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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-fifth Meeting
Montreal, 4-8 April 2005

PROJECT PROPOSAL: MAURITIUS

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

Phase-out

- Implementation of an ODS terminal phase out management plan (second tranche) Germany

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS
MAURITIUS**

PROJECT TITLE **BILATERAL/IMPLEMENTING AGENCY**

Implementation of an ODS terminal phase out management plan (second tranche)	Germany
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SUB-PROJECT TITLES

(a) Focusing on the refrigeration servicing sector	
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NATIONAL CO-ORDINATING AGENCY:	National Ozone Unit, Mauritius Meteorological Services
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LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT**A: ARTICLE-7 DATA (ODP TONNES, 2003, AS OF FEBRUARY 2005)**

CFC-12	4.07		
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B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2003, AS OF FEBRUARY 2005)

ODS	Foam	Ref.	Aerosol	ODS	Solvents	Process agent	Fumigant
CFCs		4.07					

CFC consumption remaining eligible for funding (ODP tonnes)	0
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CURRENT YEAR DRAFT BUSINESS PLAN: Total funding US \$70,094: phase-out 1.0 ODP tonne.

PROJECT DATA	2003	2004	2005	2006	2007	2008	2009	2010
Montreal Protocol limits		29.1	14.55	14.55	4.36	4.36	4.36	0
Annual consumption limit	2	4	2	1	0			
Annual phase-out from ongoing projects								
Annual phase-out newly addressed								
Annual unfunded phase-out								
TOTAL ODS CONSUMPTION TO BE PHASED OUT			2	1	1			
Project cost as originally submitted (US \$)								
Final Project costs (US \$):								
Total project funding	110,000	62,030	40,000					
Final Support costs (US \$):								
Total support costs	14,300	8,064	5,200					
TOTAL COST TO MULTILATERAL FUND (US \$)	124,300	70,094	45,200					
Final project cost effectiveness (US \$/kg)								

SECRETARIAT'S RECOMMENDATION	Approval at the costs indicated above
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PROJECT DESCRIPTION

Background

1. The Mauritius ODS Terminal Phase-out Management plan (TPMP) was approved by the Executive Committee at its 41st Meeting. The aim of the project is to assist the Government of Mauritius to completely phase out its CFC consumption by 2007. Total funding of US \$212,030 was approved in principle by the Executive Committee. At the same meeting, the Executive Committee approved US \$110,000, plus agency support cost for Germany, for the implementation of the 1st work programme.
2. According to the project proposal, Mauritius should have requested funding for the 2nd tranche at the 44th Meeting. Since funds were still remaining from the 1st work programme at that time, the Government of Mauritius decided to request the 2nd tranche at the 45th Meeting of the Executive Committee.
3. Together with the request for the second work programme, the Government of Mauritius submitted a progress report on the implementation of the first work programme for consideration by the Executive Committee.

Progress report on the implementation of the 1st work programme

4. Due to the presence of a “free port” in Mauritius, the training programme for customs officers and the provision of ODS identifiers to the officers was an important activity to be completed to ensure the control of any illegal imports of ODS into the country. In September 2004, a two-day customs training session was conducted. A total of 50 officers attended and six portable refrigerant identifiers were distributed to the country’s main border posts.
5. Implementation of the first phase of the incentive scheme for end-users has also started. During the implementation of the 1st phase, it was found that the major CFC consumption in the country is related to the cooling systems installed in government buildings. The Government of Mauritius has already started actions to replace two systems (with a combined refrigerant charge of 1.8 ODP tonnes of CFC-12) for which retrofitting to non-CFC refrigerant is not technically and economically feasible. Converting these two systems will cost the Government of Mauritius about US \$700,000. There is also a relatively new CFC-12 based chiller in good working condition at the New Court House, with a refrigerant charge of 0.5 ODP tonnes. The Electrical Services Department has estimated the cost of retrofitting this system to R-123 refrigerants at US \$200,000. The Government of Mauritius has decided to provide a subsidy of US \$100,000 to retrofit this installation from the funds available under the TPMP. The Memorandum of Understanding is being drafted, and initial payment is to be made to start the conversion process.
6. In the past, Mauritius used 0.45 ODP tonnes of MB for the fumigation of a flour mill (Les Moulins de la Concorde Ltee). However, in order to comply with its obligations under the Montreal Protocol, it banned the import of MB into the country in 2001. However, this situation created a significant problem with the flour mill, which switched to phosphine with negative results (the flour mill asked the Government to request an essential use exemption for fumigation purposes).

7. Specific activities for the phase-out of methyl bromide (MB) in Mauritius were not included in the budget of the TPMP approved for Mauritius. However, since the TPMP is to phase out all ODS in the country, and the Government of Mauritius has specifically requested assistance from the Government of Germany, it was decided to use part of the funding available under the TPMP to address the issue related to MB consumption. The only suitable alternative to MB identified for the flour mill in Mauritius was sulfuryl fluoride (SF). With assistance from the Government of Germany, SF has been successfully registered for use in Mauritius. The application of SF requires a strict safety regime and specialized application equipment. During implementation of the 1st tranche of the TPMP, a fumigator with considerable experience in the use of SF was identified, and will be responsible for training fumigators in SF use and organizing the purchase of SF application equipment.

Plan of action for the 2nd work programme

8. The Government of Mauritius is requesting US \$62,030 plus agency support costs for the Government of Germany for the implementation of the 2nd work programme of the TPMP. Through this work programme, the Government is committed to phase out an additional 2.0 ODP tonnes of CFCs.

9. The activities proposed for the 2nd work programme are the following:

- (a) Continue the implementation of the incentive scheme for end-users. The retrofit of the chiller at New Court House will start in early 2005 with an estimated time of completion of six months (60 per cent of the cost of the retrofit will be paid in April 2005 and a final payment will be made once the retrofit has been successfully conducted);
- (b) Training of refrigeration servicing technicians in the use of hydrocarbon refrigerants. An increasing number of hydrocarbon-based refrigerants are being imported into the country. In this regard, the servicing sector has requested training of technicians in the use of hydrocarbons as a refrigerant. Since local expertise is not available in the country, an international trainer will provide a 3 - 5 day training course to a few technicians at the main training centre in Mauritius, who will in turn train other servicing technicians; and
- (c) Prevent re-introduction of MB at the flour mill Les Moulins de la Concorde Ltee. This activity is to import the amount of SF needed to fumigate the flour mill and procure the specialized equipment for the application of SF (estimated at US \$15,000). The fumigation date will be decided by the Ozone Unit together with the flour mill once the chemical and equipment has arrived in the country.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

10. The Secretariat noted that, in 2003, the Government of Mauritius reported a CFC consumption of 0.4 ODP tonnes under Article 7 of the Montreal Protocol. This level of consumption is the same as the level of consumption that the Government of Mauritius committed to address under the TPMP. The CFC baseline for Mauritius is 29.1 ODP tonnes.

11. The Secretariat also noted that in 2002 and 2003 the Government of Mauritius reported zero consumption of MB under Article 7.

12. According to the agreement between the Government of Mauritius and the Executive Committee, Mauritius committed to phasing out 2 ODP tonnes of CFCs in 2005. The action plan for 2005 proposes the following two actions regarding CFCs: retrofitting the chiller at the New Court House, which will result in the phase-out of 0.5 ODP tonnes of CFC-11; and a training programme for refrigeration servicing technicians on the use hydrocarbons as refrigerants. In this regard, the Secretariat sought an explanation on how the Government of Mauritius would achieve the phase-out of 2 tonnes of CFCs.

13. Subsequently, the Government of Germany indicated that the Government of Mauritius will not issue permits for importing CFCs in 2005. The CFCs required in 2005 will be provided from the chillers that will be retrofitted in the Government building (the funding by the Government has already started).

RECOMMENDATION

14. The Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level shown in the table below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Implementation of an ODS terminal phase out management plan (second tranche)	62,030	8,064	Germany
