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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Thirty-ninth Meeting Montreal, 2-4 April 2003

# **PROJECT PROPOSALS: ALBANIA**

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

### Phase out

•	National ozone depleting substances phase-out plan: development of regulatory framework for acceleration of compliance with the Montreal Protocol	UNEP
•	National ozone depleting substances phase-out plan: awareness workshop to prevent the introduction of methyl bromide	UNEP
•	National ozone depleting substances phase-out plan: training of customs officers in monitoring of ODS	UNEP
•	National ozone depleting substances phase-out plan: training of trainers in good practices of refrigeration	UNEP
•	National ozone depleting substances phase-out plan: end users sector retrofitting/replacement programme	UNEP
•	National ozone depleting substances phase-out plan: conversion of cleaning installations from carbon tetrachloride (CTC) to tetrachloroethylene (PER) at Energy Combinat ltd., Elbasan	UNIDO
•	National ozone depleting substances phase-out plan: national project for refrigerant recovery and recycling	UNIDO
•	National ozone depleting substances phase-out plan: programme management and auditing	UNIDO

#### PROJECT EVALUATION SHEET ALBANIA

SECTOR:

ODS use in sector (2001):

70.5 ODP tonnes

Sub-sector cost-effectiveness thresholds:

A11

N/A US \$/kg

#### Project Titles:

- (a) National ozone depleting substances phase-out plan: development of regulatory framework for acceleration of compliance with the Montreal Protocol
- (b) National ozone depleting substances phase-out plan: awareness workshop to prevent the introduction of methyl bromide
- (c) National ozone depleting substances phase-out plan: training of customs officers in monitoring of ODS
- (d) National ozone depleting substances phase-out plan: training of trainers in good practices of refrigeration
- (e) National ozone depleting substances phase-out plan: end users sector retrofitting/replacement programme
- (f) National ozone depleting substances phase-out plan: conversion of cleaning installations from carbon tetrachloride (CTC) to tetrachloroethylene (PER) at Energy Combinat ltd., Elbasan
- (g) National ozone depleting substances phase-out plan: national project for refrigerant recovery and recycling
- (h) National ozone depleting substances phase-out plan: programme management and auditing

Project Data								
	Regulato- ry frame- work	MB awareness workshop	Training of customs officers	Training of trainers	End users programme	Energy Combinat	Recovery and recycling	Programme management and auditing
Enterprise consumption (ODP tonnes)								
Project impact (ODP tonnes)					5	2.3	21	
Project duration (months)	12	12	12	12	24	24	36	96
Initial amount requested (US \$)	23,150	30,000	35,700	82,425	150,000	50,000	448,000	324,000
Final project cost (US \$):								
Incremental capital cost (a)	0	20,000	34,000	78,500	120,000	40,910	181,800	150,000
Contingency cost (b)			1,700	3,925		4,090	18,200	
Incremental operating cost (c)								
Total project cost (a+b+c)	0	20,000	35,700	82,425	120,000	45,000	200,000	150,000
Local ownership (%)	100%	100%	100%	100%	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%	0%	0%	0%	0%
Amount requested (US \$)	0	20,000	35,700	82,425	120,000	45,000	200,000	150,000
Cost effectiveness (US \$/kg.)						21.74	21.3	
Counterpart funding confirmed?								
National coordinating agency	Ministry of Environment (Ozone Unit)							
Implementing agency	UNEP				UNIDO			

Secretariat's Recommendations								
Amount recommended (US \$)	0	20,000	35,700	82,425	120,000	45,000	200,000	150,000
Project impact (ODP tonnes)					5	2.3	21	
Cost effectiveness (US \$/kg)						21.74	21.30	
Implementing agency support cost	0	2,600	4,641	10,715	15,600	4,050	18,000	13,500
(US \$)								
Total cost to Multilateral Fund (US \$)	0	22,600	40,341	93,140	135,600	49,050	218,000	163,500

# **Background**

1. The Albania country programme was submitted for the consideration of the Executive Committee at its 39<sup>th</sup> Meeting (UNEP/OzL.Pro/ExCom/39/39), together with a proposal for a national ODS phase-out plan (ODS Plan).

# ODS consumption and sectoral distribution

2. In 2001, the total ODS consumption in Albania was estimated at 70.5 ODP tonnes, of which 68.8 tonnes were CFC-12 used for servicing refrigeration equipment, namely domestic refrigerators (52.9 ODP tonnes), commercial and industrial refrigeration systems (12.0 ODP tonnes) and MAC units (3.9 ODP tonnes). The remaining 1.7 ODP tonnes were carbon tetrachloride and methyl chloroform used as a solvent.

3. The total number of domestic refrigerators in operation has been estimated at 730,000 units, most of which are second-hand. Commercial refrigerators are gradually being replaced by second-hand equipment using CFC-12, HCFC-22 or R-502 refrigerants. Some CFC-12 based cold store rooms are still in operation. About 3.9 ODP tonnes of CFC-12 are used for servicing 18,000 vehicles fitted with CFC-based MAC units.

4. There are 196 registered refrigeration and air-conditioning service workshops and a large number of unregistered repair shops (particularly servicing domestic refrigerators) in Albania. The CFC consumption by the informal sector is approximately the same as the consumption by registered workshops.

5. The average price of CFC-12 in the country is US \$4.00/kg while the price of HFC-134a is US \$5.30/kg.

6. About 1.7 ODP tonnes of CTC are currently used as a solvent by an oxygen factory in the Metallurgical Complex of Elbasan, to clean cylinders before filling them with oxygen. Before 1990, CTC was also used for disinfecting animals in farms.

7. Methyl bromide (MB) was used for soil fumigation in greenhouses and tobacco processing. As a result of import restrictions and a drastic decrease in agricultural practices in the country, by the end of 2000 MB was no longer used in the country. In recent years, the agricultural output has grown resulting in an increased use of agrochemical; MB has been reported to be smuggled from neighbouring countries.

8. There are four enterprises in Albania producing flexible foam products and polystyrene foam for insulation material, none of which are using CFCs as a blowing agent.

### Policy framework

9. Since the preparation of the country programme, the Government of Albania established an Intersectoral National Committee with representation from the Ministry of Environment, Ministry of Industry and Energy, Ministry of Health, Academy of Science, Institute of Statistics, National Agency of Energy, the Chamber of Commerce of Tirana, universities and consumption associations. The ODS Plan was discussed on a regular basis and finally approved by this Committee.

10. In September 2002, the Albanian Parliament enacted a law on environment protection. Article 17 prohibits import and production of ODS-based equipment. The Government has also started the preparation of a legal and regulatory framework to bring the country in compliance with the Montreal Protocol's target as soon as possible. Specifically, the Government is proposing an immediate ban on import of ODS-based equipment, especially second-hand refrigerators; immediate prohibition of any new activity related to the production of ODSs or ODS-based equipment; application of strict control of import/export of all ODSs, through licensing, taxation and/or quotas as appropriate; development of fiscal incentives to encourage the use of ODS alternatives and transitional substances; and mandatory certification of technicians.

11. The Ministry of Environment and its regional environmental agencies have also established institutional co-operation with natural and juridical persons dealing with ODS. As a result a database containing ODS users has been developed.

#### Proposed actions by stakeholders

- 12. The following actions have been proposed in the ODS Plan for Albania:
  - (a) At the Governmental level: implementing a CFC importer registration and quota allocation system providing specific annual reductions in CFC imports; promoting the participation of key Ministries and major stakeholders in ODS phase-out programmes (refrigeration associations, hotel association, consumer association); providing technical assistance to stakeholders to implement ODS phase-out activities; developing an overall approach for the retrofit, recycle and recovery of refrigerants during maintenance and servicing of equipment; and organise training for customs officers to enforce the import licensing regulation;
  - (b) Importers and customs: development of a voluntary action plan, in anticipation of the import quota system, to limit imports of CFC and prevent CFC sales to re-exporters (it is proposed to convert this voluntary plan into the import control and quota system when appropriate);
  - (c) Domestic refrigeration sub-sector: providing training to refrigeration servicing technicians on good servicing practices and on recovery/recycling operations; establishing incentives for use of alternative refrigerants; and conducting outreach and awareness information activities;
  - (d) Commercial and industrial refrigeration sub-sector: encouraging conversion of CFC-based equipment to non-ODS refrigerants through technical assistance, training and incentives; and conducting outreach and awareness activities among end-users; and

(e) MAC sub-sector: implementing a system to reduce CFC consumption through training to refrigeration servicing technicians in good service practices and recovery/recycling operations; establishing incentives for increasing the use of alternative refrigerants; and conducting outreach and awareness programmes.

#### Sub-projects included in the ODS Plan

13. The ODS Plan, at a total cost of US \$1,143,275 as submitted, includes the following sub-projects:

- (a) Development of regulatory framework for acceleration of compliance with the Montreal Protocol (US \$23,150): to elaborate specific ODS-related regulations including a licensing system;
- (b) Training of customs officers and environmental inspectors (US \$35,700): to improve the control of imports/exports of ODS and ODS-based equipment; to establish a database of ODS importers and users; and to improve the reliability of reporting data under the Montreal Protocol;
- (c) Training of trainers in good refrigeration servicing practices (US \$82,425): to increase awareness of 300 service technicians on issues related to the ozone depletion and to enhance their technical skills to avoid emission of refrigerant into the atmosphere during the maintenance and repair of equipment;
- (d) Recovery and recycling programme (US \$448,000): to establish a network of 700 recovery units, 3 recycling machines and ancillary equipment for servicing commercial and industrial refrigeration;
- (e) End-users retrofitting programme (US \$150,000): to provide incentives for the retrofit or replacement of CFC-based cold storage in agricultural and food-chain industries to HFC-134a or R-404A refrigerants; and train technicians on retrofitting procedures;
- (f) Workshop on methyl bromide (US \$30,000): to inform farmers and other stakeholders on MB issues, promote the use of alternative technologies and encourage policy makers to develop a national action plan for preventing the reintroduction of MB;
- (g) Phase out of CTC in the solvent sector (US \$50,000) by replacement with tetrachloroethylene cleaning process. The project includes a distillation unit, activated carbon absorbers, catch trays and a suction hood; and
- (h) Programme management and audit (US \$324,000).

# Performance targets

14. The ODS performance targets, indicators of achievement and fund disbursement schedule included in the ODS Plan are as follows:

Year	ODS target	Consumption	Indicators of achievement			
	(ODP tonnes)	allowed (ODP tonnes)				
2003	68.0	41.4	<ul> <li>Ozone Unit and Implementation Plan Unit in place</li> <li>Data collection system, ODS related legislation including a licensing system in place and import quotas established</li> <li>Legislation launching workshop held</li> <li>Phase I of custom training completed</li> <li>Code on Good practices developed</li> <li>Phase I of refrigeration training completed</li> <li>MB workshop held</li> <li>Monitoring system in place</li> </ul>			
2004	61.2	41.4	<ul> <li>Follow up workshop on legislation held</li> <li>Phase II of custom training completed (70 custom officers trained)</li> <li>Phase II of refrigeration training completed (620 refrigeration technicians trained and certified)</li> <li>Association of refrigeration technicians created</li> <li>Beneficiaries of R&amp;R equipment identified; equipment imported and distributed; and R&amp;R workshop held</li> <li>Solvent phase-out project completed</li> </ul>			
2005	36.2	20.7	<ul> <li>Follow up workshop on legislation held</li> <li>Custom Training on ODS included as part of the Custom Department periodic training</li> <li>Good service practices training included in State University curricula</li> <li>R&amp;R project completed</li> <li>End-users project started</li> </ul>			
2006	15.2	20.7	<ul> <li>Follow up workshop on legislation held</li> <li>IPU report on monitoring of impact of good practices</li> <li>R&amp;R network in operation</li> </ul>			
2007	6.2	6.2	<ul> <li>Follow up workshop on legislation held</li> <li>R&amp;R network in operation</li> <li>End-users project completed</li> </ul>			
2008	2.2	6.2	<ul> <li>Follow up workshop on legislation held</li> <li>R&amp;R network in operation</li> </ul>			
2009	0	6.2	<ul> <li>Follow up workshop on legislation held</li> <li>R&amp;R network in operation</li> </ul>			
2010	0	0	<ul><li>Follow up workshop on legislation held</li><li>R&amp;R network in operation</li></ul>			

15. The Ozone Unit will be responsible for the monitoring, co-ordination and implementation of proposed phase-out activities in the ODS Plan.

# SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

## COMMENTS

#### Non-compliance status of Albania

16. In 2001, the Government of Albania, with the assistance of UNEP, prepared its country programme and submitted it to the 35<sup>th</sup> Meeting of the Executive Committee, together with a refrigerant management plan (RMP) project proposal. However, due to ODS data-related issues, the country programme was withdrawn.

17. Subsequently, the Government of Albania, with the assistance of UNEP and UNIDO, developed an ODS Plan and submitted it to the Fund Secretariat for consideration by the Executive Committee at its  $38^{th}$  Meeting. During the review process, the Secretariat noted that the proposed CFC phase-out strategy by the Government of Albania would not achieve the 2005 and 2007 CFC reductions agreed by the Montreal Protocol. Therefore, on the basis of Decision 37/2, the Albania country programme and the ODS phase-out plan were deferred until the underlying non-compliance issues were resolved.

18. The Parties, at their 14<sup>th</sup> Meeting requested, *inter alia*, that Albania submit a plan of action with time-specific benchmarks to ensure a prompt return to compliance to the Implementation Committee (Decision XIV/18).

19. The Government of Albania, with the assistance from UNIDO, has revised its national ODS phase-out plan. Through the implementation of the activities proposed in the plan, Albania will achieve the 50 per cent reduction in the CFC baseline by the end of 2005, the 85 per cent reduction in CFC baseline by 2007, and complete phase out by 2009. It is to be noted, however, that Albania will remain non-compliant with the freeze of Annex A Group I substances until 2005.

#### Issues related to ODS legislation in Albania

20. The ODS Plan includes a request in the amount of US \$23,150 for the development of a regulatory framework. The Secretariat pointed out that considering the total level of funding approved for Albania for the preparation of the country programme/terminal phase-out plan (i.e., US \$100,000) and for institutional strengthening support (US \$96,600 for a two-year period), it would have been expected that, as required under Decision 31/48, relevant ODS legislation would have already been drafted to avoid any delays in the implementation of the sub-projects in the phase-out plan. UNIDO indicated that although the legislation was already approved by the Albanian Parliament, additional support is needed for the development of specific regulations. However, no additional funding would be requested from the Multilateral Fund for finalising relevant regulations.

#### Issues related to the refrigeration servicing sector

21. The Secretariat pointed out that the 21 ODP tonnes estimated to be recovered and recycled is very high taking into account that 48 tonnes of CFC-12 are used for servicing

domestic refrigerators and only 16 tonnes are used to service commercial and industrial refrigerators and MAC units. Also, it was indicated that the request for 700 recovery units, where only 190 workshops are registered, cannot be justified. UNIDO informed the Secretariat that while recovery of refrigerants from domestic appliances would be difficult, the proposed activities in the ODS Plan will contribute toward reducing CFC usage in this sub-sector and enable Albania to achieve compliance by 2005. Taking into consideration the sectoral distribution of CFCs in the country, the project was modified to provide basic tools for the service workshops dealing with domestic refrigerators and a low number of recovery and recycling machines that would be provided to the commercial and MAC sub-sectors, at a revised cost of US\$200,000.

22. The Secretariat also indicated that the retrofit of industrial and commercial refrigeration units might not be technically and economically viable, considering that the majority of the units in operation are second-hand equipment, most of the equipment appears to be old (more than 10 years), and the current price of CFC-12 is lower than HCF-134a. In this regard, UNIDO reported that options for retrofit and/or replacement of equipment will be determined through inspection of each unit during the implementation of the ODS Plan and agreed to adjust the cost of the project to US \$120,000.

### Phase out of CTC

23. The Secretariat indicated that the enterprise uses hand cleaning in the baseline, and no production or safety equipment is currently installed. On this basis, the enterprise will need to provide a counterpart contribution. UNIDO reported that during commencement of the use of CTC by the company in 1975 the manual cleaning was an established state of the art technique and the company had to modify the ventilation system and drying shelves to implement this technology. At that time, the environment and human health impacts associated with the chemical were unknown in Albania.

24. The preferred alternative solvent, perchloroethylene, requires a longer drying time. In order to maintain the current production rates, the longer drying periods have to be overcome by application of air suction, which requires an ejector and an adsorption unit for PER to reduce emissions. Furthermore, to avoid soil and ground water pollution, the effluent from the process has to be collected and treated through a distillation system or incinerated. UNIDO also indicated that the company will absorb the proposed incremental operating costs associated with the new technology and, therefore, the funding level has been revised to US \$45,000.

### MB awareness workshop

25. The Secretariat noted that the awareness workshop was not justifiable taking into consideration that the MB has not been used in Albania since 1990, the MB consumption reported to the Ozone Secretariat has always been zero. UNIDO indicated that while MB has been banned in Albania, the recent economic growth has resulted in increased agricultural production, and smuggling of MB has been reported. The workshop will raise awareness among farmers and other stakeholders to prevent the re-introduction of MB. UNIDO agreed to implement this activity at a cost of US \$20,000.

# Level of funding

26. On the basis of the comments and observations raised by the Fund Secretariat, UNIDO revised the national ozone depleting substances phase-out plan, and adjusted its cost to US \$653,125, including programme management and auditing. The cost is consistent with the level of funding so far approved by the Executive Committee for RMP proposals as per Decision 31/48, and the funding approved for TPMP projects in LVC countries.

#### Draft agreement between the Government of Albania and the Executive Committee

27. UNIDO is assisting the Government of Albania in finalising the draft agreed conditions for the implementation of the ODP Plan, taking into account the comments and observations raised by the Fund Secretariat. The revised draft agreement will be submitted prior to the 39<sup>th</sup> Meeting of the Executive Committee.

#### RECOMMENDATIONS

28. The Fund Secretariat recommends blanket approval of the projects included in the ozone depleting substances phase-out plan for Albania at the funding level indicated below, on the understanding that the recovery and recycling component and the end users sector retrofitting/replacement programme should not commence until the legislation controlling CFC imports is in place and measures have been taken to ensure that the local market prices of CFCs and non-ODS refrigerants are similar.

29. Approval of Albania ODS Plan is without prejudice to the operation of the Montreal Protocol's mechanisms dealing with non-compliance issues.

Project Titles	Project	Support Cost	Implementing
	Funding (US\$)	(US\$)	Agency
National ozone depleting substances phase-out plan:	20,000	2,600	UNEP
awareness workshop to prevent the introduction of methyl bromide			
National ozone depleting substances phase-out plan:	35,700	4,641	UNEP
training of customs officers in monitoring of ODS			
National ozone depleting substances phase-out plan:	82,425	10,715	UNEP
training of trainers in good practices of refrigeration			
National ozone depleting substances phase-out plan: end	120,000	15,600	UNEP
users sector retrofitting/replacement programme			
National ozone depleting substances phase-out plan:	45,000	4,050	UNIDO
conversion of cleaning installations from carbon			
tetrachloride (CTC) to tetrachloroethylene (PER) at			
Energy Combinat ltd., Elbasan			
National ozone depleting substances phase-out plan:	200,000	18,000	UNIDO
national project for refrigerant recovery and recycling			
National ozone depleting substances phase-out plan:	150,000	13,500	UNIDO
programme management and auditing			

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