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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Fifty-third Meeting  
Montreal, 26-30 November 2007

**REPORT ON IMPLEMENTATION OF APPROVED PROJECTS  
WITH SPECIFIC REPORTING REQUIREMENTS**

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

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## Introduction

1. The UNDP, UNIDO and the World Bank have submitted progress reports on the implementation of the following projects, where specific reporting requirements are contained in the agreements, for consideration by the Executive Committee at its 53<sup>rd</sup> Meeting:

- (a) China: Accelerated phase-out of CFCs and halons in China (progress report) (World Bank);
- (b) Colombia: National phase-out plan for Annex A (Group I and II) substances (2006-2007 progress report) (UNDP);
- (c) Mexico: National CFC phase-out plan (2006-2007 progress report) (UNIDO); and
- (d) Mexico: Sector plan for phasing out CFC-11 and CFC-12 production sector (Verification of sustained cessation of CFC production) (UNIDO).

2. The Secretariat reviewed the progress reports in light of the original project proposals, ODS data reported by the Governments concerned under Article 7 of the Montreal Protocol, and relevant decisions taken by the Executive Committee and the Meeting of the Parties.

### **China: Accelerated phase-out of CFCs and halons in China (World Bank)**

3. The World Bank is submitting to the 53rd Meeting of the Executive Committee, on behalf of the Government of China, a 2007 progress report on the implementation of the accelerated phase-out of CFCs and halons in China. The progress is not attached but could be made available upon request.

### *Background*

4. The Executive Committee approved in 2004 the accelerated phase-out of CFCs and halons in China at a total funding level of US \$10 million under the bilateral programme of the United States of America. Two disbursements of US \$5 million each took place in 2004 and 2005. The table below summarizes the key targets of the project. However the maximum allowable amounts of production and imports of CTC in row 5 of the table have been revised as a result of the approval of Phase II of the CTC sector plan in 2005.

Table 1

### **ODS phase-out targets as per the APP Agreement (ODP tonnes)**

	2004	2005	2006	2007	2008	2009	2010
1. Max allowable CFCs production	25300	18750	13500	7400	550	550	0
2. Max allowable CFCs total consumption	25300	18750	13500	7400	550	550	0
3. Max allowable CFC-11 consumption limit in PU Foam Sector	10500	9000	7000	400	0		
4. Max allowable net CFC exports*	NL*	NL*	400	200	100	50	0
5. Max allowable sum of production and imports of CTC	54857	38686	28662	22724	12768	13415	12217

	2004	2005	2006	2007	2008	2009	2010
6. Max allowable CTC as CFC feedstock	39306	28446	21276	11396	847	847	0
7. Max allowable halon 1301 production	2000	2000	1000	1000	1000	1000	0
8. Max allowable halon-1301 consumption and export	1500	1500	1000	1000	1000	1000	0
9. Max. allowable net halon-1301 export	NL*	NL*	200	200	100	100	0

\*NL-Not Limited. It has been confirmed by the Executive Committee that exports for uses allowed by Parties to non-Article 5 countries is not to be controlled by the limits in this Agreement.

### *Project description*

5. The submission provides an update on each of the on-going sector plans from 2004-2007 in China based on the results of the verifications carried out independently under each of them. These are:

Table 2

<b>Sector Plans in China</b>	<b>Implementing Agency</b>
1. CFC Production Sector Plan	World Bank
2. Halon Sector Plan	World Bank
3. Foam Sector Plan (CFC-11)	World Bank
4. CTC and PA Sector Plan (Phase I)	World Bank
5. TCA Production Sector Plan	World Bank
6. Tobacco Sector Plan (CFC-11)	UNIDO
7. Refrigeration Servicing Sector Plan(CFC)	UNIDO
8. Solvent Sector Plan (CFC-11)	UNDP
9. CTC and PA Sector Plan(Phase II)	World Bank

6. The submission also includes the proposed 2008 work programme under each of these sectors. While there is no need to repeat any of these here, since they have been submitted separately to the Executive Committee under the annual work programmes for each of the sector plans, it is useful to briefly introduce the work that has been carried out in the control of imports and exports of ODS under the project.

7. New legislation, the National ODS Regulation, has been under preparation and contains two chapters dealing with ODS import and export management and penalties. When it is issued and enters into force, it will greatly strengthen the legal capability for combating illegal trade. Under the existing policy framework, CFC importation has been banned since 2006 except for use in MDI manufacturing; and CFCs export rights are limited only to the five CFC producers.

8. In April 2006, SEPA conducted a joint inspection tour of the key ports of Shanghai and Ningbo, and visited CFC traders in the area together with the General Administration of Customs (GACC) and the Ministry of Commerce (MOC). Coordination of the local and central authorities responsible for ODS management were strengthened. A study tour was organized for the officers from GACC, MOC and SEPA to the United States of America, Canada and Mexico in August 2006, to learn about the management experience of these countries in ODS imports/exports.

9. An on-line import and export data network among SEPA, the authority for ODS license application approval, and MOC, the authority for ODS license issuance, has been set up. Through the networking, real import (for MDI only) and export data could be monitored on-line.

10. A workshop was held at Wuxi city in July 2006 for the customs officials engaged in fighting the illegal trade of ODS with participation of experts from UNDP, UNEP, the Environmental Investigation Agency (EIA), Thai customs and experts from China. EIA and Thai customs officials introduced the practical skills to spot illegal trade, and the domestic chemical expert provided specific information about the chemicals. Two similar workshops were held in Zhuhai city and Guangdong Province in October 2006 and, Zhang Jiajie, Hunan Province in April 2007. In addition 50 identifiers of CFCs have been delivered to some key customs stations.

11. In February 2006, the chief of China GACC proposed to launch the Sky Hole Patching Initiative at the meeting for the customs chiefs of the Asian and Pacific countries. This proposal was accepted by 24 other members from customs in the Asia regions. The objective of this action was to address smuggling of ODS and associated wastes. A coordination mechanism had been set up based on an existing platform – RILO (Regional Intelligence Liaison Office of the World Customs Organization). This action was launched in September 2006 in China and was completed on 30 June 2007, during which six illegal trade cases were intercepted.

12. China provided, through UNEP, information on the registered importers and exporters of ODS in China to other NOUs in the region. In exchange, China also received similar information from other countries and reviewed the applications for export based on the information.

13. Work for the later half of 2007 and the year 2008 will include:

- (a) Policy study and enforcement: Possibility of the import and export management of HCFC, and place some main HCFC mixtures under license management;
- (b) Capacity building: Organization of a workshop for the license departments of MOC in major regions, review of penalties for those companies which are engaged in ODS illegal trade. Organization of a training workshop for the import and export enterprises about the policy, application procedure, and other related subjects; and
- (c) Continuing to strengthen international or regional co-operation.

#### Secretariat's comments

14. The 2007 progress report on the results of the accelerated phase-out plan (APP) is informative, especially concerning the management of imports and exports of ODS and the efforts in controlling illegal trade. China should be encouraged to continue its efforts to closely monitor the import and export of ODS and the illegal trade and production of ODS, after China has completed its phase-out of CFCs and halons ahead of schedule, thus contributing to the compliance effort in the region and globally.

Secretariat's recommendation

15. The Secretariat recommends the Executive Committee takes note of the 2007 progress report on the accelerated phase-out plan, and encourages China to continue its efforts to closely monitor the import and export of ODS and the illegal trade and production of ODS, thus contributing to the compliance effort in the region and globally.

**Colombia: National phase-out plan for Annex A (Group I and II) substances (UNDP)**

16. The national CFC phase-out plan (NPP) was approved by the Executive Committee at its 41st Meeting. Under the NPP, the Government of Colombia committed to phasing out all CFCs and halons by 1 January 2010. The Executive Committee approved in principle US \$4.5 million for implementation of the NPP. The Executive Committee has already approved the two funding tranches at its 41st and 47th Meetings.

*Progress report*

17. A number of results have been achieved so far during the 2006-2007 work programme of the Colombia NPP, including: the certification of some 5,000 refrigeration service technicians, providing training equipment and materials to 40 industrial learning centres, distribution of recovery and recycling equipment to some 230 service workshops, and procurement and distribution of foam blowing machines for the commercial manufacturing sector. Additionally, several information and awareness activities were implemented and further regulations on ODS and ODS-based equipment were prepared.

18. The halon banking project component has been redesigned to address the disposal of the existing halon stocks by promoting trade with established halon banks in the region. The halon end-users and suppliers concluded that there is no need for a local halon bank since these substances are no longer being used in fire-control systems. Alternative substances to halons are widely used in the country.

*Breakdown of the approved project budget*

19. The breakdown of the approved project budget (in US \$) is presented in the table below:

<b>Project component</b>	<b>Approved</b>	<b>Expenditure*</b>	<b>Balance</b>
Phase-out of CFCs in the commercial refrigeration manufacturing sector	450,000	297,981	152,019
Technician-licensing programme for the refrigeration and air conditioning service sector	1,338,820	865,193	473,627
Technical assistance for legal framework	20,000	10,782	9,218
Technical assistance for information and awareness	80,000	138,468	(58,468)
Halon bank management programme	58,000	4,714	53,286
Technical assistance for implementation and monitoring	200,000	407,658	(207,658)
<b>Total</b>	<b>2,146,820</b>	<b>1,724,796</b>	<b>422,024</b>

\* Expected expenditure as of December 2007

*Independent verification*

20. In 2007, an audit of the 2006 consumption verification report was undertaken by an independent auditor who concluded that “2006 data on imports of ODS reported by the Ozone Technical Unit (OTU) are totally reliable; and that Colombia is accomplishing its targets on internal consumption as agreed.” The auditor also recommended that “the control system for imports and exports and the institutional strengthening is widely consolidated. The main recommendation is to persevere on this path.”

*Second work programme*

21. From the end of 2007 until its completion date, the Colombia NPP’s work programme will focus on strengthening the refrigeration management plan by certifying technicians, providing basic tools and recovery/recycling equipment, researching nitrogen flushing, and preparing a strategy on hydrocarbon-based refrigerants. It will also provide technical assistance and support to major ODS and CFC end-users in all sectors. Finally, the work programme will promote institutional coordination and strengthen the implementation and monitoring units.

Secretariat’s comments

22. The Secretariat noted the comprehensive and well written progress report on the implementation of the Colombia NPP, together with the supporting documents, including the favourable verification report on national ODS consumption in Colombia.

23. The 2006 CFC consumption of 661.7 ODP tonnes reported by the Government of Colombia under Article 7 of the Montreal Protocol is already 442.4 ODP tonnes below the allowable level of CFC consumption for that year of 1,104.1 ODP tonnes. From the 2006 CFC level of consumption, a further reduction of 330.5 ODP tonnes would be needed to achieve the 2007 allowable level of 331.2 ODP tonnes. On this basis, the Secretariat asked UNDP whether the Government of Colombia would be able to meet the 2007 target. UNDP pointed out that the import licensing system is operating successfully and will guarantee that the allowable level of CFCs consumption will be reached. There is also a growth in the consumption of non-CFC refrigerants, including HCFC-22, hydrocarbons and drop-in replacements.

24. Implementation of the recovery and recycling project and the foam component of the commercial refrigeration manufacturing sub-sector was delayed due to the complex delivery procedure that had to be followed by the Government of Colombia. Several small service workshops that were scheduled to receive recovery/recycling equipment were unable to meet the requirements set by the Government and had to be removed from the project. On this basis, the Secretariat sought an explanation from UNDP on how these service shops would be supported. UNDP indicated that the Government of Colombia continues its commitment to also address CFC consumption by the smaller companies and independent technicians through different activities including the distribution of basic service tools for good practices.

25. The Secretariat also noted that no consideration has been given to the establishment of procedures to favour the importation of non-CFC drop-ins. Without a procedure to facilitate the introduction of drop-in replacement refrigerants, Colombia may not be able to meet the 2007 control limit and complete phase-out by 1 January 2010. UNDP reported that the promotion of drop-in refrigerants was not included in the strategy presented in the NPP; however, in the recent

past it had been noted that the consumption of non-CFC refrigerants was increasing as well as the consumption of HCFC-22 and hydrocarbon-based refrigerants. These refrigerants are being introduced by the same importers as CFCs and their use by the technicians has increased.

#### Secretariat's recommendation

26. The Executive Committee may wish to take note of the progress report on the implementation of the national CFC phase-out plan (NPP) for Colombia, covering the period 2006-2007.

#### **Mexico: National CFC phase-out plan (UNIDO)**

27. The national CFC phase-out plan (NPP) for Mexico was approved by the Executive Committee at its 42nd Meeting with an associated level of funding of US \$8,794,500. Through this Plan, the Government of Mexico intended to achieve a reduction in its CFC consumption to 3.2 per cent of its baseline in 2006, 1.1 per cent in 2007 and complete phase-out by the end of 2009, starting at a consumption level of 4,403 ODP tonnes in 2004. The Executive Committee approved in principle US \$4.5 million in three tranches for implementation of the NPP. The Executive Committee has already approved all tranches at its 41st, 47th and 51st Meetings.

#### *Progress report*

28. A number of activities were carried out in 2006 and during the first nine months of 2007. This includes the training of 100 trainers and more than 2,000 technicians, purchase of 2,100 tool kits, distribution of the first 300 kits, and upgrading of ten training centres for courses in good practices in refrigeration. Ten recycling centres were selected, the tender process for the necessary equipment is ongoing and the training for the staff under preparation. Under the chiller sub-programme, three chillers have been replaced during the reporting period.

#### *Expenditures and remaining project budget*

29. The following table presents the approved project budget of all three tranches, expenditures and remaining funds. The agreement foresaw only the three tranches already approved.

<b>Tranches</b>	<b>Funds Approved (US \$)</b>	<b>Expenditures (US \$)</b>	<b>Funds Available (US \$)</b>
Tranche 1	3,517,000	3,514,861	2,139
Tranche 2	4,478,000	2,958,966	1,519,034
Tranche 3	299,500	27,756	271,744
<b>Project total (Tranches 1, 2 and 3)</b>	<b>8,294,500</b>	<b>6,501,583</b>	<b>1,792,917</b>

#### *Independent verification*

30. In 2007, a verification of the 2006 consumption data was undertaken by an independent verifier. The verification examined in detail the export and import structure, information flow and responsibilities, and verified the data for imports and exports. The result is a negative consumption of -508 ODP tonnes of CFC for 2006, since the significant national stockpiles were

reduced to cover both use as well as export. The structure of monitoring and controlling CFCs was found to be very sound.

*Annual implementation programme*

31. The planned activities for 2008 include a number of activities related to the project management, such as public awareness measures, the monitoring and verification of national CFC consumption, and the operation of the coordination office. In parallel, the government will monitor the implementation of the government decree that restricts imports of CFCs. In the training programme for national service technicians, 250 workshops are planned to be carried out during the years 2006/2008 bringing the total number of certified refrigeration service technicians to 5,000 by the end of 2008. As part of the recovery and recycling programme, additional recovery and recycling centres will be installed. The chiller replacement programme will continue with the implementation of at least one new project.

Secretariat's comments

32. The Mexico NPP made good progress over the last years and appears to have achieved significant reductions in CFC use. Due to large stockpiling from the production sector closure in Mexico, the consumption number, which was negative for 2006, does not reflect the use situation in the consumption sectors due to the use of the country's significant stockpiles. Financially, the project is also in good shape with expenditures of 78.4 per cent of the funds approved in three tranches. This demonstrates fast implementation while still leaving sufficiently large financial reserves. The work undertaken appears well planned, executed and co-ordinated. The verification was thorough and demonstrated commitment by the verifier.

33. The NPP in Mexico has therefore fulfilled all requirements of the related Agreement between the Government of Mexico and the Executive Committee, the consumption being well below the target specified. The NPP in Mexico does not foresee any more funding tranches, but will continue to expend the remaining funds under the annual implementation programme for 2008 and future annual implementation programmes according to the requirements of the NPP.

Secretariat's recommendation

34. The Executive Committee may wish to take note of the verification and progress report on the implementation of the national CFC phase-out plan (NPP) for Mexico, and approve the annual implementation programme for 2008.

**Mexico: Sector plan for phasing out CFC-11 and CFC-12 production sector (UNIDO)**

35. The Government of Mexico, through UNIDO, has submitted the report on the technical and financial audit of the cessation of CFC production at Quimobásicos Plant in Mexico.

*Background*

36. The Executive Committee at its 40<sup>th</sup> Meeting in 2003, approved in principle a total of US \$31.85 million for the implementation of the Agreement for the Mexican CFC production sector, under which the Government of Mexico was committed to a dual condition of a maximum level of total CFC production of 22,000 metric tonnes for the period 2003-2005, and



at the same time not exceeding the maximum allowable production limit specified in the Agreement for each of the three years. With the successful implementation of the 2003 to 2005 annual work programmes, the Government of Mexico, with assistance from UNIDO, ceased CFC production in August 2005 at the Quimobásicos plant and met all the conditions of the Agreement ahead of the planned completion date. UNIDO submitted the verification report of the 2005 CFC production to the 47<sup>th</sup> Meeting of the Executive Committee in 2005 and received the final tranche of US \$11.85 million plus the associated support cost.

37. The Executive Committee requested the Government of Mexico and UNIDO to continue monitoring the CFC production closure at Quimobásicos between 2006-2009 to ensure sustainability of the closure. The future audits should focus in particular on:

- (a) No entry of CTC into the plant after the closure date of CFC production;
- (b) Verification of stock, purchase and use of HF for HCFC-22;
- (c) Production verification of both Quimobásicos plants;
- (d) Stock verification of the inventory of CFC-11 and CFC-12 and reductions of the inventory over the years;
- (e) Verification of consumption norms of chloroform and HF for HCFC-22 production;
- (f) Changes carried out in the plant, equipment additions and modifications; and
- (g) Any other checks needed for full compliance.

38. Accordingly, UNIDO carried out a technical and financial audit of the Quimobásicos plant to ensure that there was no CFC production in 2006 and that the plant had been refitted for good for the production of HCFC-22.

*Technical and financial audit of cessation CFC production at Quimobásicos in Mexico*

39. The verification was carried out on 30<sup>th</sup> and 31<sup>st</sup> of August 2007 by Ess Jay Consultants, the same consulting firm that had performed the verifications between 2003 to 2006. While the team, which consisted of a technical consultant and an accountant, conducted the audit following the same procedures as they had when carrying out the verifications in the previous years, they also looked for signs and indicators that could convince them of the permanent cessation of CFC production.

40. The Auditors verified:

- (a) Procurement of key raw material such as CTC by the plant;
- (b) Current production in Plants 1 and 2 (through sample verification);
- (c) Stock of finished goods, CFC-11 and CFC-12, and reduction through sales until end December 2006; and

(d) Plant modifications, if any.

41. The Auditors verified that there had been no purchase and no receipt of CTC at the Plant after the cessation of CFC-11/12 production. The auditors received a copy of the letter from the Government of Mexico declaring that they had not issued any licence to import CTC to Quimobásicos in 2006.

42. The verification confirmed the CFC production, inventory and sales data submitted by the Plant for the period January to December 2006 as shown in the Table 1 below. The plants now produce only HCFC-22. Also, there has been no incident or occurrence reported of major loss of finished product.

43. The audit confirmed that changes to convert Plant 2 from CFC-11/CFC-12 mode to HCFC-22 mode had been carried out by the enterprise. The auditors found the modification to be satisfactory and verified the ongoing modification activities until the date of audit. The field verification confirmed and found adequate the activities undertaken by the Government and the enterprise for the permanent cessation of CFC production.

Table 1

**CFC-11 and CFC-12 production audit summary**

	<b>Item</b>	<b>Data</b>	<b>Remarks</b>
A	Maximum Production Level Agreed for 2006 (mt)	0	Production terminated
B	Actual Production 2006 (mt)	0	
C	Difference +/- (mt)	0	
D	Actual Production in 2003 & 2004 (mt)	16,738	
E	Total Production in 2003-2005 (mt)	21,939	
F	Max. Allowable Production 2003-2005 (mt) under the Agreement (mt)	22,000	(In accordance with the Agreement)
G	Unutilised quota of 2003-2005 "Maximum Production Level Agreed" (mt)	61	
H	Opening Stock as of 1 <sup>st</sup> January 2006 (mt)	3,001	
I	Other additions	0	
J	Total opening stock as of 1 <sup>st</sup> January 2006 (mt)	3,001	<b>(H+I)</b>
K	Gross production (mt)	Nil	
L	Filling & other losses (mt)	31	Filling losses are accounted as depletion of stock and adjusted to reduce closing stock
M	Net production (mt)	0	Gross Production minus Losses <b>(K-L)</b>
N	Domestic Sales (mt)	565	
O	Export sales (mt)	339	
P	Total sales including losses (mt)	935	<b>(N+O +L)</b>
Q	Closing stock December 2006 (mt)	2,066	Opening stock plus net production minus sales. <b>(J+M-P)</b>

44. The CTC stock verification showed that the CTC inventory of 48.4 mt, available at the plant, had been disposed of through sales in June 2006. The sales invoice for CTC sales was checked.

Table 2

	<b>31 December 2005</b>	<b>31 December 2006</b>
Closing Stock of raw material CTC	48.4 mt	0
Closing Inventory of CFC-11	248 mt	120 mt
Closing Inventory of CFC-12	2,753 mt	1,946 mt

Secretariat's comments

45. The audit on the cessation of CFC production was carried out by UNIDO in accordance with decision 47/29 of the Executive Committee and was implemented in compliance with the guidelines for verifying ODS production phase-out approved by the Executive Committee. The results confirmed that there had been no CFC production by Quimobásicos Plant after the closure in August 2005, and that the Plant had switched to the production of HCFC-22. The results also reconfirmed the actions that had been taken by the Government of Mexico to ensure the permanence of the CFC production closure, including revoking the import license of the company to purchase CTC, one of the key feedstock for the production of CFC.

Secretariat's recommendation

46. The Secretariat recommends that the Executive Committee:
- (a) Commends the Government of Mexico and UNIDO for the good effort in complying with decision 47/29 and implementing the audit to confirm the sustained cessation of CFC production at Quimobásicos in Mexico; and
  - (b) Requests the Government of Mexico and UNIDO to continue monitoring the CFC production closure at Quimobásicos between 2008-2009.

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