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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-seventh Meeting
Montreal, 21-25 November 2005

PROJECT PROPOSALS: MADAGASCAR

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

Refrigeration

- Refrigerant management plan update: Training of customs agents and other agents of the State in control and monitoring of ODS and items containing them UNEP
- Refrigerant management plan update: Training maintenance technicians including small businessmen in the informal sector UNEP
- Refrigerant management plan update: Recovery and recycling programme France

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**PROJECT EVALUATION SHEET – NON-MULTI-YEAR PROJECTS
MADAGASCAR**

PROJECT TITLES**BILATERAL/IMPLEMENTING AGENCY**

(a) Refrigerant management plan update: Training of customs agents and other agents of the State in control and monitoring of ODS and items containing them	UNEP
(b) Refrigerant management plan update: Training maintenance technicians including small businessmen in the informal sector	UNEP
(c) Refrigerant management plan update: Recovery and recycling programme	France

NATIONAL CO-ORDINATING AGENCY	National Ozone Office, Ministry of Environment
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LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT**A: ARTICLE-7 DATA (ODP TONNES, 2004, AS OF SEPTEMBER 2005)**

Annex A, Group I: CFC	7.1		
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B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2003, AS OF SEPTEMBER 2005)

ODS Name	Sub-sector/quantity	Sub-sector/quantity	Sub-sector/quantity	Sub-sector/quantity
CFC-11	Refrigeration	Servicing: 0.50		
CFC-12	Refrigeration	Servicing: 6.00		
CFC-115	Refrigeration	Servicing: 0.67		

MB consumption remaining eligible for funding (ODP tonnes)	N/A
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CURRENT YEAR BUSINESS PLAN ALLOCATIONS		Funding US \$	Phase-out ODP tonnes
	(a) – (b)	US \$44,070	0
	(c)	US \$43,759	0

PROJECT TITLE:	(a)	(b)	(c)
ODS use at enterprise (ODP tonnes):	N/A	N/A	7.1
ODS to be phased out (ODP tonnes):	N/A	N/A	7.1*
ODS to be phased in (ODP tonnes):			
Project duration (months):	12	12	18
Initial amount requested (US \$):	22,000	25,000	40,500
Final project cost:			
Incremental Capital Cost (US \$)			
Contingency (10%) (US \$)			
Incremental Operating Cost (US \$)			
Total Project Cost (US \$)	22,000	25,000	40,500
Local ownership (%):	N/A	N/A	N/A
Export component (%):	N/A	N/A	N/A
Requested grant (US \$):	22,000	25,000	40,500
Cost-effectiveness (US \$/kg):	N/A	N/A	N/A
Implementing agency support cost (US \$):	2,860	3,250	5,265
Total cost of project to Multilateral Fund (US \$):	24,860	28,250	45,765
Status of counterpart funding (Y/N):	N/A	N/A	N/A
Project monitoring milestones included (Y/N):			

SECRETARIAT'S RECOMMENDATION*	Blanket approval at the costs indicated above
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* To be in compliance with the 2005 and 2007 Montreal Protocol limits (CFC baseline is 47.9 ODP tonnes)

PROJECT DESCRIPTION

1. The Government of Madagascar, through UNEP and the Government of France, has submitted for consideration by the Executive Committee at its 47th Meeting a project proposal for a refrigerant management plan (RMP) update at a cost of US \$87,500, excluding agency support costs. The RMP update will be jointly implemented by the Government of France and UNEP.

2. In 2004, the Government of Madagascar reported CFC consumption of 7.1 ODP tonnes under Article 7 of the Montreal Protocol. The CFC baseline for consumption is 47.9 ODP tonnes.

Background

3. Total CFC consumption in the refrigeration sector in the country is currently estimated at 9.2 ODP tonnes, mainly CFC-12, used for servicing domestic refrigerators (about 107,000 units), commercial refrigeration equipment (10 cold rooms) and vehicles fitted with MAC units (245 vehicles). A survey conducted during the preparation of the RMP update identified 520 technicians in the refrigeration servicing sector, which have been trained in the field, working from 330 small workshops.

4. The current prices of refrigerants per kg are: US \$6.50 (informal sector) to US \$20.00 (formal sector) for CFC-12, US \$12.50 (informal) to US \$42.40 (formal) for HFC-134a, and US \$6.00 (formal) for HCFC-22.

ODS regulations

5. The Government of Madagascar has issued Decree 2003/170 of 4 May 2003, regulating the importation and use of ODS by special authorization through a technical visa, import quotas, and the use of recovered and recycled ODS. The institutions responsible for implementing the decree are the Ministries of the Environment, Trade, Agriculture, Livestock and Fisheries, and Finance and Budget (Customs).

RMP project

6. The RMP project approved at the 29th Meeting of the Executive Committee included two basic training programmes, one for customs officers, and a “train-the-trainers” program for refrigeration technicians in good refrigerant management practices. A total of 19 customs officers and 89 refrigeration technicians were trained.

7. The RMP also included a subproject for the establishment of a recovery and recycling network comprised of 40 refrigerant recovery units to service commercial and industrial refrigeration equipment. Implementation of this project component was conditional on having in place the regulatory and legislative requirements and fiscal measures to favour recovery and recycling of CFCs in the country. Only in March 2003, when the requirements were in place, did the implementation of the recovery/recycling programme commence. After a tendering process, the equipment arrived in the first quarter of 2004, and contractual agreements between the Ministry and the three recycling centres were signed in the third quarter of 2004. The 40 machines were then distributed evenly among the three centres, and the centres began to

use the equipment at the beginning of 2005. However, a system to monitor recovered and recycled CFCs has not been set up.

RMP update

8. The following activities are being proposed as part of the RMP update:
- (a) Training of customs officers and other state agents for the control and monitoring of ODS and substances containing them (US \$22,000, to be implemented by UNEP), to train an additional 30 customs officers in techniques for control and identification of ODS, to raise awareness on the application of regulations in force, and to circulate the relevant laws to the main groups concerned;
 - (b) Training for maintenance technicians, including small business operators in the informal sector (US \$25,000, to be implemented by UNEP), to provide additional training in good refrigeration servicing practices to technicians and small business managers. Training will be conducted according to the principle of “train-the-trainers”; the equipment that was acquired during the first phase will be utilized; and
 - (c) Reactivation of the recovery and recycling programme, including optimization of the existing network and identification of a new site at Majunga (US \$40,500, to be implemented by France).
9. The Government of Madagascar submitted the RMP update with a transmittal letter signed by the Ozone Office within the Ministry of the Environment, Waters and Forests, committing to achieve the 2007 allowable control limits of CFCs, without seeking any additional assistance from the Multilateral Fund.

Lead agency and cooperating agency

10. The Government of Madagascar has selected UNEP as the lead implementing agency and the Government of France as the cooperating agency for the RMP update.

SECRETARIAT’S COMMENTS AND RECOMMENDATION

COMMENTS

11. From the beginning of the implementation of the Madagascar country programme, CFC consumption has decreased from a calculated baseline of 47.9 ODP tonnes to 7.1 ODP tonnes in 2004, which is below the 2005 allowable consumption level of 23.9 ODP tonnes, and is similar to the 2007 allowable level of 7.2 ODP tonnes.

12. The RMP update project proposes to provide additional training to customs officers and refrigeration technicians, and additional support for the recovery/recycling project. The Secretariat suggested, however, that within the eligible level of funding for the RMP proposal, the Government of France and UNEP would examine the merits of using most of the available resources for the provision of a mix of training programmes in good refrigeration servicing

practices and basic servicing equipment and tools. The suggestion was based taking into account the current situation of the refrigeration servicing sector in Madagascar (i.e., a CFC consumption of 7.1 ODP tonnes used only for servicing domestic refrigerators, and that the prices of non-CFC refrigerants are double the price of CFC-12), and that the requirements of decision 41/100 on RMPs must be met.

13. Subsequently, the Secretariat was informed that reactivation of the original recovery/recycling programme involved the development of an implementation management strategy, for which a certain amount of equipment would be purchased. This equipment could be used for the training programme in best practices. The proposed fourth recycling centre in Majunga had initially been planned in the original project. Concerning CFC prices, the Government of France and UNEP considered that, once the legislation is practically enforced, CFC imports will decrease and local CFC prices will increase.

14. In conclusion, the Government of Madagascar, the Government of France and UNEP believe that by combining training programmes, recovery/recycling activities and basic servicing equipment, synergies can be created, which will reactivate the initial recovery/recycling programme, make it sustainable, and result in greater coordination and awareness of CFC phase-out issues.

RECOMMENDATION

15. The Fund Secretariat recommends blanket approval of the projects with associated support costs at the funding levels shown in the table below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Refrigerant management plan update: Training of customs agents and other agents of the State in control and monitoring of ODS and items containing them	22,000	2,860	UNEP
(b)	Refrigerant management plan update: Training maintenance technicians including small businessmen in the informal sector	25,000	3,250	UNEP
(c)	Refrigerant management plan update: Recovery and recycling programme	40,500	5,265	France
