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Executive Committee of
the Multilateral Fund for the
Implementation of the Montreal Protocol

Eighteenth Meeting
Vienna, 22-24 November 1995

PROJECT PROPOSALS: ALGERIA

This document includes the Comments and Recommendations from the Fund Secretariat on the following projects:

- Phasing out of CFC-11 in the manufacture of sandwich panels at Batimetal Béni Mansour UNIDO
- Phasing out of CFC-11 in the manufacture of sandwich panels by discontinuous method at Prosider Berrahal UNIDO

**PROJECT EVALUATION SHEET
ALGERIA**

SECTOR: **Foam** ODS use in sector (1991): 650 ODP tonnes

Sub-sector cost-effectiveness threshold: Rigid polyurethane 7.83

Project Titles:

- (a) Phasing out of CFC-11 in the manufacture of sandwich panels at Batimetal Béni Mansour
(b) Phasing out of CFC-11 in the manufacture of sandwich panels by discontinuous method at Prosider Berrahal

Project Data	Rigid polyurethane	
	Batimetal*	Prosider*
ODS phase-out (ODP tonnes)	110	82
Proposed project duration (Yrs)	1.5	1.5
Incremental capital cost (US\$)	496,650	434,500
Contingency (%)	10	10
Incremental operational cost (US\$)	0	0
Total project cost (US\$)	496,650	434,500
Local ownership (%)	100	100
Export component (%)	0	0
Amount requested (US\$) { Original	656,150	633,050
{ Revised	496,650	434,500
Cost effectiveness (US\$/kg)	4.51	5.29
National Coordinating Agency	Direction Generale de l'Environnement	Direction Generale de l'Environnement
Implementing Agency	UNIDO	UNIDO
Technical review completed?	Yes	Yes

Secretariat's Recommendations		
Amount recommended (US \$)	496,650	434,500
Project impact (ODP tonnes)	110	82
Cost effectiveness (US \$/kg)	2.93	3.44
Implementing Agency support cost (US\$)	64,565	56,485
Total cost to Multilateral Fund (US \$)	561,215	490,985

* New proposal to 18th Meeting

PROJECT DESCRIPTION

(a) BATIMETAL

1. The company produces sandwich panels for the use in industrial buildings. The panels are made from iron sheets which are processed and heated prior to foam injection. The latter is effected in a continuous way.
2. The company will replace CFC-11 with n-pentane. This conversion will require establishing storage facility for n-pentane, metering unit for n-pentane, retrofitting of existing foaming system, gas detection and fire protection system for the safe handling of n-pentane.
3. The capital cost includes the cost of commissioning and start up, and consultancy. Ten per cent contingency is applied to project capital cost.
4. The project does not realize operating saving.

(b) PROSIDER

5. The company produces steel faced sandwich panels for use in cold storage warehouses, agro-industrial buildings and others.
6. Foam injection is done by the discontinuous method by means of two high pressure foam machines and two presses.
7. CFC-11 will be replaced with n-pentane.
8. Storage and piping facility for n-pentane is required. The existing two high pressure machines will be retrofitted and an additional mixing head will be provided. A premixing unit for the mixing of n-pentane is also required.
9. The required safety measures include gas detection system, extraction hoods and fans, antistatic floor and fire protection system.
10. The capital costs include costs of commissioning and start-up. Ten per cent contingency is applied to capital cost.
11. The project will not realize operating savings.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The technology selected is well proven.
2. The Secretariat discussed with UNIDO the costs of the two projects to determine their incrementality and level. UNIDO adjusted the projects budgets accordingly.

RECOMMENDATIONS

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

Project	Project Cost US \$	Support Cost US \$	Implementing Agency
(a) Phasing out of CFC-11 in the manufacture of sandwich panels at Batimetal Béni Mansour	496,650	64,565	UNIDO
(b) Phasing out of CFC-11 in the manufacture of sandwich panels by discontinuous method at Prosider Berrahal	434,500	56,485	UNIDO