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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty first Meeting
Montreal, 17 -19 December 2003

PROJECT PROPOSALS: CAMBODIA

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

Refrigeration:

- Implementation of the refrigerant management plan: development of an ODS import/export licensing system Sweden
- Implementation of the refrigerant management plan: awareness and incentive programme UNDP
- Implementation of the refrigerant management plan: recovery & recycling of CFC-12 refrigerant UNDP
- Implementation of the refrigerant management plan: refrigeration & air-conditioning technicians training UNEP
- Implementation of the refrigerant management plan: customs training UNEP
- Implementation of the refrigerant management plan: implementation support and monitoring UNEP

PROJECT EVALUATION SHEET CAMBODIA

SECTOR: Refrigeration ODS use in sector (2002): 94.2 ODP tonnes

Sub-sector cost-effectiveness thresholds: N/A US \$/kg

Project Titles:

- (a) Implementation of the refrigerant management plan: development of an ODS import/export licensing system
- (b) Implementation of the refrigerant management plan: awareness and incentive programme
- (c) Implementation of the refrigerant management plan: recovery & recycling of CFC-12 refrigerant
- (d) Implementation of the refrigerant management plan: refrigeration & air-conditioning technicians training
- (e) Implementation of the refrigerant management plan: customs training
- (f) Implementation of the refrigerant management plan: implementation support and monitoring

Project Data	Refrigerant management plan					
	(a)	(b)	(c)	(d)	(e)	(f)
Enterprise consumption (ODP tonnes)			16.15			
Project impact (ODP tonnes)			16.15			
Project duration (months)	12	48	36	24	24	36
Initial amount requested (US \$)	58,750	632,000	241,653	179,000	109,000	90,000
Final project cost (US \$):						
Incremental capital cost (a)	58,750		223,230			
Contingency cost (b)			18,423			
Incremental operating cost (c)						
Total project cost (a+b+c)	58,750	632,000	241,653	179,000	109,000	90,000
Local ownership (%)	100%	100%	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%	0%	0%
Amount requested (US \$)	58,750	632,000	241,653	179,000	109,000	90,000
Cost effectiveness (US \$/kg.)			14.96			
Counterpart funding confirmed?						
National coordinating agency			Ministry of Environment			
Implementing agency	Sweden	UNDP	UNDP	UNEP	UNEP	UNEP

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 Government of Cambodia has submitted a refrigerant management plan (RMP) project proposal for the consideration of the Executive Committee at its 41st Meeting.

ODS consumption

2. In 2003, a national survey on the consumption of ODS was conducted by the Ozone Unit of Cambodia. Based on this survey, in 2002, about 94.2 ODP tonnes of CFCs were used in the country to service MAC units (78.64 ODP tonnes), refrigeration systems (14.71 ODP tonnes) and chillers (0.83 ODP tonnes of CFC-11).

3. There are 140 service workshops in Cambodia, with the following geographical distribution:

Province	No. workshops	CFC-12 (tonnes)	HCFC-22 (tonnes)
Phnom Penh	110	82.24	37.98
Siem Reap	9	2.75	1.68
Batteay Mean Chey Province	8	1.73	0.52
Battambang Province	11	6.00	0.56
Sihanoukville	2	0.63	0.46
Total	140	93.35	41.20

4. The price of CFC-12 refrigerant has risen considerably in recent years but is still cheaper than HFC-134a. It is assumed that, due to import controls and increased worldwide restrictions in supply of CFC-12, this tendency will continue.

Policy framework

5. The Government of Cambodia is proposing the establishment of legislation and a regulatory system to control imports of ODSs and ODS-based equipment. The introduction of an import/export licensing system will be complemented with control measures for downstream users (e.g., service workshops will have to present a proof of purchase of ODS from an authorized importer).

Sub-projects in the RMP

6. The RMP consists of the following sub-projects:

- (a) Establishment of ODS legislation (US \$58,750): to assist the Government of Cambodia in the development of an ODS import/export licensing system that will enable enforcement of ODS phase-out policies, monitor ODS consumption, fulfil reporting requirements, and assist in the prevention of illegal trade with ODS;
- (b) MAC awareness and incentive programme (US \$632,000): to provide a funding incentive for replacement or retrofit of existing CFC-based MAC units to

HFC-134a refrigerant. Implementation of this sub-project will lead to the phase out of 19 tonnes of CFCs;

- (c) Establishment of a recovery and recycling network (US \$241,653): to establish a network of 17 recovery machines and 26 MAC recovery/recycling units including ancillary equipment, for servicing commercial and industrial refrigeration and MAC units. Implementation of this sub-project will lead to the phase out of 16 tonnes of CFCs;
- (d) Refrigeration and air-conditioning technicians training (US \$179,000): to train 25 trainers and refrigeration servicing technicians (over 800 technicians) in good refrigeration servicing practices to reduce emissions of CFCs; introduce alternative refrigerants and improve the distribution channels for alternative refrigerants; and introduce to retrofits and recovery and recycling practices;
- (e) Training for customs officers (US \$109,000): to train 300 customs officers to ensure enforcement of the restriction on imports of CFC based equipment and import/export regulations in Cambodia, recognition of ODS and ODS-based equipment, and monitor ODSs; and
- (f) Implementation, support and monitor (US \$90,000): to promote the activities proposed in the RMP, mainly targeting the refrigeration technicians and end-users.

7. The Cambodia RMP project was submitted with an official letter from the Government of Cambodia (signed by the Secretary of State for the Environment).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Issues related to baseline and compliance by Cambodia

8. On 1 October 2003, the Fund Secretariat received an official communication from the Government of Cambodia (copied to the Ozone Secretariat and UNEP DTIE) submitting the ODS consumption data in Cambodia based on the data forms available for reporting progress on the implementation of the country programme (Fund Secretariat) and data reporting under Article 7 (Ozone Secretariat). The Implementation Committee, at its 31st Meeting noted with appreciation the fact that Cambodia (among other Parties) has reported its ODS data, thus bringing the country into compliance with the provisions of Article 7.

9. Since August 2002, the Ministry of Environment started the process to ratify the London and Copenhagen Amendments to the Montreal Protocol. After the July 2003 election in Cambodia, a new Government was formed in November 2003. The Ministry of Environment will follow up on the ratification in early 2004.

Issues related to the RMP project

10. The Secretariat discussed with UNDP and UNEP issues related to the CFC consumption used for servicing MAC units (more than 83 per cent of the total CFC consumption in Cambodia) and whether or not CFC-12 is being used for servicing non-CFC based equipment taking into consideration price differential between CFC-12 and HFC-134a. The Secretariat was informed that calculation of CFC consumption was based on the number of vehicles in Cambodia provided by the Ministry of Public Works and Transport. There are only a small number of vehicles fitted with an HFC-134a MAC unit; therefore using CFC-12 for servicing these units is not common.

11. In the review of the sub-projects within the RMP proposal, the Secretariat noted that several items were found to be more expensive than those requested in similar projects already approved and/or their eligibility was in doubt (international resource person in the customs training programme, customs clearance, unitary cost for reproduction of training materials, monitoring and evaluation within the training programmes; national consultants in addition to trainers, national resource persons; preparation/dissemination of information for informal sector training, laptop computers for monitoring and transportation costs). These issues are still under discussion and will be communicated to the Executive Committee prior to the 41st Meeting.

12. The Secretariat also noted that the letter of transmittal of the RMP project by the Government of Cambodia did not include the Government's commitment to achieve, without further request for funding, at least 50 per cent reduction in consumption of CFCs by 2005 and 85 per cent reduction by 2007. UNEP indicated that an additional letter had been requested to the Government of Cambodia and will be submitted prior to the 41st Meeting of the Executive Committee.

RECOMMENDATION

13. Pending.