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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-second Meeting
Montreal, 29 March - 2 April 2004

PROJECT PROPOSAL: BOLIVIA

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

Refrigeration

- Terminal umbrella project for the commercial manufacturing sector UNDP

**PROJECT EVALUATION SHEET
BOLIVIA**

SECTOR: Refrigeration ODS use in sector (2002): 59.93 ODP tonnes

Sub-sector cost-effectiveness thresholds: Commercial US \$15.21/kg

Project Titles:

- (a) Terminal umbrella project for the commercial manufacturing sector

Project Data	Refrigeration
Enterprise consumption (ODP tonnes)	5.8
Project impact (ODP tonnes)	5.8
Project duration (months)	36
Initial amount requested (US \$)	156,085
Final project cost (US \$):	
Incremental capital cost (a)	44,400
Contingency cost (b)	4,440
Incremental operating cost (c)	40,000
Total project cost (a+b+c)	88,840
Local ownership (%)	100
Export component (%)	0
Amount requested (US \$)	88,840
Cost effectiveness (US \$/kg.)	15.31
Counterpart funding confirmed?	
National coordinating agency	Ozone Protection Unit (COGO)
Implementing agency	UNDP

Secretariat's Recommendations	
Amount recommended (US \$)	
Project impact (ODP tonnes)	
Cost effectiveness (US \$/kg)	
Implementing agency support cost (US \$)	
Total cost to Multilateral Fund (US \$)	

PROJECT DESCRIPTION

1. The majority of the remaining consumption in the refrigeration sector in Bolivia is related to the servicing of installed refrigeration equipment. There are a number of small manufacturers of commercial refrigeration equipment still consuming CFCs. UNDP has submitted to the 42nd Meeting of the Executive Committee a terminal umbrella project for the conversion of 28 small enterprises manufacturing commercial refrigeration equipment, that would phase-out 5.8 ODP tonnes of CFC-12.
2. The enterprises either manufacture or assemble refrigeration equipment. They are characterised by a small level of annual production of refrigerators and consumption of CFC-12. The average enterprise employs only two technicians. There are no foaming activities involving CFC-11 as a blowing agent. In 2001, the total production of the 28 enterprises was 597 units. All enterprises are involved in servicing operations which are being addressed through training in good refrigeration practices provided under an approved refrigeration management plan (RMP).
3. The phase out of CFC-12 will be achieved by converting CFC-12 based technology to HFC-134a as the refrigerant. The proposal requests funding for charging equipment, vacuum pumps and leak detectors suitable for HFC-134a duty, as well as tools and electrical measurement instruments. The cost of technology transfer is included in the proposal. Incremental costs are requested by the enterprises reflecting the higher cost of refrigerant.
4. The overall cost-effectiveness of the proposal is US \$26.91/kg ODP. Bolivia is a low-volume-consuming country therefore the cost-effectiveness threshold value was not applied in determining the level of requested grant.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

5. In 2002, Bolivia reported CFC consumption to the Fund Secretariat of 65.59 ODP tonnes, with the following breakdown: 53.43 ODP tonnes in the refrigeration servicing sector (81.4%); 5.66 ODP tonnes in the foam sector and 6.5 ODP tonnes in the refrigeration manufacturing.
6. At its 36th Meeting, the Executive Committee approved an RMP for Bolivia at a cost of US \$517,000 as a bilateral activity to be undertaken by Canada. UNDP received US \$146,000 for a recovery and recycling project in Bolivia at the 20th Meeting of the Executive Committee. Two investment projects in the foam sector have been approved with a total impact 10 ODP tonnes. Bolivia's institutional strengthening project, implemented by UNEP, includes awareness programmes, training and monitoring activities.
7. The RMP for Bolivia will ensure the achievement of the 2005 and the 2007 control measures for CFCs in Bolivia. Therefore, no CFC phase-out activities in Bolivia have been included in the 2003 – 2005 phase-out plan of the Multilateral Fund. Accordingly, the proposal has been submitted under the funding window for projects that involve accelerated phase-out or

maintaining momentum, in accordance with Decisions 41/13, 41/81 and 40/7. The following criteria established by Decision 40/7 might apply:

- (iii) LVC countries that have received funding for a refrigerant management plan pursuant to Decision 31/48; and
- (v) countries with a low level of residual consumption on a case-by-case basis.

8. With approval and implementation of this proposal, the remaining unaddressed CFC consumption would not exceed 2.7 ODP tonnes and would be in the refrigeration servicing sector. The Secretariat suggested that the project be widened to cover the remaining consumption and achieve complete phase-out of CFCs. However, UNDP advised that the country did not wish to commit to a cessation of consumption for servicing at this stage.

9. The Secretariat discussed with UNDP the incremental capital and operating costs. Decision 25/50 relating to umbrella projects was taken into consideration in determining the eligible incremental costs. Part of the requested equipment and tools associated with servicing operations and operating costs were recognized to be ineligible for funding. The total incremental cost was agreed with UNDP at the level of US \$88,840 with a cost-effectiveness of US \$15.31/kg ODP. The impact of the project is 5.8 ODP tonnes.

RECOMMENDATION

10. The Executive Committee may wish to consider approval of the proposal under the funding window for projects that involved accelerated phase-out or maintaining momentum at a cost of US \$88,840 plus agency support cost of US \$6,663.
