



**United Nations  
Environment  
Programme**

Distr.  
LIMITED

UNEP/OzL.Pro/ExCom/44/15  
27 October 2004



ORIGINAL: ENGLISH

---

EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Forty-fourth Meeting  
Prague, 29 November-3 December 2004

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

## Background

1. The Government of Canada, UNDP and UNIDO have submitted for consideration by the Executive Committee at its 44th Meeting progress reports on the implementation of the following projects:

- (a) Colombia: National phase-out plan for Annex A (Group I and II) substances: first implementation programme (UNDP), approved by the Executive Committee at its 41st Meeting at a total cost of US \$2,146,820 (for the first tranche);
- (b) Jamaica: Terminal phase-out management plan for CFCs (Government of Canada and UNDP), approved by the Executive Committee at its 37th Meeting at a total cost of US \$380,000;
- (c) Trinidad and Tobago: Terminal phase-out management plan for CFCs (first tranche) (UNDP), approved by the Executive Committee at its 40th Meeting at a total cost of US \$220,000 (for the first tranche); and
- (d) Turkey: Phase-out of methyl bromide in protected tomato, cucumber and carnation crops (second tranche) (UNIDO), approved by the Executive Committee at its 41st Meeting at a total cost of US \$1,000,000 (for the second tranche).

2. The Secretariat reviewed the progress reports in light of the original project proposals and ODS data reported by the Governments concerned to the Ozone Secretariat under Article 7 of the Montreal Protocol.

3. This document consists of summaries of progress achieved so far in the implementation of the project proposals, comments by the Secretariat and related responses by relevant implementing agencies where applicable, and the Secretariat's recommendation.

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

4. The national CFC phase-out plan (NPP) was approved by the Executive Committee at its 41st Meeting (UNEP/OzL.Pro/ExCom/41/29 and Corr.1 and Add.1). Under the NPP, the Government of Colombia committed to the phase-out of all CFCs and halons by 1 January 2010. The Executive Committee approved in principle US \$4.5 million for implementation of the NPP, according to the schedule contained in the agreement between the Government of Colombia and the Executive Committee.

5. Also at its 41st Meeting, the Executive Committee approved the first funding tranche at the amount of US \$2,146,820 for the implementation of the first phase covering the 2004–2005 period.

6. UNDP has submitted to the 44th Meeting of the Executive Committee a progress report on the implementation of the NPP from January to August 2004. The biannual report including the request of the second tranche is due at the end of 2005.

7. The majority of the projects under the NPP target the refrigeration servicing sector. In this regard, from the beginning of the implementation of the project, the Ozone Unit has been conducting surveys on the refrigeration servicing sector to determine the number of repair shops and a more precise number of technicians working in the field.

#### ODS consumption

8. According to the agreement under the NPP, total CFC consumption in 2004 should be below 1,057.5 ODP tonnes. Based on the information available as of August 2004, the Ozone Unit has forecast that the CFC consumption would be below the maximum agreed level of 1057.5 ODP tonnes at the end of 2004 (however, actual consumption will only be known in 2005).

9. The total annual reduction of CFCs proposed in the NPP (about 26 ODP tonnes) is expected to be achieved through the completion, by the end of 2004, of three ongoing projects, two in the rigid polyurethane foam sub-sector (Friotermica and Indufrio) and one in the solvent sector (replacement of CFC-113 as solvent in the silicone coating process of needles and catheters at Laboratorios Rymco).

10. The 2003 halon consumption reported by the Government of Colombia to the Ozone Secretariat is zero. As of August 2004, no imports of halon have been reported for 2004. A system to control halon imports is already in operation.

#### Legal framework

11. The legal framework that supports the implementation of the NPP has been modified through the following measures:

- (a) Circular 002 of January 2004, issued by the Ministry of Foreign Trade, through which a mandatory note issued by the Ministry of the Environment must be submitted as part of the importation documents for ODS;
- (b) Resolution 734 of June 2004, issued by the Ministry of the Environment, which modifies annual quotas for CFC imports and the import licenses system; and
- (c) Resolution 874 of July 2004, issued by the Ministry of the Environment, which modifies the system for granting import rights over the remaining unassigned import quota.

12. In 2004, the Ozone Unit is also considering:

- (a) Modification of Resolution 528 to ban the production of CFC-based commercial refrigeration equipment and establish conditions for their import; and

- (b) Designing a measure to monitor and control exports of CFCs; and establish a system of export licenses and sanctions for non-compliance.

Breakdown of the approved project budget

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

<b>Project component</b>	<b>2004</b>	<b>2005</b>	<b>Total</b>
Phase-out of CFCs in the commercial refrigeration manufacturing sector	200,000	250,000	450,000
Technician-licensing programme for the refrigeration and air conditioning service sector	20,000	1,318,000	1,338,820
Technical assistance for legal framework	0	20,000	20,000
Technical assistance for information and awareness	10,000	70,000	80,000
Technical assistance for implementation and monitoring	50,000	150,000	200,000
Halon bank management programme	15,000	43,000	58,000
<b>Totals</b>	<b>610,759</b>	<b>1,851,820</b>	<b>2,146,820</b>

Secretariat's comments

14. The Secretariat notes the comprehensive progress report on the implementation of the NPP prepared by the Government of Colombia with the assistance of UNDP.

15. The 2003 CFC consumption of 1,058.1 ODP tonnes reported by the Government of Colombia under Article 7 of the Montreal Protocol is 1,150.1 ODP tonnes below the CFC baseline (2,208.2 ODP tonnes). Based on 2003 CFC consumption, Colombia is currently in compliance with the 2005 Montreal Protocol limit.

Secretariat's recommendation

16. 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 January-August 2004.

**Jamaica: Terminal phase-out management plan for CFCs (Government of Canada and UNDP)**

17. At its 37th Meeting, the Executive Committee approved a CFC terminal phase-out management plan (TPMP) for Jamaica, at a total cost of US \$380,000, to be implemented by Canada and UNDP (UNEP/OzIL.Pro/ExCom/37/42).

18. The Government of Jamaica is committed to achieving total phase-out of CFCs by the end of 2005, as required under the national licensing system, with the following annual CFC consumption limits (in ODP tonnes):

July 2002-June 2003	48.0
July 2003-June 2004	32.0
July 2004-June 2005	16.0
July 2005-December 2005	4.2
2006, 2007, 2008, 2009, 2010	0

19. The Canadian component of the TPMP (US \$240,000) mostly included activities for further training of refrigeration technicians, recovery and recycling, and the development of a code of good practice for refrigeration. The UNDP component (US \$140,000) consisted of a retrofit incentive programme in the commercial refrigeration sector.

20. As indicated in the project agreement between the Government of Jamaica and the Executive Committee, Canada and UNDP are to report annually on the implementation of the TPMP, provide verification that the control targets in the agreement and associated activities have been met, ensure that technical reviews of the project are undertaken by independent technical experts, and assist Jamaica in the preparation of annual implementation programmes. The present report can be considered to be a mid-term review of the TPMP.

21. The following activities have been implemented:

- (a) In total, 153 refrigeration service technicians were trained through nine four-day workshops between November 2002 and November 2003. Combined with the original RMP, approximately 300 technicians have now received good practices training in Jamaica, constituting the majority of technicians in the country;
- (b) A code of good practice for the management and servicing of refrigeration and air conditioning equipment was developed, distributed to refrigeration technicians and promoted through several workshops;
- (c) So far, 36 recovery machines for stationary installations, 60 recovery pumps for domestic refrigerators and two recovery and recycling machines for training in the MAC sector have been distributed. Three training sessions were held in August 2003 to train technicians in the use of this equipment. Each technician who received a recovery machines paid 10 per cent of the cost the machine and undertook an agreement to report on the use of the machines. The proceeds from these payments will be used to purchase additional equipment;
- (d) Regarding the retrofit/replacement incentive program for end-users, the Ozone Unit reported in July 2004 that seven enterprises had received end-user incentive payment approvals and that two remained pending, subject to assessment and approval by the national consultant. It was reported that by the end of September 2004 an expected US \$28,200 would have been disbursed through incentive payments.

22. The TPMP is playing a role in facilitating CFC phase-out, but there are other important factors at play. Firstly, it appears that promotional activities by the Ozone Unit and the technicians association, combined with the impact of the RMP, were having an effect in influencing businesses to retrofit to alternative refrigerants and encouraging recovery and recycling of refrigerants. Then, in June 1999, Jamaica put in place CFC import restrictions with stricter limits than those required simply to comply with the Montreal Protocol. From the outset, this legislation raised the price of CFCs and restricted the amount of virgin CFCs available for servicing, which provided an incentive for more businesses to retrofit.

23. In addition to retrofitting, the retirement of CFC equipment seems to have been a major factor in reducing CFC consumption. While the TPMP itself may lead to the direct reductions of only a few tonnes of CFCs, its indirect impact in facilitating phase-out by providing technicians with the expertise, tools and equipment to retrofit and practice refrigerant recovery and recycling is significant.

24. The funding available for the second and third phases of the TPMP is US \$105,000. The following activities are planned: additional training courses for customs officers and refrigeration service technicians, distribution of additional equipment among service technicians; continued implementation of the retrofit/replacement incentive programme for end-users; and monitoring.

#### Secretariat's comments

25. The Secretariat notes the comprehensive and well documented progress report on the implementation of the TPMP that was prepared by the Government of Jamaica with the assistance of the Government of Canada and UNDP.

26. At the time the TPMP was approved, the latest CFC consumption (2000) reported by the Government of Jamaica under Article 7 of the Montreal Protocol was 59.5 ODP tonnes. The 2003 CFC consumption reported to the Ozone Secretariat is 16.2 ODP tonnes, which is 77 ODP tonnes below the CFC baseline (93.2 ODP tonnes).

#### Secretariat's recommendation

27. The Executive Committee may wish to take note of the progress report on the implementation of the terminal phase-out management plan for CFCs for Jamaica, covering the period July 2002 to July 2004.

#### **Trinidad and Tobago: Terminal phase-out management plan for CFCs (first tranche) (UNDP)**

28. At its 40th Meeting, the Executive Committee approved in principle a CFC terminal phase-out management plan (TPMP) for Trinidad and Tobago, at a total cost of US \$460,000, to be implemented by UNDP (UNEP/OzL.Pro/ExCom/40/44). At the same Meeting, the Committee allocated US \$220,000 to UNDP for the implementation of the first phase of the TPMP covering the period July 2003 to June 2006.

29. The Government of Trinidad and Tobago committed to achieving total phase-out of CFCs by the end of 2007, with the following annual CFC consumption limits (in ODP tonnes):

Programme	Time period		ODS consumption		ODS reduction	Funding (US\$)
	Start	End	Start	End		
First Action Programme	1 July 2003	30 June 2006	77.0	34.1 (2005)	42.9	220,000
Second Action Programme	1 July 2006	31 December 2007	34.1	0 (2007)	34.1	240,000
End of Action Programmes		1 January 2008	-	0 (2008)	77.0	-

30. The status of implementation of the activities that were identified under the TPMP is presented below:

- (a) Allocation of import quota: Data submission forms on the amount of ODS imported in 2003 were distributed to the various importers prior to January 2004. To date, all the data from the importers of ODS have been submitted and cross-referenced with their import quota. Import licenses from the Ministry of Trade for 2003 have also been received. Using this information, ODS consumption data has been reported to the Fund and Ozone Secretariats. Using the 2003 data from the importers, the import quota for 2004 was assigned;
- (b) Implementation of the recovery and recycling programme and MAC retrofit: A local consultant was employed for management of these sub-project components of the TPMP. The specifications for the recovery and recycling equipment have been drafted and quotations for the equipment have been requested. It was decided that the retrofitting of MAC systems would be done in the last quarter of 2004;
- (c) Training programmes: The training programme under the TPMP proposes to train 475 refrigeration service technicians in good refrigeration practices, 30 senior technicians as trainers, and 50 customs officers. At the time of submission of the progress report, nine courses had been held with 140 participants from both the formal and informal sectors;
- (d) Commercial refrigeration conversion sub-project component: The terms of reference for the rebate criteria, and the qualification form have been drafted. The commercial retrofit programme is being done by way of an incentive rebate mechanism upon successful completion of the project. Promotion of this project is being done through the Supermarkets Association and an advertisement in newspapers. Presently the Environmental Management Authority is receiving applications from various supermarkets for the project.
- (e) Public awareness and information dissemination was conducted during the celebration of the Ozone Day.

Secretariat's comments

31. The 2003 CFC consumption reported to the Ozone Secretariat is 62.5 ODP tonnes, which is 57.5 ODP tonnes below the CFC baseline (120 ODP tonnes). An additional 2.5 ODP tonnes of CFCs will need to be phased out in order to comply with the 2005 phase-out target.

Secretariat's recommendation

32. The Executive Committee may wish to take note of the progress report on the implementation of the terminal phase-out management plan for CFCs for Trinidad and Tobago, covering the period July 2003 to September 2004.

**Turkey: Phase-out of methyl bromide in protected tomato, cucumber and carnation crops (second tranche) (UNIDO)**

33. The Executive Committee, at its 31st Meeting, approved US \$479,040 (World Bank) as the total funds available to Turkey to achieve the complete phase-out of MB used in the dried fig sector (30 ODP tonnes) (UNEP/OzL.Pro/ExCom/31/47).

34. At its 35th Meeting, the Executive Committee approved in principle an additional US \$3,408,844 (UNIDO) as the total funds available to Turkey to achieve the complete phase-out of 292.2 ODP tonnes of MB used in protected tomato, cucumber, and carnation crops and allocated US \$1,000,000 to UNIDO for the first tranche, which would phase out 29.2 ODP tonnes (UNEP/OzL.Pro/ExCom/35/54, Corr.1 and Add.1/Corr.1). An additional US \$1,000,000 was approved by the Committee at its 41st Meeting for UNIDO to implement the second tranche of the project (UNEP/OzL.Pro/ExCom/41/62).

35. The Government of Turkey has prepared a progress report on the implementation of the MB phase-out project in protected tomato, cucumber, and carnation crops. The Government of Turkey is not requesting approval of funding at this time.

36. The 2003 and 2004 MB phase-out targets established in the agreement between the Government of Turkey and the Executive Committee have been achieved. The technical staff selected to implement the project have been trained.

37. About 6,000 farmers in the horticulture and cut flower sub-sectors have also been trained through workshops, practical field demonstrations and other means. Farm equipment and materials have been purchased and distributed among farmers and support teams. A database has been developed to track ongoing activities.

38. In 2003, about 30 per cent of growers in both the horticulture and cut flower sub-sectors phased out the use of MB. Additional reductions in MB consumption were recorded in 2004. However, the cut flower sector faces critical limitations due to energy costs and the availability of steam machines for the application of the selected steam pasteurization technology. Some other effective and economically feasible technologies (such as 1,3-dichloropropene with chloropicrin) need to be considered further for this sub-sector.



39. Among MB alternative technologies solarization alone, and in combination with other technologies (bio-fumigation and low doses of alternative chemicals), has been the most sustainable technology. It has been widely accepted by growers because it is very cost-effective and easy to apply.

Secretariat's comments

40. The Secretariat has reviewed the progress report in light of the original project approved at the 35th Meeting (including the agreement between the Government of Turkey and the Executive Committee), the first progress report submitted to the 41st Meeting, and the MB consumption data reported to both the Fund and Ozone Secretariats.

41. The Secretariat notes that the 2003 MB consumption reported to the Ozone Secretariat under Article 7 of the Protocol was 185.4 ODP tonnes, which was 40 ODP tonnes below the maximum allowable MB consumption in Turkey. The Secretariat also noted that, as of 30 September 2004, the total amount of MB that has been imported is 167.4 ODP tonnes and no additional imports will be allowed in 2004.

42. The Secretariat pointed out that, according to the agreement between the Government of Turkey and the Executive Committee, US \$700,000 and US \$708,844 could have been requested in 2003 and 2004. However, no funding is being requested at this time. UNIDO indicated that the remaining funds would be requested in 2005 and 2006, respectively; UNIDO also confirmed that MB would be phased out according to the agreement.

43. The Secretariat also discussed with UNIDO the issue of implementation of steam technology in the cut flower sector, which has been delayed by at least two years. In this regard, UNIDO indicated that the phase-out of MB in the cut flower sector would commence with the 2005 crop season, starting in February, with the application of steam for pasteurization of the substrate, as farmers approved both the operational cost and application technology. Steam pasteurization of soil will be further discussed with those farmers who are looking for the best option in light of recent developments.

Secretariat's recommendation

44. The Executive Committee may wish to take note of the progress report on the implementation of MB phase-out in protected tomato, cucumber and carnation crops in Turkey.

-----