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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-eighth Meeting
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PROJECT PROPOSALS: MALDIVES

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

Refrigeration:

- Implementation of the refrigerant management plan: awareness and incentive programme UNDP
- Implementation of the refrigerant management plan: monitoring and review UNEP
- Implementation of the refrigerant management plan: training of customs officials and NOU staff UNEP
- Implementation of the refrigerant management plan: train the trainer programme for service UNEP

**PROJECT EVALUATION SHEET
MALDIVES**

SECTOR: Refrigeration ODS use in sector (2000): 4.6 ODP tonnes

Sub-sector cost-effectiveness thresholds: n/a

Project Titles:

- (a) Implementation of the refrigerant management plan: awareness and incentive programme
- (b) Implementation of the refrigerant management plan: monitoring and review
- (c) Implementation of the refrigerant management plan: training of customs officials and NOU staff
- (d) Implementation of the refrigerant management plan: train the trainer programme for service

Project Data	Refrigerant management plan			
	(a)	(b)	(c)	(d)
Enterprise consumption (ODP tonnes)				
Project impact (ODP tonnes)	3.50	0.00	0.00	0.00
Project duration (months)	30	30	30	30
Initial amount requested (US \$)	269,100	25,000	35,000	35,000
Final project cost (US \$):				
Incremental capital cost (a)				
Contingency cost (b)				
Incremental operating cost (c)				
Total project cost (a+b+c)	115,000	15,000	35,000	35,000
Local ownership (%)	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%
Amount requested (US \$)	115,000	15,000	35,000	35,000
Cost effectiveness (US \$/kg.)				
Counterpart funding confirmed?				
National coordinating agency				
Implementing agency	UNDP	UNEP	UNEP	UNEP

Secretariat's Recommendations				
Amount recommended (US \$)	115,000	15,000	35,000	35,000
Project impact (ODP tonnes)	3.50			
Cost effectiveness (US \$/kg)				
Implementing agency support cost (US \$)	14,950	1,950	4,550	4,550
Total cost to Multilateral Fund (US \$)	129,950	16,950	39,550	39,550

PROJECT DESCRIPTION

1. In 2000, total CFC consumption in the refrigeration-servicing sector in Maldives was estimated at 4.6 ODP tonnes for servicing domestic and commercial refrigeration equipment and MAC units.
2. There are about 20 refrigeration service centres in Male, the island which has more than 75 per cent of refrigeration equipment in the country. There are an additional 10 service shops in other islands and 80 agencies which service refrigeration equipment in tourist resorts. Each agency has on average 2 to 3 technicians; and very few workshops have skilled technicians.
3. At present, there are 18 registered importers of CFCs in the country. Also, a few end users directly import CFCs, though in very small quantities. The importers supply the refrigerants to customers including the tourist resorts and service agencies. Stockpiling is observed to be a common phenomenon in Maldives; since exports from China and India in large volumes are cheaper, CFCs are purchased in larger quantities than required and kept as stocks for future use.
4. The imports of chemicals have to be approved by the National Security Service before the substances are imported onto the islands. The Government actively co-operates with the neighbouring countries in the region to control imports. Prior to 2001, the Customs Department did not have separate codes for CFCs; since then, separate customs codes for CFCs have been established and now, it is mandatory for importers to declare the type of ODS that is being imported.
5. The RMP includes the following sub-projects:
 - (a) Training of enforcement officers (US \$35,000), to implement a regulatory framework including measures for identification and control of ODS and ODS-based equipment; and to develop a licensing system.
 - (b) Training programme for refrigeration technicians (US \$35,000), to train key customs officers as trainers, on ODS phase-out issues and methods of controlling imports of ODSs and ODS-based products; to train other officers who operate in the field; and to provide ODS identification equipment ;
 - (c) Awareness and incentive programme (US \$269,100), to provide financial incentives and other support measures to facilitate retrofit of refrigeration equipment to non-ODS technologies;
 - (d) Monitoring of the activities proposed in the RMP (US \$25,000).

6. The Maldives RMP project was submitted with an official letter stating the Government's commitment to achieve, without further request for funding, at least 50% reduction in consumption of CFCs by 2005 and 85% reduction by 2007. Imports of CFCs and/or CFC-based equipment will be restricted, if necessary to achieve compliance with the reduction in the levels of CFC consumption and to support the sub-projects within the RMP.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

7. On 23 September 2002, through an email from the Ozone Officer of Maldives, the Secretariat was informed that in 2001 during verification of amounts of ODS imported into the country, it was found that a registered company imported approximately 7.5 tonnes of CFC-12 from China, above the CFC baseline consumption (about 4.6 tonnes). The CFC was imported into the country before the licensing system was established. The Ozone Officer stated that the importer probably imported the shipment to stockpile it for future use and is willing to return the amount of CFC imported for the price it was bought. He also sought advice from the Secretariat on what procedure should the Government follow (i.e., methods for disposing, destroying and/or re-exporting the CFCs).

8. On the basis of the statement by the Ozone Officer, the Secretariat noted that Maldives may not be in compliance with the Montreal Protocol in 2001. However, as indicated by the Ozone Secretariat, in order to determine compliance with the control measures for CFCs, countries whose production and/or consumption exceeded the baseline for either 2000 or 2001, were requested to report their data for the control period 1 July 2000 to 30 June 2001. In this regard, the Secretariat advised the Ozone Officer to submit to the Ozone Secretariat the 2001 ODS consumption for Maldives, so that the status of compliance could be assessed by the Ozone Secretariat. UNDP and UNEP informed the Secretariat that they were also following up this matter with the Government of Maldives.

9. The Maldives RMP project proposal was prepared following the various elements of Decision 31/48. The total level of funding requested by the Government for the implementation of the activities contained in the RMP are also in the range allowable under Decision 31/48. Also, Decision 31/48 gives flexibility to the countries in selecting and implementing RMP components most relevant to their phase-out commitments. The Secretariat, however, questioned the long-term sustainability and the need for CFC recovery equipment and financial incentives for end-users as proposed in the RMP project, taking into consideration that the ODS consumption in the Maldives is about 5 tonnes; about 68 per cent of the CFC consumption is for servicing MAC units; the Government has imposed a ban on import of vehicles older than five years, and non-CFC MAC units have been imported over the last three years; between 40 and 60 per cent of commercial refrigeration units in operation are already non-CFC based; the average lifetime of all domestic and commercial refrigeration equipment is 6 years; and the difference in price between CFC-12 (US \$3.20/kg) and HFC-134a (US \$13.00/kg) is very large.

10. In this regard, UNDP and UNEP reported that during the preparation of the RMP, it was found that one resort was already using recovery equipment during servicing operations.

Therefore, it is possible that there may be additional users who may be willing to use recovery and recycling equipment. As a recovery and recycling project was not included, the training programme for refrigeration technicians provided for some equipment. According to the RMP, after 2010 there will still be CFC-based refrigeration equipment in operation; this equipment can be retrofitted.

11. UNDP and UNEP also indicated that the prices of CFCs will be an important factor in sustainability; however, it is important to recognise that as supply of CFCs decreases, the quantities procured will also decrease. While the price difference between CFC-12 and HFC-134a is currently high, the Government is actively considering reduction in price differential through additional taxes on CFCs.

12. The Secretariat, UNDP and UNEP discussed issues related to the cost of the awareness incentive programme which was higher than similar requests in other approved RMP projects. Subsequently, the project cost was adjusted.

RECOMMENDATIONS

13. Noting that it is not certain at this stage that the Maldives is in non-compliance, and also that the circumstances represented an anomaly which is being addressed by the Government, the circumstances of Decision 37/20 on non-compliance do not seem to apply in this case. Therefore, the Fund Secretariat recommends blanket approval of the projects with associated support costs at the funding level shown in the table below:

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Implementation of the refrigerant management plan: awareness and incentive programme	115,000	14,950	UNDP
(b)	Implementation of the refrigerant management plan: monitoring and review	15,000	1,950	UNEP
(c)	Implementation of the refrigerant management plan: training of customs officials and NOU staff	35,000	4,550	UNEP
(d)	Implementation of the refrigerant management plan: train the trainer programme for service	35,000	4,550	UNEP
