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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Fortieth Meeting  
Montreal, 16-18 July 2003

**PROGRESS REPORT OF BILATERAL COOPERATION**

This document includes:

- The Comments and Recommendations of the Fund Secretariat
- The Bilateral Progress Reports of Australia, Belgium, Canada, France, Germany, Israel, Italy, Japan, Poland, Sweden and United Kingdom (January - December 2002)

## COMMENTS AND RECOMMENDATIONS OF THE FUND SECRETARIAT

### Comments

1. The following countries involved in bilateral cooperation activities submitted progress reports (see Annexes I-IX): Australia, Canada, France, Germany, Israel, Italy, Japan, Sweden and the United Kingdom. Bilateral agencies also provided data in the progress report database. Instead of providing database information and a narrative, Belgium and Poland informed the Secretariat of their progress by email. Bilateral database information is provided in the Consolidated Progress Report database that is available on the Fund Secretariat's world wide web site ([www.unmfs.org](http://www.unmfs.org)) in the spreadsheet programme, Microsoft Excel XP.

2. Progress reports were not received from Finland and Switzerland. Data from their previous progress reports are included in the summary table. The Executive Committee may wish to request progress reports from these countries to be submitted to the 41<sup>st</sup> Meeting.

3. Additional data from previous progress reports for other countries previously involved in bilateral cooperation is also included in the database (including data for the projects already reported completed by Austria, Denmark, Singapore, South Africa, and the United States of America). These data are included in the Consolidated Progress Report (UNEP/OzL.Pro/ExCom/40/13).

4. Table 1 presents a summary of bilateral cooperation. Over US \$58 million has been approved for bilateral activities. The table indicates that 55 per cent of bilateral activities have been completed. Although most bilateral projects are non-investment projects, bilateral agencies estimate that their projects will result in the total annual phase-out of 4,055 ODP tonnes once completed. Completed bilateral projects have resulted in the phase-out of 708 ODP tonnes. The rate of disbursement on bilateral activities is 65 per cent.

Table 1

### ANNUAL SUMMARY OF BILATERAL COOPERATION

Year Approved	Number of Approvals *	Number Completed	Per Cent Completed	ODP to be Phased Out*	ODP Phased Out*	Per Cent of ODP Phased Out	Approved Funding plus Adjustment (US\$)	Funds Disbursed (US\$)	Per Cent of Funds Disbursed	Balance (US\$)	Estimated Disbursement in Current Year (US\$)	Support Costs Approved (US\$)	Support Cost Adjustments (US\$)
1991	0	0	0%	0	0	0%	0	0	0%	0	0	0	0
1992	18	18	100%	0	0	0%	2,883,669	2,883,669	100%	0	0	0	0
1993	10	10	100%	0	0	0%	1,445,586	1,445,586	100%	0	0	0	0
1994	30	30	100%	229	243	106%	3,221,801	3,190,374	99%	31,427	0	0	0
1995	17	17	100%	234	296	127%	4,925,449	4,654,902	95%	270,547	0	0	0
1996	26	26	100%	218	38	17%	3,513,121	3,423,782	97%	89,339	0	0	0
1997	32	27	84%	154	0	0%	4,239,759	3,274,786	77%	964,973	210,000	1,500	0
1998	40	23	58%	66	20	30%	4,494,352	3,703,511	82%	790,841	533,030	0	0
1999	62	33	53%	591	8	1%	12,972,053	8,340,383	64%	4,631,670	1,935,864	952,433	0
2000	29	8	28%	943	67	7%	4,837,561	3,167,918	65%	1,669,643	1,408,010	526,448	0
2001	41	8	20%	1,093	36	3%	7,545,351	2,824,841	37%	4,720,510	2,816,796	896,577	-37,754
2002	65	3	5%	527	0	0%	7,853,013	859,114	11%	6,993,899	3,841,379	885,065	0
<b>Total</b>	370	203	55%	4,055	708	17%	58,030,015	37,768,866	65%	20,261,149	10,778,308	3,271,853	-37,754

\*Excludes Closed and Transferred Projects

## Implementation delays

5. There are 10 bilateral cooperation projects with implementation delays after taking into consideration any projects removed from the list per Executive Committee decision. According to the procedures for project cancellation (Decision 26/2), a report on these projects will be provided to the 41<sup>st</sup> Meeting to determine if there is any progress toward removing the impediments causing the implementation delays. Table 2 presents by bilateral agency those projects with implementation delays for which an updated report will be required for the 41<sup>st</sup> Meeting.

Table 2

### PROJECTS WITH IMPLEMENTATION DELAYS

Code	Agency	Project Title
BOL/FOA/28/INV/10	Belgium	Conversion from CFC-11 to HCFC-141b technology in the manufacture of rigid polyurethane foam at Quimica Andina
GEO/FUM/30/TAS/07	Canada	Initiating early phase-out of methyl bromide through awareness-raising, policy development and demonstration/training activities
MOL/FUM/30/TAS/06	Canada	Initiating early phase-out of methyl bromide through awareness-raising, policy development and demonstration/training activities
LEB/REF/28/TAS/29	France	Remaining issues for a RMP and preparation of strategy and projects for reduction of CFC emissions in centrifugal chillers
MOR/REF/32/TAS/42	France	Technical assistance for cold storage – Training and demonstration project
SYR/REF/29/INV/56	France	CFC emission reduction in central air conditioning
ALG/FOA/32/INV/45	Germany	Conversion of SOFTPM, Choupot Oran, to LCD technology
ALG/FOA/32/INV/46	Germany	Conversion of Matelas Souf to LCD technology
CPR/REF/27/INV/282	Germany	Elimination of CFC-11 and CFC-12 in the manufacture of domestic refrigerators and freezers at China Aerospace Industry Corp. Kunming Refrigerator Factory
CPR/REF/31/TAS/359	Japan	Develop a strategy for the refrigeration servicing sector

## Highlights from bilateral activities

6. 69 of the 165 ongoing bilateral projects concern refrigerant management plans or their components. 34 projects are investment projects, followed by 15 technical assistance activities, 5 training activities, 22 project preparation activities, 12 halon banking projects, 6 recovery and recycling activities, one demonstration activities and one institutional strengthening activities.

### Australia

7. Annex I contains Australia's progress report narrative. Australia is currently implementing 17 projects, 16 of which are Australia's contribution to the Pacific Island Countries Regional Strategy approved by the Executive Committee in January 2002. Australia's component of these projects includes training of refrigeration technicians and customs officers and assistance for enforcing ODS regulations. The initiation of Australia's components is contingent on the preparation of ODS regulations by each country. Model regulations were

circulated to each country by UNEP and a workshop was held on issues associated with ODS regulations in May 2002. Australia plans to complete the training programme for refrigeration technicians in 2004 which is after the planned milestone.

*Activities that are not subject to ongoing monitoring or cancellation*

8. The remaining Australian project under implementation is the national halon management and banking programme in India (IND/HAL/32/INV/281) that was approved in December 2000 that is being jointly implemented with the Government of Canada. Australia and India have made arrangements for the financial transfer of funds for the activities for which India has responsibility. Funds were disbursed for the preparation of India's halon Critical User Database. Planned 2003 activities include the establishment of the halon management advisory group, establishment of the national halon banking operation, technical training of halon bank operators and major users, and the development of education and awareness activities.

*Adjustments*

9. Based on the records of the Reports of the Executive Committee, the Secretariat's Inventory of Approved Projects, and the progress report, the total net amount of bilateral contributions for Australia prior to the 40<sup>th</sup> Meeting was US \$1,208,219. The Treasurer was requested to adjust this amount for her report to the 40<sup>th</sup> Meeting and the Executive Committee may wish to note that this adjustment was made.

Belgium

10. Belgium indicated that there has been no progress or disbursements for the Quimica Andina foam project in Bolivia. The project is being monitored in the context of projects with implementation delays. Belgium indicated that it had not received any information from Bolivia on the project since April, perhaps due to the destruction of the offices of the National Ozone Unit. It should be noted that Bolivia was found to be in non-compliance per Decision XIV/20 of the XIVth Meeting of the Parties.

Canada

11. Annex II contains Canada's progress report narrative. Canada is implementing 29 bilateral projects, most of which are associated with RMPs. It has completed 27 additional projects and cancelled one. Ongoing Canadian bilateral projects are expected to result in the phase out of 316 ODP tonnes when completed. Canada is implementing RMPs in Benin, Belize, Bolivia, Chile, Cuba, Guyana, Saint Kitts and Nevis, Saint Lucia and Uruguay. Canada is also implementing halon banking projects in India (with Australia) and in the Caribbean and methyl bromide projects in Georgia, Kenya, and Moldova.

12. Canada's RMP activities in Belize, Cuba, Guyana, Saint Kitts and Nevis, Saint Lucia, and Uruguay were delayed. Some of these activities are expected to be completed in 2003.

*Activities in countries found to be in non-compliance*

13. Canada is implementing five RMP activities in Bolivia (BOL/REF/36/INV/17, 19-22. RMP implementation pursuant to Decision 31/48 should enable countries to achieve compliance with the Montreal Protocol's control measures through the 85 per cent reduction in the CFC baseline level of consumption in 2007. Bolivia was in non-compliance last year (Decision XIV/20). Canada indicated that funds were disbursed for the development of regulations that are expected to be approved in 2003 and for the training of refrigeration technicians. It also indicated that the customs training project is expected to begin in the last quarter of 2003 following the adoption of legislation. Concerning the monitoring and awareness activities, Canada indicated that Bolivia has begun work on the design of a monitoring database and the awareness activity is expected to begin in 2003.

*Projects with implementation delays*

14. There are 2 projects with implementation delays for which a report may be required for the 41<sup>st</sup> Meeting: methyl bromide technical assistance projects in Georgia (GEO/FUM/30/TAS/07) and Moldova (and MOL/FUM/30/TAS/06). Canada indicated that it expected both projects to be completed before the 41<sup>st</sup> Meeting.

*Activities that are not subject to ongoing monitoring or cancellation*

15. The customs training project in Colombia (COL/REF/35/TRA/52) has been delayed because Canada's executing agency (UNEP) did not have a system in place to transfer funds to Colombia and staffing difficulties. The issues with the executing agency appear to have been resolved and the project is now planned to be completed by December 2004.

16. Canada indicated that the Caribbean regional halon bank (LAC/HAL/26/TAS/28) was delayed because of staffing changes within its executing agency (UNEP). The executing agency's regional office has contracted a consultant to implement the project, and several activities were planned to occur in 2003, including halon surveys and halon import bans in each country, the distribution of halon recovery pumps to larger consuming countries, training activities, public awareness, and a halon information clearinghouse in the Caribbean.

17. Canada is implementing a recovery and recycling project in Chile (CHI/REF/35/TAS/147) that was approved with several conditions including inter alia that legislation is enacted to control CFC import. Canada indicated that the conditions of approval for the project have not yet been met. Canada also indicated that draft legislation has been prepared, but that there does not appear to be active high-level support for the legislation in the Government. Canada has informed the Compliance and Enforcement Officer of UNEP/ROLAC of this situation and suggested that a high-level visit from UNEP, Canadian and/or Secretariat/Executive Committee officials later this year could be helpful to obtain approval of the legislation.

18. The methyl bromide demonstration programme in Kenya (KEN/FUM/26/DEM/20) has a similar report to the last three progress reports since 2000, i.e. slow response from NOU. The

field trials have been delayed for another year. The remarks indicate that it has not been possible to contact the NOU for a number of months. Canada indicated that without any response from the NOU by the 40<sup>th</sup> Meeting, it would like to investigate the possibility of cancelling the project. Pending a report from Canada at the 40<sup>th</sup> Meeting, the Executive Committee may wish to consider cancelling this project.

19. The remarks in the progress report database concerning the assistance in the design of policies and regulations component of the RMP in Saint Kitts (STK/REF/24/TAS/04) indicate that the NOU had been slow to respond. Canada indicated that it had received a recent commitment from the Government to implement the project. Draft legislation has been prepared, however, as the RMP has been delayed several times, the Executive Committee may wish to consider this project as a project with an implementation delay.

#### *Adjustments*

20. Based on the reports of the Executive Committee, the Secretariat's Inventory of Approved Projects, and Canada's progress report, the total net amount of bilateral contributions for Canada prior to the 40<sup>th</sup> Meeting was US \$6,449,438. The Treasurer was requested to adjust this amount in her report to the 40<sup>th</sup> Meeting and the Executive Committee may wish to note that this adjustment was made.

#### France

21. Annex III contains France's progress report narrative. France is implementing 28 bilateral projects and has completed 47 additional projects and cancelled one project. 6 of France's 28 ongoing projects are investment projects including 4 refrigeration projects in Syria, a refrigeration project in Cote D'Ivoire, and a methyl bromide investment project in Morocco. Ongoing projects under French implementation are expected to phase out 415 ODP tonnes, when completed.

22. France is implementing RMP activities in Central African Republic, Cote d'Ivoire, Laos, and Madagascar. Recovery and recycling activities in Iran, Lebanon and Morocco have delays of four years. France is also implementing halon banking projects in Iran, Syria (with Germany), and West Asia (with Germany).

23. Three French bilateral projects are classified as projects with implementation delays including refrigeration project (technical assistance) in Lebanon and Morocco, and a refrigeration investment project in Syria.

#### *Adjustments*

24. France provided a table of adjustments to its previously approved projects, which amounts to project savings that can be offset against its future bilateral programme. The following table indicates which adjustments have been recorded in Executive Committee reports and those which the Executive Committee might note as being adjusted at the 40<sup>th</sup> Meeting.

Correct Code	Project Title	2002 PR - Adjustment (US\$)	Adjustments Previously Recorded (US\$)	Difference (US\$)
COS/FUM/29/PRP/21	Project preparation for phase out of methyl bromide used in grain fumigation	-19,257	0	-19,257
GHA/REF/27/TAS/11	Technical assistance in air conditioning	-5,121	0	-5,121
IVC/REF/27/TAS/14	Documentary on traffic in second-hand refrigerators	-2,381	0	-2,381
JOR/REF/27/TAS/46	Technical assistance in air-conditioning	-31,575	0	-31,575
LEB/FOA/19/TAS/07	Projects preparation and technical assistance	-495	0	-495
LEB/FOA/20/INV/10	Conversion to non-CFC technology in the manufacture of flexible moulded foam at MEUBLE MODE Sarl	-235	0	-235
LEB/FOA/20/INV/12	Conversion to non-CFC technology in the manufacture of flexible foam (slabstock) at PLASTIFLEX Sarl	-7,224	0	-7,224
LEB/FOA/20/INV/13	Conversion to non-CFC technology in the manufacture of flexible foam (slabstock) at MERZA FOAM Sarl	-950	0	-950
LEB/FOA/20/INV/15	Conversion to non-CFC technology in the manufacture of flexible foam (slabstock) at FOMACO Sarl	-2,258	0	-2,258
LEB/REF/23/INV/22	Conversion of commercial refrigeration production facilities	-13,443	0	-13,443
MAG/SEV/21/CPG/01	Country Programme	-3,019	0	-3,019
MAL/SOL/22/TRA/97	Project No Clean improvement training for electronic assemblers who phased out CFC 113	-4,538	a)	-34,538
MAU/SEV/13/CPG/01	Country programme preparation	-2,580	-2,580	0
MAU/SEV/14/INS/02	Institutional strengthening project proposal	-12,891	0	-12,891
MAU/SEV/14/TRA/03	Training and awareness of personnel involved in the task of codifying and identifying ODS and ODS-containing material	-544	0	-544
MLI/FOA/25/PRP/04	Project preparation in foam sector	-1,000	0	-1,000
SEN/REF/19/PRP/06	Project preparation for projects in the hotel and fisheries industries and7 recycling	-248	0	-248
SYR/REF/26/PRP/35	Project preparation in commercial refrigeration	-8,828	0	-8,828
SYR/REF/26/TAS/37	Project preparation in the air conditioning sector	-4,018	0	-4,018
THA/SOL/29/TRA/124	No clean process improvement training for electronic assemblers	-2,140	0	-2,140
VIE/REF/20/TAS/12	Technical assistance on alternatives technologies for cold storage	-5,500	0	-5,500
Total		-128,245	-2,580	-127,314

25. Based on the records of the Reports of the Executive Committee, the Secretariat's Inventory of Approved Projects, and France's progress report, the total net amount of bilateral contributions for France prior to the 40<sup>th</sup> Meeting was US \$8,599,455. The Treasurer should be requested to adjust her records to reflect this agreed amount.

*Request for transfer of project*

26. The remarks for the technical assistance project in air-conditioning in Jordan (JOR/REF/27/TAS/46) indicate that the project would be transferred to the World Bank based on an agreement with the Government of Jordan. The Executive Committee may wish to consider France's request to transfer this project to the World Bank.

*Projects with implementation delays*

27. There are 3 projects with implementation delays for which a report may be required for the 41<sup>st</sup> Meeting: a chiller project in Lebanon (LEB/REF/28/TAS/290), a cold storage project in Morocco (MOR/REF/32/TAS/42), and a chiller project in Syria (SYR/REF/29/INV/56).

Germany

28. Annex IV contains Germany's progress report narrative. Germany is implementing 64 bilateral projects, in addition to 47 completed projects and two cancelled projects. 18 of Germany's 64 ongoing projects are investment projects including: 3 foam projects in Algeria, a halon banking in Algeria, 2 refrigeration projects in China, 2 foam projects in India, 7 foam projects in Iran, a methyl bromide investment project in Jordan, a refrigeration project in Tanzania and a regional halon banking project for Eastern and Southern African countries. Germany has ongoing projects that should result in the phase out of 1,656 ODP tonnes when completed.

29. Germany is implementing RMP activities in Botswana, Egypt, Ethiopia, Gambia, Kenya, Malawi, Mozambique, Namibia, Swaziland, Syria, Tanzania, Uganda and Zimbabwe. The implementation of Germany RMP activities are delayed in general between 1 to 3 years.

30. Germany has US \$506,530 in project preparation funds available to it to prepare activities in the following countries excluding the aerosol project in Croatia cancelled at the 39<sup>th</sup> Meeting: Algeria (phase-out sector), Cuba (phase-out sector), Ethiopia (refrigeration), Lesotho (refrigeration), Mauritius (refrigeration), Malawi (refrigeration), Morocco (halon), Mozambique (refrigeration), Namibia (phase-out sector), Oman (halon), Papua New Guinea (phase-out sector), Seychelles (refrigeration), Swaziland (refrigeration), Tanzania (refrigeration), Uganda (refrigeration), Yemen (fumigants), Zambia (refrigeration), and Zimbabwe (phase-out sector). Project preparation in Oman is delayed by one year and in Morocco and Yemen by two years.

*Projects with implementation delays*

31. Three German bilateral projects are classified as projects with implementation delays including the Kunming refrigeration project in China (CPR/REF/27/INV/282), the SOFTPM and Matelas Souf LCD foam projects in Algeria (ALG/FOA/32/INV/45-46).



*Multi-year agreements*

32. Germany has two training activities as part of the national CFC phase-out plan in Brazil: customs training (BRA/PHA/37/TRA/260) and refrigeration training (BRA/PHA/37/TRA/261). Germany indicated that the first train the trainer course was conducted in 2002.

*Activities in countries found to be in non-compliance*

33. Namibia was found to be in non-compliance per Decision XIV/22. Germany is implementing a technical assistance project in Namibia to develop ODS policies and regulations (NAM/REF/26/TAS/06) and is developing a national ODS phase-out plan. ODS draft legislation was prepared in 2001. Germany indicated that the legislation was ready for approval by cabinet in the summer session. Germany indicated that emphasis has been on creating awareness among the industry and the public regarding the incoming legislation banning use of ODS in the country and once the legislation will be in place, along with the licensing system, Germany expects that ODS imports would decline.

34. Germany is implementing a technical assistance project in Ethiopia (ETH/REF/26/TAS/06) to assist Ethiopia in establishing ODS legislation. Ethiopia was found to be in non-compliance with the Montreal Protocol (Decision XIV/34). Germany indicated that draft legislation had been prepared in its 2001 progress report. Germany indicates that ODS regulations are still pending but are already in the Parliament for approval and Germany's customs training project is expected to begin in June. 2002 country programme implementation data has been received from Ethiopia that indicate that its 2002 consumption was 30 ODP tonnes of CFCs, which is below the baseline of 33.8 ODP tonnes. Germany indicated that with the approval of the legislation as well as the completion of the customs training, Ethiopia would be well on to its way to meet its future phase out targets.

*Activities that are not subject to ongoing monitoring or cancellation*

35. The remarks for the project of establishing a halon bank in Algeria (ALG/HAL/35/INV/51) indicate that the project is at a less advanced stage that was reported last year. Last year, Germany reported that the equipment was bought. This year, the progress report indicates that equipment was ordered and contracts were about to be closed. The Executive Committee may wish to monitor this project as a project with implementation delays.

36. Germany is implementing the institutional strengthening project in Angola (ANG/SEV/38/INS/03) that was approved in November 2002. Angola was found in non-compliance with the data reporting requirement for the purpose of establishing baselines under Article 5 (Decision XIV/16). Germany indicated that in January 2003 it was informed that Angola had not yet reported its ODS baseline consumption. Germany assisted the NOU in compiling the data. Germany indicated that during February 2003 ODS consumption data as well as data related to ODS consumption have been submitted to the Ozone Secretariat in Nairobi. However, the information received from the Ozone Secretariat in May 2003 indicated that Angola had not reported baseline data, but had reported 105 ODP tonnes of CFC consumption in 2002.

37. The remarks for the halon banking management plan in West Asia countries (AFR/HAL/35/INV/29) indicate that work has started and the project would be completed in January 2003. The remarks also indicate a delay due to the Iraq war. The Executive Committee may wish to monitor this project as a project with implementation delays.

38. In its report to the 38<sup>th</sup> Meeting on establishing a national recovery and recycling network project in Egypt (EGY/REF/29/TAS/75), Germany indicated that it had transferred funds to UNIDO for the implementation of the good refrigeration practices component of this project. Moreover, the implementation of the good practice courses was a condition for the release of the recovery and recycling equipment. Since Germany is the lead agency for this project, it was requested to indicate the status of the refrigeration practices component of this project and when the course are planned to be completed. Pending a response from Germany to the Secretariat, the Executive Committee may wish to monitor this project as a project with implementation delays.

39. The remarks for the project preparation/technical assistance for the halon sector in Oman (OMA/HAL/34/PRP/03) are the same as in the 2002 progress report. We note that US \$12,240 of the US \$17,000 approved for this project preparation was disbursed, but now Oman wants the World Bank to prepare a halon bank and the Bank has requested project preparation funds. Germany indicated that its preparation would be used by the World Bank to implement the halon bank.

40. In its report to the 38<sup>th</sup> Meeting on the national recovery and recycling network project in Syria (SYR/REF/30/TAS/59), Germany indicated that it had transferred funds to UNEP for the implementation of the good refrigeration practices component of this project. Moreover, the implementation of the good practice courses was a condition for the release of the recovery and recycling equipment. Since Germany is the lead agency for this project, it was requested to indicate the status of the refrigeration practices component of this project and when the course are planned to be completed. Pending a response from Germany to the Secretariat, the Executive Committee may wish to monitor this project as a project with implementation delays.

41. Germany is implementing a project to provide assistance in the design of policies and regulations in Tanzania (URT/REF/26/TAS/12). Germany reported last year that ODS regulations were under the East African Customs and Transfer Tax Management Act for the policy and regulations project in Tanzania (URT/REF/26/TAS/12). This year the remarks address refrigeration training which is not a component of this project. Since the regulation were in place last year when 60 per cent of the funds were disbursed of the US \$45,000, this year 82 per cent of the funds were disbursed, the Secretariat asked if the balance (US \$8,243) could be returned. Germany indicated that refrigeration training was ongoing, but Germany is implementing the RMP of 14 African countries in another project (GLO/REF/26/TAS/172) that included Tanzania and addressed *inter alia* refrigeration technician training. The Executive Committee may wish to request Germany to return the balance of funds for this project.

42. Germany reported that ODS regulations were developed under the Hazardous Substance and Articles Act in its 2001 progress report for the technical assistance project in Zimbabwe (ZIM/REF/26/TAS/15) . Since 91 per cent of the US \$45,000 approved for this project have

been disbursed, the Secretariat asked if the balance of approved funds (US\$ 4,015) could be returned. Germany did not respond to this request. The Executive Committee may wish to request Germany to return the balance of funds for this project.

43. The following RMP update preparation activities that were approved at the 37<sup>th</sup> Meeting in July 2002 are delayed pending the completion of the current RMP activities that are expected to be completed from September 2003 to April 2004 as indicated below:

- Mozambique (MOZ/REF/37/PRP/09) August 2003
- Project preparation for a refrigerant management plan update in Uganda (UGA/REF/37/PRP/09) August 2003
- Project preparation for a refrigerant management plan update in Tanzania (URT/REF/37/PRP/15) April 2004
- Project preparation for a terminal ODS phase-out management plan in Zimbabwe (ZIM/PHA/37/PRP/25) September 2003

44. The following projects have the same remarks as were indicated in the 2001 progress report. Germany was requested to provide an update. Since no information was provided, the Executive Committee may wish to monitor these projects as projects with implementation delays:

- Establishment of a regional halon bank for Eastern and Southern African countries (Botswana, Ethiopia, Kenya, Lesotho, Namibia, Tanzania and Zimbabwe) (AFR/HAL/35/INV/29)
- Implementation of RMPs for 14 low volume consuming countries in eastern and southern Africa (GLO/REF/26/TAS/172)
- Recovery and recycling project in Kenya (KEN/REF/28/TAS/24)

#### *Adjustments*

45. Germany indicated that US \$81,000 should be offset against future approvals for the methyl bromide project in Egypt (EGY/FUM/26/DEM/69). This offset had not been reflected in the reports of the Executive Committee, but was previously indicated by Germany. The Executive Committee may wish to note this adjustment indicating that it should be offset against future approvals at the 40<sup>th</sup> Meeting.

46. Based on the records of the Reports of the Executive Committee, the Secretariat's Inventory of Approved Projects, and Germany's progress report, the total net amount of bilateral contributions for Germany prior to the 40<sup>th</sup> Meeting was US \$21,254,824. The Treasurer should be requested to adjust her records to reflect this agreed amount.

#### Israel

47. Annex V contains Israel's progress report narrative. Israel has one bilateral project, a methyl bromide workshop (GLO/FUM/37/TRA/240) that was completed in December 2002. Israel provided a detailed report on the activity as its progress report, along with a database with

the required information. The database indicated that of the US \$98,300 approved for the project, none of the funds were disbursed in 2002 but US \$33,229 was planned for disbursement in 2003. Israel indicated that although the project activity had been fully completed, the funds had not yet been disbursed by the Ministry of the Environment to the local agency that undertook the organization of the workshop. Thus the planned expenditures for 2003 represent the total cost of the workshop, and will be disbursed during 2003 by the Ministry of the Environment to the local agency. Israel further noted that the Ministry of the Environment expects to return the unutilized balance from the project budget to the Multilateral Fund upon completion of final payments for the project.

#### Italy

48. Annex VI contains Italy's progress report narrative. Italy is implementing 7 investment projects that will phase out 440 ODP tonnes when implemented. Italy will complete its refrigeration project in Yugoslavia in 2003, its four foam projects in India in 2004, its refrigeration project in China in 2005 and its methyl bromide investment project in Romania in 2005.

#### Japan

49. Annex VII contains Japan's progress report narrative. Japan is implementing 9 projects, in addition to 5 already completed projects. 4 of Japan's 9 ongoing projects are investment projects including: a refrigeration projects in China, 2 foam projects in Indonesia and a foam project in Nigeria. Japan has ongoing projects that should result in the phase out of 149 ODP tonnes when completed.

#### *Projects with implementation delays*

50. There is one project with implementation delays for which a report may be required for the 41<sup>st</sup> Meeting, the development of a strategy for the refrigeration servicing sector in China (CPR/REF/31/TAS/359).

#### *Completed projects with balances*

51. Japan indicated that the project preparation in the solvent sector in China (CPR/SOL/29/PRP/307) was completed in December 2000. Despite the fact that Japan indicates that US \$12,000 is expected to be disbursed in 2003, there remains a balance of US \$35,739. The Executive Committee may wish to request Japan to report on this project as a completed project with balances.

#### Poland

52. Poland is implementing one project, a customs training project in Viet Nam (VIE/REF/34/TAS/37). Poland provided a report to the 38<sup>th</sup> Meeting that indicated that the project was delayed since the payment for the project through Poland's bilateral contributions was delayed due to problems with the national budget, but that the contribution was confirmed as

received by UNON in March 2002. The Secretariat asked for a progress report for other activities through 2002 in April 2003. Poland indicated that it had no new information. However, the project was planned to be completed in January 2003. Since there were additional delays reported and the project does not appear to have been completed in January 2003, the Executive Committee may wish to monitor this project as a project with implementation delays.

### Sweden

53. Annex VIII contains Sweden's progress report narrative. Sweden is implementing 5 projects, in addition to two completed projects. The ongoing projects include: a refrigerant management plan in Laos, a CFC phase-out plan in Philippines, a halon banking in Thailand, a technical assistance project in the Asia and the Pacific region and a project preparation in Croatia, noting that the World Bank is the lead agency for the projects in the Philippines and Thailand.

#### *Multi-year agreement*

54. Sweden is co-implementing agency with the World Bank in the National CFC phase-out plan in the Philippines (PHI/PHA/38/TAS/68). Sweden is responsible for technical assistance activities. Sweden indicated that a mission to review implementation plans took place in February 2003, an international consultant was hired in April 2003. A regional workshop on the implementation of the national CFC phase-out plans for the Southeast Asian region was held in December 2002. A project management was planned to be established in May 2003.

#### *Activities that are not subject to ongoing monitoring or cancellation*

55. Sweden is implementing the technical assistance components of the Thai halon bank project (THA/HAL/29/TAS/120). Sweden indicated that it transferred the funds for the project to the World Bank in May 2001. Sweden noted that the recruitment of national and international consultants for the project had been delayed, mainly due to the time required to identify the qualified candidate, but the selection of national consultant was planned for completion in May 2003. As indicated in the Secretariat's comments on the World Bank progress report (UNEP/OzL.Pro/ExCom/40/18), there is no reported phase-out and Thailand's 2001 consumption (500 ODP tonnes) exceeds its baseline (272 ODP tonnes). The World Bank's project is being recommended for continued monitoring as a project with implementation delays.

### United Kingdom

56. The United Kingdom is implementing a concessional loan project in Mexico (MEX/REF/28/INV/95). The progress report database submitted by the United Kingdom indicated that project was completed in April 2002.

57. The project was approved with the condition that "The Multilateral Fund money repaid in the first phase of the project would be made available for redeployment by the Executive Committee within three years of project approval and would be usable, based on a decision to be taken by the Executive Committee, either for a second phase of chiller purchases in Mexico or

for other specific ODS phase-out projects in that country (Decision 28/32). The Secretariat asked the United Kingdom if the US \$500,000 approved by the Multilateral Fund as a bilateral contribution from the Government of the United Kingdom had been repaid in full by the beneficiaries. The United Kingdom indicated that the first \$500,000 has not yet been fully repaid to the Mexican Government because enterprises have 3 year to repay the loans which allows sufficient time for economic benefit from energy savings to be realized. It also noted that all expected payments thus far have been made on time and in full. The United Kingdom provided a detailed progress report (see Annex IX) as part of a funding request for the second phase of the project. This request is before the Sub-Committee for Project Review for its consideration.

## RECOMMENDATION

The Monitoring, Evaluation and Finance Sub-Committee may wish to consider recommending to the Executive Committee to:

1. Note with appreciation the progress reports submitted by the Governments of Australia, Belgium, Canada, France, Germany, Israel, Italy, Japan, Poland, Sweden and the United Kingdom.
2. Request the Governments of Finland and Switzerland to provide their progress reports to the 41<sup>st</sup> Meeting of the Executive Committee.
3. Note that the Treasurer made adjustments prior to the 40<sup>th</sup> Meeting to the total net value of bilateral contributions of Australia and Canada (US \$1,208,219 and US \$6,449,438, respectively) based on the data submitted in their progress reports that agreed with the data in the Secretariat's Inventory of Approved Projects.
4. Request the Governments of Canada, France, Germany and Japan to provide reports on the projects with implementation delays to the 41<sup>st</sup> Meeting of the Executive Committee.
5. Cancel the methyl bromide demonstration programme in Kenya (KEN/FUM/26/DEM/20) under Canadian implementation pending a report on the status at the 40<sup>th</sup> Meeting.
6. Monitor the following projects as projects with implementation delays and note their slow progress:
  - (a) Assistance in the design of policies and regulations in St. Kitts and Nevis (STK/REF/24/TAS/04) under Canadian implementation;
  - (b) Halon bank in Algeria (ALG/HAL/35/INV/51) under German implementation;
  - (c) Halon banking management plan in West Asia (AFR/HAL/35/INV/29) under German implementation;

- (d) National recovery and recycling project in Egypt (EGY/REF/29/TAS/75) under German implementation;
  - (e) National recovery and recycling project in Syria (SYR/REF/30/TAS/59) under German implementation;
  - (f) Establishment of a regional halon bank for Eastern and Southern African countries (Botswana, Ethiopia, Kenya, Lesotho, Namibia, Tanzania and Zimbabwe) (AFR/HAL/35/INV/29) under German implementation;
  - (g) Implementation of RMPs for 14 low volume consuming countries in eastern and southern Africa (GLO/REF/26/TAS/172) under German implementation;
  - (h) Recovery and recycling project in Kenya (KEN/REF/28/TAS/24) under German implementation; and
  - (i) Customs training project in Viet Nam (VIE/REF/34/TAS/37) under Polish implementation.
7. Offset US \$127,314 in project savings against future approvals of the Government of France for bilateral cooperation as indicated below:
- (a) US \$19,257 from project preparation for phase out of methyl bromide used in grain fumigation in Costa Rica (COS/FUM/29/PRP/21);
  - (b) US \$5,121 from technical assistance in air conditioning (GHA/REF/27/TAS/11);
  - (c) US \$2,381 from documentary on traffic in second-hand refrigerators in Cote-d'Ivoire (IVC/REF/27/TAS/14);
  - (d) US \$31,575 from technical assistance in air-conditioning in Jordan (JOR/REF/27/TAS/46);
  - (e) US \$495 from project preparation and technical assistance in Lebanon (LEB/FOA/19/TAS/07);
  - (f) US \$235 from conversion to non-CFC technology in the manufacture of flexible moulded foam at Meuble Mode Sarl in Lebanon (LEB/FOA/20/INV/10);
  - (g) US \$7,224 from conversion to non-CFC technology in the manufacture of flexible foam (slabstock) at Plastiflex Sarl in Lebanon (LEB/FOA/20/INV/12);
  - (h) US \$950 from conversion to non-CFC technology in the manufacture of flexible foam (slabstock) at Merza Foam Sarl in Lebanon (LEB/FOA/20/INV/13);
  - (i) US \$2,258 from conversion to non-CFC technology in the manufacture of flexible foam (slabstock) at Fomaco Sarl in Lebanon (LEB/FOA/20/INV/15);

- (j) US \$13,443 from conversion of commercial refrigeration production facilities in Lebanon (LEB/REF/23/INV/22);
  - (k) US \$3,019 from country programme preparation in Madagascar (MAG/SEV/21/CPG/01);
  - (l) US \$4,538 from no clean improvement training for electronic assemblers who phased out CFC-113 in Malaysia (MAL/SOL/22/TRA/97);
  - (m) US \$12,891 from institutional strengthening in Mauritania (MAU/SEV/14/INS/02);
  - (n) US \$544 from training and awareness of personnel involved in the task of codifying and identifying ODS and ODS-containing material in Mauritania (MAU/SEV/14/TRA/03);
  - (o) US \$1,000 from project preparation in foam sector in Mali (MLI/FOA/25/PRP/04);
  - (p) US \$248 from project preparation for projects in the hotel and fisheries industries and recycling in Senegal (SEN/REF/19/PRP/06);
  - (q) US \$8,828 from project preparation in commercial refrigeration in Syria (SYR/REF/26/PRP/35);
  - (r) US \$4,018 from project preparation in the air conditioning sector in Syria (SYR/REF/26/TAS/37);
  - (s) US \$2,140 from No clean process improvement training for electronic assemblers in Thailand (THA/SOL/29/TRA/124); and
  - (t) US \$5,500 from technical assistance on alternatives technologies for cold storage in Viet Nam (VIE/REF/20/TAS/12).
8. Request the Treasurer to modify the total amount of France's bilateral assistance through the 39<sup>th</sup> Meeting to US \$8,592,195 based on the data submitted in France's progress report that agreed with the data in the Secretariat's Inventory of Approved Projects
  9. Note the transfer of funds from France for the technical assistance project in air-conditioning in Jordan (JOR/REF/27/TAS/46) to the World Bank.
  10. Request the Government of Germany to return the balance of funds from the project to provide assistance in the design of policies and regulations in Tanzania (URT/REF/26/TAS/12) and Zimbabwe (ZIM/REF/26/TAS/15).
  11. Offset US \$81,000 against future approvals of the Government of Germany for bilateral cooperation from the methyl bromide project in Egypt (EGY/FUM/26/DEM/69).



12. Request the Treasurer to modify the total amount of Germany's bilateral assistance through the 39<sup>th</sup> Meeting to US \$21,254,824 based on the data submitted in Germany's progress report that agreed with the data in the Secretariat's Inventory of Approved Projects.
13. Request the Government of Japan to report to the 41<sup>st</sup> Meeting on the project preparation in the solvent sector in China (CPR/SOL/29/PRP/307) in the context of completed projects with balances.

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**Annex I**

**PROGRESS REPORT OF AUSTRALIA**

## BILATERAL AGENCIES PROGRESS REPORT - AUSTRALIA

### I. Project Approvals and Disbursements

#### A. Annual Summary Data

As at 31 December 2002, the Executive Committee has approved 26 activities as bilateral contributions from the Government of Australia to the Multilateral Fund. Of the US\$ 1 172 339 approved\*, US\$ 642 428 has been disbursed including completed projects. The remainder of the approved funding relates to projects approved in 2000 and 2002. Bilateral contributions on an annual basis are as follows:

<u>Year</u>	<u>Amount (US dollars)**</u>
1992	34 974
1993	4 317
1994	66 800
1995	120 896
1996	423 652
1997	0
1998	0
1999	0
2000	245 700
2001	290 413
2002	276 000
<b>TOTAL</b>	<b>1 559 144</b>

\*\* Adjusted for the return of unutilised funds.

#### B. Summary Data by Type (CPG, DEM, INS, INV, PRP, TAS, TRA)

Under the Secretariat's classification system, Australia's bilateral activities are distributed among the following types of projects:

Type	Number of Projects	Amount Approved * (US dollars)
Country Programmes	-	-
Demonstration Projects	2	423,652
Institutional Strengthening	-	-
Investment Projects	1	245 700
Project Preparation	-	-
Technical Assistance	20	687 309
Training	3	106 091
<b>TOTAL</b>	<b>26</b>	<b>1 559 144</b>

\* Adjusted amount - includes any adjustments for unutilised funds.

## II. Project Completions since Last Report

*VIE/REF/20/DEM/14: Demonstration project CFC recycling and emissions reduction in the commercial refrigeration sector*

Awaiting report from UNDP.

## III. Global and Regional Project Highlights

N/A

## IV. Completed and Ongoing Projects

All of the Government of Australia's bilateral activities are considered non-investment projects with the exception of *National Halon Management and Banking Programme:IND/HAL/32/INV/281* which is expected to phase out 213.6 ODP-weighted metric tonnes (Australian contribution).

Of the 26 approved activities, the Government of Australia has completed 7 and 17 are classified as ongoing. 16 of Australia's ongoing projects consist of Australia's contribution to the Pacific Island Countries Regional Strategy approved by the Executive Committee in January 2002. 1 project, *Replacement of methyl bromide with non- ozone depleting substances in grain storage: KEN/FUM/21/DEM/12* was cancelled at the 30<sup>th</sup> Meeting of the Executive Committee and the undisbursed balance of US\$91 869 was returned for reprogramming on 29 June 2000. A Project Cancellation Report was submitted to the 32<sup>nd</sup> Meeting of the Executive Committee. Another project, *Implementation of the RMP: Programme for the recovery and recycling of CFC 12 refrigerant: VIE/REF/34/TAS/34* was transferred to UNDP for implementation as Australia could not reach agreement with UNDP on implementation modalities.

Brief progress reports on the Government of Australia's 17 ongoing investment activities are provided below. Those projects that collectively consist of

*IND/HAL/32/INV/281: National Halon Management and Banking Programme*

The 32<sup>nd</sup> Meeting of the Executive Committee approved IND/HAL/32/INV/281 in December 2000. This project is being implemented jointly with the Government of Canada.

Australia and India have signed an arrangement on procedures for Australia to make contributions towards those project elements for which India has responsibility. India has opened a bank account for receipt of Australian funds and Australia will commence disbursements upon completion of agreed milestones.

The project consultant has completed costed work programmes for the implementation of the project, and has instructed Partner Country Authorities on the preparation of India's halon Critical User Database. First disbursements for this project occurred in 2002. As at 31 December 2002, US\$33 950 had been disbursed.

It is anticipated that the following activities will be completed in 2003:

- Establishment of a the Halon Critical Users Database;
- Establishment of the Halon Management Group/ Advisory Forum;
- Establishment of the National Halon Banking Operation;
- Technical training for halon bank operators and major halon users; and
- Development of Public and Technical Personnel Education and Awareness Activities.

*FSM/REF/36/TAS/01; FSM/REF/36/TAS/02; KIR/REF/36/TAS/02; KIR/REF/36/TAS/03;*  
*MAS/REF/36/TAS/02; MAS/REF/36/TAS/04; SOI/REF/36/TAS/02; SOI/REF/36/TAS/04;*  
*TON/REF/36/TAS/01; TON/REF/36/TAS/03; TTR/REF/36/TAS/01; TTR/REF/36/TAS/02;*

*TUV/REF/36/TAS/02; TUV/REF/36/TAS/04; VAN/REF/36/TAS/02; VAN/REF/36/TAS/04: Regional Strategy for the Implementation of the Montreal Protocol in Pacific Island Countries.*

The 36<sup>th</sup> Meeting of the Executive Committee approved the *Regional Strategy for the Implementation of the Montreal Protocol in Pacific Island Countries* in March 2002. This project is being jointly implemented by Australia and UNEP. The project is due to be completed by 2005.

Australia is responsible for the following components of this project:

- training programme for refrigeration technicians including MAC recovery and recycling equipment; and
- assistance for enforcing ODS regulations and training programme for customs officers.

These components are scheduled to commence post-31 December 2002 and are dependent upon the preparation of ODS regulations by each country. In that regard, UNEP has advised that model regulations have been circulated to each country participating in the strategy during 2002. Additionally, issues for each country to consider in the preparation of regulations were considered during the first thematic workshop conducted in Fiji during May 2002.

It is anticipated that the training programme for refrigeration technicians will be completed in 2003. The milestone “training programme for customs officers” is dependant upon each participating country implementing appropriate regulations. This is not expected to occur in time to permit the milestone to be met in 2003. This activity is planned to continue through to 2004.

***VIE/REF/20/DEM/14: Vietnam Refrigerant Recovery/Recycling Project***

Australia’s 2001 Bilateral Agencies Progress Report reported that several refrigerant analysers had broken down. These analysers have subsequently been either replaced with new equipment or repaired under warranty. The monitoring phase of this project was completed in 2001, and Vietnam has signed the handover protocol concluding the project. A Project Completion Report is currently being prepared.

V. Status of Project Preparation, by country

N/A

VI. Administrative Issues (Adjustments and Other Issues)

A. Adjustments

The project Replacement of methyl bromide with non ozone depleting substances in grain storage: KEN/FUM/21/DEM/12 was cancelled. The balance remaining in the project was returned to the MLF for reprogramming on 29 June 2000.

The project Implementation of the RMP: Programme for recovery and recycling of CFC-12 refrigerant: VIE/REF/34/TAS/34 was transferred back to UNDP after agreement could not be reached between UNDP and Australia regarding implementation of this project.

B. Other Issues

N/A

**Annex II**

**PROGRESS REPORT OF CANADA**

## 2002 Status on Canada's Bilateral Activities

### I. Project Approvals and Disbursements

#### A. Annual Summary Data

As of December 31<sup>st</sup> 2002, the Executive Committee has approved 57 activities as bilateral contribution from the Government of Canada to the Multilateral Fund. Of the US \$ 6,449,438 approved as bilateral contributions from Canada, US \$ 4,375,095 has been disbursed including completed projects. Bilateral contributions on an annual basis are as follows:

Year	Amount*
1993	\$649,500.00
1994	\$536,270.00
1995	\$50,000.00
1996	\$762,685.00
1997	\$853,950.00
1998	\$548,710.00
1999	\$727,040.00
2000	\$917,251.00
2001	\$878,582.00
2002	\$525,450.00
<b>TOTAL</b>	<b>\$6,449,438.00</b>

\*Adjusted for the return of unutilized funds

#### B. Summary Data by type (CPG, DEM, INS, INV,PRP, TAS,TRA)

According to the Secretariat's classification system, Canada's bilateral activities are distributed among the following types of projects:

Type	Number of Projects	Amount Approved (US dollars)*
Country Programmes		
Demonstration Projects	3	\$562,000
Institutional Strengthening		
Investment Projects	6	\$524,520
Project Preparation	2	\$31,075
Technical Assistance	26	\$3,550,761
Training	20	\$1,781,082
<b>TOTAL</b>	<b>57</b>	<b>\$6,449,438</b>

\*Adjusted for the return of unutilised funds



## **II. Project Completion's Since Last Report**

Since the last progress report, Canada has financially completed 9 projects.

## **III. Global and Regional Project Highlights**

n/a

## **IV. Completed and On-going Projects**

Of the 57 activities approved to date, 27 have been completed, one closed and the remaining 29 are on-going.

## **V. Status of Project preparation, by country**

The preparation for an RMP update for St. Lucia was approved at the 35<sup>th</sup> meeting of the Executive Committee. The preparation of the update is completed, but St. Lucia and Canada have decided to wait until additional data is collected on St. Lucia's CFC recovery and recycling rates before submitting the project, in case such information might lead to the redefinition of the existing project proposal. It is expected that the proposal will be submitted at the 41<sup>st</sup> meeting of the Executive Committee.

## **VI. Administrative Issues (Adjustments and Other Issues)**

n/a

## **Annex I Country Developments**

During 2002, progress was undertaken in the implementing Refrigerant Management Plans (RMPs) in Belize, Benin, Chile and Cuba, finalizing customs training in Antigua and Barbuda, Burkina Faso, St. Lucia and Uruguay, and initiating the CFC Terminal Phase Out Plan in Jamaica (in collaboration with UNDP) and the Halon Bank Management Plan in India (in cooperation with Environment Australia). The following include some special achievements in a few of these countries.

### **Belize: Adoption of the licensing system and training of customs officers**

While in 2001, Belize's CFC consumption was above its baseline, in 2002, the country adopted national legislation establishing an ODS licensing system, quota provisions for certain ODS and bans on the importation of ODS-using equipment.

The legislation is very comprehensive with the principal provisions effective from January 2003 (although the bans on the import of ODS-using equipment will only come into effect on January 1, 2004). Due to the implementation and enforcement of this legislation, Belize will be in compliance with the Montreal Protocol 2005 and 2007 targets for CFCs and will achieve a complete phase-out of CFC consumption by January 2008. The RMP contributed to Belize's efforts by holding a stakeholder consultation workshop prior to the adoption of the legislation, financing legal experts to draft the legislation and initiating the training of customs officers on the implementation of the legislation.

### **Cuba: Implementation of the RMP**

Implementation of Cuba's RMP was nearing completion in 2002, with the training of 920 technicians already undertaken and the implementation of a CFC recovery and recycling project for the mobile air conditioning (MAC) sector. A project mission in early 2003 confirmed that new technicians were continually being trained in good practices, while the MAC machines provided were being used mostly to recover, recycle and re-use CFCs from bus and train air conditioners. A successful Train-the-Trainer Customs Training workshop was also held in May 2002, with the assistance of an international expert and an Environment Canada customs and enforcement expert. To date, Cuba has trained over 50 Customs officers and intends on training and additional 150 in 2003.

### **India: Initiation of a Halon Bank Management Plan**

In cooperation with Environment Australia, progress was undertaken in implementing India's Halon Bank Management Plan, including the formation of a Halon Management Group in the country, initiating development of a halon user database, procurement of halon recycling and reclamation equipment and construction of a facility in India to house the recycling and reclamation plant. Commissioning of the halon recycling and reclamation plant, together with associated operator training is scheduled to take place in May 2003. It should be noted that India has committed itself to banning the production and import of new halon 6 month following the installation of the plant.

**Annex III**

**PROGRESS REPORT OF FRANCE**

**RAPPORT SUR L'ETAT D'AVANCEMENT DES ACTIVITES BILATERALES DE  
LA FRANCE DANS LE CADRE DU PROTOCOLE DE MONTREAL A LA DATE  
DU 31 DECEMBRE 2002**

**I. Approbation de projets et décaissements:**

**A. Données annuelles:**

Le Comité Exécutif a approuvé 77 activités comme contributions bilatérales du Gouvernement français au Fonds Multilatéral. Sur les 8 146 102\* dollars US approuvés au 31 décembre 2002, 3 957 314 dollars US ont été décaissés, y compris les activités achevées. La répartition sur la base des contributions bilatérales est comme suit:

<u>Année</u>	<u>Montant en US dollars(*)</u>
1994	220 767
1995	139 505
1996	1 129 542
1997	1 649 851
1998	509 804
1999	2 653 114
2000-2002	1 843 519
<b>Total</b>	<b>8 146 102</b>

\* Montants ajustés par rapport aux fonds non décaissés.

**B. Classification des contributions par type (CPG, DEM, INS, INV, PRP, TAS, TRA)**

Selon le système de classification du Secrétariat, les activités bilatérales de la France sont réparties selon les types suivants de projets:

<b>Type</b>	<b>Nombre de Projets</b>	<b>Montants approuvés(*) (US dollars)</b>
Programmes de pays (CPG)	3	97 787
Projets de démonstration (DEM)	0	0
Renforcement Institutionnel (INS)	1	25 983
Projets d'investissement (INV)	18	3 826 054
Préparation de projets (PRP)	13	291 167
Assistance technique (TAS)	29	3 083 701
Formation (TRA)	13	821 410
<b>TOTAL</b>	<b>77</b>	<b>8 146 102</b>

\* Montants ajustés par rapport aux fonds non décaissés.

## II. Projets complétés et/ou annulés depuis le dernier rapport:

Depuis le dernier rapport de progression des projets, le Gouvernement français a achevé les projets suivants:

Référence du projet	Titre du projet	Remarques
IRA/REF/24/INV/34	Conversion à des technologies non-CFC de 4 producteurs de voitures et wagons	Rapport d'achèvement à soumettre
IRA/SOL/28/INV/48	Conversion à une technologie non-SAO sur le site d'Iran Dorchakh	Rapport d'achèvement à soumettre
JOR/REF/27/TAS/46	Assistance technique dans les chillers	La Jordanie a soumis son plan d'élimination totale de CFC. Donc ce projet est sans suite.
CPR/SOL/29/PRP/32 7	Préparation de projets dans le secteur des solvants	Préparation achevée. Attente de la confirmation du gouvernement chinois avant soumission
VIE/REF/28/INV/22	Assistance technique dans le secteur des Chillers chez VINATEX	Rapport d'achèvement à soumettre
AFR/REF/32/TAS/26	Modernisation des équipements frigorifique dans l'UEMOA	Rapport en circulation dans les pays pour commentaires éventuels avant soumission à la 41 <sup>ème</sup> réunion du Comité Exécutif
THA/SOL/29/TRA/12 4	Formation dans les industries de la sous-traitance électronique à l'utilisation des technologies sans nettoyage	Rapport d'achèvement à soumettre

## III. Remarques sur les projets globaux et régionaux:

Référence du projet	Titre du projet	Remarques
ASP/ASP/HAL/28/ TAS/29	Préparation d'un programme régionale de banque de halons concernant 4 pays (Bahrain, Liban, Qatar et Yémen)	Les équipements ont été acquis et sont en cours d'installation

#### **IV. Projets complétés et en cours (INV, TAS et TRA):**

A la date du 31 décembre 2002, 77 activités bilatérales ont été approuvées. L'état d'avancement de ces projets est comme suit :

**INV** : 18 projets d'investissement ont été approuvés.

- 8 projets achevés avant 2002,
- 3 Projets achevés en 2002;
- 6 Projets en cours : 5 projets en 1999 et 1 projet en 2002 ;
- Projet annulé : 1 projet a été annulé (ASP/MAL/SOL/18/INV/78).

**TAS** : 29 projets de ce type ont été approuvés.

- 2 projets achevés en 2002,
- 9 Projets achevés avant 2002;
- 18 projets en cours : 3 en 1997, 2 en 1998, 3 en 1999 et 10 en 2000-2002,

**TRA** : 13 projets de ce type ont été approuvés :

- 1 projet achevé en 2002,
- 8 projets achevés avant 2002,
- 4 projets en cours : 2 approuvés en 1999 et 2 en 2000-2002,

#### **V. Rapport d'état d'avancement des projets de préparation par pays:**

13 projets de préparation de projets ont été approuvés :

- 1 projet achevé en 2002,
- 11 projets ont été achevés : avant 2001,
- 1 projet en cours approuvé en 2000-2002,

## VI. Aspects administratifs (ajustements et autres aspects)

Les ajustements demandés ainsi que les projets correspondant se trouvent dans le tableau ci-dessous :

Code projet	Montant ajustement en USD
COS/FUM/29/PRP/21	19 257
GHA/REF/27/TAS/11	5 121
IVC/REF/27/TAS/14	2 381
JOR/REF/27/TAS/46	31 575
LEB/FOA/19/TAS/07	495
LEB/FOA/20/INV/10	235
LEB/FOA/20/INV/12	7 224
LEB/FOA/20/INV/13	950
LEB/FOA/20/INV/15	2 258
LEB/REF/23/INV/22	13 443
MAG/SEV/21/CPG/01	3 019
MAL/SOL/22/TRA/97	4 538
MAU/SEV/13/CPG/01	2 580
MAU/SEV/14/INS/02	12 891
MAUV/SEV/14/TRA/03	544
MLI/FOA/25/PRP/04	1000
SEN/REF/19/PRP/06	248
SYR/REF/26/PRP/35	8 828
SYR/REF/26/TAS/37	4 018
THA/SOL/29/TRA/124	2 140
VIE/REF/20/TAS/12	5 500
TOTAL	128 245

**Annexe I      Remarques sur l'exécution des Programmes de pays et du projet de renforcement institutionnel:**

**A.      Programme de pays:**

3 préparations de programmes de pays ont été approuvées :

- 2 achevés en 1995 (Mauritanie et Vietnam),
- 1 achevé en 1999 (Madagascar, y inclus un plan de gestion des réfrigérants).

**B.      Renforcement Institutionnel:**

1 seul projet avait été approuvé en 1994 et achevé en 1999



**Annex IV**

**PROGRESS REPORT OF GERMANY**

**Government of Germany**  
**Narrative Progress report and financial reporting for bilateral activities**

April 2003

**I. Project Approvals and Disbursements**

**A. Annual Summary Data**

The Executive Committee has approved 113 bilateral projects submitted by the Government of Germany until December 2002. Of the US\$ 21.254.824 approved US\$ 12.708.679 has been disbursed including completed projects.

Bilateral contributions on an annual basis are as follows:

<b>Year</b>	<b>Amount (US\$)</b>
1992	18.378
1993	-
1994	-
1995	1.336.918
1996	-
1997	992.308
1998	2.569.962
1999	6.399.570
2000	3.154.470
2001	2.695.673
2002	4.087.545
<b>TOTAL</b>	<b>21.254.824</b>

**B. Summary Data by Type (CPG, DEM, INS, INV, PRP, TAS, TRA)**

Under the Secretariat's classification system, Germany's bilateral activities are distributed among the following types of projects (until Dec 2002):

<b>Type</b>	<b>Number of Projects</b>	<b>Amount approved (US\$)</b>
Country Programmes	1	67.800
Demonstration Projects	4	1.067.312
Institut.Strengthening	1	81.000
Investment Projects	21	12.542.086
Project Preparation	47	1.293.100
Technical assistance	32	4.871.957
Training	7	1.331.569
<b>TOTAL</b>	<b>113</b>	<b>21.254.824</b>

## II. Project Completion since last report

Since the last progress report, the Government of Germany has completed the following projects:

Project Number	Project Title	Remarks
ALG/FOA/33/PRP/49	Project preparation for the phase out of ODS use in the flexible foam sub-sector	Project preparation resulted in project proposal which will be part of National Phase out Document, planned to be submitted at 41st ExCom
ALG/SOL/33/PRP/48	Project preparation in the solvent sector	Project preparation resulted in project proposal which will be part of National Phase out Document, planned to be submitted at 41st ExCom
ANG/SEV/34/CPG/02	Country programme preparation	Country Programme was set up, submitted and approved by 38 <sup>th</sup> ExCom
CPR/SEV/33/PRP/372	Project preparation/technical assistance in the refrigeration sector (thermostat)	Project preparation lead to project proposal which was approved at 35 <sup>th</sup> ExCom
IND/FOA/34/PRP/309	Project preparation for the phase out of ODS use in the flexible moulded foam sub-sector in 5 enterprises	Project completed, 2 resultant investment projects have been submitted, others will be submitted in 2003
IRA/FOA/35/PRP/118	Project preparation for the phase out of ODS use in the flexible foam sub-sector in 5 companies	Project preparation lead to project proposal which was approved at 37 <sup>th</sup> ExCom
IRA/FOA/37/PRP/154	Project preparation for the development of a foam sector strategy	Project preparation lead to project proposal which was approved at 37 <sup>th</sup> ExCom
KEN/FUM/30/PRP/23	Development of an investment project for the phase out of methyl bromide in vegetable production	Project preparation lead to project proposal which was approved at 39 <sup>th</sup> ExCom
KEN/SOL/35/PRP/26	Project preparation for the solvent sector	Project preparation lead to project proposal which was approved at 39 <sup>th</sup> ExCom
MAR/FUM/37/PRP/13	Project preparation for the phase out of methyl bromide use	Project completed and project proposal prepared
MAR/REF/26/TAS/10	Implementation of the RMP: Assistance in the design of policies and regulations	Project completed, resultant TPMP will be submitted for 41 <sup>st</sup> ExCom, Completion report submitted
NIR/HAL/34/PRP/87	Project preparation/technical assistance for the halon sector	Project proposal submitted and approved by 37 <sup>th</sup> ExCom
SEY/REF/26/TAS/05	Implementation of the RMP: Assistance in the design of policies and regulations	Project completed and resultant RMP-Update submitted to 39 <sup>th</sup> ExCom, Completion Report submitted

## III. Global and regional project highlights

### A. Global Projects

n/a

## **B. Regional Projects**

The implementation of the national RMPs which comprises the following regional umbrella activities:

- Set up of ODS legislation meeting in the Montreal protocol requirements
- Customs officer training
- Training of trainers for courses in good refrigeration practices
- Training of technicians

is nearly finalised and expected to be completed in December 2003.

The development of the Halon Bank Management Plan for Bahrain, Yemen, Lebanon and Qatar (West Asia) is undertaken in a regional context for the cost-effective management of halons in the respective countries as well as in the whole region.

The Governments of Bahrain, Lebanon, Qatar and Yemen realized in the last two years the management of halon:

- Legislation on halon management had been established through policy advice.
- Installed fire protection system had been identified through surveys.
- Involvement of stakeholders guaranteed through workshops.
- Recovery and recycling equipment provided through technology transfer
- Training for Government officials organized through international experts
- Training of fire protection engineers organized in using environmental friendly alternatives
- Substitution of halons realized through environmental friendly fire protection systems.

## **IV. Completed and Ongoing Projects**

As of the 31 December 2002 the Government of Germany has 113 approved projects, of which 64 projects are ongoing (ONG), 23 projects have been completed (COM), 24 projects financially completed (FIN) and 2 projects closed (CLO).

All of the German bilateral activities are implemented through the German Agency for Technical Cooperation, GTZ, within the programme Proklima.

44 of the 92 non-investment projects have been completed, of the 21 investment projects 3 have been completed.

## **V. Status of Project Preparation, by country**

### **A. Status of agreements**

- Twelve RMP countries in Africa have approved preparation for RMP updates with GTZ-Proklima
- Zimbabwe and Namibia intend to do the total CFC phase-out with GTZ-Proklima

## ***B. Project Preparation by country***

Funds to develop project proposals have been allocated in the following eighteen cases:

- \$12.430 to prepare a project proposal for the phase out of methyl bromide in Mauritius (MAR/FUM/37/PRP/13)
- \$58.591 to develop a foam sector strategy in Iran (IRA/FOA/37/PRP/154)
- \$18.645 to prepare a project proposal for phasing out ODS use in Pliva Pharmaceuticals in Croatia (CRO/ARS/36/PRP/16)
- \$67.800 to develop an ODS phase out action plan in Papua New Guinea (PNG/PHA/36/PRP/04)
- \$47.460 to prepare a terminal ODS phase out management plan, excluding the refrigeration sector in Algeria (ALG/PHA/37/PRP/57)
- \$79.100 to develop a CFC phase out management plan in Cuba (CUB/PHA/37/PRP/21)
- \$16.950 to prepare a refrigerant management plan update in Ethiopia (ETH/REF/37/PRP/10)
- \$16.950 to prepare a refrigerant management plan update in Lesotho (LES/REF/37/PRP/07)
- \$16.950 to develop a CFC terminal phase out management plan in Mauritius (MAR/REF/37/PRP/14)
- \$16.950 to prepare a refrigerant management plan update in Malawi (MLW/REF/37/PRP/17)
- \$16.950 to prepare a refrigerant management plan update in Mozambique (MOZ/REF/37/PRP/09)
- \$56.783 to develop a terminal ODS phase-out management plan (NAM/PHA/37/PRP/08)
- \$16.950 to prepare a refrigerant management plan update in Seychelles (SEY/REF/37/PRP/07)
- \$16.950 to prepare a refrigerant management plan update in Swaziland (SWA/REF/37/PRP/06)
- \$16.950 to prepare a refrigerant management plan update in Uganda (UGA/REF/37/PRP/09)
- \$16.950 to prepare a refrigerant management update in Tanzania (URT/REF/37/PRP/15)
- \$16.950 to prepare a refrigerant management plan update in Zambia (ZAM/REF/37/PRP/12)
- \$70.917 to develop a terminal ODS phase-out management plan for Zimbabwe (ZIM/PHA/37/PRP/25)

**Annex V**

**PROGRESS REPORT OF ISRAEL**

# METHYL BROMIDE COMPLIANCE ASSISTANCE WORKSHOP ISRAEL 2002

## SUMMARY

### GENERAL

The core of Israel's agriculture relies on intensive, irrigated and export-oriented horticultural crops. Of these, both indoor and outdoor vegetable, fresh herbs and spices and flower crops are cultivated in soils infected with soil-borne pathogens, nematodes, annual and perennial weeds and insect pests.

For almost four decades, the successful cultivation of the country's scarce soil resources which support an intensive cropping pattern relied on the development and promotion of soil-fumigation technologies centered on methyl bromide. The country became a major consumer and producer of methyl bromide, which led to the development of advanced soil-fumigation practices. Many of these practices focused on the optimal application of methyl bromide and the subsequent reduction of its application rates.

The development of *alternative* soil-fumigation practices is the result of a collaborative R&D effort in which public research, extension and regulatory agencies, industry and growers all played an important role. As a result of these efforts, Israel has seen a huge phase out of methyl bromide consumption in line with the control measures set out by the Montreal Protocol. Article 5 countries with potential for non-compliance could benefit from Israel's experience in building a system approach for MB phase out.

### THE WORKSHOP

An international workshop on MB compliance assistance was held at Bet Dagan, Israel between December 8-13, 2002 under the auspices of the Israel Ministries of the Environment, Agriculture and Foreign Affairs as well as the United Nations Environment Program (UNEP) and the United Nations Industrial Development Organization (UNIDO). The workshop was attended by 14 participants from developing countries and countries in economic transition, namely Congo, Zambia, Bosnia-Herzegovina, Moldova, Ecuador and Mexico, five representatives from the two UN organizations and a core group of Israeli professionals who interacted with visitors throughout the workshop. The workshop was funded via the bilateral funding mechanism of the Multilateral Fund for the Implementation of the Montreal Protocol.

In order to present participants with up-to-date information on potential alternatives and on Israel's activity in this arena, the 5-day workshop held 2.5 days of presentations and discussions and 2 days of field visits. The workshop created a participatory framework, exposing participants to the strategic structures and methodologies developed in Israel in keeping with the methyl bromide phase-out timetable set by the Montreal Protocol, and to the various technical solutions and rapid delivery models developed in the country for this purpose. The participants had the opportunity to present on their current methyl bromide situation (e.g. patterns of use, existing/potential alternatives available in their countries), as well as to highlight any problem areas or bottlenecks impeding their implementation plans. These problem areas were discussed during the workshop, and advice was offered by expert panels.

### WORKSHOP CONTENT

The workshop included the following:

- Up-to-date information on specific use patterns and existing/potential alternatives to methyl bromide, with reference to their possible application in a developing country setting.
- Information related to methyl bromide use, including consumer concerns, environmental and health implications and actions being taken to phase out its use.

- Presentations on effective alternatives that are being used in Israel on vegetables and flower crops, or that have been identified through demonstration trials conducted by implementing agencies under the Multilateral Fund and by bilateral reviews of recommended methyl bromide substitutes for vegetable and flower crops.
- Reviews of chemical alternatives, non-chemical alternatives and of the reduction of application rates of methyl bromide substitutes.
- Active displays at regional research stations and farms on the use of key alternatives, and field demonstrations of the specific application of methyl bromide substitutes.
- Identification of farmer training and extension and education strategies needed to implement effective alternatives, and agricultural institutes in the host country that could act as partners in the efforts to implement alternatives.
- Identification of specific policy initiatives needed by governments in developing countries which are at risk of non-compliance.
- Initiation of the development of country-specific action plans for accelerated compliance.

## **WORKSHOP STRUCTURE**

The workshop was structured around two main processes. The first was an experience-sharing process, cutting across all five workshop days. It began on the first day with the presentation of the “big picture”, consisting of acquaintance with the international arena (UNIDO, UNEP and Israel keynote presentations) and acquaintance with the Israeli MB substitution system. This process was followed by the field trips which were devoted to a display of individual MB substitution technologies. The second day of the discussions, immediately after the field visits, introduced the audience to the holistic broad picture of the alternatives and of the system approach applied by the host country.

The second process was the participatory one which began with the individual country presentations of the attending parties and an analysis of their problem areas, followed by an introduction to group work and the final day of the workshop which was dedicated to group work. Conducted along geographical lines of the three continents of the participating countries, namely Latin America, Europe and Africa, the group work was the synthesis of all the know-how presented at the workshop and its application to the problem areas presented at the outset of the meeting.

## **OUTPUT**

Two unique tools were presented at the workshop:

- Israel’s system approach, bringing together research, extension, regulatory functions, growers and industry for the joint formulation of a strategic implementation project.
- The “model farms” rapid delivery system based on on-farm testing of methyl bromide (MB) alternatives presented by research and industry.

In terms of specific alternatives, the workshop surveyed chemical and non-chemical, stand-alone and combined MB alternatives providing short- and long-term solutions for vegetables, flower crops and fresh herbs, organic farming and stored commodities. Among the major recommended non-chemical alternatives acting as building blocks for the formulation of a long-term Integrated Pest Management (IPM) strategy are: soil solarization, grafting (tomato and cucurbits), sanitation and crop rotation, soil-less culture, steaming, biocontrol (Trichoderma and Bacillus firmus-based compounds), organic and mineral amendments and resistant varieties (tomato, carnation).



The following chemical MB alternatives recommended as short-term alternatives were surveyed: a. Nematicides: Aldicarb, Telon, Cadusafos, Fenamiphos, Oxamyl, Telon+Chloropicrin, b. Wide range Fungicides: Metam-Sodium, Basamid, Telon+Chloropicrin, Formaldehyde, c. Specific Fungicides: Propamocarb Quintozene, Tolclofos Methyl, Metalaxyl, Benomyl, d. insecticides and weed killers.

The workshop paid attention to the integration of chemical and non-chemical MB alternatives, coalescing them into an IPM of soil-borne pests. The workshop paid special attention to the improvement of application techniques for MB alternatives and the reduction of application rates with the aid of VIF impermeable plastic films, deep shank injection, applications through the irrigation system, using plastic mulching, and combining fumigants with solarization and with other non-chemical substitutes.

For problem areas requiring further R&D intervention, working groups consisting of the Article 5 countries' experts and Israeli counterparts were formed, to explore the possibility of prospective bilateral projects, including the initiation of compliance action plans with a focus on technical assistance, research and technology transfer and the development of local expertise to suit phase-out strategies for specific countries. Recommendations were formulated at the end of the workshop.

A workshop evaluation questionnaire was distributed to all participants to evaluate the workshop per se, and the future interaction and activities that it could trigger. The following is the analysis of the questionnaires filled out by the overseas participants at the end of the workshop. With regard to the question on the duration of the workshop, most participants (79% of the high 4-5 marks) indicated that the workshop was too short. Exceptionally high marks were given to the quality of the professional visits, to the exposure to new know-how and to the willingness to develop bilateral activities with Israeli professionals. The answers of the participants to these questions reflected 100% satisfaction. The workshop met the expectations of the participants, this being rated at 4.7 out of a maximum of 5. The same is true for the workshop's organization and the quality of the sightseeing visits. In summary, the workshop met the expectations of its overseas attendants. They learnt new subject matter fields and they were impressed by the topics demonstrated at the field visits. New professional ties were established with Israeli technical staff and these could lead to further technical cooperation in the field of MB alternatives.

## **RECOMMENDATIONS**

1. Close cooperation between research and extension institutes, farmers and private sector funding is the key factor in the timely development of adequate MB alternatives. Israel's approach, that brings together research, extension, regulatory functions, growers and industry for the joint formulation of a strategic implementation project, could serve as a model to be internationally disseminated.
2. In light of the adoption of chemical MB alternatives in the short run, the aim of research and extension institutes is to increase the use of environmentally-friendly alternatives. Research and development is still needed, primarily in the following fields:
  - Integrated Pest Management (IPM) of soil-borne pathogens
  - Studies into the long-term effects of MB alternatives
  - Development of precise application techniques for existing and new MB alternatives
  - Local research in general, and for the fine-tuning of imported technologies in particular, given that not all developed country research is relevant for the developing country context.
3. In order to promote these objectives, one suggestion is to propose the creation of an extra-budgetary fund that would support research and development along the lines proposed above.
4. Agricultural extension in Israel plays an essential role in research and development, focusing particularly on MB replacement at the field level.

The main extension components for a successful MB substitution program in an Article 5 country setting could include:

- Adoption of the “model farm” approach developed in Israel for the accelerated on-farm testing and delivery of registered MB alternatives, and the accelerated formulation of recommendations to growers.
  - A program to promote the adoption of Quality Management principles by Article 5 country exporters, in order to both comply with prevalent policy of importing countries, and to accelerate the adoption of environmentally-friendly MB alternatives and IPM systems.
  - The monitoring of adoption rates and barriers to the introduction of MB alternatives by end-users, which could be included in extension programs via the creation of an extra-budgetary fund (see para. 3 above),
  - Feeding these programs, such as the multi-agency and multidisciplinary effort developed by Israel, as well as the “model farms” approach, into the UNEP clearing-house; using them for the joint development of educational outreach material translated into the UN languages.
5. Chemical alternatives receive backing by private, commercial firms. Some non-chemical alternatives, such as grafting and artificial media, are also supported and marketed privately. Public sector research and extension should be encouraged to promote non-marketable practices, such as crop rotation, sanitation and solarization, in order to enrich the arsenal of IPM tools.
6. With regard to future activities, Article 5 countries could benefit from similar courses. Experts from Israel could visit UNIDO-driven MB substitution projects in Latin America. Bilateral investment projects with field testing, demonstration and training components could be organized using Israeli expertise via UN implementing agencies, and involving current participating countries.

**Annex VI**

**PROGRESS REPORT OF ITALY**

## 2002 Status on 7 Bilateral Activities

### I. Project Approvals and Disbursements

#### A. Annual Summary Data

As of December 31<sup>st</sup> 2002, the Executive Committee has approved **7** activities as bilateral contribution from the Government of **Italy** to the Multilateral Fund. Of the US \$ **5.324.489** approved as bilateral contributions from **Italy**, US **1.306.972** has been disbursed including completed projects. Bilateral contributions on an annual basis are as follows:

Year	Amount*
2001	3.374.489
2002	1.950.000
<b>TOTAL</b>	

\*Adjusted for the return of unutilized funds

#### B. Summary Data by type (CPG, DEM, INS, INV,PRP, TAS,TRA)

According to the Secretariat's classification system, **7** bilateral activities are distributed among the following types of projects:

Type	Number of Projects	Amount Approved (US dollars)*
Country Programmes		
Demonstration Projects		
Institutional Strengthening		
Investment Projects	<b>7</b>	<b>5.324.489</b>
Project Preparation		
Technical Assistance		
Training		
<b>TOTAL</b>	<b>7</b>	<b>5.324.489</b>

\*Adjusted for the return of unutilised funds

**II. Project Completion's Since Last Report**

N/a

**III. Global and Regional Project Highlights**

N/a.

**IV. Completed and On-going Projects**

Of the **7** activities approved to date, **7** are on-going.

**V. Status of Project preparation, by country**

In China, **ONGOING**

In India, **ONGOING**

In Romania, **ONGOING**

In Yugoslavia, **ONGOING**

**VI. Administrative Issues (Adjustments and Other Issues)**

N/a

**Annex VII**

**PROGRESS REPORT OF JAPAN**

## 2002 Status on Japan's Bilateral Activities

### I. Project Approvals and Disbursements

#### A. Annual Summary Data

As of December 31<sup>st</sup> 2002, the Executive Committee has approved 6 activities as bilateral contribution from the Government of Japan to the Multilateral Fund. Of the US \$ 764,892 approved, US \$197,826 has been disbursed including completed projects. The remainder of the approved funding relates to projects approved in 2001/2002. Bilateral contributions on an annual basis are as follows:

Year	Amount*
2001	252,555
2002	512,337
<b>TOTAL</b>	<b>764,892</b>

\*Adjusted for the return of unutilized funds

#### B. Summary Data by type (CPG, DEM, INS, INV,PRP, TAS,TRA)

According to the Secretariat's classification system, Japan's bilateral activities are distributed among the following types of projects:

Type	Number of Projects	Amount Approved (US dollars)*
Country Programmes		
Demonstration Projects		
Institutional Strengthening		
Investment Projects	2	294,247
Project Preparation		
Technical Assistance	3	385,895
Training	1	84,750
<b>TOTAL</b>	<b>6</b>	<b>764,892</b>

\*Adjusted for the return of unutilised funds

**II. Project Completion's Since Last Report**

N/A

**III. Global and Regional Project Highlights**

N/A

**IV. Completed and On-going Projects**

Of the 6 activities approved to date (2001-2002), the remaining All are on-going.

**V. Status of Project preparation, by country**

N/A

**VI. Administrative Issues (Adjustments and Other Issues)**

A. Adjustments N/A

B. Other Issues N/A



**Annex VIII**

**PROGRESS REPORT OF SWEDEN**

## 2002 Status Report on Sweden's Bilateral Activities

### I. Project Approvals and Disbursements

#### A. Annual Summary Data

The Executive Committee (ExCom) has until 31 December 2002 approved seven activities as bilateral contributions from the Government of Sweden to the Multilateral Fund. Three projects were approved at the 29<sup>th</sup> ExCom meeting in November 1999. The 34<sup>th</sup> ExCom meeting in July 2001 approved two projects. During 2002, one project was approved by the 36<sup>th</sup> meeting and one at the 38<sup>th</sup> meeting. As of 31 December 2002, funds were disbursed for these projects as specified in the report.

#### B. Summary Data by Type (CPG, DEM, INS, INV, PRP, TAS, TRA)

In line with the Secretariat's classification system, Sweden's bilateral activities are distributed as follows:

Type	Number of Projects	Amount Approved (US dollars)
Country Programmes		
Demonstration Projects		
Institutional Strengthening		
Investment Projects		
Project Preparation	2	US\$ 141,400 US\$ 15,000 + agency support cost
Technical Assistance	4	US\$ 200,000 + agency support cost (WB) US\$ 250,000 US\$ 55,000 US\$152,400 + agency support cost
Training	1	US\$ 55,000 + agency support cost (UNEP)
TOTAL		US\$ 868,800 + agency support cost 47,716 = US\$ 916,516

### II. Project Completions

Regional Workshop on Control and Monitoring of ODS Consumption for the South East Asia/Pacific Region (funded with equal bilateral contributions from Sweden and Japan and implemented through UNEP). The workshop was held in Thailand (Jomtien) 22-27 May 2000 and was attended by ozone and customs officers from ten countries in the region. The participating countries developed a joint set of declarations and drafted national action plans for further work in their respective country. The report from the workshop was prepared by Sweden in February 2001. The project completion report prepared in coordination with UNEP was submitted 1 May 2002. The project was financially completed 27 May 2002.

### **III. Global and Regional Project Highlights**

#### **A. Global Projects**

N/A

#### **B. Regional Projects**

##### **Regional Customs Cooperation**

At the 34<sup>th</sup> Meeting of the Executive Committee, the Government of Sweden received approval for establishing a customs cooperation network in the SEAP region. UNEP/ROAP has been contracted as implementing agency and a steering group has been appointed. A first steering group meeting was held in September 2001 and the first project meeting with the authority officials was held in April 2002. The second meeting was held in September 2002. Invited to participate in this meeting was also the ozone officer from China to present China's production control measures and discuss issues of common concern with regards to illegal trade. A large part of the countries concerns are influenced by and can be greatly improved by cooperating with the producing and exporting countries such as China.

As a result of the first meeting, three countries have established a formal agreement between the NOU and Customs. Both meetings have clearly demonstrated the need for customs officers and ozone officers to meet regularly and informally with colleagues in other countries to discuss sensitive issues such as illegal trade. Both meetings have concluded by the participants agreeing on a list of recommendations and points for follow-up around information exchange, development of enforcement tools and prevention of illegal trade.

#### **IV. Performance Indicators**

N/A

#### **V. Status of Agreements and Project Preparation, by Country**

##### **Philippines**

At the 29<sup>th</sup> Meeting of the Executive Committee, the Government of Sweden received approval for preparation of a government strategy to reduce and eliminate the use of CFC refrigerants for servicing and installations on site in the Philippines. Detailed discussions with the Philippine authority in charge, Department of Environment and Natural Resources (DENR), on the implementation took place May 2000. International and local consultants were contracted and in November 2000, the first meeting with the involved authorities and the private sector was conducted. The political situation in the Philippines during 2001 caused the project some delay. A survey of current consumption and use in the sector has been conducted. An RMP outline was adopted in October 2001.

During 2002 the Sweden collaborate with the WB to reformulate the RMP into a NCPP. This was done mainly through a joint data collection workshop in Manila in April 2002 and a meeting in Stockholm in June 2002. The project was finalized in August 2002 and submitted

jointly with the WB as a NCPP to the 38<sup>th</sup> ExCom meeting in November 2002. In the NCPP Sweden has been responsible for assisting the DENR in planning activities for the servicing sector (over 80% of the remaining consumption) whereas the WB has been responsible for the manufacturing sector.

### **The Philippines National CFC Phase-out Plan: servicing sector (first tranche)**

In November 2002 ExCom approved the NCPP for the Philippine. Sweden is co-implementing agency for technical assistance activities in the servicing sector. WB is lead agency. In October 2002 a mission was conducted in order to coordinate the scheduled activities in the NCPP with the DENR and relevant authorities in the Philippines. A mission to further review implementation plans and ToR for the international consultant was held in February 2003. An International consultant was contracted in March 2003.

### **Thailand**

The Swedish contribution to project THA/HAL/29/INV/120 (Thai Halon Management Programme) consists of technical assistance. The project is being implemented by the World Bank. Swedish has in May 2001 disbursed 100% of the Swedish contribution to the WB. No funds have been disbursed to Thailand, however. Recruitment of national and international consultants for this subproject has been delayed, mainly due to the time required to identify the qualified candidates. ToR were established in December 2001 and the tendering process begun in January 2002

For national consultant, the Project Steering Committee considered the proposals submitted to DIW in 2001 inadequate. DIW therefore decided to proceed with the Quality Based Selection method (QBS) to re-identify the most potential consultant. It is expected that the selection of national consultant will be completed by May 2003. For international consultants, the Project Steering Committee has identified the most potential international consultant. Given the need to jointly carry out the assignment with national consultants, the signing of contract for international consultant will be in conjunction with that for the national consultant.

### **Lao PDR**

The Swedish contribution to LAO/REF/34/TAS/65 consist of technical assistance to prepare an import/export licensing system. International and national consultants was contracted in April 2002. After some initial delay in the signing of agreement and data collection, the project is now progressing well and according to the project plan. The first mission was held in September 2002 and the second mission in February 2003.

### **Croatia**

At the 36<sup>th</sup> meeting in March 2002 Sweden received approval for assisting the Government of Croatia in updating their Refrigerant Management Plan (RMP Update). International and National consultants were contracted in June 2002. A survey of current ODS consumption and use in the servicing sector was conducted followed by a desk study and sector review. A mission to Croatia to discuss proposed activities was conducted in November 2002. Following an ExCom decision regarding Terminal Phase-out Management Plans (TPMP) the RMP Update was reformulated as a TPMP, with Sweden as co-implementing agency and

UNIDO as lead Implementing Agency, and submitted in January 2002 for approval at the 39<sup>th</sup> ExCom meeting.

**VI. Administrative Issues**

**A. Adjustments**

N/A

**B. Other Issues**

N/A

**Annex IX**

**PROGRESS REPORT OF THE UNITED KINGDOM**

(Please note that Annex II of the Progress Report on the First Phase of the Mexico Chiller Concessional Lending Pilot Project is not attached to this document)

## **Mexico Chiller Concessional Lending Pilot Project – Progress Report on First Phase**

### **Scope and Aim of this report**

This report highlights the achievements of the first phase of the Mexico chiller replacement program and presents lessons learned thereof. According to the project design, implementation of the second phase of the program for the \$500,000 additional funds, is contingent on the successful implementation of the first phase. Consequently, the aim of this report is to provide as evidence, measured and verified facts and information to support a request for funds to implement the second phase of the chiller replacement program, and by so doing fulfill project requirements.

### **Summary of Achievements**

The Mexico Chiller Program accomplished its objectives and improved the expected results due to the following reasons:

1. The Mexican counterpart (FIDE) funding exceeded by 40% the expected amount (\$700,000 instead of the \$500,000 requested). FIDE's total contribution of \$700,000 included an additional \$200,000 grant for energy efficiency improvements in the chiller system.
2. The building owners contribution exceeded by 350% the expected amount (\$692,300 instead of the \$153,466 expected), thereby accounting for 34.8% of project costs instead of 13% of project costs expected.
3. The ODP to be eliminated in the first year was 56% greater than the expected (7.8 tons instead of 5 tons).
4. Twelve (12) chillers were financed instead of the ten (10) expected, with the same grant amount expected to replace ten chillers due to the increased building owner contributions.
5. Disbursements have been made on schedule with 100% disbursement achieved in August 2002 upon payment to suppliers of 15% of the contract sum originally withheld.
6. 100% of building owners that participated in the program have made their monthly repayment on time.
7. Based on the successful loan repayment achieved to date, it is envisaged that with continued similar success, sufficient funds will be accumulated that will allow the purchase of an additional two chillers by November 2002.
8. Loan conditions in both UDIs (Units of Investments, an inflation-adjusted monetary unit updated daily based on the consumer price index) and US\$ with a 2% interest rate, that permit the sustainability of the revolving fund, were attractive to building owners which proves that a credit program in this sector is feasible.
9. Energy savings were 36% higher than proposed (7,387,902kWh/yr instead of 5,423,539kWh/yr proposed)<sup>1</sup>.

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<sup>1</sup> These savings are based on the results of in-situ verification tests performed on 9 out of the initial 10 chillers selected to participate in the program.

## **Background**

1. The objectives of the Mexico Chiller Concessional Lending Pilot Project are (i) to test various loan conditions to finance the replacement of 20 CFC chillers with energy-efficient CFC-free systems; (ii) to assess the sustainability of a revolving fund created by the project; (iii) to reduce technology risks and the uncertainty associated with the level of electricity savings; and (iv) to encourage borrowing for early chiller replacement. Technology risks were reduced by soliciting performance-based bids from chiller suppliers and installation firms. To enable the measurement of electricity savings, the project undertook an independent energy audit of the chillers/buildings employing a measurement and verification protocol to establish a baseline.
2. The total cost of the project was estimated at US\$2.3million of which \$1million was provided as a grant to Mexico by the United Kingdom from its bilateral contribution to the Multilateral Fund. The remaining \$1.3million was provided as counterpart funding from two sources: (i) \$1million from the Fideicomiso para el Ahorro de Energía Eléctrica (FIDE), and (ii) \$300,000 co-financing from chiller owners. In addition, FIDE contributed additional \$200,000 solely to fund energy efficiency activities related to the chiller project. The initial grant funds and the funds recovered into the revolving fund will be used exclusively for chiller replacements. A limit of US\$100,000 was set as the cost of each chiller replacement. Installation, transport and insurance of chillers was funded by chiller owners. The Table below illustrates how the first phase was funded.

<b>Source of Funding</b>	<b>Contribution (US\$)</b>
<b>Multilateral Funding</b>	
Multilateral Fund (UK bilateral)	500,000
<b>Mexican Counterpart Funding (chiller replacements)</b>	
FIDE	500,000
Chiller owners	150,000
<b>Mexican Counterpart Funding (Energy Efficiency activities)</b>	
FIDE	200,000
<b>TOTAL FUNDING (PHASE ONE)</b>	<b>1,350,000</b>

3. Funding from the Multilateral Fund was applied on 50% basis to the cost of chillers below \$100,000. Where the cost of the chiller exceeded \$100,000, the excess was financed entirely by the chiller owners.
4. Chiller owners have been offered the following financing conditions:
  - a. fixed repayment period (3 years)
  - b. loans denominated in US\$ at 0% or 2% interest rate (for chillers up to 20 years of age or older, respectively) or UDIs (Units of Investments, an inflation-adjusted monetary unit updated daily based on the consumer price index) at 0% interest rate.
5. 50% of the chillers that were financed under the project were chosen so as to be no older than 20 years in order to qualify for MLF funding. For the other 50% FIDE was allowed flexibility in choosing older chillers if deemed necessary.
6. The overall project impact in terms of elimination of ODP was expected to be 5 tons in the first year and 52 tons in a period of 11 years. This assumes an average chiller capacity of 400kg and average leakage rate of 15% (servicing and purge) of the capacity per year. The lifetime of the chiller is estimated at 25 years.



## **Project Launch and Results of Bidding Process**

7. FIDE launched the program in October 2000 with the issuance of a detailed Project Manual to inform bidders of the program characteristics and the procedures to be followed. The time allowed for the bid preparation and submission was six weeks. The four main chiller suppliers operating in Mexico: York International, Ideal Standard, Trane Division, Equipos McQuay and Carrier Mexico, were invited to participate in the bidding process and the bid opening took place on December 5, 2000. Four bid evaluation and qualification criteria were developed to prioritize the most cost-effective and efficient proposals and to share the technological/economic risks with the supplier and the chiller owner:
  - (i) Price per ton of refrigeration
  - (ii) Guaranteed electric energy savings (kWh/year)
  - (iii) Proportion of owner's counterpart with respect to total project cost, and
  - (iv) Time required to implement chiller replacement (weeks)
8. In total FIDE received 18 bids. The process of evaluation, requests for clarifications and the bid qualification took one month. All bids were assessed based on the evaluation and qualification criteria mentioned above. Subsequently FIDE pre-awarded a total of \$US1,115,559 in loans (US\$ 467, 508 from the UK and US\$648,051 from FIDE) for the replacement of the 12 best projects with the same grant funds originally requested for 10 chillers. Following the pre-award of the said loans, the projects were further assessed based on verification of potential energy savings using a proven methodology, and a financial evaluation of the building owner. The details of the financial evaluation are presented in more detail below. The results of the bidding process are presented in Table 1 below. In spite of the fact that there has not been any announcement of the second phase, another 5 projects are already in the pipeline for the second phase.

## **FIDE Financial screening criteria**

8. FIDE's decisions to finance or not to finance projects were reached based on the following three criteria:
  - Based on information obtained from the Buró Nacional de Crédito (BNC) the bidder must have a history of payments of credit with a qualification of 1 to 4, which signifies that the client pays within a time limit no longer than 90 days. Furthermore, according to the credit reports from BNC, the bidder must qualify as 'A' or 'B' indicating that the bidder is not a debtor and does not pose a high credit/financial risk. Where the bidder satisfactorily meets this criterion, it is considered credit worthy.
  - The second criterion is applied where the required credit information cannot be obtained from BNC and is based on the bidders previous experience/background with FIDE. The bidder is classified as *acceptable* or *unacceptable* according to the information obtained and the judgment of the credit committee.
  - The third criterion involves the calculation of five financial ratios which must comply with values specified in Procedures of evaluation for authorizing financing by FIDE.

## **Chiller performance Measurement**

9. In order to verify the initial energy savings estimates provided by the bidders, the performance levels of the existing chillers were measured. Verification of potential energy savings was carried out by an international auditing company funded from a World Bank trust fund.. The work

program of these firms consisted of three phases: (a) Training and Workshop; (b) Set up and initial measurement; and (c) Verification after chiller replacement. Phases (a), (b) and (c) were carried out in March 2001, April 2001 and April 2002 respectively. A copy of the report produced by the firm including the methodology used for the measurement and verification tests, is included in Annex II of this report.

10. The in-situ measurements performed on the existing (CFC) chillers in April 2001, used a well-established methodology, the temperature dependent model developed by the Joint Center for Energy Management (University of Colorado) as an ASHRAE (American Society of Heating, refrigerating and Air-Conditioning Engineers, Inc.) research project. Based on the results of the in-situ performance tests, the bidders adjusted the potential energy savings on the chillers to reflect the verified levels. Proposed energy savings (as submitted by bidders before performance test) are presented in Table 2.
11. Similar in-situ verification measurements as had been carried out on the (CFC) chillers were carried out on ten new replacement chillers in April 2002, using the same methodology. Verified energy savings in kWh/yr for the 10 replacement chillers are compared with the proposed energy savings.
12. The results of the in-situ tests on the new chillers indicate that for all 10 projects evaluated, the actual savings achieved lie within 15% of the predicted savings or are in fact higher than the predicted savings. Bidding procedures stipulated that when the predicted energy savings for a project are more than 15% greater than the actual savings, a penalty shall be incurred on the remaining 15% of the contract value.

**TABLE 1: Bidding Process Results**

<b>Concept</b>	<b>Project Design</b>	<b>Actual Result</b>
Timeframe of bidding process and pre-award of contract.	10 weeks	10 weeks
Chillers to be replaced	10	12
Participating firms	4	4
Awarded firms		4
ODP eliminated in the first year	5 tons	7.8 tons
ODP to be eliminated in 11 years	52 tons	81 tons
Projects in Pipeline	N/A	8
Average Age of chiller replaced	20 years	12 years
Owner counterpart for installation, freight and insurance as a percentage of total project cost	13%	31%
Owner counterpart for chillers, system optimization, and building energy consumption optimization as a percentage of total project cost.	0	3.8%
Price per ton of refrigeration	\$125	\$100
Guaranteed electric energy savings (kWh/year)	5.4 million	8.0 million

**TABLE 2: Results of Energy savings verification tests for new chillers**

<b>NEW CHILLERS</b>				
<b>Manufacturer</b>	<b>Project Name</b>	<b>Proposed savings (kWh/yr)</b>	<b>Verified savings (kWh/yr)</b>	<b>% Difference</b>
Trane	Cancun Palace	1,335,600	2,296,895	72.0
Trane	Sun Palace I	540,000	1,115,136	107.0
Trane	Sun Palace II	540,000	1,115,136	107.0
Trane	Beach Palace	651,000	594,268	-8.7
Trane	ITESM Campus Mty	362,279	347,251	-4.1
Trane	Cetys Universidad	214,448	236,525	10.3
York	La Campiña I	552,960	482,102	-12.8
York	La Campiña II	552,960	527,116	-4.7
York	Condominio Acero Mty	674,292	673,473	-0.1
York	IQUISA - CYDSA	628,687	NA <sup>1</sup>	NA
<b>TOTAL</b>		<b>5,423,539</b>	<b>7,387,902<sup>2</sup></b> <b>8,016,589<sup>3</sup></b>	<b>36.2<sup>3</sup></b>

<sup>1</sup> Data not available, project was not completed at the time ECONOLER visited Mexico to conduct the measurements. Verified savings will be based on readings from chiller control panel.

<sup>2</sup> Based on 9 chillers (i.e. not including IQUISA- CYDSA).

<sup>3</sup> Based on 10 chillers (i.e. including IQUISA – CYDSA)

### **Achievement of Project Objectives**

The project has been extremely successful and has recorded the following significant achievements:

#### ***The bidding process:***

- i. The loan conditions were well received by the market as was evident by the increased demand for the loans. Of the 10 loans already awarded, 5 were denominated in US\$ and 5 in UDIs. It is noteworthy that eligibility for a US\$ denominated loan requires that the owner of the building proves that at least part of his revenues is in US\$. This requirement will be removed in the second phase of the program as it was found to be a barrier to some interested building owners.
- ii. All the suppliers presented performance-based bids, leaving 15% of the payment contingent to the in-situ verification of the energy savings proposed in the bid. As can be observed from the preceding tables, Trane Division and York International were the two suppliers awarded loans, for 6 and 4 projects respectively.

#### ***Owner's Counterpart Contribution:***

- iii. The first phase of the project was originally planned with the aim of replacing 10 chillers with an average capacity of 400TR with a grant of US\$1 million, with US\$100,000 being the maximum amount to be granted for a single project (chiller) and the going average market price of a 400TR chiller in Mexico. The grant amount was to be dedicated exclusively to acquisition of the chiller and did not include other costs to the owner such as installation of the new chiller acquired, maintenance of the new chiller and taxes. Per the project design, the costs of freight and installation of the new chillers amounted to 13% of the total project cost and were to be provided by the building owner. Due to inclusion of the building owner's counterpart contribution as one of the evaluation and qualifying criteria in the bidding process, the building owner's contribution was increased as one of the evaluation and qualifying criteria in the bidding process, the building owner's contribution was increased from the expected 13% to 34.8% of the original project cost including shipment and installation, upgrade of the chiller capacity, optimisation of the refrigeration system and improvement of other building facilities that help to further reduce energy consumption. As a result

of this and competitive bidding process the project had the capacity to finance 12 chillers instead of the 10 originally planned. Annex 1 provides a detailed description of the commercial and technical characteristics of each of the 10 chillers financed.

***Disbursements:***

- iv. Disbursements have been made on schedule with 100% disbursements (\$1,200,000) achieved to date. It is important to note that an important factor to achieving complete disbursement was the fact that all projects met the requirement for actual energy savings within 15% of the predicted savings on which the contract award was based. Consequently, the 15% of the contract that was withheld as a performance bond was released. Furthermore, two additional chillers were purchased.

***Increments of the ODP eliminated in the first year:***

- v. The project design estimated that the amount of ODP eliminated will be 4.6 tons in the first year and 52 tons in the following eleven years. These numbers have subsequently been revised based on the first 10 new chillers to be 7.8 tons in the first year and 81 tons in the subsequent eleven years.

***Institutional Outcomes:***

- vi. The project has leveraged additional US\$200,000 from FIDE to finance energy efficiency activities.

***Financial Outcomes:***

- vii. Loan conditions in both UDIs (Units of Investments, an inflation-adjusted monetary unit updated daily based on the consumer price index) and US\$ 2% interest rate, that permit the sustainability of the revolving fund (two chillers received a loan with 2% interest rate which was deposited in the revolving fund), were attractive to participating building owners, which proves that a credit program in this area is feasible. Commercial interest rates in Mexico lie between 30 and 40%, which represent a barrier for building owners to replace old equipment.
- viii. To underscore the above, it is pertinent to note that 100% of loan repayments have been made by users on schedule and according to the stipulated instalments agreed with FIDE. Monthly instalments were based on a 3-year payback period as for a regular commercial loan. The table below summarizes (for the period January to June 2002) how payments have been made by users.

**TABLE 3: Monthly Loan Repayments by users**

Project	Monthly Repayment					
	Jan. '02	Feb. '02	Mar. '02	Apr. '02	May '02	Jun. '02
La Campiña (I &II)	4,540.73	4,540.73	4,540.73	4,540.73	4,540.73	4,540.73
Cond. Acero Mty	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
ITESM Campus Mty	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
CETYS Universidad	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
Palace resorts (4) <sup>1</sup>	9,611.57	9,611.57	9,611.57	9,611.57	9,611.57	9,611.57
<b>Monthly Total<sup>2,3</sup></b>	26,152.30	26,152.30	26,152.30	26,152.30	26,152.30	26,152.30
<b>Cumulative Total</b>	26,152.30	52,304.60	78,456.60	104,609.20	130,761.50	156,913.80

<sup>1</sup> includes Sun Palace (I & II), Beach Palace and Cancun Palace

<sup>2</sup> monthly payments for IQUISA will commence as of July 2002.

<sup>3</sup> monthly payments were based on a 3-year payback period as for a regular commercial loan.

### ***Lessons learned:***

- ix. ***New Areas:*** The positive results obtained with respect to energy savings and elimination of ODP have demonstrated the technical success of the chiller replacement program. This success coupled with a growing demand from owners and providers have generated impetus for FIDE to undertake activities in the following new areas in the second phase of the program:
  - a. ***Replacement of Industrial chillers:*** FIDE is looking to replace existing *industrial chillers* with new *absorption chillers* in the Northern parts of Mexico where the cost of electricity is significantly higher than the cost of gas. The use of absorption chillers potentially offers significant savings as their operation is based on the use of natural gas as the source of energy.
- x. The program will need to ensure suitable financing for industrial chillers as the US\$100,000 per project limit is inadequate to finance projects in the industrial sector.

### ***Bidding Process***

- xi. Based on its experience from the bidding process employed in the first phase of the program, and increased awareness and willingness to participate of owners and chiller suppliers, FIDE seeks to approach the selection of participating suppliers differently in the second phase of the program. To this end, FIDE seeks on a *first come first served* basis to select projects to participate in the program according to selected pre-set criteria, in addition to the financial screening process which it currently employs. This approach offers the advantage of time savings in that the time needed for FIDE to accumulate bids from ten building owners in order to implement a program, will be eliminated. The following pre-set criteria have been developed by FIDE to be used in the second phase of the program:
  - a. ***Price/ton of refrigeration:*** maximum of \$341/ton (for chiller capacity  $\leq$  350TR)  
maximum of \$290/ton (for chiller capacity  $>$  350TR)
  - b. ***Efficiency :*** 0.67kW/ton (for screw chillers)  
0.64kW/ton (centrifugal chillers)
  - c. ***Delivery Time :*** maximum of 24 weeks.

### ***Financing:***

- xii. Although the financing conditions stipulated in the project did not preclude the success of the first phase of the program, they nonetheless posed a barrier to some interested potential bidders. In order to eliminate this barrier, it is proposed that in the second phase, loans be denominated in pesos and a fixed interest rate be applied.
- xiii. Based on a survey of suppliers, it was found that inclusion of the cost of installation of new chiller equipment in grant financing will attract increased participation by building owners and chiller suppliers in the chiller replacement program. The promising results of the first phase, not least the fact that 100% of participating building owners have made their loan repayments regularly and on time, lend strong support to adopting this approach to financing.

### ***Conclusions:***

- xiv. The heightened level of interest from suppliers, has created within FIDE an aspiration for the receipt of funds for the second phase of the project as soon as possible.
- xv. The program has achieved success in terms of the positive results obtained with respect to energy savings and elimination of ODP.

**Annex I**  
**Technical Characteristics**

	1	2	3	4	5	6	7	8	9	10	Total
Company	Trane	York	Trane	Trane	Trane	Trane	York	York	Trane	York	
Project Name	Cancun Palace	Cond. Acero	Sun Palace	Sun Palace	Beach Palace	ITESM	La Campiña I	La Campiña II	Cetys	IQUISA	
Capacity of existing chiller(TR)	700	450	375	375	350	550	200	200	380	400	3980
OPD Eliminated (Charge)	960	450	520	520	480	750	225	225	520	750	6787
ODP eliminated (Servicing and Purge)	144	68	78	78	72	113	34	34	78	113	812
Total ODP eliminated	1104	518	598	598	552	863	259	259	598	863	<b>6212</b>

Capacity of new chiller (TR)	700	450	375	375	350	550	200	200	436	500
Efficiency	0.65	0.58	0.64	0.64	0.65	0.60	0.74	0.74	0.575	0.59
Cost of the Chiller	\$176,695	\$129,158	\$88,348	\$88,348	\$88,348	\$119,123	\$68,111	\$68,111	\$116,642	\$145,116
\$/ton	252	287	236	236	252	217	341	341	268	290
Total TRs installed	4136									
Average TR per chiller	414									
Total cost of 10 chillers	\$1,088,000									
Average Cost per chiller	\$108,880									

### Budget Plan

	1	2	3	4	5	6	7	8	9	10	Total
Company	Trane	York	Trane	Trane	Trane	Trane	York	York	Trane	York	
Project Name	Cancun Palace	Cond. Acero	Sun Palace	Sun Palace	Beach Palace	ITESM	La Campiña I	La Campiña II	Cetys	IQUISA	
(i) Project's Funding (FIDE+MP funds)	\$100,000	\$100,000	\$50,000	\$50,000	\$88,348	\$100,000	\$68,111	\$68,111	\$100,000	\$100,000	\$824,570
(ii) General system optimization (FIDE's funds)	\$0*	\$20,000	\$0	\$0*	\$0*	\$20,000	\$0*	\$0*	\$20,000	\$0*	\$60,000
(iii) Building owner counterpart for installation	\$50,591	\$46,935	\$33,372	\$33,372	\$34,657	\$35,587	\$30,335	\$30,335	\$17,442	\$80,095	\$392,721
(iv) Shipment	\$7,115	\$544	\$4,418	\$4,418	\$4,418	\$5,075	\$2,652	\$2,652	\$3,358	\$1,500	\$36,150
(v) Difference in cost of chiller <sup>1</sup>	\$76,695	\$29,158	\$38,348	\$38,348	\$0	\$19,123	\$0	\$0	\$16,642	\$45,115	\$263,429
<b>Total (i) +(ii) (iii) + (iv) + (v)</b>	<b>\$234,401</b>	<b>\$196,637</b>	<b>\$126,138</b>	<b>\$126,138</b>	<b>\$127,423</b>	<b>\$179,785</b>	<b>\$101,098</b>	<b>\$101,098</b>	<b>\$157,442</b>	<b>\$226,710</b>	<b>\$1,576,870</b>

<sup>1</sup> (v) = Cost of chiller minus (FIDE + MP funds)