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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-seventh Meeting
Montreal, 17-19 July 2002

PROJECT PROPOSAL: JAMAICA

This document consists of the comments and recommendations of the Fund Secretariat on the following project proposal:

Phase out

- Terminal phase-out management plan for CFCs

UNDP

**PROJECT EVALUATION SHEET
JAMAICA**

SECTOR: Phase-out ODS use in sector (2001): 59.5 ODP tonnes

Sub-sector cost-effectiveness thresholds: US \$/kg N/A

Project Title:

(a) Terminal phase-out management plan for CFCs

Project Data	CFC phase-out plan	CFC phase-out plan
Enterprise consumption (ODP tonnes)	59.50	
Project impact (ODP tonnes)	59.50	
Project duration (months)	42	42
Initial amount requested (US \$)	240,000	140,000
Final project cost (US \$):		
Incremental capital cost (a)		
Contingency cost (b)		
Incremental operating cost (c)		
Total project cost (a+b+c)	380,000	380,000
Local ownership (%)	100%	100%
Export component (%)	0%	0%
Amount requested (US \$)		
Cost effectiveness (US \$/kg.)	6.39	
Counterpart funding confirmed?		
National coordinating agency	NEPA	National Environment and Planning Agency
Implementing agency	Canada	UNDP

Secretariat's Recommendations		
Amount recommended (US \$)		
Project impact (ODP tonnes)		
Cost effectiveness (US \$/kg)		
Implementing agency support cost (US \$)		
Total cost to Multilateral Fund (US \$)		

PROJECT DESCRIPTION

1. The Government of Jamaica submitted a terminal CFC phase-out management plan (TPMP) for the consideration of the Executive Committee at its 37th Meeting. Through this Plan, the Government of Jamaica is requesting technical assistance to achieve a complete phase out of its ODS consumption by the end of 2005.
2. The TPMP was prepared by Canada and UNDP, using the US \$15,000 that had been approved for UNDP at the 30th Meeting of the Executive Committee to prepare a project in the commercial refrigeration sub-sector, and supplemented by financial and in-kind assistance from Environment Canada.
3. The Executive Summary of the Plan, prepared by the Government of Canada and UNDP, is presented below:

Background

4. TPMP for CFCs in Jamaica will be implemented through three annual implementation phases beginning in September 2002 and will result in the complete phase out of CFCs in Jamaica within 3.5 years (i.e., by December 2005). The TPMP will ensure timely, sustainable and cost-effective phase-out of CFCs through a combination of training, technical support and policy/management support components.
5. The total requested grant for the project is US \$380,000. It is proposed that this grant be allocated over the next 3-year period, as Jamaica's current regulations mandate a total phase-out of CFCs by the end of 2005.

The refrigeration sector

6. For the refrigeration and air-conditioning servicing sector as a whole, current use is estimated to be about 67 ODP tonnes of CFCs. Current use is estimated to be divided among the following sub-sectors: domestic refrigeration (13 ODP tonnes), commercial and industrial refrigeration (13 ODP tonnes), mobile air conditioning (39 ODP tonnes) and chilled air conditioning (2 ODP tonnes). While the current estimated use of CFCs in the refrigeration and air-conditioning servicing sector, 67 ODP tonnes, is slightly higher than the level of CFC imports in 2002, 59.5 ODP tonnes, this is explained through the availability of stockpiles of CFCs which are gradually being used to compensate for the drop in imports.
7. The price of CFC-12 rose significantly in 1999, following the implementation of the licensing system, but then declined slightly. In 2001, the prices of CFC-12, CFC-11 and HFC-134a, were US \$6.2/kg, US \$6.7/kg and US \$7.9/kg, respectively. At this point, the slightly higher price of HFC-134a does not encourage the retrofitting of CFC-based refrigeration and air-conditioning systems. However, the difference in prices is not so significant as to encourage re-conversion to CFCs, once systems have been retrofitted to alternatives. Hence, it can be expected that a retrofit programme would yield permanent results in eliminating CFC use.

8. Assuming the retiring of the majority of the existing base of CFC equipment over the next 10 years, (about 50 per cent of CFC equipment are over 15 years of age), it is anticipated that total cumulative CFC demand for that period will be close to 230 ODP tonnes. Part of that amount will have to come from any remaining stockpiles. The remaining demand will need to be phased out over the next 3.5 years through application of the regulations and implementation of the proposed TPMP projects.

Policy measures

9. The Jamaica Licensing System for CFCs came into effect in July 1999. Under that system, imports of CFCs are being gradually reduced on an annual basis, from a total quota of 96 MT during July 1999-June 2000 to 0 by end of 2005. In addition, since March 1998, Jamaica has implemented a ban on the import of most ODS-based products and equipment and, since March 1999, a ban on the import of CFC-based mobile air conditioning (MAC) systems. Jamaica has also adopted a number of other regulatory provisions for CFC products, including labelling requirements. Various pieces of legislation are currently being combined into an Ozone Act, which is expected to be approved in the first half of 2003. This Ozone Act is to include provisions for the certification of refrigeration technicians to ensure that they participate in training on good practices, as well as anti-venting provisions.

10. Thanks to the effective implementation of its ODS legislation, combined with the impact of the RMP projects and aggressive retrofitting/replacement of CFC-based equipment by the industry, Jamaica has been able to reduce its consumption of CFCs by over 36 per cent from its baseline (from a 93.2 ODP tonnes baseline to 59.5 ODP tonnes in 2000). Preliminary analysis of 2001 import data indicate that CFC consumption in 2001 has been further reduced. All of Jamaica's remaining CFC consumption is in the refrigeration-servicing sector.

Status of projects so far approved

11. Implementation of Jamaica's RMP, approved in 1999 for Canada and implemented with the assistance of UNEP, and associated recovery and recycling projects (UNDP and US EPA) have been completed and project completion reports for each RMP sub-project have been submitted to the Secretariat. Over 150 technicians have been trained in good practices and four technical institutes have incorporated modules on good practices in their curriculum. About 200 customs officers have been trained and an evaluation found that the training contributed to more effective control of ODS imports. Recovery and re-use in the stationary sector is estimated to be about 10 per cent, while in the MAC sector, it is estimated to be about 20 per cent.

Sub-projects in the TPMP

12. The TPMP consists of two major sub-projects. The first sub-project, training and recovery and recycling, would be implemented by Canada, at a cost of US \$240,000 and consist of the following activities:

- (a) training on good practices to an additional 150 refrigeration technicians, mostly from the informal sector, using the local expertise developed under the RMP;

- (b) mandatory certification of technicians through the Ozone Act;
- (c) development, publishing and distribution to refrigeration technicians a Code of Good Practice;
- (d) additional recovery and recycling equipment and associated training for the commercial/industrial, MAC and chillers sub-sectors, including a recycling machine for a centre in Montego Bay;
- (e) promoting recovery and recycling and good practices through an awareness-raising campaign;
- (f) developing a management plan for contaminated CFCs (separate Canadian contribution for which Multilateral Fund assistance is not requested);
- (g) monitoring and reporting of progress, particularly of quantities of CFCs recovered, recycled and re-used.

13. This component of the TPMP is expected to achieve a reduction of 5 ODP tonnes of CFCs in 2003, 9 ODP tonnes in 2004 and about 15 per cent of the estimated annual demand thereafter.

14. The second TPMP sub-project, retrofitting/replacement programme is to be implemented by UNDP, at a cost of US \$140,000. The objective of this component is to provide incentives to large end-user establishments in the commercial and industrial refrigeration sub-sector, for expediting retrofitting or replacement of their existing CFC-based equipment. The proposed activities consist of:

- (a) incentive grants to end-users to retrofit or replace CFC-based medium and large installations less than 15 years of age;
- (b) technical assistance for retrofitting and replacement, including advice on system redesign and selection of alternative technology;
- (c) technical workshops for end-users to provide information and technical support, including technological options and implications;
- (d) monitoring and reporting.

15. The estimated project impact is 2 ODP tonnes in 2003 and 5 ODP tonnes in 2004.

Cost of the TPMP

16. The total cost of the TPMP, and the funding requested from the Multilateral Fund, is US \$380,000, with US \$240,000 of that amount for Canada to implement the training programme and recovery and recycling project, and US \$140,000 for UNDP to implement the retrofit/replacement programme.

17. The funding would be disbursed in 3 tranches, with the first tranche being the most significant in terms of value. This is required in order for Jamaica to achieve sufficient reduction in CFC consumption in the next 2 years to lead to a 73 per cent reduction from current consumption between the time of project approval and the period July 2004-July 2005 (from 59.5 ODP tonnes to 16 ODP tonnes), and 100 per cent reduction as of December 2005, as required by Jamaica's regulations.

18. Disbursement of the second and third funding tranches of the TPMP would be contingent on the achievement and verification of the following milestones:

(a) December 2003:

- (i) Compliance with CFC Licensing System: consumption of no more than 48 ODP tonnes of CFCs between July 2002 and June 2003.
- (ii) About 150 new technicians trained in good practices.
- (iii) Reports from technicians, verified by NOU, indicating that recovery and recycling equipment provided under TPMP is being used, and the quantities of CFC being recovered, recycled and re-used.
- (iv) Completion of retrofitting/replacement of approximately 30 per cent of end-users qualifying in the retrofit/replacement programme.

(b) December 2004:

- (i) Compliance with CFC Licensing System: consumption of no more than 32 ODP tonnes of CFCs between July 2003 and June 2004.
- (ii) Reports from technicians, verified by NOU, indicating that equipment provided under TPMP is being used, and the quantities of CFC being recovered, recycled and re-used.
- (iii) Completion of retrofitting/replacement of approximately 70 per cent of end-users qualifying in the retrofit/replacement programme.

19. Canada will be responsible for verifying the achievement of the milestones, at the end of 2003 and at the end of 2004.

20. By December 2005, it is expected that the TPMP will have assisted Jamaica to achieve a complete phase out of CFCs.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

21. The Secretariat reviewed the CFC TPMP and noted that the work undertaken by the Government of Canada and UNDP resulted in the submission of a comprehensive and well developed strategy for the complete phase out of CFCs in Jamaica by the end of 2005.

22. The Secretariat pointed out to the Government of Canada and UNDP that, in light of the Decision 31/48 on RMPs, LVC countries could additionally receive up to 50 per cent of the funding level received in their original RMP to meet the 85 per cent phase-out measure by 2007. However, the Government of Jamaica is submitting a plan to completely phase out its CFC consumption by the end of 2005. Furthermore, the Executive Committee will consider the issue of whether or not RMP activities could be submitted as new terminal phase-out management plans if countries requested agencies to do so (Decision 36/6).

23. The Government of Canada informed the Secretariat that the rationale for the level of total funding requested was based on the costs of the projects proposed and their associated phase-out, as well as on the Guidelines for RMPs (Decision 31/48) and the Multilateral Fund experience to date on funding TPMPs for LVCs. Decision 31/48 allows funding to a maximum of 50 per cent of the costs of approved RMP-related activities for RMP updates, to achieve the 85 per cent CFC reduction by 2007. In Jamaica's case, 50 per cent of approved RMP-related activities amount to US \$218,777 (i.e., to move from the current 30 per cent reduction from the baseline to an 85 per cent reduction). The TPMP proposes to add US \$161,222 to that amount (for a total of US \$380,000) to achieve a 100 per cent reduction by the end of 2005, to facilitate Jamaica's compliance with its regulations.

24. The Secretariat noted that about 40 per cent of the total cost of the retrofit/replacement incentive programme is for logistical arrangements and training and only 60 per cent (US \$85,000) is for the actual incentive programme. In this regard, the Government of Canada and UNDP agreed to increase the level of funding for the retrofit/replacement of equipment to US \$100,000; and reduce the budget for the international consultants by US \$5,000 and also reduce the budget for workshops by US \$10,000.

25. Upon a request from the Secretariat, the Government of Jamaica prepared an official letter of the submission of the TPMP. The Secretariat also suggested that the Government of Canada and UNDP assist the Government of Jamaica in the preparation of a draft agreement for CFC TPMP (similar to the agreement for the Bahamas). The draft agreement will be finalised prior to the 37th Meeting of the Executive Committee.

RECOMMENDATION

26. The Executive Committee may wish to consider the TPMP for CFCs in Jamaica in light of the results of its discussion on whether RMP activities could be submitted as new terminal phase-out management plans, and taking into consideration the above comments.
