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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: CHAD

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

Refrigeration

- Refrigerant management plan: national programme for recovery & recycling of refrigerants UNDP
- Refrigerant management plan: monitoring of the activities included in the RMP UNDP
- Refrigerant management plan: training the trainers of refrigeration technicians UNEP
- Refrigerant management plan: customs training UNEP

**PROJECT EVALUATION SHEET
CHAD**

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

Sub-sector cost-effectiveness thresholds: N/A

Project Titles:

- (a) Refrigerant management plan: national programme for recovery & recycling of refrigerants
- (b) Refrigerant management plan: monitoring of the activities included in the RMP
- (c) Refrigerant management plan: customs training
- (d) Refrigerant management plan: training the trainers of refrigeration technicians

Project Data	Refrigerant management plan			
Enterprise consumption (ODP tonnes)				
Project impact (ODP tonnes)	8.80			
Project duration (months)	36	36	18	18
Initial amount requested (US \$)	217,685	15,455	80,000	118,537
Final project cost (US \$):				
Incremental capital cost (a)	181,684	14,050	75,000	80,125
Contingency cost (b)	16,568	1,405		
Incremental operating cost (c)				
Total project cost (a+b+c)	198,252	15,455	75,000	80,125
Local ownership (%)	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%
Amount requested (US \$)	198,252	15,455	75,000	80,125
Cost effectiveness (US \$/kg.)				
Counterpart funding confirmed?				
National coordinating agency				
Implementing agency	UNDP	UNDP	UNEP	UNEP

<i>Secretariat's Recommendations</i>				
Amount recommended (US \$)	198,252	15,455	75,000	80,125
Project impact (ODP tonnes)	8.80			
Cost effectiveness (US \$/kg)				
Implementing agency support cost (US \$)	25,773	2,009	9,750	10,416
Total cost to Multilateral Fund (US \$)	224,025	17,464	84,750	90,541

PROJECT DESCRIPTION

Refrigerant Management Plan: Chad

1. In 1998, the total ODS consumption in the refrigeration sector in the country was estimated at 36 ODP tonnes for servicing domestic and commercial refrigeration equipment. Based on data gathered during a survey completed in 1999, there are about 700 refrigeration technicians in the country, and 100 workshops servicing domestic and commercial refrigeration equipment.
2. The Government's Action Plan proposes to implement in 2000-2001 specific control measures including establishment of legal and regulatory systems for CFC monitoring including a licensing system; creation of levies on imports; establishment of a code of good practices; training and certification of refrigeration and air-conditioning service technicians and implementation of a national programme for recovery and recycling of refrigerants.
3. The RMP identified two basic training programmes: (i) training for customs officers to establish an import/export licensing system in order to identify and develop techniques for collecting and reporting consumption of ODS import and ODS-based refrigeration equipment together with a licensing/quota system for CFC imports and development of a database on consumption by importers, users and retailers. The programme includes a request for US \$13,000 for ODS identification kits; 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.
4. The RMP also includes a subproject for the establishment of a recovery and recycling network comprising 30 recovery units (including units to be used in the training programme on good servicing practices) and 4 recycling centres for servicing commercial and industrial refrigeration equipment, at a total cost of US \$196,000. This subproject also provides for 4 one-day workshops for service technicians on practical demonstrations on recovery and recycling equipment.
5. Implementation of these projects will lead to recovery and recycling of 8.8 tonnes of CFC each year. This amount would be additional to the amount of refrigerant which should be saved from the teaching of good service and maintenance practices at the training seminars.
6. Chad's Ozone Unit will be responsible for the monitoring, co-ordination and implementation of proposed phase-out activities in the RMP. It will monitor the overall programme, distribute the recovery equipment and establish the recycling centers, monitor the amount of CFC recycled and redistribute the equipment as necessary. The project also includes a request in the amount of US \$15,455 for engaging a local consultant to collect data from all the service workshops that are included in the recovery and recycling project.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. UNEP and the Secretariat discussed the level of funding requested for the training programmes. 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 (UNDP and UNEP) also discussed the size of the recovery and recycling programme in relation to CFC consumption level and its sectoral distribution. The proposed subproject for monitoring the activities included in the RMP was also discussed in the light of the functions of the Ozone Unit. UNEP and UNDP agreed to adjust the level of funding accordingly.

RECOMMENDATIONS

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

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Refrigerant management plan: national programme for recovery & recycling of refrigerants	198,252	25,773	UNDP
(b)	Refrigerant management plan: monitoring of the activities included in the RMP	15,455	2,009	UNDP
(c)	Refrigerant management plan: customs training	75,000	9,750	UNEP
(d)	Refrigerant management plan: training the trainers of refrigeration technicians	80,125	10,416	UNEP

2. The Executive Committee may also wish to request UNEP and UNDP not to proceed with the disbursement of funds approved for the customs training programme and the recovery and recycling programme until the regulatory and legislative requirements and fiscal steps proposed by the Government of Chad are put into place.