



**United Nations
Environment
Programme**



Distr.
Limited

UNEP/OzL.Pro/ExCom/28/46
16 June 1999

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-eighth Meeting
Montreal, 14-16 July 1999

PROJECT PROPOSAL: VENEZUELA

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

Foam

- Phasing out CFC-12 at Fandec C.A. (EPSR foam)

UNIDO

**PROJECT EVALUATION SHEET
VENEZUELA**

SECTOR: Foam ODS use in sector (Baseline): 637 ODP tonnes

Sub-sector cost-effectiveness thresholds: Extruded Polystyrene/Polyethylene US \$8.22/kg

Project Titles:

(a) Phasing out CFC-12 at Fandec C.A. (EPSR Foam)

Project Data	Extruded polystyrene/polyethylene	
	Fandec	
Enterprise consumption (ODP tonnes)		45.00
Project impact (ODP tonnes)		45.00
Project duration (months)		24
Initial amount requested (US \$)		301,051
Final project cost (US \$):		
Incremental capital cost (a)		424,750
Contingency cost (b)		38,200
Incremental operating cost (c)		-172,469
Total project cost (a+b+c)		290,481
Local ownership (%)		100%
Export component (%)		0%
Amount requested (US \$)		290,481
Cost effectiveness (US \$/kg.)		6.46
Counterpart funding confirmed?		Yes
National coordinating agency	FONDOIN	
Implementing agency	UNIDO	

Secretariat's Recommendations	
Amount recommended (US \$)	290,481
Project impact (ODP tonnes)	45.00
Cost effectiveness (US \$/kg)	6.46
Implementing agency support cost (US \$)	37,763
Total cost to Multilateral Fund (US \$)	328,244

PROJECT DESCRIPTION

(a) Phasing out CFC-12 at Fandec C.A. (EPSR Foam)

Sector Background

- Latest available total ODS consumption (1997)	3,842.4	ODP tonnes
- Baseline consumption* of Annex A Group I substances (CFCs)	3,321.6	ODP tonnes
- 1998 consumption of Annex A Group I substances	Not reported	
- Baseline consumption of CFCs in foam sector	637	ODP tonnes
- 1998 consumption of CFCs in foam sector	Not reported	
- Funds approved for investment projects in foam sector as of March 1999 (27 th Meeting)	US \$ 2,285,816	
- Quantity of CFC to be phased out in foam sector as of March 1999 (27 th Meeting)	382.2	ODP tonnes
- Quantity of CFC phased out in foam sector as of March 1999 (27 th Meeting)	259	ODP tonnes

*Baseline consumption of Annex A controlled substances refers to average of the consumption for the years 1995-1997 inclusive.

Other relevant information:

1. One project is being submitted to the 28th Executive Committee Meeting in the foam sector. When approved and implemented 45 ODP tonnes of CFC-12 will be phased out.

Impact of the Project

2. The 45 ODP tonnes to be phased out constitutes 1.4 per cent of Venezuela's baseline consumption of Annex A Group I substances and 7.1 per cent of its foam sector baseline consumption.

(a) Phasing out CFC-12 at Fandec C.A. (EPSR Foam)

3. Fandec C.A., Caracas produces average of 375 tonnes of extruded polystyrene foam sheets using 240 kg/hr LMP mode RC-40 extruder installed in 1974. Its average consumption of CFC-12 is 45 tonnes/year. The project will phase out 100% of CFC-12 used in the production of the extruded polystyrene foam. The chosen replacement alternative is n-butane as foam blowing agent. The project will be implemented through modification of existing production facilities and installation of supplementary safety equipment and instruments. This includes retrofit of the existing extruder, including installation of explosion-proof motors (US \$216,000), replacement of the CFC-12 tank with butane tank and supply system (US \$101,800), safety and fire protection measures (US \$121,300) and contingency (US \$42,210). Incremental operational savings amount to US \$160,659. The replacement alternative and the time from for phasing out ODS will be in line with the programme for phasing out ODS of the Government of Venezuela.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The project was discussed between the Fund Secretariat and UNIDO against the background of the company's baseline, the age of the equipment and possible technological upgrade associated with replacement of some of the equipment. This resulted in the revision of the capital cost structure of the project.

2. The incremental operational cost recalculated based on the agreed price of butane of US \$0.90 /kg instead of US \$1.15 /kg as originally proposed, resulted in US \$172,469 instead of US \$160,659.

3. The total costs of the project became as follows:

Incremental capital cost:	US \$426,950
Operational savings:	US \$172,469
Project cost (eligible grant):	US \$290,481

RECOMMENDATIONS

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

	Project Title	Project Cost (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Phasing out CFC-12 at Fandec C.A. (EPSR Foam)	290,481	37,763	UNIDO