



**United Nations
Environment
Programme**



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

Twentieth Meeting
Montreal, 16-18 October 1996

PROJECT PROPOSAL: LEBANON

This document includes the Comments and Recommendations from the Fund Secretariat on the following project:

Foam

- Phasing out CFC-11 at Nasri Karam and Sons

UNIDO

**PROJECT EVALUATION SHEET
LEBANON**

SECTOR: FOAM ODS use in sector (1995): 216 ODP tonnes

Sub-sector cost-effectiveness thresholds: Flexible slabstock Polyurethane US \$6.23/kg

Project Titles

Phasing out of CFC-11 at Nasri Karam & Sons

Project Data	Flexible Slabstock
	Nasri Karam
ODS (CFC-11) phase out (ODP tonnes)	22
Proposed project duration (Yrs)	1.0
Incremental capital cost (US\$)	105,050
Contingency (%)	10
Incremental operational cost (US\$)	(4,941)
Total project cost (US\$)	100,109
Local ownership (%)	100
Export component (%)	0
Amount requested (US\$) { Original	100,109
{ Revised	
Cost effectiveness (US\$/kg.)	4.55
National Coordinating Agency	Ministry of Environment
Implementing Agency	UNIDO
Technical review completed?	Yes
<i>Secretariat's Recommendations</i>	
Amount recommended (US \$)	100,109
Project Impact (ODP tonnes)	22
Cost effectiveness (US \$/kg)	4.55
Implementing Agency support cost (US\$)	13,014
Total cost to Multilateral Fund	113,123

PROJECT DESCRIPTION

Flexible Slabstock Polyurethane Foam Projects

Phasing out of CFC-11 at Nasri Karam & Sons

1. Nasri Karam manufactures flexible slabstock polyurethane foam on a Viking Maxfoam machine and currently produces 1,000 tonnes of foam per year, which is about 8% of its installed capacity. Nasri Karam will phase out CFC-11 through the use of methylene chloride. Capital cost of the project relates to provision of methylene chloride metering pump (US \$15,000), enclosure for the machine and extra ventilation (US \$55,000), technology transfer, training, commissioning and trials for US \$20,000. The project will have some incremental operational savings (US \$4,941).

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. Projects were submitted in this sub-sector for Lebanon by the Government of France and by UNIDO. Following review of these projects, the Secretariat had discussions with both UNIDO and Caisse Française de Développement (CFD) of France with a view to harmonizing the prices of chemicals and costs of common capital items such as technology transfer, start up and production trials. It therefore became necessary to review some of the cost items and recalculate the incremental operational costs, where necessary.

2. The agreed price of CFC-11 was US \$2.2/kg instead of US \$1.3/kg and methylene chloride was US \$0.9/kg instead of US \$1.0/kg. Since the price differential of CFC-11 to methylene chloride in the Nasri Karam project (US \$1.4/kg) was almost the same as the price differential agreed for all projects (US \$1.3) the project costs of Nasri Karam remained unchanged.

RECOMMENDATIONS

1. The Fund Secretariat recommends blanket approval of the project with the associated support cost, at the levels of funding indicated below:

	Project Cost US \$	Support Cost US \$	Implementing Agency
Phasing out of CFC-11 at Nasri Karam & Sons	100,109	13,014	UNIDO