



**United Nations
Environment
Programme**



Distr.
LIMITED

UNEP/OzL.Pro/ExCom/22/38
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: JAMAICA

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 West Indies Synthetics Company, Ltd (Wisynco) UNDP

PROJECT EVALUATION SHEET **JAMAICA**

SECTOR: Foams ODS use in sector (1994): 165.69 ODP tonnes

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

Project Titles:

Elimination of CFC-11 in the manufacture of extruded polystyrene foam sheet at West Indies Synthetics Company, Ltd. (WISYNCO).

Project Data	EPS
	WISYNCO
ODS phase-out (ODP tonnes)	81.6
Proposed project duration (Yrs)	2
Incremental capital cost (US \$)	1,130,800
Contingency (%)	10
Incremental operational cost (US \$)	(134,787)
Total project cost (US \$)	996,013
Local ownership (%)	100
Export component (%)	0
Amount requested (US \$) {Original}	844,946
{Revised}	
Cost effectiveness (US \$/kg)	10.35
National Coordinating Agency	Natural Resources Conservation Authority
Implementing Agency	UNDP
Technical review completed?	Yes

Secretariat's Recommendations:

Amount recommended (US \$)	596,000
Project impact (ODP tonnes)	81.6
Cost effectiveness (US \$/kg)	7.30
Implementing Agency support cost (US \$)	77,480
Total cost to Multilateral Fund (US \$)	673,480

PROJECT DESCRIPTION

Elimination of CFC-11 in the manufacture of extruded polystyrene foam sheet at West Indies Synthetics Company, Ltd. (WISYNCO).

1. West Indies Synthetics Company, Ltd. (WISYNCO), manufactures extruded polystyrene (PS) foam sheet for thermoforming into meat trays, egg cartons, egg trays, and dinner serveware. The project document indicates that the company phased-out use of 81.6 tonnes of CFC-11 in May 1996 through the introduction of LPG, and that in order for the company to be able to maintain the same product quality it had to switch from using three (3) Winstead processes to one (1) Tandem Foam Extrusion System and two (2) off-line thermoformers. The current building and production equipment were modified or replaced to allow them to use LPG as the blowing agent. Safety features are being added and appropriate safety procedures are being established. Follow-up and evaluation of the conversion will be provided by the UNDP expert.
2. The following is a summary of the costs of investment and related activities, including those that have been procured and those that are yet to be procured and UNDP's technology transfer costs:

Description	Cost
2-1/2" x 3-1/2" Tandem Foam Extrusion System	380,000
Exhaust, Ventilation, Ceiling & Wall Fan Systems	65,000
Cast Aluminum Heaters with Ex Proof Terminals	10,000
Modification to 3 Grinders	8,000
High Pressure Pump	75,000
Two (2) Replacement Thermoformers & Tooling	320,000
Sprinkler System	45,000
Bulk Storage Tank and Deluge System	42,000
Simco Ionized Air Blowers	25,000
Portable & Stationary Gas Sensing Systems	41,500
Clothing	1,500
Follow-up Technology Assistance & Safety Training by UNDP	15,000
Capital Investment Total	US \$1,028,000

3. The cost of the replacement tandem extrusion system and the two replacement thermoformers and tooling are expenditures that have already been made by WISYNCO. Both systems are installed and are running production. Since the Winstead systems were not adaptable to non-ODS technology, the company was unable to sell them and they will be sold as scrap metal. The other costs of the budget, mainly for safety measures, are estimates said to be based on information from a recent project in Colombia (equipment modifications, safety systems), from local suppliers (tank) and from UNDP (training, technology transfer).

4. The company further indicates that, since the above machine will only provide a throughput of 190 lbs./hr., as compared to their previous 360 lbs./hr., it will undertake on its own additional investment amounting to US \$640,000 to achieve its previous output of 360 lbs./hr. capacity.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The Jamaica Country Programme approved at the 20th Meeting of the Executive Committee (October 1996) indicated that the company (WISYNCO) phased-out the use of CFCs in 1995. This information was confirmed in a communication from UNEP/IE which was responsible for the country programme preparation. The project document also indicates that the company phased-out the use of CFC-11 in May 1996. However, a letter from the Managing Director of the company attached to the project document indicates that the company ran out of CFC in 1993, 1994 and 1995. At the same time invoices also attached to the project document show imports of CFC-11 in late 1995 and of LPG/Butane in May 1996. Although the actual period of the complete phase-out of CFCs at the company cannot be established with any degree of certainty, evidence provided show that the company has indeed completely phased-out the use of CFCs.

2. In line with Executive Committee Decisions 9/8 and 20/25 (b) which made the cost of installation of safety equipment in enterprises that were no longer using controlled substances ineligible for funding, the project was considered only as a request for retroactive funding of the actual investment costs, following a letter from UNDP. Those investment costs related to safety which have not been undertaken, as evidenced from the project description were not considered.

3. The eligible project costs as assessed on the basis of the expenditure already incurred were as follows:

(i)	Total eligible investment cost (purchase, tooling and installation of extruder and thermoformers)	US \$700,000
(ii)	Technology transfer, trials and training (UNDP)	US \$20,000
(iii)	Total eligible capital cost	US \$720,000
(iv)	Total quantity of CFC-11 phased-out	81.6 tonnes
(v)	Total incremental operational savings	US \$124,400
(vi)	Grant amount (i) - (iii)	US \$595,600
(vii)	Cost-effectiveness	7.3

4. The project duration indicated as two years does not apply in this case as the company has already phased out the use of CFC.

Impact of the Project on 1999 Freeze

5. No statement is made on the impact of the project on Jamaica's 1999 freeze target.

RECOMMENDATION

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

<u>Project Title</u>	<u>Project Cost</u> US \$	<u>Support</u> <u>Cost US \$</u>	<u>Implementing</u> <u>Agency</u>
Elimination of CFC-11 in the manufacture of extruded polystyrene foam sheet at West Indies Synthetics Company, Ltd. (WISYNCO).	596,000	77,400	UNDP