



**United Nations
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Programme**



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Executive Committee of
the Multilateral Fund for the
Implementation of the Montreal Protocol

Twenty-second Meeting
Nairobi, 28-30 May 1997

PROJECT PROPOSALS: ALGERIA

This document includes the comments and recommendations from the Fund Secretariat on the following projects:

Foam

- | | | |
|---|--|-------|
| • | Phasing out CFC-11 at Snam flexible polyurethane foam plant | UNIDO |
| • | Phasing out CFC-11 at Sammo flexible polyurethane foam plant | UNIDO |
| • | Phasing out CFC-11 at Ets Leulmi Essaid flexible polyurethane foam plant | UNIDO |

SECTOR:	Foams	ODS use in sector (1996):	400 ODP tonnes
Sub-sector cost-effectiveness thresholds:	Slabstock		6.23 US \$/kg

- Phasing out CFC-11 at Ets Leulmi Essaid flexible polyurethane Foam plant.
- Phasing out CFC-11 at SAMMO flexible polyurethane Foam plant.
- Phasing out CFC-11 at SNAM flexible polyurethane Foam Plant.

Project Data	Slabstock		
	Leulmi Essaid	SAMMO	SNAM
ODS phase-out (ODP tonnes)	28	24	32
Proposed project duration (Yrs)	1	1	1
Incremental capital cost (US \$)	115,500	123,200	155,250
Contingency (%)	10	10	10
Incremental operational cost (US \$)	(40,120)	(16,430)	(26,840)
Total project cost (US \$)	75,380	106,770	128,360
Local ownership (%)	100	100	100
Export component (%)	0	0	0
Amount requested (US \$) {Original}	75,380	106,770	128,360
{Revised}			
Cost effectiveness (US \$/kg)	2.69	4.45	4.01
National Coordinating Agency	Ministère de l'Intérieur, des Collectivités Locales, de l'Environnement		
Implementing Agency	UNIDO		
Technical review completed?	Yes	Yes	Yes

Amount recommended (US \$)	61,880	98,770	88,360
Project impact (ODP tonnes)	28	24	32
Cost effectiveness (US \$/kg)	2.21	4.11	2.76
Implementing Agency support cost (US \$)	8,044	12,840	11,487
Total cost to Multilateral Fund (US \$)	69,924	111,610	99,847

PROJECT DESCRIPTION

- (a) Phasing out CFC-11 at Ets Leulmi Essaid flexible polyurethane Foam plant.
- (b) Phasing out CFC-11 at SAMMO flexible polyurethane Foam plant.
- (c) Phasing out CFC-11 at SNAM flexible polyurethane Foam Plant.

1. The three companies (Leulmi Essaid, SAMMO and SNAM) produce flexible polyurethane foam blocks for the furniture industry. SAMMO operates a continuous Secmer (France) slabstock machine installed in 1981 with installed annual capacity of 2,000 tonnes. Leulmi Essaid and SNAM operate block foam molds and have installed capacities of 2,400 and 3,000 tonnes respectively. All the foaming machines are reported to be kept in good condition and having useful life of at least 10 years after conversion.

2. All three companies will phase-out the use of CFC-11 through replacement with methylene chloride. Conversion at SAMMO will involve replacement of the existing CFC-11 metering pump with a pump suitable for metering methylene chloride (US \$15,000), encapsulation of appropriate sections of the foaming line (US \$54,000) and upgrading of the ventilation systems for efficient extraction of methylene chloride fumes in order to ensure occupational safety (US \$19,000) and provision of safety devices (airflow meter and methylene chloride monitor) at US \$5,000. Commissioning and start-up, technology transfer and training amount to US \$20,000 in each case. Conversion at Leulmi Essaid and SNAM involve replacement of the metering system (US \$15,000), ventilation in foam and cure areas (US \$60,000) and safety devices (US \$11,000). the capital costs of all the three enterprises include costs of commissioning and start up, technology transfer and training (US \$19,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The three projects were discussed between the Fund Secretariat and UNIDO and costs agreed as indicated in the project evaluation sheet.

Impact of Projects on Meeting the 1999 Freeze

2. The project documents indicate that: "Since the projects are expected to be completed by mid 1998, they are considered among the priorities of the country to meet the 1999 freeze target."

RECOMMENDATION

1. The Fund Secretariat recommends blanket approval of the project with the level of funding and associated support costs below.

<u>Project Title</u>	<u>Project Cost</u> <u>US \$</u>	<u>Support</u> <u>Cost US \$</u>	<u>Implementing</u> <u>Agency</u>
(a) Phasing out CFC-11 at Ets Leulmi Essaid flexible polyurethane Foam plant.	61,880	8,044	UNIDO
(b) Phasing out CFC-11 at SAMMO flexible polyurethane Foam plant.	98,770	12,840	UNIDO
(c) Phasing out CFC-11 at SNAM flexible polyurethane Foam Plant	88,360	11,487	UNIDO