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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-ninth Meeting
Beijing, 24-26 November 1999

PROJECT PROPOSALS: GAMBIA

This document includes the comments and recommendations of the Fund Secretariat on the following project proposals:

Refrigeration

- Refrigerant management plan: policy development and related information dissemination UNEP
- Refrigerant management plan: training the technicians in good refrigeration practices UNEP
- Refrigerant management plan: complementary refrigerant recovery and recycling UNIDO

**PROJECT EVALUATION SHEET
GAMBIA**

SECTOR: Refrigeration ODS use in sector (199): ODP tonnes

Sub-sector cost-effectiveness thresholds: N/A

Project Titles:

- (a) Refrigerant management plan: policy development and related information dissemination
- (b) Refrigerant management plan: training the technicians in good refrigeration practices
- (c) Complementary refrigerant recovery and recycling

Project Data	Refrigerant management plan		
Enterprise consumption (ODP tonnes)			
Project impact (ODP tonnes)			
Project duration (months)	12	18	24
Initial amount requested (US \$)	22,000	40,000	46,000
Final project cost (US \$):			
Incremental capital cost (a)			44,000
Contingency cost (b)			2,000
Incremental operating cost (c)			
Total project cost (a+b+c)	22,000	40,000	46,000
Local ownership (%)	100%	100%	100%
Export component (%)	0%	0%	0%
Amount requested (US \$)	22,000	40,000	46,000
Cost effectiveness (US \$/kg.)			
Counterpart funding confirmed?			
National coordinating agency	National Environmental Agency		
Implementing agency	UNEP	UNEP	UNIDO

<i>Secretariat's Recommendations</i>			
Amount recommended (US \$)	22,000	40,000	
Project impact (ODP tonnes)			
Cost effectiveness (US \$/kg)			
Implementing agency support cost (US \$)	2,860	5,200	
Total cost to Multilateral Fund (US \$)	24,860	45,200	

PROJECT DESCRIPTION

Refrigerant Management Plan: Gambia

1. In 1998, the total ODS consumption in the refrigeration sector in the country was estimated at 6 ODP tonnes for servicing domestic and commercial refrigeration equipment and MAC units. Based on data gathered during preparation of the RMP, there are about 100 refrigeration technicians in the country, and 25 formal workshops servicing domestic, commercial and industrial refrigeration equipment. The informal service sector consists of approximately 60 semi-skilled technicians working in basic workshops.
2. A new market for second-hand CFC-based refrigeration equipment has been established in the country that will increase the needs for servicing in the coming years. In order to reduce the consumption of CFCs, the Government of Gambia has enacted ozone depleting substances regulations (1999), through which no CFCs and CFCs-based refrigeration equipment can be imported into the country as of 1 January 2002.
3. Under the ozone depleting substances regulations, from 1 January 1999, a provision is made for the Customs and Excise Office to impose a quota system on the importation of any motor vehicle that has a CFC-based MAC unit. It is also proposed that there is to be a 25 per cent reduction on imports in 1999 and an additional 75 per cent by 2002. The customs coding system would be modified to allow for the monitoring of all the controlled substances. A provision has also been included in the regulations by which reduction or exemption from duties in certain products that do not contain controlled substances may be allowed and a market incentive has been created for non-ODS based refrigeration equipment (“ozone friendly” label). Also Customs would report to the Ozone Unit (on a monthly basis) on all ODSs imported into the country.
4. Registration and certification of refrigeration servicing workshops is mandatory and servicing technicians have to be trained and pass an examination (on issues related to the ozone layer, the applicable regulations, recycling and retrofitting techniques).
5. The RMP identified two basic training programmes: (i) policy development and establishment of an import/export licensing system to assist the Government in developing policy instruments for implementation of the ODS regulations already enacted (code of good refrigeration practices; procedures and standards suitable to local market and servicing conditions and ODS alternatives; a system of certification for the servicing personnel; and a system of labeling for the ODS and non-ODS products) and (ii) a “train the trainers” programme for refrigeration technicians in good management practices, aimed at improving service practices to prevent release of CFCs into the atmosphere and thus making it possible for refrigeration equipment to operate to the end of their useful life.
6. The Executive Committee approved at its 22nd Meeting a refrigerant recovery and recycling project (including a training programme on recovery/recycling practices) in Gambia and allocated US \$68,000 to UNIDO for its implementation. The training programme has been implemented and a lower number of recovery machines and service kits than those proposed in the original project (due to higher unit prices than expected) has been delivered. Thus, the RMP included a request to

complement the number of equipment items included in the original project (25 recovery machines and 25 servicing kits at a cost of US \$46,000).

7. The RMP had identified 11 companies whose refrigeration equipment needs to be retrofitted or replaced, at an estimated cost of US \$145,000. A project proposal will be prepared and submitted to a future meeting of the Committee, to match with the ODS phase out plans as indicated under the RMP.

8. Gambia's Ozone Unit will be responsible for the monitoring, co-ordination and implementation of proposed phase-out activities in the RMP.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The Secretariat and UNEP discussed costs associated with logistical arrangements for workshops, consultants' fees and project assistance, monitoring and evaluation, were adjusted accordingly.

2. The Secretariat and the implementing agencies (UNIDO and UNEP) also discussed the request for additional recovery units and refrigeration servicing kits in relation to recovery and recycling project currently under implementation. UNIDO informed the Secretariat that the unit price of the recovery machines included in the original project was underestimated (US \$450) since it has been confirmed that the unit price of this equipment is US \$1,000. Considering that less than 6 tonnes of CFC-12 are consumed by the refrigeration servicing sector, and that a recovery machine is usually provided only to workshops servicing commercial/industrial refrigeration equipment with a minimum consumption of 250 kg of CFC per year, it appears that the 10 recovery and 4 recycling machines already provided through the UNIDO project, are sufficient for the needs in the country. Additionally, the UNIDO's progress report on the recovery and recycling project (December 1998) did not raise any issue regarding the number of units delivered (the completion report on this activity has not been submitted to the Fund Secretariat).

RECOMMENDATIONS

1. The Fund Secretariat recommends blanket approval of the training projects at the funding level indicated below:

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Refrigerant management plan: policy development and related information dissemination	22,000	2,860	UNEP
(b)	Refrigerant management plan: training the technicians in good refrigeration practices	40,000	5,200	UNEP

2. The Executive Committee might wish to consider the request for additional funds for the recovery and recycling subproject in the light of the above comments.

