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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Forty-fourth Meeting Prague, 29 November-3 December 2004

#### PROJECT PROPOSALS: HONDURAS

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

### Refrigeration

•	<ul> <li>Implementation of the refrigerant management plan: technical assistance programme for the promotion of good practices and recovery and recycling</li> </ul>		
•	Implementation of the refrigerant management plan: programme for certification and licensing of refrigeration technicians	UNEP	
•	Implementation of the refrigerant management plan: programme for prevention of illegal ODS trade	UNEP	
•	Implementation of the refrigerant management plan: programme for permanent monitoring of the RMP	UNEP	

PROJECT TITLES

# PROJECT EVALUATION SHEET HONDURAS

BILATERAL/IMPLEMENTING AGENCY

(a)	Implementation of the refrigerant management plan: technical assistance	UNDP
	programme for the promotion of good practices and recovery and recycling	
(b)	Implementation of the refrigerant management plan: programme for certification and licensing of refrigeration technicians	UNEP
(c)	Implementation of the refrigerant management plan: programme for prevention of illegal ODS trade	UNEP
(d)	Implementation of the refrigerant management plan: programme for permanent monitoring of the RMP	UNEP

## NATIONAL CO-ORDINATING AGENCY Unidad Tecnica del Ozono (UTO)

#### LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT

A: ARTICLE-7 DATA (ODP tonnes, 2003, as of October 2004)

Annex A Group I CFCs	219.10	

#### B: COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes, 2003, as of October 2004)

ODS Name	Sub-sector/quantity	Sub-sector/quantity	Sub-sector/quantity	Sub-sector/quantity
CFCs	Refrigeration servicing 206.43			

CFC consumption remaining eligible for funding (ODP tonnes)	317.40
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CURRENT YEAR BUSINESS PLAN		Funding US \$	Phase-out ODP tonnes
ALLOCATIONS	(a)	538,000	35.8
	(b) to (d)	61,000	

PROJECT TITLE:	(a)	(b)	(c)	(d)	
ODS use at enterprise (ODP tonnes):	219.10				
ODS to be phased out (ODP tonnes):		*	:		
ODS to be phased in (ODP tonnes):		n/	a		
<b>Project duration (months):</b>	36	36	36	36	
Initial amount requested (US \$):	212,000	133,000	34,000	54,000	
Final project cost:					
Incremental Capital Cost (US \$)					
Contingency (10%) (US \$)					
Incremental Operating Cost (US \$)					
Total Project Cost (US \$)	150,000	94,000	23,000	38,000	
Local ownership (%):	100	100			
Export component (%):	0	0			
Requested grant (US \$):	150,000	94,000	23,000	38,000	
Cost-effectiveness (US \$/kg):	n/a	n/a	n/a	n/a	
Implementing agency support cost (US \$):	13,500	12,220	2,990	4,940	
Total cost of project to Multilateral Fund (US \$):	163,500	106,220	25,990	42,940	
Status of counterpart funding (Y/N):	n/a	n/a	n/a	n/a	
Project monitoring milestones included (Y/N):	Y	Y	Y	Y	

SECRETARIAT'S RECOMMENDATION	Blanket approval at the costs indicated above

<sup>\*</sup> To be in compliance with the 2005 and 2007 Montreal Protocol limits (CFC baseline is 331.60 ODP tonnes)

#### PROJECT DESCRIPTION

#### Background

- 1. The Government of Honduras has submitted for consideration by the Executive Committee at its 44th Meeting a project proposal for a refrigerant management plan (RMP) update at a cost of US \$433,000.
- 2. Since the implementation of the Honduras country programme began, CFC consumption has decreased from 523.3 ODP tonnes in 1996 to 219.1 ODP tonnes in 2003. The projects approved so far under the Multilateral Fund accounted for a direct reduction in consumption of 227.2 ODP tonnes of CFCs.
- 3. The CFC baseline for Honduras is 331.6 ODP tonnes. Therefore, Honduras will need to phase-out 53.3 ODP tonnes of CFCs in order to comply with the 2005 phase-out target plus an additional 116.1 ODP tonnes to achieve the 2007 consumption limit.

#### Servicing sector

- 4. In 2003, total CFC consumption (219.1 ODP tonnes) was concentrated in the refrigeration servicing sector, distributed as follows: 64.5 ODP tonnes in the domestic refrigeration sub-sector, 70.7 ODP tonnes in the commercial refrigeration sub-sector, 45.2 ODP tonnes in the industrial sub-sector, and 38.7 ODP tonnes (17.79 per cent) in the mobile air conditioning sector. The most important CFC-user industries are fruit processing, dairy products and meat processing.
- 5. The servicing sector consists of approximately 500 workshops, of which 227 are formally established. Of the 2,000 service technicians in the country, 700 work in the established workshops; the other 1,300 technicians are ill equipped, providing basic refilling services. Servicing and maintenance practices continue to be poor, the most common ones being: refrigerant refilling without repairing leaks, flushing and cleaning with CFCs, or, in some cases with paint thinner, and failure to use the appropriate service tools, such as vacuum pumps and scales.
- 6. As of the first half of 2004, refrigerant prices per kg are: US \$5.73 to US \$13.85 for CFC-11, US \$10.20 for CFC-12, US \$11.50 for HFC 134a and US \$4.30 for HCFC-22. Prices vary greatly depending on the size of the packaging.

#### ODS regulations

- 7. The legal framework governing the implementation of the Montreal Protocol in the Honduras is all contained in the General Regulation on the Use of ODSs that was enacted at the end of 2002. This regulation establishes, *inter alia*:
  - (a) The creation of the registry of ODS importers and exporters, and of the ODS import and export licensing and quota system, including the requirement to report import, export and sales of ODS;

- (b) Bans on manufacturing and venting ODS, on establishing enterprises that manufacture or assemble ODS-based equipment or products, and on installing new or used ODS-based refrigeration systems;
- (c) The requirement to include recovery and recycling operations and alternative ODS refrigerants in the curricula of training institutions, the certification for refrigeration service technicians, the requirement for enterprises handling refrigerants to have certified personnel, prohibition to sell ODS to non-accredited personnel; and
- (d) The requirement to recover refrigerants when installing, servicing or retrofitting ODS-based equipment and/or to destroy ODS in an environmentally safe manner.

#### Projects previously approved for the refrigeration servicing sector

- 8. So far, the Executive Committee has approved the following projects for the refrigeration servicing sector in Honduras:
  - (a) Regional Central America MAC servicing demonstration project (US \$ 200,000 approved for Honduras), as a bilateral cooperation project implemented by the United States, which also included El Salvador, Honduras, Nicaragua and Panama. A total of 17 CFC recovery and recycling machines were distributed to MAC servicing workshops. An estimated 6 ODP tonnes of CFC-12 have recovered on an annual basis;
  - (b) Customs training (US \$38,250) approved at the 28th Meeting of the Executive Committee, implemented by UNIDO as part of the original RMP. In total, 500 customs officers and frontier policemen were trained and 19 refrigerant identifiers were distributed to customs entry points and laboratories;
  - (c) Training of trainers in good refrigerant management practices (US \$70,000), implemented by UNIDO as part of the RMP. Through this programme, 6 national experts, 100 trainers and more than 2,000 technicians were trained in good refrigeration servicing and maintenance practices; and
  - (d) National recovery and recycling programme (US \$245,900), implemented by UNIDO as part of the RMP. Through this programme, 20 recovery and recycling machines were distributed to 14 technical institutes and 8 high-CFC-consuming workshops, and an additional 75 recovery machines were distributed to servicing workshops.

#### Compliance Strategy

9. In order to ensure the country's compliance with its obligations under the Montreal Protocol in 2005 and 2007, the Government of Honduras has decided to undertake a strategy that will provide technical and financial assistance to the private sector in order to: promote a reduction in the level of CFC consumption; strengthen the legal framework towards promoting a reduction in CFC consumption and dissuading any activity contrary to this objective; and

establish a permanent monitoring system to monitor all CFC phase-out activities to guarantee the fulfilment of the objectives.

- 10. To implement the phase-out strategy, the Government has decided to implement the following phase-out projects and activities:
  - (a) Technical assistance programme for the promotion of good practices and recovery and recycling (US \$212,000), promoting the use of good practices in servicing and maintenance of refrigeration equipment, providing technicians with basic service tools, promoting recovery and recycling of CFCs through redistribution of the equipment procured through the original RMP and the distribution of additional equipment;
  - (b) Programme for certification and licensing of refrigeration technicians (US \$133,000), that will establish the infrastructure of a national system for certification and licensing of refrigeration technicians to reduce the use of CFCs by the servicing sector;
  - (c) Programme for the prevention of illegal trade of ODSs (US \$34,000), strengthening the Customs function by providing ongoing training to the personnel that control imports of ODS, that will also establish a virtual centre for gathering and distribution of ODS-related information, and a communication forum for high-ranking officials from the various Government departments dealing with ODS;
  - (d) Permanent monitoring of all RMP-project activities undertaken (US \$54,000), and the timely design and application of corrective measures to guarantee the results of the RMP and the fulfillment of the country's obligations under the Montreal Protocol.
- 11. In addition, through the institutional strengthening project (at no additional cost to the Multilateral Fund), the Government is proposing the following two activities:
  - (a) Assistance to adjust and include modifications to the legal framework to support the national goals under the RMP proposal; and
  - (b) Public awareness programme, to increase all stakeholders' level of commitment to meeting the country's obligations under the Montreal Protocol.
- 12. The impact of the RMP will be the reduction of 169.3 ODP tonnes of CFCs, thus enabling the country to comply with its obligations under the Montreal Protocol until 2007.
- 13. The Honduras RMP update project was submitted with an official letter from the Government of Honduras (from the Coordinator of the Ozone Unit under the Ministry of Natural Resources and the Environment), stating the Government's commitment to achieve at least the 50 per cent reduction in CFC consumption by 2005 and the 85 per cent reduction by 2007.

14. The Government of Honduras has selected UNEP as the lead implementing agency and UNDP as the cooperating agency responsible for implementing the investment components of the RMP update.

#### SECRETARIAT'S COMMENTS AND RECOMMENDATION

#### **COMMENTS**

- 15. According to the RMP update proposal, CFC consumption in Honduras increased from 131.2 ODP tonnes in 2002 to 219.1 ODP tonnes in 2003 (about a 70 per cent increase). In this regard, the Secretariat noted that it would appear that a portion of the CFCs imported were for re-export to other countries, taking into consideration that:
  - (a) Stockpiling is not an option since it is not economically viable to maintain a stock of imported goods due to their high price and due to the continuous re-evaluation of foreign currencies;
  - (b) Since November 2002, imports of new or used CFC-based equipment have been banned (ODS use regulations) and imports of non-CFC refrigerants have increased (in 2003, 116.4 tonnes of non-CFC refrigerants were imported);
  - (c) It is reported that the distributors of refrigerants receive large purchase requests for CFCs from distributors in neighbouring countries, even though they prefer to satisfy the demand of their local clients;
  - (d) Between 2002 and 2003, the import price of CFC-12 sharply decreased from US \$4.20/kg to US \$2.64/kg, while the prices of all other CFCs and HCFC-22 refrigerants increased;
  - (e) More than 65 per cent of the 227 registered service workshops have been certified and over 2,000 refrigeration service technicians have been trained through the training programme approved under the original RMP; and
  - (f) In total, 37 CFC recovery and recycling machines have been distributed through the MAC recovery and recycling programme (United States) and the recovery and recycling programme (UNIDO).
- 16. Subsequently, UNEP (as the lead agency) indicated that all national stakeholders agreed that the 2003 CFC consumption levels reflect actual consumption in the country, since it was the first year that the import/export licensing system had been fully operational, therefore CFC imports had been accurately reported. However, as the Secretariat pointed out, the potential risk of CFC re-exportation has been identified and it would become more relevant as the actual CFC consumption in the country starts to diminish. However, there is no institutional infrastructure at the moment that would enable a more conclusive verification of this issue. This risk will be addressed through the programme for the prevention of illegal trade in ODS proposed in the RMP update.

- 17. There are also other factors that would corroborate the high CFC consumption reported for 2003, such as:
  - (a) The lack of enforcement and monitoring of several of the directives in the ODS regulation approved in 2002;
  - (b) The control of the ODS market by two economic groups, without communication links, which produces market distortions;
  - (c) Widespread poor maintenance and servicing practices among technicians due to the lack of appropriate servicing tools (leak detectors, vacuum pumps or scales); the continued use of CFC-11 as a cleaning agent; the use of large amounts of CFC-12 to detect leaks (before and after the repair), flushing the system, refilling the equipment and overfilling it to purge it of any air left in it; the availability of CFCs in small cans, which has allowed unskilled technicians to refill equipment at a low cost; and the lack of supervision and enforcement of the new rules of operation; and
  - (d) The import of used cars fitted with a CFC-based MAC unit to satisfy the demand of lower income consumers, and the on-going installation of CFC-based MAC compressors even for HFC-134a-based MAC systems.
- 18. The Secretariat also discussed with UNEP and UNDP issues related to calculating the level of CFC consumption in the commercial and industrial refrigeration sub-sectors, the number of vehicles with a CFC-based MAC unit still in operation; and whether or not servicing of HFC-134a based refrigeration systems with CFC-12 is a common practice in the country taking into consideration the difference in price between CFC and non-CFC refrigerants. All these issues were addressed and further documented by UNDP and UNEP.

#### Cost of the RMP project

- 19. The total funding so far approved for Honduras in the refrigeration servicing sector amounts to US \$415,000. As per Decision 31/48, the total maximum funding for the RMP update for Honduras would be US \$210,000 (at 50 per cent of the total amount previously approved). Subsequently, UNDP and UNEP revised the project budget accordingly. The revised RMP update consists of the following sub-projects:
  - (a) Technical assistance programme for the promotion of good practices and recovery and recycling (US \$150,000)
  - (b) Programme for certification and licensing of refrigeration technicians (US \$94,000);
  - (c) Programme for prevention of illegal trade of ODS (US \$23,000); and
  - (d) Programme for permanent monitoring of the RMP (US \$38,000).

# RECOMMENDATION

20. The Fund Secretariat recommends blanket approval of the project 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 RMP: technical assistance programme for the promotion of good practices and recovery and recycling	150,000	13,500	UNDP
(b)	Implementation of the RMP: programme for certification and licensing of refrigeration technicians	94,000	12,220	UNEP
(c)	Implementation of the RMP: programme for prevention of illegal trade of ODS	23,000	2,990	UNEP
(d)	Implementation of the RMP: programme for permanent monitoring of the RMP	38,000	4,940	UNEP

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