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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Twenty-eighth Meeting Montreal, 14-16 July 1999

# PROJECT PROPOSALS: ROMANIA

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

# Refrigeration

•	Refrigerant management plan: training of custom officers and	UNIDO
	development criteria for ODS and ODS consuming equipment imports	
•	Refrigerant management plan: recovery and recycling	UNIDO
•	Refrigerant management plan: training for good practices in refrigeration	UNIDO

# PROJECT EVALUATION SHEET ROMANIA

SECTOR: Refrigeration ODS use in sector (1998): 609.8 ODP tonnes

RMP

Sub-sector cost-effectiveness thresholds: n/a US \$/kg

### Project Titles:

(a) Refrigerant management plan: training of custom officers and development criteria for ODS and ODS consuming equipment imports

(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)		50.00		
Project duration (months)	26	30	22	
Initial amount requested (US \$)	23,100	373,840	244,000	
Final project cost (US \$):				
Incremental capital cost (a)	21,000	339,855	222,000	
Contingency cost (b)	2,100	33,985	22,000	
Incremental operating cost (c)				
Total project cost (a+b+c)	23,100	373,840	244,000	
Local ownership (%)	100%	100%	100%	
Export component (%)	0%	0%	0%	
Amount requested (US \$)	23,100	373,840	244,000	
Cost effectiveness (US \$/kg.)				
Counterpart funding confirmed?				
National coordinating agency	Ozone Office/MWFEP			
Implementing agency	UNIDO	UNIDO	UNIDO	

Secretariat's Recommendations			
Amount recommended (US \$)	23,100	373,840	70,000
Project impact (ODP tonnes)	n/a	50.00	n/a
Cost effectiveness (US \$/kg)	n/a	n/a	n/a
Implementing agency support cost (US \$)	3,003	48,599	9,100
Total cost to Multilateral Fund (US \$)	26,103	422,439	79,100

#### PROJECT DESCRIPTION

- (a) Refrigerant management plan: training of custom officers and development criteria for ODS and ODS consuming equipment imports
- (b) Refrigerant management plan: recovery and recycling
- (c) Refrigerant management plan: training for good practices in refrigeration

## Refrigerant Management Plan for Romania

- 1. According to the country programme (approved in July 1995), the 1993 ODS consumption of Annex A and B substances was 1,557.9 ODP tonnes (out of this amount, CFCs counted for 1,431.0 tonnes). The CFC refrigerant consumption was 176,3 tonnes. While the 1998 ODS consumption was only 664.8 tonnes, CFCs used in the refrigeration sector amounted to approximately 590 ODP tonnes (an increase of 413.7 ODP tonnes). This is attributed to two reasons: an underestimation of CFCs during the preparation of the country programme, and the political and economic situation of the country.
- 2. According to data reported to the Ozone Secretariat, in 1997 Romania produced 11,906 ODP tonnes of Annex B, Groups II and III substances (carbon tetrachloride and methyl chloroform. In 1996, Romania produced 830 ODP tonnes of Annex A substances (CFCs).
- 3. Romania has approximately 310 licensed refrigeration service workshops (i.e. businesses which indicate refrigeration maintenance as their activity). There are no specific rules to start or run a maintenance business and thus no regulated way to prevent a business from starting the maintenance. The number of small, unlicensed workshops and individual operators/technicians has been increasing recently. The total number of technicians working on refrigeration maintenance has been estimated at 1,200. Larger commercial and industrial installations are usually serviced properly, but economic difficulties could result in the lowering of the standards by using non-professional operators. The current maintenance standards of domestic and commercial refrigeration equipment are generally poor.
- 4. Legislation related to ODSs has been passed. The following regulations form the basic tools available for the Ozone Office and the concerned authorities to tackle ODS consumption: (a) Decision no 437/1992 concerning imports of waste materials and residues and other environmentally dangerous goods; (b) a decision to complement the denomination and classification of goods in the Romanian Customs Import Tariff regarding a sub-classification of ODSs; (c) a decision concerning the organization and functioning of the responsible authority regarding ODS issues; (d) a decision concerning the setting-up, organization and functioning of the National Committee for the Protection of the Ozone Layer.
- 5. The Ozone Office has prepared a proposal for a comprehensive ODS regime which includes: general regulations concerning import, export, use, recovery and equipment; import/re-export bans from/to non-Parties to the Montreal Protocol (substances and equipment); technical regulations on handling the substances; assembling and disposing of equipment using ODSs; establishment of import quotas starting from 1999; a specific "ability license" as a condition for import; mandatory recovery and recycling of CFCs; mandatory training as a condition to get a

license for maintaining refrigeration equipment; and specific penalties for misconduct and misuse of CFC refrigerants.

- 6. 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 \$4,800 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.
- 7. The RMP also includes a subproject for the establishment of a recovery and recycling network comprising 300 recovery equipment units (including those to be used in the training programme on good servicing practices) and 7 recycling centres for servicing commercial and industrial refrigeration equipment, at a total cost of US \$373,840.
- 8. Implementation of these projects will lead to recovery and recycling of 50.0 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.
- 9. The monitoring of the implementation 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 now set and operational, the monitoring task should be feasible.

## SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

#### **COMMENTS**

- 1. The Secretariat requested additional information to justify the relatively large number of recovery equipment requested. UNIDO informed the Secretariat that the 300 workshops which will receive this equipment have an average consumption of 1.2 tonnes per year. The unlicensed maintenance workshops performing occasional services will be forced out of the market using both regulatory means and market instruments. The seven recycling centres proposed are necessary for servicing the refrigerant recovered throughout out the country.
- 2. Regarding savings that will accrue from the recovery and recycling of 50 tonnes, UNIDO indicated that these savings will be equivalent to the costs associated with transportation of the recovered CFC-12 (to/from the recycling centres), space rent and labour. However, no calculations were provided on operating costs.
- 3. UNIDO and the Secretariat also discussed issues related to the logistical arrangements for the training programmes and the level of funding requested. UNIDO agreed to revise the requests and adjusted the level of funding accordingly.

# RECOMMENDATIONS

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
	Refrigerant management plan: training of custom officers and development criteria for ODS and ODS consuming equipment imports		3,003	UNIDO
(b)	Refrigerant management plan: recovery and recycling	373,840	48,599	UNIDO
` /	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 Romania are put into place.