UNITED NATIONS



United Nations Environment Programme Distr. Limited

UNEP/OzL.Pro/ExCom/29/33 29 October 1999

ORIGINAL: ENGLISH

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

PROJECT PROPOSALS: FIJI

This document includes the comments and recommendations of the Fund Secretariat on the following project proposals:

Refrigeration

•	Refrigerant management plan:	national programme for recovery &	UNDP
	recycling of refrigerants		

- Refrigerant management plan: training of custom officers, ODS UNEP inspectorate and NOU staff
- Refrigerant management plan: train the trainer programme UNEP

PROJECT EVALUATION SHEET FIJI

SECTOR: Refrigeration ODS use in sector (199):

ODP tonnes

N/A

Sub-sector cost-effectiveness thresholds:

Project Titles:

- (a) Refrigerant management plan: national programme for recovery & recycling of refrigerants
- (b) Refrigerant management plan: training of custom officers, ODS inspectorate and NOU staff
- (c) Refrigerant management plan: train the trainer programme

Project Data	Refrigerant management plan			
Enterprise consumption (ODP tonnes)				
Project impact (ODP tonnes)	5.20			
Project duration (months)	36	18	18	
Initial amount requested (US \$)	103,946	44,500	75,000	
Final project cost (US \$):				
Incremental capital cost (a)				
Contingency cost (b)				
Incremental operating cost (c)				
Total project cost (a+b+c)	96,755	42,500	70,500	
Local ownership (%)	100%	100%	100%	
Export component (%)	0%	0%	0%	
Amount requested (US \$)	96,755	42,500	70,500	
Cost effectiveness (US \$/kg.)				
Counterpart funding confirmed?				
National coordinating agency				
Implementing agency	UNDP	UNEP	UNEP	

Secretariat's Recommendations			
Amount recommended (US \$)	96,755	42,500	70,500
Project impact (ODP tonnes)	5.20		
Cost effectiveness (US \$/kg)			
Implementing agency support cost (US \$)	12,578	5,525	9,165
Total cost to Multilateral Fund (US \$)	109,333	48,025	79,665

PROJECT DESCRIPTION

Refrigerant Management Plan: Fiji

1. In 1998, the total CFC consumption in the refrigeration sector in the country was estimated at 19.2 ODP tonnes for servicing domestic and commercial refrigeration equipment. Based on data gathered during a survey completed in 1998, there are about 142,000 domestic refrigerators, 7,500 commercial refrigeration systems and 18,600 vehicles with MAC units.

2. There are nearly 300 refrigeration technicians in the country, and 35 service workshops of different sizes. These workshops carry out maintenance and repair of domestic, commercial and industrial refrigeration equipment. In 1992, the Australian Institute of Refrigeration, Air Conditioning and Heating conducted CFC awareness and retrofit courses for refrigeration service technicians in Fiji. Since 1997, all technicians graduating from the Fiji Institute of Technology are familiar with the requirements of containment, recovery and recycling of refrigerants and are aware of the necessity of adopting good practices in refrigeration.

3. In July 1998, the Parliament approved the Ozone Depleting Substances Bill of 1997. This Bill, which has been renamed as the ODS Act, includes: a ban on the importation of all equipment, air-conditioners, refrigerators, compressors and units using any Annex A and Annex B substances; a ban on the import, storage, sale or purchase of any Annex A and B substances (as of 1st January 2000) and Annex C substances (as of 2031). Some organizations are currently containing, recovering and reusing refrigerants. Ecolabelling programmes and reduction of import duties are also proposed to be implemented by the country. The Government's Action Plan proposes to make compulsory licensing for technicians who handle controlled substances and CFC-based equipment.

4. The RMP identified two basic training programmes: (i) training for customs officers to identify and develop techniques for collecting and reporting consumption of ODS import and ODS-based refrigeration equipment; and (ii) a "train the trainers" programme for refrigeration technicians in good management practices, aimed at improving service practices to prevent release of CFCs into the atmosphere and master the technical skills to service and repair non-CFC based refrigeration equipment.

5. The RMP also includes a subproject for the establishment of a recovery and recycling network comprising 20 recovery units (including units to be used in the training programme on good servicing practices) and 3 recycling centres for servicing commercial and industrial refrigeration equipment to be located in the three larger islands, at a total cost of US \$84,000. This subproject also provides for 3 one-day workshops for service technicians on practical demonstrations on recovery and recycling equipment.

6. Implementation of these projects will lead to recovery and recycling of 5.2 tonnes of CFC each year. This amount would be additional to the amount of refrigerant that should be saved from the teaching of good service and maintenance practices at the training seminars.

7. Fiji's Ozone Unit will be responsible for the monitoring, co-ordination and implementation of proposed phase-out activities in the RMP. It will distribute the recovery

UNEP/OzL.Pro/ExCom/29/33 Page 4

equipment, assist in establishing the recycling centers, monitor the amount of CFC recycled and redistribute the equipment, as necessary. The project also includes a request for US \$6,000 for monitoring the subprojects in the RMP (this request is under the recovery and recycling subproject).

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The Secretariat and UNEP discussed the scope of the training programme for refrigeration service technicians in the light of the high-level of preparation of technicians in the country and the comprehensive programme provided by the Australian Institute of Refrigeration and Air Conditioning and Heating, as well as the costs associated with logistical arrangements for the training programmes. UNEP reviewed the scope of the training programme for refrigeration technicians and agreed to adjust the costs of the programmes.

2. The Secretariat and the implementing agencies (UNDP and UNEP) also discussed the size of the recovery and recycling programme in relation to the CFC consumption level and its sectoral distribution and the request for monitoring the activities within the RMP. UNEP and UNDP agreed to adjust the level of funding, accordingly.

RECOMMENDATION

1. The Fund Secretariat recommends blanket approval of the projects at the funding levels indicated below:

	Project Title	Project	Support Cost	Implementing
		Funding (US\$)	(US\$)	Agency
(a)	Refrigerant management plan: national programme for	96,755	12,578	UNDP
	recovery & recycling of refrigerants			
(b)	Refrigerant management plan: training of custom officers,	42,500	5,525	UNEP
	ODS inspectorate and NOU staff			
(c)	Refrigerant management plan: train the trainer programme	70,500	9,165	UNEP