



**United Nations
Environment
Programme**



Distr.
LIMITED

UNEP/OzL.Pro/ExCom/22/48
3 May 1997

ORIGINAL: ENGLISH

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

Twenty-second Meeting
Nairobi, 28-30 May 1997

PROJECT PROPOSAL: PANAMA

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

Foam

- Elimination of CFCs in the manufacture of extruded polystyrene foam sheet at Productos Moldeados America S.R. Ltda. (Plasticos Modernos)

UNDP

PROJECT EVALUATION SHEET **PANAMA**

SECTOR: Foams ODS use in sector (1995): 70 ODP tonnes

Sub-sector cost-effectiveness thresholds: Extruded Polystyrene Foam 8.22 US \$/KG

Project Title:

Elimination of CFC-12 in the manufacture of extruded polystyrene foam sheet at Productos Moldeados America S.R. Ltda (Plasticos Modernos).

Project Data	EPS
	Plasticos Modernos
ODS phase-out (ODP tonnes)	42
Proposed project duration (Yrs)	2
Incremental capital cost (US \$)	343200
Contingency (%)	10
Incremental operational cost (US \$)	(2254)
Total project cost (US \$)	340,946
Local ownership (%)	100
Export component (%)	0
Amount requested (US \$) {Original}	340,946
{Revised}	
Cost effectiveness (US \$/kg)	8.11
National Coordinating Agency	Ministry of Health
Implementing Agency	UNDP
Technical review completed?	Yes

<i>Secretariat's Recommendations:</i>	
Amount recommended (US \$)	339,296
Project impact (ODP tonnes)	42
Cost effectiveness (US \$/kg)	8.07
Implementing Agency support cost (US \$)	44,108
Total cost to Multilateral Fund (US \$)	383,404

PROJECT DESCRIPTION

1. Plasticos Modernos manufactures extruded polystyrene foam sheet for thermoforming into meat trays, egg cartons, egg trays, dinner serviceware. The company will phase out the use of CFC-12 through substitution with isopentane as blowing agent.
2. The main costs of the project are as follows:

(i)	Capital Costs	US \$
	Isopentane storage tank and deluge system	75,000
	High pressure pump system	75,000
	Extruder and grinder retrofit	33,000
	Fire protection and safety equipment and measures	114,000
	Technology transfer	15,000
	Sub-total	312,000
	Contingency	31,200
	Total	343,200
(ii)	Incremental operational savings	2,254
	Total project cost	340,946

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The Fund Secretariat and UNDP agreed on the costs of the project, providing US \$1,000 instead of US \$2,500 for anti-static clothing. Thus, the total agreed incremental capital cost was US \$341,550 and the total project cost after taking account of the incremental operational savings of US \$2,254 became US \$339,296.

Impact of Project on the 1999 Freeze

2. The project document states as follows:

“In view of the large consumption to be phased out relative to the total ODP being consumed in the country, this project will be of paramount importance in order for Panama to meet the 1999 freeze obligations under the Montreal Protocol.”

RECOMMENDATION

1 The Fund Secretariat recommends that the project be given blanket approval at the funding level indicated in the table 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>
Productos Moldeados America S.R. Ltda (Plasticos Modernos).	339,296	44,108	UNDP