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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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PROJECT PROPOSAL: BENIN

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

Foam:

- Phaseout of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Plastique Elastomeres du Benin (P.E.B.)

UNDP

**PROJECT EVALUATION SHEET
BENIN**

SECTOR: Foam ODS use in sector (1998): 25 ODP tonnes

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

Project Titles:

- (a) Phaseout of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Plastique Elastomeres du Benin (P.E.B.)

Project Data	Flexible slabstock
	P.E.B.
Enterprise consumption (ODP tonnes)	27.30
Project impact (ODP tonnes)	27.30
Project duration (months)	30
Initial amount requested (US \$)	169,000
Final project cost (US \$):	
Incremental capital cost (a)	133,000
Contingency cost (b)	13,300
Incremental operating cost (c)	-3,273
Total project cost (a+b+c)	143,027
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	143,027
Cost effectiveness (US \$/kg.)	5.24
Counterpart funding confirmed?	Yes
National coordinating agency	Ministry of Environmental Affairs
Implementing agency	UNDP

Secretariat's Recommendations	
Amount recommended (US \$)	143,027
Project impact (ODP tonnes)	27.30
Cost effectiveness (US \$/kg)	5.24
Implementing agency support cost (US \$)	18,594
Total cost to Multilateral Fund (US \$)	161,621

PROJECT DESCRIPTION

Sector Background

- Latest available total ODS consumption (1999)	134.00	ODP tonnes
- Baseline consumption of Annex A Group I substances (CFCs)	27.10	ODP tonnes
- Consumption of Annex A Group I substances for the year 1999	123.00	ODP tonnes
- Baseline consumption of CFCs in foam sector	Not Available	ODP tonnes
- Consumption of CFCs in foam sector in 1998	25.00	ODP tonnes

There has been no investment project in Benin as of now.

Flexible Slabstock

P.E.B.

1. Plastiques Elastomeres du Benin (P.E.B.), founded in 1984, is the only foam producer in Benin. It produces flexible slabstock foam for the furniture industry. At the time that Benin's country programme was adopted the company used relatively small quantity of CFCs as it was trying to change to the use of methylene chloride. However in the past few years the company's consumption of CFC-11 is reported to have grown as it moved away from its trials with methylene chloride. The most recent blowing agent consumption data is reported as follows:

	1996	1997	1998	Last 12 Months
CFC-11 (tonnes)	20	18	25	27.3
Methylene Chloride (tonnes)	10	12	5	3

2. The company operates a 220 kg/min low pressure conventional Tipocvh foam machine commissioned in 1984.

3. P.E.B. will convert the production to the use of methylene chloride. The capital cost of conversion includes the cost of methylene chloride tank (US \$12,000), methylene chloride metering system (US \$13,000), machine enclosure including extractor fans and encasement of relevant sections of the foaming line (US \$63,000), ventilation in the curing room (US \$18,000) and methylene chloride detector systems and safety devices (US \$8,000). Trials, technology transfer and training amount to US \$19,000. The project will realize incremental operational savings of US \$3,273.

Impact of the project

4. When completed the project will eliminate 27.3 tonnes of CFC-11 which is 22.2% of Benin's 1999 consumption of Annex A Group I substances.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS**COMMENTS**

1. The Secretariat and UNDP have discussed the project and agreed on the eligible grant.

RECOMMENDATIONS

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

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Phaseout of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Plastique Elastomeres du Benin (P.E.B.)	143,027	18,594	UNDP