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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-ninth Meeting
Beijing, 24-26 November 1999

Corrigendum

PROJECT PROPOSALS: INDONESIA

Replace pages 3, 7 and 8 with the attached pages 3, 7 and 8.

**PROJECT EVALUATION SHEET
INDONESIA**

SECTOR: Foam ODS use in sector (1998): 3015 ODP tonnes

Sub-sector cost-effectiveness thresholds: Integral Skin US \$16.86/kg

Project Titles:

- (a) Phase-out of CFC-11 by conversion to water-based systems (FMF) and HCFC-141b (ISF) in the manufacture of polyurethane foam for automotive and furniture applications at P.T. Yoska Prima Inti
- (b) Phase-out of CFC-11 consumption by conversion to water-blown technology and HCFC-141b at P.T. Meta Presindo Utama in the manufacture of polyurethane integral skin and moulded polyurethane foam
- (c) Phase-out of CFC-11 consumption by conversion to water-blown technology and HCFC-141b at P.T. Nirwana in the manufacture of polyurethane integral skin and flexible moulded polyurethane foam

Project Data	Integral skin		
	Yoska	Meta Presindo	Nirwana
Enterprise consumption (ODP tonnes)	63.00	22.50	34.00
Project impact (ODP tonnes)	49.50	21.80	32.60
Project duration (months)	36	24	24
Initial amount requested (US \$)	390,868	285,653	309,211
Final project cost (US \$):			
Incremental capital cost (a)	70,000	142,500	115,000
Contingency cost (b)	7,000	14,250	11,500
Incremental operating cost (c)	291,868	56,853	80,411
Total project cost (a+b+c)	368,868	213,603	206,911
Local ownership (%)	100%	100%	100%
Export component (%)	0%	0%	0%
Amount requested (US \$)	368,868	213,603	206,911
Cost effectiveness (US \$/kg.)	7.45	9.79	6.35
Counterpart funding confirmed?			
National coordinating agency	Ministry of Environment		
Implementing agency	UNDP	UNIDO	UNIDO

Secretariat's Recommendations			
Amount recommended (US \$)		213,603	206,911
Project impact (ODP tonnes)		21.80	32.60
Cost effectiveness (US \$/kg)		9.79	6.35
Implementing agency support cost (US \$)		27,768	26,898
Total cost to Multilateral Fund (US \$)		241,371	233,809

60 kg/min high pressure machines at US \$100,000 and US \$110,000 respectively. The KMK Rimstar will be retrofitted at US \$30,000.

9. With regard to the incremental operational costs, while there is no request for any costs associated with density increase for spray, block or panel foams in five projects (Chemindo, Dawamiba, Kinmura, Sukses Selalu and Sumber Logam – World Bank projects) the Tansri Gani project (UNDP) claims that the CFC-based foam has a density of 35 kg/m³ for panels and blocks and 32-35 kg/m³ for spray foam and therefore requests operational cost associated with 10% increase in density. The cost associated with the density increase amounts to US \$104,400 and constitutes 55% of the total incremental operational cost calculated to be US \$190,000.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

Integral Skin Foam Projects

1. The Fund Secretariat and UNIDO discussed the projects for Meta Presindo and Nirwana and agreed on the costs as US \$ 213,603 and US \$206,911 respectively. The incremental capital cost of the project for Yoska Prima was also agreed. With regard to the claim for 10% increase in density which results in the amount of US \$219,223 the Secretariat could not recommend as eligible incremental operational cost since the density at which the company produces its foam currently does not require any density increase on conversion. Indonesia imports all its polyurethane chemicals. Since the project is to be implemented within a three year period such chemicals that would not add to the production costs of the companies should be available within that time.

2. UNDP calculated the project costs for Yoska Prima in light of Decision 25/48, which stipulates that in flexible molded polyurethane foam projects where both LCD and water-blown technologies are zero ODP options, an enterprise would be free to choose its technology subject to the provision that the eligible grant would be based on the more cost-effective of the two technology options. The project based on cost of the LCD technology was agreed as US \$169,500 made up of US \$308,000 as incremental capital cost and US \$138,000 as incremental operational savings. The project cost based on water-blown technology including 10% density increase is US \$368,868 made up of US \$77,000 incremental capital cost and US \$291,868 incremental operational cost. UNDP suggested that the project's eligible grant be based on the costs associated with the LCD technology, i.e. US \$169,500 as the more cost-effective option. However the project cost of the water-blown option when the claimed increase in density is excluded will be US \$145,950. In such a case, the more cost-effective option will be the water-blown technology at the cost of US \$145,950.

Project Duration

3. While UNIDO proposes to implement the two projects (Meta Presindo and Nirwana) in the period of two years, UNDP will implement the Yoska Prima project in three years. Given Indonesia's planned restrictions on import of ODS in 2000, this long period of implementation could have a negative impact on the country's ODS phase-out strategies.

Rigid Foam Projects

4. The Secretariat and the World Bank discussed the projects of Chemindo, Dawamiba, Kinmura, Sukses Selalu and Sumber Logam and agreed on their costs.

5. The Fund Secretariat and UNDP agreed on incremental capital cost of Tansri Gani as US \$295,000 and US \$29,500 contingency.

6. With regard to the operational cost, information from industry experts led the Secretariat to conclude that the foam products manufactured by Tansri Gani which are similar to those manufactured by the other five companies do not normally require density increase following conversion to HCFC-141b. Furthermore in cases such as sandwich panels the HCFC-141b foam can be produced at similar densities as the CFC-based foam.

7. Based on the above comments the Secretariat determined the eligible incremental operational cost of the project as US \$66,338 instead of US \$190,000 indicated in the project, consistent with the other companies producing similar products for the Indonesian market. Consequently the total project cost based on the agreed incremental capital cost will be US \$390,838 when the claimed increase in density is excluded and US \$514,500 including the claimed increase in density.

Project Duration

8. Both UNDP and the World Bank propose to implement the projects in three years. The Secretariat draws attention to this issue in its comments in paragraph 3 above.

RECOMMENDATIONS

1. The Fund Secretariat recommends blanket approval of the projects for Meta Presindo, Nirwana, Intimas Chemindo, Dawamiba, Kinmura, Sukses Selalu and Sumber Logam with the funding level and associated support costs as indicated in the table below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(b)	Phase-out of CFC-11 consumption by conversion to water-blown technology and HCFC-141b at P.T. Meta Presindo Utama in the manufacture of polyurethane integral skin and moulded polyurethane foam	213,603	27,768	UNIDO
(c)	Phase-out of CFC-11 consumption by conversion to water-blown technology and HCFC-141b at P.T. Nirwana in the manufacture of polyurethane integral skin and flexible moulded polyurethane foam	206,911	26,898	UNIDO
(d)	Phaseout of CFC-11 by conversion to HCFC-141b in the manufacture of rigid polyurethane foam (boxfoam and sprayfoam) at PT Intimas Chemindo	290,294	37,738	IBRD
(e)	Phaseout of CFC-11 by conversion to HCFC-141b in the manufacture of rigid polyurethane foam (panels) at PT Dawamiba Engineering	156,500	20,345	IBRD