



**United Nations
Environment
Programme**



Distr.
LIMITED

UNEP/OzL.Pro/ExCom/23/50
18 October 1997

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-third Meeting
Montreal, 12-14 November 1997

PROJECT PROPOSAL: VENEZUELA

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

Foam

- Phasing out ODS at Industrias Todos C.A., Caracas

UNIDO

**PROJECT EVALUATION SHEET
VENEZUELA**

SECTOR: FOAMS ODS use in sector (1994): 512 ODP tonnes

Sub-sector cost-effectiveness thresholds: Rigid 7.83 US \$/kg

Project Title:

Phasing out ODS at Industrias Todos C.A.

Project Data	Rigid Foam
	TODOS C.A.
ODS phase-out (ODP tonnes)	17.8
Proposed project duration (months)	18
Incremental capital cost (US \$)	54,000
- including contingency (%)	10
Incremental operational cost (US \$)	83,520
Total project cost (US \$)	137,520
Local ownership (%)	100
Export component (%)	
Amount requested (US \$) {Original}	137,520
{Revised}	
Cost effectiveness (US \$/kg)	7.73
National Coordinating Agency	FONDOIN
Implementing Agency	UNIDO
Technical review completed?	Yes

<i>Secretariat's Recommendations:</i>	
Amount recommended (US \$)	137,520
Project impact (ODP tonnes)	17.8
Cost effectiveness (US \$/kg)	7.73
Implementing Agency support cost (US \$)	17,878
Total cost to Multilateral Fund (US \$)	155,398

PROJECT DESCRIPTION

Foam Sector Profile

Sector ODS consumption (1994) reported in country programme	512 tonnes ODP
Most recent consumption data	not available
ODS to be phased out in approved projects (as at July 1997)	315
ODS reported to have been phased out (as at July 1997)	259
ODS phase-out in current proposed projects	18
Latest (1995) CFC-11 consumption reported according to Art. 7	491

Phasing out ODS at Industrias Todos C.A.

1. Industrias Todos C.A. will phaseout the use of CFC-11 in the production of moulded rigid polyurethane foam. The company uses two low pressure foam machines: one Viking 19A (minimum 15 years old), and one home-made (approximately 10 years old), each with a capacity of 10 kg/min.
2. The chosen interim replacement is HFC-141b. The capital costs include one high pressure dispenser 40 kg/min at US \$100,00 of which US \$60,000 will be paid by the company. Trials, technology transfer and training costs amount to US \$10,000. Capital costs also include contingency (US \$4,000). Incremental operating costs of US \$83,520 are expected based on the use of the following chemicals: Polyol + CFC-11 @ US \$3.60/kg, MDI @ US \$3.80/kg, PU (pre-conversion) @ US \$3.70/kg; Polyol + HCFC-141b @ US \$4.00/kg, MDI @ US \$3.80/kg and PU (post-conversion) @ US \$3.90/kg.

Justification for the Use of HCFCs

3. Among all solutions mentioned, HFC-141b is the technically and economically most acceptable one, even as a transitional solution.

Equipment or Components to be Destroyed or Rendered Unusable

4. The fate of the replaced equipment after conversion is not indicated.

Impact of Project on 1999 Freeze

5. Since this project is expected to be completed by end 1998, it will contribute to reach the freeze target of 1999.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENT

1. The project costs were agreed between the Fund Secretariat and the implementing agency.

RECOMMENDATION

1. The Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level indicated in the table below:

Project Title	Project Cost US \$	Support Cost US \$	Implementing Agency
Phasing out ODS at Industrias Todos C.A.	137,520	17,878	UNIDO