tonnes	Funds Project	Recommended Support	(USS) Total	C.E. (US\$/kg)
Conversion to CFC-free technology in the manufacture of polyurethane foam at Kalf Calcados	UNDP	15.0	\$101,100	\$13,143	\$114,243	6.74
Conversion to CFC-free technology in the manufacture of polyurethane foam at Mikawa & Cia	UNDP	7.5	\$80,600	\$10,478	\$91,078	10.75
Conversion to CFC-free technology in the manufacture of polyurethane foam at FJ Polymers	UNDP	8.2	\$89,500	\$11,635	\$101,135	10.91
Conversion to CFC-free technology in the manufacture of polyurethane foam at Plasmold	UNDP	11.0	\$161,500	\$20,995	\$182,495	14.68
Conversion to CFC-free technology in the manufacture of polyurethane foam at Bruzze	UNDP	16.5	\$278,190	\$36,165	\$314,355	16.86
Conversion to CFC-free technology in the manufacture of polyurethane foam at CMZ Poliuretanos	UNDP	5.5	\$92,750	\$12,058	\$104,808	16.86
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Conversion to CFC-free technology in the manufacture of polyurethane foam at Friar	UNDP	14.9	\$185,726	\$24,144	\$209,870	12.46
Elimination of CFCs in the manufacture of refrigerated trucks and trailers at Increal Ltda.	UNDP	33.0	\$418,000	\$54,340	\$472,340	12.66
Elimination of CFCs in the manufacture of refrigerated trucks and trailers at Niju Ind. Com Implem Rodov Ltda.	UNDP	8.4	\$111,600	\$14,508	\$126,108	13.21
Phasing out of CFC-12 by HFC-134a and CFC-11 by cyclopentane in the production of commercial refrigeration equipment at Refrigeracao Rubra	UNIDO	21.8	\$320,540	\$41,670	\$362,210	14.70
Conversion to CFC-free technology in the manufacture of polyurethane foam at Mais Frio	UNDP	10.2	\$154,400	\$20,072	\$174,472	15.21
Conversion to CFC-free technology in the manufacture of polyurethane foam at Artico	UNDP	14.8	\$225,100	\$29,263	\$254,363	15.21
<b>SEVERAL</b>						
<b>Technical assistance/support</b>						
Survey of ODS use in SMEs and approaches to ODS elimination	UNDP		\$100,000	\$13,000	\$113,000	
<b>Total for Brazil</b>		380.3	\$3,722,456	\$483,919	\$4,206,375	
<b>BURUNDI</b>						
<b>SEVERAL</b>						
<b>Country programme/country survey</b>						
Preparation of country programme	UNEP		\$40,000	\$5,200	\$45,200	
<b>Total for Burundi</b>			\$40,000	\$5,200	\$45,200	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project Support	(USS) Total	C.E. (US\$/kg)
<b>CAMEROON</b>					
<b>FOAM</b>					
<b>Flexible</b>					
Phasing out CFC-11 at Sonopol	UNIDO	130.0	\$506,310	\$65,820	\$572,130 3.89
<i>Contingent upon the ability of UNIDO to certify the ODS consumption of the enterprise and that the enterprise converted back to using CFCs before 25 July 1995.</i>					
Phasing out CFC-11 at Scimpos	UNIDO	120.0	\$541,350	\$70,376	\$611,726 4.51
<i>Contingent upon the ability of UNIDO to certify the ODS consumption of the enterprise and that the enterprise converted back to using CFCs before 25 July 1995.</i>					
<b>Total for Cameroon</b>		<b>250.0</b>	<b>\$1,047,660</b>	<b>\$136,196</b>	<b>\$1,183,856</b>
<b>CHINA</b>					
<b>FOAM</b>					
<b>Flexible</b>					
Conversion to CFC-free technology in the manufacture of flexible polyurethane foam (slabstock) at Dalian No. 1	UNDP				
<i>Note: Submitted for change in technology with no additional funding</i>					
<b>Rigid</b>					
Conversion of rigid and spray polyurethane foam manufacture from CFC-11 to HCFC-141b foam blowing agent at Yantai Moon Group Co. Ltd.	IBRD	462.6	\$1,132,682	\$147,249	\$1,279,931 2.45
Elimination of CFC-11 in the manufacture of rigid and spray polyurethane foams at Xinjiang Tianye Co. Ltd.	UNDP	92.3	\$300,620	\$39,081	\$339,701 3.26
Conversion of rigid and spray polyurethane foam manufacture from CFC-11 to HCFC-141b foam blowing agent at Shanghai General Machinery Company (SGMC)	IBRD	88.3	\$380,300	\$49,439	\$429,739 4.31
Elimination of the use of CFCs in the manufacture of sandwich polyurethane panels, pipes and spray foams at Baoding Oil Depot & Storage Engineering Company	UNDP	75.5	\$400,960	\$52,125	\$453,085 5.31
Elimination of the use of CFCs in the manufacture of sandwich polyurethane panels at Luoyang Refrigeration Machinery Factory	UNDP	117.8	\$698,595	\$90,817	\$789,412 5.93
<b>HALON</b>					
<b>General</b>					
Sector Plan for halon phaseout in China, 1998 Annual Programme	IBRD	21,378.0	\$12,400,000	\$1,240,000	\$13,640,000 0.58

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>REFRIGERATION</b>						
<b>Domestic</b>						
Elimination of CFCs 11 and 12 in the manufacture of domestic freezers at DeBao Refrigeration Equipment Co. Ltd.	UNDP	314.7	\$1,208,176	\$157,063	\$1,365,239	2.50
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Elimination of CFCs 11 and 12 in the manufacture of domestic freezers at Honxiang Group, Laizhou Freezer Plant	UNDP	301.5	\$1,339,203	\$174,096	\$1,513,299	2.88
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Conversion of refrigerator manufacture to HFC-134a refrigerant and cyclopentane foam blowing agent at Henan Xinfei Electric Co. Ltd.	IBRD	375.0	\$1,556,490	\$202,344	\$1,758,834	4.15
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Elimination of CFCs in the manufacture of domestic refrigerators at Wanbao Electrical Appliance Industries Co.	UNDP	574.2	\$4,566,985	\$593,708	\$5,160,693	5.17
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Phasing out ODS at the Changshu Refrigerating Equipment Works (Baixue), Changshu	UNIDO	425.7	\$3,548,775	\$461,341	\$4,010,116	5.41
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Phasing out ODS at the freezer plant of Xing Xing Electric Appliances Industrial Co.	UNIDO	348.0	\$3,346,941	\$435,102	\$3,782,043	6.25
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Phasing out ODS at the refrigerator plant of Zhejiang Rongsheng Electric Co. Ltd., Zhejiang, Deqing County	UNIDO	177.8	\$1,274,640	\$165,703	\$1,440,343	7.17
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						

**LIST OF PROJECTS AND ACTIVITIES RECOMMENDED FOR APPROVAL**

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
Phasing out ODS at the refrigerator plant of Bole Electric Appliances Group  <i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>	UNIDO	132.0	\$1,469,029	\$190,974	\$1,660,003	7.23
Elimination of CFCs 11 and 12 in the manufacture of domestic freezers at Jilin Jinouer Electric Appliances Group Co.  <i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>	UNDP	223.9	\$2,548,360	\$331,287	\$2,879,647	7.40
Conversion of refrigerator manufacture to HFC-134a refrigerant and cyclopentane foam blowing agent at Shanghai Shangling Chang-An Refrigerator Co., Ltd (former Shanghai Yuandong Refrigerator Co. Ltd.)  <i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>	IBRD	66.6	\$1,237,663	\$160,896	\$1,398,559	12.18
<b>Commercial</b> Hefei General Machinery Research Institute (HGMRI): Four technical assistance projects to support conversion of commercial refrigeration compressors	IBRD		\$692,400	\$90,012	\$782,412	
<b>Compressor</b> Phasing out ODS at the Yuhuan Compressor Factory in Kanmen Town in Yuhuan County, South East China	UNIDO	145.3	\$1,465,155	\$190,470	\$1,655,625	
<b>SOLVENT</b> <b>CFC-113</b> Elimination of ODS (CFC-113) used in the production line at Fujian Putian Vikay Electronics Co. Ltd.	UNDP	70.0	\$619,780	\$80,571	\$700,351	8.85
<b>Total for China</b>		25,369.3	\$40,186,754	\$4,852,278	\$45,039,032	
<b>COMOROS</b>						
<b>SEVERAL</b> <b>Institutional strengthening</b> Establishment of the National Ozone Unit  <i>UNEP could proceed with the disbursement of the first one-year tranche of the funds approved for institutional strengthening, but subsequent disbursements would be contingent on the submission of a report to the Executive Committee on the status of development of a refrigerant management plan (Decision 20/4).</i>	UNEP		\$27,800	\$3,614	\$31,414	
<b>Total for Comoros</b>		\$27,800	\$3,614	\$31,414		

**LIST OF PROJECTS AND ACTIVITIES RECOMMENDED FOR APPROVAL**

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>CUBA</b>						
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Umbrella project for elimination of CFCs 11 and 12 in the manufacture of unitary commercial refrigeration equipment at Empco-Mincin and Segere-Sime "Dionisio Rodrigues"	UNDP	3.2	\$119,505	\$15,536	\$135,041	36.91
<b>Total for Cuba</b>		3.2	<b>\$119,505</b>	<b>\$15,536</b>	<b>\$135,041</b>	
<b>ETHIOPIA</b>						
<b>REFRIGERATION</b>						
<b>Training programme/workshop</b>						
Implementation of a training programme for recovery and recycling of refrigerants	Finland		\$93,490		\$93,490	
<i>The Government of Germany is requested to integrate this project in the original RMP to be prepared by it.</i>						
<b>Total for Ethiopia</b>			<b>\$93,490</b>		<b>\$93,490</b>	
<b>GAMBIA</b>						
<b>REFRIGERATION</b>						
<b>Preparation of project proposal</b>						
Assistance for formulation of a refrigerant management plan	UNEP		\$30,000	\$3,900	\$33,900	
<i>To be coordinated with UNIDO</i>						
<b>Total for Gambia</b>			<b>\$30,000</b>	<b>\$3,900</b>	<b>\$33,900</b>	
<b>GEORGIA</b>						
<b>REFRIGERATION</b>						
<b>Recovery/recycling</b>						
Implementation of the refrigerant management plan: Implementation of a national programme for recovery and recycling of refrigerants	UNDP		\$106,750	\$13,878	\$120,628	
<i>Project was approved taking into account that the accompanying measures necessary for successful implementation were already or would be in place before implementation began and that the project had been prepared on the basis of in-depth discussions with the national authorities and trade associations.</i>						
Implementation of the refrigerant management plan: Training in monitoring and controlling of ODS	UNEP		\$35,000	\$4,550	\$39,550	
Implementation of the refrigerant management plan: Training of trainers in refrigeration	UNEP		\$50,000	\$6,500	\$56,500	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>SEVERAL</b>						
<b>Institutional strengthening</b>						
Establishment of a National Ozone Unit	UNEP		\$70,000	\$9,100	\$79,100	
<b>Total for Georgia</b>				\$261,750	\$34,028	\$295,778
<b>GUATEMALA</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Terminal umbrella project: Conversion to CFC-free technology in the manufacture of rigid polyurethane foam at Construservicios, Aplitex, and Fiberglas & Plasticos	UNDP	12.6	\$128,500	\$16,705	\$145,205	10.20
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Conversion to CFC-free technology in the manufacture of commercial refrigeration equipment at four enterprises (Exea S.A., Productos American Vitas S.A., Termomecanica S.A., Unirefri S.A.)	UNDP	14.0	\$212,000	\$27,560	\$239,560	15.14
<b>Total for Guatemala</b>				26.6	\$340,500	\$44,265
<b>GUYANA</b>						
<b>REFRIGERATION</b>						
<b>Domestic</b>						
Phasing out ODS at Guyana Refrigerator Ltd., Guyana (GRL)	UNIDO	7.2	\$461,000	\$59,930	\$520,930	42.25
<b>Recovery/recycling</b>						
Implementation of the refrigerant management plan: Training on monitoring and control of ODS and ODS using equipment	UNEP		\$16,000	\$2,080	\$18,080	
Implementation of the refrigerant management plan: National recovery and recycling programme	Canada		\$73,450		\$73,450	
<i>Project was approved taking into account that the accompanying measures necessary for successful implementation were already or would be in place before implementation began and that the project had been prepared on the basis of in-depth discussions with the national authorities and trade associations.</i>						
Implementation of the refrigerant management plan: Training of trainers for good refrigeration servicing practices	UNEP		\$50,000	\$6,500	\$56,500	
<b>SEVERAL</b>						
<b>Institutional strengthening</b>						
Creation of the National Ozone Action Unit	UNEP		\$65,000	\$8,450	\$73,450	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>Total for Guyana</b>		7.2	\$665,450	\$76,960	\$742,410	
<b>INDIA</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Elimination of CFCs in the manufacture of rigid polyurethane foam insulation products at Panna International	UNDP	9.7	\$48,000	\$6,240	\$54,240	4.96
Elimination of CFCs in the manufacture of rigid polyurethane foam insulation products at Viral Corporation	UNDP	11.8	\$84,000	\$10,920	\$94,920	7.13
Elimination of CFCs in the manufacture of rigid polyurethane foam at Ras Polybuild Products P. Ltd.	UNDP	17.7	\$128,000	\$16,640	\$144,640	7.22
Elimination of CFCs in the manufacture of rigid PUF insulated thermoware at Alaska Industries	UNDP	17.6	\$128,000	\$16,640	\$144,640	7.29
Elimination of CFCs in the manufacture of rigid PUF insulated thermoware at Bluplast Corporation	UNDP	10.1	\$76,000	\$9,880	\$85,880	7.51
Elimination of CFCs in the manufacture of rigid polyurethane foam insulation products at Reliable Rotomoulders P. Ltd.	UNDP	8.7	\$63,000	\$8,190	\$71,190	7.83
Elimination of CFCs in the manufacture of rigid polyurethane foam insulation products at Malanpur Entech P. Ltd.	UNDP	18.9	\$148,000	\$19,240	\$167,240	7.83
Elimination of CFCs in the manufacture of rigid PUF insulated thermoware at Nissan Thermoware P. Ltd.	UNDP	15.4	\$111,000	\$14,430	\$125,430	7.83
<b>Integral skin</b>						
Elimination of CFCs in the manufacture of flexible cold-cured molded PU foam at K.J. Polymers P. Ltd.	UNDP	30.0	\$127,550	\$16,582	\$144,132	4.25
<i>NOTE: PENDING ADVICE FROM INDIA</i>						
Elimination of CFCs in the manufacture of flexible molded cold-cured and integral skin PU foam at Venus Auto P. Ltd.	UNDP	21.0	\$137,250	\$17,843	\$155,093	6.53
<i>NOTE: PENDING ADVICE FROM INDIA</i>						
Phase-out of CFCs in the manufacture of cold cured molded and integral skin at Shri Krishna Polyurethane Industries P. Ltd.	UNDP	19.2	\$192,875	\$25,074	\$217,949	9.79
<i>NOTE: PENDING ADVICE FROM INDIA</i>						
Elimination of CFCs in the manufacture of flexible cold-cured molded PU foam at Siddhi Polymer P. Ltd.	UNDP	7.5	\$75,250	\$9,783	\$85,033	10.03
<i>NOTE: PENDING ADVICE FROM INDIA</i>						
Phase-out of CFCs in the manufacture of integral skin PUF products at Legend Interiors	UNDP	9.0	\$124,000	\$16,120	\$140,120	12.65

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Project Title	Agency	ODP Tonnes	Funds Project	Recommended Support	(USS) Total	C.E. (US\$/kg)
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Elimination of CFCs in the manufacture of commercial refrigeration equipment at Aarkay Industries <i>No more projects in the commercial refrigeration sub-sector in India be considered by the Executive Committee until its requirements from the 22nd Meeting regarding development of a group approach to technology transfer, trials and training have been implemented by the World Bank. Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>	IBRD	19.8	\$135,798	\$17,654	\$153,452	6.86
Elimination of CFCs in the manufacture of commercial refrigeration equipment at Saikrupa Industries <i>No more projects in the commercial refrigeration sub-sector in India be considered by the Executive Committee until its requirements from the 22nd Meeting regarding development of a group approach to technology transfer, trials and training have been implemented by the World Bank. Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>	IBRD	14.8	\$125,618	\$16,330	\$141,948	8.49
Elimination of CFCs in the manufacture of commercial refrigeration equipment at Sarkar Refrigeration Industries <i>No more projects in the commercial refrigeration sub-sector in India be considered by the Executive Committee until its requirements from the 22nd Meeting regarding development of a group approach to technology transfer, trials and training have been implemented by the World Bank. Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>	IBRD	12.0	\$117,100	\$15,223	\$132,323	9.76
Elimination of CFCs in the manufacture of commercial refrigeration equipment at Sidwal Refrigeration Industries P. Ltd. <i>No more projects in the commercial refrigeration sub-sector in India be considered by the Executive Committee until its requirements from the 22nd Meeting regarding development of a group approach to technology transfer, trials and training have been implemented by the World Bank. Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>	IBRD	11.7	\$169,744	\$22,067	\$191,811	14.51

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>Preparation of project proposal</b>						
Preparation of an investment project for phasing out ODS in the refrigeration sector (project under identification)	UNIDO		\$25,000	\$3,250	\$28,250	
		<b>Total for India</b>	<b>254.9</b>	<b>\$2,016,185</b>	<b>\$262,104</b>	<b>\$2,278,289</b>
<b>INDONESIA</b>						
<b>FOAM</b>						
<b>Flexible</b>						
Elimination of CFC-11 in the manufacture of flexible polyurethane foam (slabstock) at PT. Irc Inoac Indonesia	IBRD	110.0	\$412,900	\$53,677	\$466,577	3.38
Flexible boxfoam. Technical assistance program for SMEs at Indonesian Foam Association (AFI)	IBRD	954.0	\$4,060,640	\$527,883	\$4,588,523	4.26
<i>The project is a terminal project for the flexible slabstock foam sub-sector and thus, the Government of Indonesia will not submit any further projects in that sub-sector for funding under the Multilateral Fund. The Government of Indonesia has been made aware of the potential economic differences in the use of 2 different technological options by different groups of SMEs and would not submit any project in future which is aimed at addressing any possible market advantages and/or disadvantages among the different boxfoam producers.</i>						
Elimination of CFC-11 in the manufacture of flexible polyurethane foam (slabstock) at PT Sea Horse Maspion Indonesia	IBRD	90.0	\$532,200	\$69,186	\$601,386	5.91
<b>Rigid</b>						
Conversion to CFC-free technology in the manufacture of rigid PUF spray insulation at Karya Cipta Semesta	UNDP	16.4	\$68,000	\$8,840	\$76,840	4.16
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (spray foam) at PT Ferrarindo Multi Sarana	UNDP	7.7	\$32,900	\$4,277	\$37,177	4.30
Conversion to CFC-free technology in the manufacture of rigid PUF insulated products at UD Samrow Foam	UNDP	22.7	\$110,000	\$14,300	\$124,300	4.85
Conversion to CFC -free technology in the manufacture of rigid polyurethane foam (panels, blocks) at PT Aneka Cool Citratama	UNDP	32.7	\$232,225	\$30,189	\$262,414	7.10
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (thermoware) at PT Dilihan Glory	UNDP	13.1	\$102,200	\$13,286	\$115,486	7.83
Conversion to CFC-free technology in the manufacture of rigid PUF insulated thermoware at PT Langgeng Makmur Plastic Industry Ltd.	UNDP	18.1	\$142,000	\$18,460	\$160,460	7.83

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>Integral skin</b>						
Conversion to CFC-free technology in the manufacture of flexible cold cured molded and integral skin PUF at PT Archigramma	UNDP	16.5	\$106,625	\$13,861	\$120,486	6.48
Conversion to CFC-free technology in the manufacture of flexible cold cured molded PUF at Ciptaindah Jokindo	UNDP	9.0	\$77,125	\$10,026	\$87,151	8.57
Flexible molded PU foam. Technical assistance program for SMEs at Indonesian Foam Association (AFI)	IBRD	370.0	\$3,538,400	\$459,992	\$3,998,392	9.56
<b>Polystyrene/polyethylene</b>						
Elimination of CFC-12 in the manufacture of extruded polyethylene foam sheet at PT. Tara Guna Foam	IBRD	35.0	\$287,700	\$37,401	\$325,101	8.22
<b>FUMIGANT</b>						
<b>Preparation of project proposal</b>						
Preparation of a demonstration project in the methyl bromide sector	UNIDO			\$10,000	\$1,300	\$11,300
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Conversion of CFC-12 refrigerate to HFC-134a, and CFC-11 to HCFC-141b as the blowing agent for foam insulation in the manufacture of commercial refrigeration units at PT Wahana Derby Sejati	IBRD	10.3	\$139,233	\$18,100	\$157,333	13.54
Conversion to CFC-free technology in the manufacture of commercial refrigeration equipment at C.V. Kulkasindo	UNDP	9.4	\$136,000	\$17,680	\$153,680	14.47
Conversion of CFC-12 commercial refrigeration to HFC-134a at PT Porkka Indonesia	IBRD	4.0	\$58,517	\$7,607	\$66,124	14.77
Conversion of CFC-12 commercial refrigeration to HFC-134a at PT Maspion	IBRD	9.0	\$136,890	\$17,796	\$154,686	15.21
<b>SEVERAL</b>						
<b>Institutional strengthening</b>						
Renewal of institutional strengthening	UNDP			\$208,650	\$27,125	\$235,775
<b>Preparation of project proposal</b>						
Preparation of an investment project for phasing out ODS at three enterprises including the companies Nirwana and P.T. Success	UNIDO			\$10,000	\$1,300	\$11,300
<b>Total for Indonesia</b>		1,727.7	\$10,402,205	\$1,352,287	\$11,754,492	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>IRAN</b>						
<b>FOAM</b>						
<b>Flexible</b>						
Phasing out of CFC-11 from flexible slabstock foam manufacturing at Mashhad Foam	UNIDO	90.0	\$503,330	\$65,433	\$568,763	5.59
<b>Preparation of project proposal</b>						
Preparation of an investment project in the foam sector for phasing out ODS at three enterprises including Bahaman Plastic	UNIDO		\$10,000	\$1,300	\$11,300	
<b>FUMIGANT</b>						
<b>Preparation of project proposal</b>						
Preparation of a demonstration project in the methyl bromide sector	UNIDO		\$10,000	\$1,300	\$11,300	
<b>HALON</b>						
<b>Preparation of project proposal</b>						
Projects preparation and technical assistance in the halon sector	France		\$31,500		\$31,500	
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Phasing out ODS at Electro Steel Co.	UNIDO	120.0	\$898,159	\$116,761	\$1,014,920	7.48
Phasing out ODS at Yakh Chavan Manufacturing Company	UNIDO	41.8	\$527,802	\$68,614	\$596,416	12.64
Phasing out ODS at Zagross II Co.	UNIDO	34.0	\$444,858	\$57,832	\$502,690	13.08
Phasing out ODS at Yakh Saran Co.	UNIDO	34.0	\$458,663	\$59,626	\$518,289	13.49
<b>Recovery/recycling</b>						
Set up of a national program of recovery and recycling CFC-12 (pilot project in Tehran)	France		\$345,923		\$345,923	
<b>SOLVENT</b>						
<b>Preparation of project proposal</b>						
Project preparation/technical assistance in the solvent sector	France		\$31,500		\$31,500	
<b>SEVERAL</b>						
<b>Institutional strengthening</b>						
Renewal of institutional strengthening	UNDP		\$133,470	\$17,351	\$150,821	
<b>Total for Iran</b>		<b>319.8</b>	<b>\$3,395,205</b>	<b>\$388,217</b>	<b>\$3,783,422</b>	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>JAMAICA</b>						
<b>REFRIGERATION</b>						
<b>MAC recovery/recycling</b>						
MAC demonstration project	USA		\$130,000		\$130,000	
<b>Total for Jamaica</b>			\$130,000		\$130,000	
<b>JORDAN</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (miscellaneous applications) at Fathei Abu Arja	IBRD	105.4	\$824,869	\$107,233	\$932,102	7.83
<i>The project will complete the CFC phaseout in the rigid foam sub-sector in the country and the Government of Jordan will submit no further requests for funding from the Multilateral Fund for any enterprise in this sector (Decision 19/32).</i>						
<b>FUMIGANT</b>						
<b>Preparation of project proposal</b>						
Preparation of a demonstration project in the methyl bromide sector	UNIDO		\$10,000	\$1,300	\$11,300	
<b>Total for Jordan</b>			171.9	\$1,379,972	\$179,396	\$1,559,368
<b>KENYA</b>						
<b>FUMIGANT</b>						
<b>Preparation of project proposal</b>						
Preparation of a demonstration project in the methyl bromide sector	UNIDO		\$10,000	\$1,300	\$11,300	
<b>SOLVENT</b>						
<b>TCA</b>						
Conversion of ODS cleaning processes from TCA to aqueous cleaning and cleaning in TCE at Kenyan Railways Central Workshop	UNIDO	6.0	\$205,524	\$26,718	\$232,242	34.48
<b>Total for Kenya</b>			6.0	\$215,524	\$28,018	\$243,542

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>KOREA, DPR</b>						
<b>FOAM</b>						
<b>General</b>						
Phasing out CFC-11 at Pyongyang Foam Plant	UNIDO	83.0	\$103,570	\$13,464	\$117,034	1.25
Phasing out CFC-11 at Hamhung Foam Factory, Hamgyong South Province	UNIDO	35.0	\$102,680	\$13,348	\$116,028	2.93
Phasing out CFC-11 at Chongjin Foam Factory, Hamgyong North Province	UNIDO	32.0	\$103,670	\$13,477	\$117,147	3.24
<b>FUMIGANT</b>						
<b>Preparation of project proposal</b>						
Preparation of a demonstration project in the methyl bromide sector	UNIDO		\$15,000	\$1,950	\$16,950	
<b>SOLVENT</b>						
<b>CTC</b>						
Conversion of metal cleaning processes from ODS solvents to vapour degreasing at Unsan Tools Factory (UTF)	UNIDO	110.0	\$311,922	\$40,550	\$352,472	2.83
<i>The country programme for Korea be re-examined by UNEP, the agency which prepared it, to resolve the apparent inconsistencies between stated and actual consumption in the solvent sector.</i>						
<b>Total for Korea, DPR</b>		260.0	\$636,842	\$82,789	\$719,631	
<b>LEBANON</b>						
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Conversion of refrigeration industrial facilities	France	10.4	\$166,605		\$166,605	15.21
<b>Recovery/recycling</b>						
Implementation of an ODS recovery and recycling network	France		\$425,289		\$425,289	
<b>Training programme/workshop</b>						
Training of refrigeration technicians on recovery and recycling methodologies	France		\$52,668		\$52,668	
<b>Total for Lebanon</b>		10.4	\$644,562		\$644,562	

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Project Title	Agency	ODP Tonnes	Funds Project	Recommended Support	(US\$) Total	C.E. (US\$/kg)
<b>MALAYSIA</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Conversion to CFC-free technology in the manufacture of polyurethane foam at Hi Tech Insulation	UNDP	18.5	\$96,815	\$12,586	\$109,401	5.23
Conversion to CFC-free technology in the manufacture of polyurethane foam at Frank Chee	UNDP	28.0	\$174,350	\$22,666	\$197,016	6.23
Phasing out ODS at Kean Chong Industries Sdn. Bhd.	UNIDO	16.3	\$107,819	\$14,016	\$121,835	6.61
Phasing out ODS at Summer Technologies Sdn. Bhd.	UNIDO	12.1	\$89,407	\$11,623	\$101,030	7.38
Phasing out ODS at Visdamax Sdn. Bhd.	UNIDO	18.5	\$139,959	\$18,195	\$158,154	7.56
Conversion to CFC-free technology in the manufacture of polyurethane foam at OAL Enterprise	UNDP	7.5	\$58,300	\$7,579	\$65,879	7.82
<b>Integral skin</b>						
Conversion to CFC-free technology in the manufacture of polyurethane foam at Heng Huat Furniture	UNDP	50.0	\$269,500	\$35,035	\$304,535	5.39
Conversion to CFC-free technology in the manufacture of polyurethane foam at CT Foam	UNDP	14.0	\$236,000	\$30,680	\$266,680	16.86
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Conversion to CFC-free technology in the manufacture of polyurethane foam at Kwang Tai Refrigeration	UNDP	28.5	\$316,000	\$41,080	\$357,080	11.09
<b>Total for Malaysia</b>			<b>193.3</b>	<b>\$1,488,150</b>	<b>\$193,460</b>	<b>\$1,681,610</b>
<b>MEXICO</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Conversion to CFC-free technology in the manufacture of rigid foam at Valsa Panel	UNDP	24.0	\$92,000	\$11,960	\$103,960	3.83
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (spray) at group project Pumex	UNDP	167.7	\$1,133,881	\$147,405	\$1,281,286	6.76
<b>Integral skin</b>						
Conversion to CFC-free technology in the manufacture of polyurethane shoe soles at Group Project (Orca)	UNDP	190.0	\$1,471,500	\$191,295	\$1,662,795	7.74
Conversion to CFC-free technology in the manufacture of integral skin foam at Air Design	UNDP	5.0	\$80,500	\$10,465	\$90,965	16.10

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>General</b>						
Conversion to CFC-free technology in the manufacture of rigid foam (spray) and integral skin foam at Con Espuma	UNDP	11.4	\$96,100	\$12,493	\$108,593	8.43
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Phasing out of CFCs at Nieto S.A.	UNIDO	24.6	\$353,976	\$46,017	\$399,993	14.38
Phasing out of CFCs at Criotec S.A.	UNIDO	16.0	\$240,794	\$31,303	\$272,097	15.00
Phasing out of CFC at Vendo S.A.	UNIDO	16.5	\$248,524	\$32,308	\$280,832	15.09
Phasing out of CFCs at Torrey S.A.	UNIDO	15.1	\$228,165	\$29,661	\$257,826	15.15
<b>Preparation of project proposal</b>						
Preparation of an investment project for phasing out ODS at several small enterprises in the commercial refrigeration	UNIDO		\$20,000	\$2,600	\$22,600	
<b>Total for Mexico</b>		470.3	\$3,965,440	\$515,507	\$4,480,947	
<b>MOROCCO</b>						
<b>FOAM</b>						
<b>Flexible</b>						
Phase out of CFC in the manufacture of flexible foam (slabstock) at Sodiflex and Tiznit Plastic S.A.	UNDP	85.0	\$517,300	\$67,249	\$584,549	6.08
Phase out of CFC in the manufacture of flexible foam (slabstock) at Molen Industrie S.A.	UNDP	9.0	\$56,070	\$7,289	\$63,359	6.23
Phase out of CFC in the manufacture of flexible foam (slabstock) at Mousse d'Or S.A.	UNDP	45.0	\$280,350	\$36,446	\$316,796	6.23
Phase out of CFC in the manufacture of flexible foam (slabstock) at Richdor S.A.	UNDP	10.0	\$62,300	\$8,099	\$70,399	6.23
Phase out of CFC in the manufacture of flexible foam (slabstock) at Salidor S.A.	UNDP	48.0	\$299,000	\$38,870	\$337,870	6.23
<b>Rigid</b>						
Phase out of CFC in the manufacture of rigid foam at Panaf Isolation S.A.	UNDP	17.5	\$137,000	\$17,810	\$154,810	7.83

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Funds Recommended Support	(US\$) Total	C.E. (US\$/kg)
<b>REFRIGERATION</b>						
<b>Recovery/recycling</b>						
Implementation of an ODS recovery and recycling network	France	22.3	\$355,867		\$355,867	15.95
<i>Project was approved taking into account that the accompanying measures necessary for successful implementation were already or would be in place before implementation began and that the project had been prepared on the basis of in-depth discussions with the national authorities and trade associations.</i>						
<b>Training programme/workshop</b>						
Training of refrigeration technicians on recovery and recycling methodologies	France		\$53,361		\$53,361	
<b>Total for Morocco</b>		<b>236.8</b>	<b>\$1,761,248</b>	<b>\$175,763</b>	<b>\$1,937,011</b>	
<b>NIGERIA</b>						
<b>FOAM</b>						
<b>Flexible</b>						
Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Ugochukwu Chemical Industries Ltd.	UNDP	118.6	\$407,600	\$52,988	\$460,588	3.43
Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Bajabure Industrial Complex Ltd.	UNDP	32.3	\$135,400	\$17,602	\$153,002	4.19
Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Mouka Ltd.	UNDP	30.3	\$143,600	\$18,668	\$162,268	4.73
Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Elico Industries Ltd.	UNDP	25.7	\$133,900	\$17,407	\$151,307	5.22
Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Safa Foam Products (Nig) Ltd.	UNDP	24.4	\$146,400	\$19,032	\$165,432	6.00
Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Winco Foam Industries Ltd.	UNDP	19.1	\$117,200	\$15,236	\$132,436	6.13
<b>Rigid</b>						
Elimination of CFCs in the manufacture of rigid PUF insulation products at Aluminium Manufacturing Company of Nigeria Plc (Alumaco)	UNDP	11.5	\$38,000	\$4,940	\$42,940	3.30
Elimination of CFCs in the manufacture of rigid PUF spray insulation at Polyurethane Manufacturers Ltd. (Polyma)	UNDP	18.5	\$80,500	\$10,465	\$90,965	4.36

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
Elimination of CFCs in the manufacture of rigid PUF for thermoware in three enterprises of the Eleganza Group (Eleganza Cooler and Household Industries Ltd., Eleganza Ceramics and Cooler Industries Ltd., Eleganza Ball Pen) Industries Ltd.)	UNDP	73.8	\$568,000	\$73,840	\$641,840	7.69
<b>Total for Nigeria</b>		<b>354.3</b>	<b>\$1,770,600</b>	<b>\$230,178</b>	<b>\$2,000,778</b>	

**PAKISTAN**
**FOAM**
**Rigid**

Umbrella project: Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (thermoware)	IBRD	239.6	\$1,600,000	\$208,000	\$1,808,000	6.68
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**Integral skin**

Conversion to CFC-free technology in the manufacture of integral skin polyurethane foam at Synthetic Products Enterprises (Pvt) Ltd. (SPEL)	IBRD	13.6	\$160,625	\$20,881	\$181,506	11.81
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**General**

Conversion to CFC-free technology in the manufacture of polyurethane foam (flexible slabstock, flexible molded, rigid foam) at Diamond Group of Industries	IBRD	64.1	\$563,339	\$73,234	\$636,573	8.79
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**REFRIGERATION**
**Domestic**

Conversion to CFC-free technology in the manufacture of polyurethane foam (domestic refrigeration) at Cool Industries Ltd. (Waves)	IBRD	117.6	\$841,750	\$109,428	\$951,178	7.16
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Conversion to CFC-free technology in the manufacture of polyurethane foam at Singer Pakistan Ltd.	IBRD	17.8	\$205,893	\$26,766	\$232,659	7.52
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Phasing out ODS at the freezer factory of Hirra Farooq's (Pvt) Ltd.	UNIDO	31.2	\$521,580	\$67,805	\$589,385	11.34
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**Commercial**

Conversion to CFC-free technology in the manufacture of polyurethane foam at Kold Kraft Ltd.	IBRD	11.5	\$175,000	\$22,750	\$197,750	15.21
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<b>Total for Pakistan</b>		<b>495.4</b>	<b>\$4,068,187</b>	<b>\$528,864</b>	<b>\$4,597,051</b>	
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**PARAGUAY**
**FOAM**
**Multiple-subsectors**

Terminal umbrella project: Conversion to CFC-free technology in the manufacture of polyurethane foam at Superspuma Del Paraguay SAIC, Suenolar, La Asuncena, and Industrias Cel	UNDP	55.5	\$405,600	\$52,728	\$458,328	7.31
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*The projects would phase out the use of CFCs in the foam sector in Paraguay and that the Government of Paraguay would not submit any further projects in the sector for funding by the Multilateral Fund.*

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>Total for Paraguay</b>		<b>55.5</b>	<b>\$405,600</b>	<b>\$52,728</b>	<b>\$458,328</b>	

**PHILIPPINES**
**FOAM**
**Rigid**

Umbrella project: Conversion to CFC-free technology in small CFC consuming enterprises using CFC in the manufacture of rigid polyurethane foam (Ashlar Industrial Corporation, Alen International, Zegal Plastic Product)

**Integral skin**

Conversion to CFC-free technology in the manufacture of polyurethane foam at Soutech

**REFRIGERATION**
**Commercial**

Elimination of CFC-11 and CFC-12 in the manufacture of commercial refrigeration equipment at Azkcon Refrigeration Industries, Inc.

**Total for Philippines** **44.0** **\$736,938** **\$47,668** **\$784,606**

**ROMANIA**
**FOAM**
**Preparation of project proposal**

Preparation of an investment project in the foam sector for phasing out ODS at Romcarbon

**FUMIGANT**
**Preparation of project proposal**

Preparation of a demonstration project in the methyl bromide sector

**Total for Romania** **\$20,000** **\$2,600** **\$22,600**

**SAINT LUCIA**
**REFRIGERATION**
**Recovery/recycling**

Implementation of the refrigerant management plan

Canada

\$146,900

\$146,900

*Project was approved taking into account that the accompanying measures necessary for successful implementation were already or would be in place before implementation began and that the project had been prepared on the basis of in-depth discussions with the national authorities and trade associations.*

**Total for Saint Lucia** **\$146,900** **\$146,900**

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>SENEGAL</b>						
<b>SEVERAL</b>						
<b>Institutional strengthening</b>						
Renewal of institutional strengthening	UNEP		\$117,000	\$15,210	\$132,210	
<b>Total for Senegal</b>			<b>\$117,000</b>	<b>\$15,210</b>	<b>\$132,210</b>	
<b>SRI LANKA</b>						
<b>SEVERAL</b>						
<b>Institutional strengthening</b>						
Renewal of institutional strengthening	UNDP		\$103,120	\$13,406	\$116,526	
<b>Total for Sri Lanka</b>			<b>\$103,120</b>	<b>\$13,406</b>	<b>\$116,526</b>	
<b>SUDAN</b>						
<b>REFRIGERATION</b>						
<b>Preparation of project proposal</b>						
Preparation of an investment project in the recovery and recycling	UNIDO		\$10,000	\$1,300	\$11,300	
<b>Total for Sudan</b>			<b>\$10,000</b>	<b>\$1,300</b>	<b>\$11,300</b>	
<b>SYRIA</b>						
<b>AEROSOL</b>						
<b>Filling plant</b>						
Phasing out CFCs at Laboratories Kosmeto	UNIDO	59.9	\$175,062	\$22,758	\$197,820	2.92
Phasing out CFCs at Dina Cosmetics	UNIDO	70.0	\$228,477	\$29,702	\$258,179	3.26
<b>Preparation of project proposal</b>						
Preparation of at least three investment projects in the aerosol sector for phasing out ODS at three enterprises including Nweylati	UNIDO		\$10,000	\$1,300	\$11,300	
<b>FOAM</b>						
<b>Flexible</b>						
Phasing out of CFC-11 from flexible slabstock foam manufacturing at Akal Factory	UNIDO	101.0	\$510,130	\$66,317	\$576,447	5.05
<b>FUMIGANT</b>						
<b>Preparation of project proposal</b>						
Preparation of a demonstration project in the methyl bromide sector	UNIDO		\$10,000	\$1,300	\$11,300	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>REFRIGERATION</b>						
<b>Preparation of project proposal</b>						
Assistance for formulation of a refrigerant management plan	UNEP		\$30,000	\$3,900	\$33,900	
<i>To be coordinated with UNIDO</i>						
<b>Total for Syria</b>			<b>230.9</b>	<b>\$963,669</b>	<b>\$125,277</b>	<b>\$1,088,946</b>
<b>THAILAND</b>						
<b>AEROSOL</b>						
<b>Filling plant</b>						
P-Tech Manuchem Co. Ltd. conversion	UNDP	37.3	\$115,830	\$15,058	\$130,888	3.10
J.M.T. Laboratories Co. Ltd. conversion	UNDP	36.6	\$127,920	\$16,630	\$144,550	3.49
<b>FOAM</b>						
<b>Flexible</b>						
Conversion to CFC-free technology in the manufacture of flexible slabstock polyurethane foam at Chareon Porn	UNDP	15.0	\$93,500	\$12,155	\$105,655	6.23
Conversion to CFC-free technology in the manufacture of flexible polyurethane boxfoam at Nun Charoen	UNDP	16.8	\$105,000	\$13,650	\$118,650	6.23
Conversion to CFC-free technology in the manufacture of flexible slabstock polyurethane foam (boxfoam) at Thai International	UNDP	15.0	\$93,500	\$12,155	\$105,655	6.23
<b>Rigid</b>						
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (panels) at Alcan Nikkei Thai Aluminum Co. Ltd.	IBRD	43.5	\$36,500	\$4,745	\$41,245	0.84
Conversion to CFC-free technology in rigid spray foam applications at P.U. Foam Insulation and Trading Co. Ltd.	IBRD	58.1	\$225,400	\$29,302	\$254,702	3.88
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (containers) at Can Asia Products Co. Ltd.	IBRD	16.8	\$84,300	\$10,959	\$95,259	5.01
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (containers) at Viriyakit Plastic Industry Co. Ltd.	IBRD	27.5	\$142,700	\$18,551	\$161,251	5.18
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (thermoware) at Century Plastics	UNDP	7.3	\$56,750	\$7,378	\$64,128	7.83
Conversion to CFC-free technology in rigid sprayfoam applications at Thermobond Co. Ltd.	IBRD	10.4	\$81,400	\$10,582	\$91,982	7.83

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (thermoware) at General Injection Co. Ltd.	IBRD	15.4	\$120,580	\$15,675	\$136,255	7.83
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (thermoware) at Siam Chaicharoen Industry Co. Ltd.	IBRD	11.3	\$88,500	\$11,505	\$100,005	7.83
Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (containers) at Treathaboon Industry Co. Ltd	IBRD	22.7	\$177,750	\$23,108	\$200,858	7.83
<b>Integral skin</b>						
Conversion to CFC-free technology in the manufacture of integral skin polyurethane foam at Novochem	UNDP	19.7	\$196,600	\$25,558	\$222,158	9.98
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Conversion of CFC-12 refrigerant to HFC-134a, and CFC-11 to HCFC-141b as the blowing agent for foam insulation in the manufacture of Water Coolers at Siam Cooler	IBRD	26.4	\$186,545	\$24,251	\$210,796	7.07
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Conversion of CFC-12 commercial refrigeration to HC-134a, and CFC-11 to HCFC-141b as the blowing agent for foam insulation at Padriew Co. Ltd.	IBRD	10.2	\$135,954	\$17,674	\$153,628	13.28
<i>Incremental operating costs for compressors are not included in the calculation of incremental operating costs but may be eligible for submission to a future meeting consistent with Decision 22/26.</i>						
Conversion of CFC-12 refrigerant to HFC-134a and CFC-11 to HCFC-141b as the blowing agent for foam insulation in the manufacture of water coolers at Sirithana	IBRD	8.1	\$122,593	\$15,937	\$138,530	15.21
Conversion of CFC-12 commercial refrigeration to HFC-134a, and CFC-11 to HCFC-141b as the blowing agent for foam insulation at Sahakarn Intercool Co. Ltd.	IBRD	5.7	\$86,697	\$11,271	\$97,968	15.21
<b>Total for Thailand</b>		403.7	\$2,278,019	\$296,142	\$2,574,161	
<b>TOGO</b>						
<b>SEVERAL</b>						
<b>Institutional strengthening</b>						
Establishment of the National Ozone Office	UNEP		\$70,000	\$9,100	\$79,100	
<b>Total for Togo</b>			\$70,000	\$9,100	\$79,100	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>TRINIDAD AND TOBAGO</b>						
<b>REFRIGERATION</b>						
<b>Recovery/recycling</b>						
Implementation of the refrigerant management plan: Training the trainers of technicians in the refrigeration sector	UNEP		\$50,000	\$6,500	\$56,500	
Implementation of the refrigerant management plan: Training in monitoring and controlling of ODSs	UNEP		\$26,500	\$3,445	\$29,945	
Implementation of the refrigerant management plan: Implementation of a national programme for recovery and recycling of refrigerant	UNDP	18.5	\$213,990	\$27,819	\$241,809	
<i>Project was approved taking into account that the accompanying measures necessary for successful implementation were already or would be in place before implementation began and that the project had been prepared on the basis of in-depth discussions with the national authorities and trade associations.</i>						
<b>MAC recovery/recycling</b>						
MAC demonstration project	USA			\$117,000		\$117,000
<b>Total for Trinidad and Tobago</b>			<b>18.5</b>	<b>\$407,490</b>	<b>\$37,764</b>	<b>\$445,254</b>
<b>TUNISIA</b>						
<b>AEROSOL</b>						
<b>Filling plant</b>						
Phasing out CFCs at Parhycos, Sfax, Tunisia	UNIDO	10.0	\$41,195	\$5,355	\$46,550	4.12
<b>FOAM</b>						
<b>Flexible</b>						
Phasing out CFC-11 at Polymousse flexible polyurethane foam plant	UNIDO	35.0	\$104,343	\$13,565	\$117,908	2.98
Phasing out CFC-11 at Sotrapoc flexible polyurethane foam plant	UNIDO	20.0	\$90,037	\$11,705	\$101,742	4.50
Phasing out CFC-11 at Sud Inter Mousse flexible polyurethane foam plant	UNIDO	102.0	\$546,920	\$71,100	\$618,020	5.36
<b>REFRIGERATION</b>						
<b>Commercial</b>						
Terminal umbrella project to phase out ODS at 7 manufacturers of commercial and domestic refrigerators (Chahed Refrigeration, Sogima, Sotiem, Rei, Frigo BAF, Societe Moderne Refrigeration, Frigo Technique)	UNIDO	29.0	\$374,111	\$48,634	\$422,745	12.90
<b>Total for Tunisia</b>			<b>196.0</b>	<b>\$1,156,606</b>	<b>\$150,359</b>	<b>\$1,306,965</b>

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>TURKEY</b>						
<b>FOAM</b>						
<b>Flexible</b>						
Phasing out CFC-11 at Isbir Termoset Plastic San. A.S., Ankara, Turkey	UNIDO	130.0	\$501,350	\$65,176	\$566,526	3.85
Phasing out CFC-11 at Go-Ya Sungar Ltd. Sti.	UNIDO	95.0	\$533,400	\$69,342	\$602,742	5.61
Conversion from CFC-11 into LCD for flexible slabstock foam at Safas	IBRD	93.8	\$530,000	\$68,900	\$598,900	5.65
<b>REFRIGERATION</b>						
<b>MAC recovery/recycling</b>						
MACs servicing demonstration project	USA		\$205,000		\$205,000	
		<b>Total for Turkey</b>	<b>318.8</b>	<b>\$1,769,750</b>	<b>\$203,418</b>	<b>\$1,973,168</b>
<b>URUGUAY</b>						
<b>REFRIGERATION</b>						
<b>Preparation of project proposal</b>						
Assistance for formulation of a refrigerant management plan	UNEP		\$30,000	\$3,900	\$33,900	
		<b>Total for Uruguay</b>	<b>\$30,000</b>	<b>\$3,900</b>	<b>\$33,900</b>	
<b>VENEZUELA</b>						
<b>FOAM</b>						
<b>Rigid</b>						
Phasing out ODS at Industrias Todos C.A., Caracas	UNIDO	17.8	\$137,520	\$17,878	\$155,398	7.73
		<b>Total for Venezuela</b>	<b>17.8</b>	<b>\$137,520</b>	<b>\$17,878</b>	<b>\$155,398</b>
<b>VIETNAM</b>						
<b>REFRIGERATION</b>						
<b>Preparation of project proposal</b>						
Assistance for formulation of a refrigerant management plan	UNEP		\$30,000	\$3,900	\$33,900	
		<b>Total for Vietnam</b>	<b>\$30,000</b>	<b>\$3,900</b>	<b>\$33,900</b>	
<b>YUGOSLAVIA</b>						
<b>REFRIGERATION</b>						
<b>Preparation of project proposal</b>						
Preparation of an investment project in the refrigeration sector for phasing out ODS at Obod	UNIDO		\$10,000	\$1,300	\$11,300	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Funds Recommended Support	(US\$) Total	C.E. (US\$/kg)
<b>SOLVENT</b>						
<b>Preparation of project proposal</b>						
Preparation of an investment project in the solvent sector for phasing out ODS at Hemofarm	UNIDO		\$10,000	\$1,300	\$11,300	
			<b>Total for Yugoslavia</b>		<b>\$20,000</b>	<b>\$2,600</b>
						<b>\$22,600</b>
<b>ZIMBABWE</b>						
<b>FUMIGANT</b>						
<b>Methyl bromide</b>						
Demonstration Project - Two alternatives to the use of methyl bromide in the production of tobacco drought-resistant seedlings: non-soil cultivation and low-dose chemicals	UNIDO		\$370,700	\$48,191	\$418,891	
			<b>Total for Zimbabwe</b>		<b>\$370,700</b>	<b>\$48,191</b>
						<b>\$418,891</b>
<b>REGION: AFR</b>						
<b>REFRIGERATION</b>						
<b>Preparation of project proposal</b>						
Development of Refrigerant management plans for 10 low volume consuming countries in Southern and Eastern Africa (Botswana, Ethiopia, Kenya, Malawi, Mauritius, Namibia, Seychelles, Swaziland, Zambia, Zimbabwe)	Germany		\$300,000		\$300,000	
			<b>Total for Region: AFR</b>		<b>\$300,000</b>	
<b>SEVERAL</b>						
<b>Network</b>						
African regional networks for French-speaking and English-speaking countries (1998)	UNEP		\$431,000	\$56,030	\$487,030	
			<b>Total for Region: AFR</b>		<b>\$431,000</b>	<b>\$56,030</b>
						<b>\$487,030</b>
<b>REGION: ASP</b>						
<b>SEVERAL</b>						
<b>Network</b>						
Asia Regional Networks for SEAP and East Asia (1998)	UNEP		\$209,000	\$27,170	\$236,170	
			<b>Total for Region: ASP</b>		<b>\$209,000</b>	<b>\$27,170</b>
						<b>\$236,170</b>
West Asian regional network	UNEP		\$115,000	\$14,950	\$129,950	
			<b>Total for Region: ASP</b>		<b>\$115,000</b>	<b>\$14,950</b>
						<b>\$129,950</b>
<b>REGION: LAC</b>						
<b>SEVERAL</b>						
<b>Training programme/workshop</b>						
Regional workshop on monitoring and control of ODS consumption for the Caribbean region	UNEP		\$85,000	\$11,050	\$96,050	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
<b>Network</b>						
Latin America Region Networks for LAC South, LAC Central, and Caribbean (1998)	UNEP		\$399,000	\$51,870	\$450,870	
			<b>Total for Region: LAC</b>	<b>\$484,000</b>	<b>\$62,920</b>	<b>\$546,920</b>
<b>GLOBAL</b>						
<b>FUMIGANT</b>						
<b>Technical assistance/support</b>						
Handbook for NOUs reducing reliance on methyl bromide	UNEP		\$100,000	\$13,000	\$113,000	
Technical sourcebook of methyl bromide alternatives	UNEP		\$100,000	\$13,000	\$113,000	
<b>HALON</b>						
<b>Technical assistance/support</b>						
Provide international halon bank management information clearinghouse services (1998)	UNEP		\$89,000	\$11,570	\$100,570	
<b>REFRIGERATION</b>						
<b>Training programme/workshop</b>						
International workshop (Montreal, 8-9 September 1997) on potential for hydrocarbon-based refrigerant as replacements in existing domestic and small commercial refrigeration appliances	Switzerland		\$33,900		\$33,900	
Information video: Working safely with hydrocarbons in domestic and small scale commercial refrigeration	Germany		\$322,050		\$322,050	
<b>SEVERAL</b>						
<b>Preparation of project proposal</b>						
Advance for project preparation as indicated in the 1998 business plan	UNDP		\$256,000	\$33,280	\$289,280	
Advance for project preparation as indicated in the 1998 business plan	IBRD		\$311,400	\$40,482	\$351,882	
<b>Information exchange</b>						
Publish the OzonAction newsletter and special supplements	UNEP		\$347,000	\$45,110	\$392,110	
Support to national activities (1998)	UNEP		\$30,000	\$3,900	\$33,900	
Conduct outreach at conferences and workshops (1998)	UNEP		\$50,000	\$6,500	\$56,500	
Translate and print three guidelines and training modules into Arabic, Chinese, French and Spanish	UNEP		\$360,000	\$46,800	\$406,800	

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Project Title	Agency	ODP Tonnes	Funds Recommended Project	Support	(US\$) Total	C.E. (US\$/kg)
Deliver the OzonAction newsletter and other information through World Wide Web home page site	UNEP		\$25,000	\$3,250	\$28,250	
Provide direct query-response service (1998)	UNEP		\$80,000	\$10,400	\$90,400	
Disseminate awareness materials, technical and policy information	UNEP		\$340,000	\$44,200	\$384,200	
Collect prioritized sectoral data from worldwide sources	UNEP		\$112,000	\$14,560	\$126,560	
Maintain contact data base of experts and mailing list for OzonAction Programme publications	UNEP		\$42,000	\$5,460	\$47,460	
<b>Document/video/diskette</b>						
Update the OAIC diskette version (1998)	UNEP		\$66,000	\$8,580	\$74,580	
<b>Programme administration</b>						
Travel (1998)	UNEP		\$75,000	\$9,750	\$84,750	
Advisory and expert group meetings (1998)	UNEP		\$75,000	\$9,750	\$84,750	
<b>Total for Global</b>			<b>\$2,814,350</b>	<b>\$319,592</b>	<b>\$3,133,942</b>	
<b>GRAND TOTAL:</b>			<b>32,280.4</b>	<b>\$97,071,131</b>	<b>\$11,824,128</b>	<b>\$108,895,259</b>