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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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Twenty-eighth Meeting
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PROJECT PROPOSALS: MACEDONIA

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

Refrigeration

- Refrigerant management plan: training of customs officers UNIDO
- Refrigerant management plan: recovery and recycling UNIDO
- Refrigerant management plan: training for good practices in refrigeration UNIDO

PROJECT EVALUATION SHEET MACEDONIA

SECTOR: Refrigeration ODS use in sector (1995): 560.5 ODP tonnes
 RMP
 Sub-sector cost-effectiveness thresholds: n/a US \$/kg

Project Titles:

- (a) Refrigerant management plan: training of customs officers
- (b) Refrigerant management plan: recovery and recycling
- (c) Refrigerant management plan: training for good practices in refrigeration

Project Data	RMP	RMP	RMP
	(a)	(b)	(c)
Enterprise consumption (ODP tonnes)			
Project impact (ODP tonnes)		13.50	
Project duration (months)	19	22	22
Initial amount requested (US \$)	37,180	220,044	102,300
Final project cost (US \$):			
Incremental capital cost (a)	33,800	200,040	93,000
Contingency cost (b)	3,380	20,004	9,300
Incremental operating cost (c)			
Total project cost (a+b+c)	37,180	220,044	102,300
Local ownership (%)			
Export component (%)			
Amount requested (US \$)	37,180	220,044	102,300
Cost effectiveness (US \$/kg.)			
Counterpart funding confirmed?			
National coordinating agency	Ozone Unit - Ministry of Urbanism, Civil Engineering and Environment		
Implementing agency	UNIDO	UNIDO	UNIDO

<i>Secretariat's Recommendations</i>			
Amount recommended (US \$)	37,180	220,044	70,000
Project impact (ODP tonnes)	n/a	13.50	n/a
Cost effectiveness (US \$/kg)	n/a	n/a	n/a
Implementing agency support cost (US \$)	4,833	28,606	9,100
Total cost to Multilateral Fund (US \$)	42,013	248,650	79,100

PROJECT DESCRIPTION

(a) Refrigerant management plan: training of customs officers

(b) Refrigerant management plan: recovery and recycling

(c) Refrigerant management plan: training for good practices in refrigeration

Refrigerant Management Plan for Macedonia

1. In 1998, the total ODS consumption in the refrigeration servicing sector in Macedonia was estimated at 65 ODP tonnes. In 1998, a domestic refrigeration manufacturing plant had been converted to non-CFC technology with a phase out of 57 ODP tonnes of CFC used as refrigerant (50.2 ODP tonnes of CFCs used for insulation foam were also phased out).
2. Macedonia has approximately 100 refrigeration service workshops. The total number of service technicians is about 500. Service business is highly seasonal and is thus concentrated in the summer months. The current maintenance standards of domestic and commercial refrigeration equipment are generally poor.
3. The Ozone Unit regularly compiles import and consumption of ODSs, issues licenses for imports of both ODSs and ODS-based equipment; maintains regular contacts with the industrial and other larger ODS consumers; gathers and reports ODS consumption data to the Ozone Secretariat. The Ozone Unit is also engaged in the preparation of the legal framework, regulatory and control measures to support the RMP, and the assessment of the likely impacts of the prospective regulations, and in the development of an ODS database. The Government is avoiding direct intervention, but monitors and follows up trade through a licensing system. The Government is empowered to ban the imports of ODSs and ODS-based equipment, however, the economic and social consequences of bans are not desirable.
4. The RMP identified two basic training programmes: (i) training for customs officers to identify and develop techniques for collecting and reporting consumption of ODS import and ODS-based equipment and to allow the Customs Department to create a database on imported ODS; this programme includes a request in the amount of US \$2,400 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, making it possible for refrigeration equipment to operate to the end of its useful life.
5. The RMP also includes a subproject for the establishment of a recovery and recycling network comprising 60 recovery units (including units to be used in the training programme on good servicing practices) and 6 recycling centres for servicing commercial and industrial refrigeration equipment, at a total cost of US \$220,044.
6. Implementation of these projects will lead to recovery and recycling of 13.5 tonnes of CFC each year. This amount would be additional to the amount of refrigerant, which might be saved from the teaching of good service and maintenance practices at the training seminars.

7. The monitoring of the implementation of the RMP will be done by the Ozone Unit, which will be supported by the Customs Department and authorities responsible for compilation of statistics. As the legal and administrative framework is under development, the monitoring task should be feasible.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENT

1. The Secretariat requested additional information for the justification for demonstration refrigeration equipment for faculties under the training programme for refrigeration technicians. UNIDO and the Secretariat also discussed issues related to the logistical arrangements for the training programmes and the level of funding requested, as well as the size of the recovery and recycling programme in relation to CFC consumption level and its sectoral distribution. UNIDO agreed to revise some of the requests and adjusted the level of funding, accordingly.

RECOMMENDATION

1. 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 Cost (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Refrigerant management plan: training of customs officers	37,180	4,833	UNIDO
(b)	Refrigerant management plan: recovery and recycling	220,044	28,606	UNIDO
(c)	Refrigerant management plan: training for good practices in refrigeration	70,000	9,100	UNIDO

2. To request UNIDO 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 Macedonia are put into place.