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

Nineteenth Meeting
Montreal, 8-10 May 1996

PROJECT PROPOSAL: COTE D'IVOIRE

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

Foam

- Phasing out CFC-11 at F.I.M.A. flexible polyurethane foam plant UNIDO

PROJECT EVALUATION SHEET
CÔTE D'IVOIRE

SECTOR: FOAM ODS use in sector (1991): 4.5 ODP tonnes[1]

Sub-sector cost-effectiveness thresholds: Flexible Slabstock US $6.23/kg.

Project Title:

Phasing out CFC-11 at F.I.M.A. flexible polyurethane foam plant

Project Data	Flexible Foam
	F.I.M.A.
ODS phase-out (ODP tonnes)	53.1
Proposed project duration (Yrs)	1.2
Incremental capital cost (US$)	242,000
Contingency (%)	10
Incremental operational savings (US$)	(58,463)
Total project cost (US$)	183,537
Local ownership (%)	100
Export component (%)	0
Amount requested (US$) {Original	183,537
{Revised	
Cost effectiveness (US$/kg)	3.46
National Coordinating Agency	Ministry of Environment
Implementing Agency	UNIDO
Technical review completed?	Yes

Secretariat's Recommendations	
Amount recommended (US $)	85,087
Project impact (ODP tonnes)	53.1
Cost effectiveness (US $/kg)	1.60
Implementing Agency support cost (US$)	11,061
Total cost to Multilateral Fund	96,148

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1 The project document claimed sector consumption (1991) of 238 tonnes and consumption of the enterprise as 53.1 tonnes (1995). The Secretariat drew attention of UNIDO to the differences in the consumption figures. In line with Decision 17/2 of the Executive Committee, UNIDO submitted revised sector consumption data for 1994 and 1995 with explanation from the Government of Côte d'Ivoire. The communication is available for reference if desired.

PROJECT DESCRIPTION

Phasing out CFC-11 at F.I.M.A. flexible polyurethane foam plant

1. F.I.M.A. is the largest producer of flexible foam in Côte d'Ivoire. It has an installed capacity of 3,000 tonnes with current production output of 800 tonnes. The company manufactures flexible foam blocks for the furniture industry. The company's consumption of CFC-11 is reputed to be 53.1 tonnes in 1995 and it proposes to replace CFC-11 with methylene chloride as auxiliary blowing agent.

2. The capital cost of conversion relates to improvement in the ventilation system and provision of enclosures at sources of exposure to methylene chloride in the production, cutting and transport systems.

3. Designs for machine enclosure will be procured from an equipment supplier and manufactured by a local contractor.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The project costs have been considered in relation to similar projects submitted by UNIDO to this meeting, especially the Dakkak flexible foam project, which has a higher installed capacity, similar or larger plant dimensions and with similar provisions as F.I.M.A. project, in relation to changes to be made.

2. Consequently the following cost revisions were recommended: Designs for machine enclosure US $4,500 instead of US $9,000, commissioning and start up US $10,000 instead of US $15,000, technology transfer and training US $10,000 instead of US $13,000, electrical control system US $4,000 instead of US $12,000, machine enclosure US $45,000, instead of US $62,000, extra ventilation in cure area US $35,000, instead of US $65,000. Electrical generator (US $20,000) is not eligible for funding as incremental cost.

3. The total incremental capital cost will, therefore, be US $143,550 including 10 per cent contingency. The total project cost will be US $85,087 taking account of incremental operating savings of US $58,463.

RECOMMENDATIONS

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

	Project Cost US $	Support Cost US $	Cost Effectiveness US $/kg.
Phasing out CFC-11 at F.I.M.A. flexible polyurethane foam plant.	85,087	11,061	UNIDO