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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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PROJECT PROPOSALS: PARAGUAY

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

Refrigeration:

- Implementation of the RMP: national programme for recovery and recycling of CFC-12 refrigerant UNDP
- Implementation of the RMP: policy dialogue programme on complementary policy and enforcement UNEP
- Implementation of the RMP: monitoring and control of ODS and ODS based equipment/training customs and other inspection officers UNEP
- Implementation of the RMP: training of trainers and refrigeration technicians UNEP

PROJECT EVALUATION SHEET PARAGUAY

SECTOR: Refrigeration ODS use in sector (1999): 345.3 ODP tonnes
RMP

Sub-sector cost-effectiveness thresholds: n/a

Project Titles:

- (a) Implementation of the RMP: national programme for recovery and recycling of CFC-12 refrigerant
- (b) Implementation of the RMP: policy dialogue programme on complementary policy and enforcement
- (c) Implementation of the RMP: monitoring and control of ODS and ODS based equipment/training customs and other inspection officers
- (d) Implementation of the RMP: training of trainers and refrigeration technicians

Project Data	RMP			
	(a)	(b)	(c)	(d)
Enterprise consumption (ODP tonnes)				
Project impact (ODP tonnes)	23.05			
Project duration (months)	36	9	12	48
Initial amount requested (US \$)	285,158	12,000	50,000	184,000
Final project cost (US \$):				
Incremental capital cost (a)	262,280			
Contingency cost (b)	22,878			
Incremental operating cost (c)				
Total project cost (a+b+c)	285,158			
Local ownership (%)	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%
Amount requested (US \$)	285,158	10,000	44,920	168,020
Cost effectiveness (US \$/kg.)	12.37			
Counterpart funding confirmed?				
National coordinating agency	Unidad de Accion Ozono			
Implementing agency	UNDP	UNEP	UNEP	UNEP

<i>Secretariat's Recommendations</i>				
Amount recommended (US \$)	285,158	10,000	44,920	168,020
Project impact (ODP tonnes)	23.05			
Cost effectiveness (US \$/kg.)	12.37			
Implementing agency support cost (US \$)	37,071	1,300	5,840	21,843
Total cost to Multilateral Fund (US \$)	322,229	11,300	50,760	189,863

PROJECT DESCRIPTION

- (a) Implementation of the RMP: national programme for recovery and recycling of CFC-12 refrigerant
- (b) Implementation of the RMP: policy dialogue programme on complementary policy and enforcement
- (c) Implementation of the RMP: monitoring and control of ODS and ODS based equipment/training customs and other inspection officers
- (d) Implementation of the RMP: training of trainers and refrigeration technicians

Background

1. The refrigeration and air-conditioning sector plays a vital role in the nation's economy. Its predominant sectors are based on agriculture (cattle breeding, dairy products and vegetables), which are dependent on refrigeration equipment. Also, for at least six months of the year, the average temperature in the capital city is above 40° C. In consequence, refrigeration equipment, air conditioners and MAC units operate continuously. Therefore, the RMP project will assist refrigeration equipment users to reduce and subsequently phase out CFC consumption in a co-ordinated and cost effective manner.

2. In 1999, total CFC consumption in the refrigeration sector in the country was estimated at 349.1 tonnes, mainly CFC-12 (345.3 tonnes) for servicing domestic, commercial and industrial refrigeration equipment and MAC units. Consumption of HCFC-22 increased from 14.2 tonnes in 1998 to 23.2 tonnes in 1999.

3. There are approximately 5,000 refrigeration service technicians, working in both the formal and informal sectors (many of them have not received any formal training). This, combined with lack of tools and basic equipment results in handling practices which permit refrigerant emissions into the atmosphere.

Policy and legislation

4. The Government of Paraguay has already enacted legislation regarding ODS. Presidential Decree No. 4980 mandates registration of all importers of ODS and the need to have a license. Registered importers are obliged to declare amounts of ODSs imported in 1995, 1996 and 1997. As of 1 July 1999, the annual import of Annex A Group 1 substances for each registered importer has been restricted to the average amount imported over the period 1995-1997. Moreover, this quota will be proportionally reduced on a yearly basis until the year 2005 when all imports of ODS would be prohibited. The Decree also prohibits the production of ODS in the country (either pure or mixtures) and the import of recycled ODS and new or used CFC-based refrigeration equipment (as of July 1999); it also establishes labeling requirements for ODS containers and refrigeration equipment and prohibits the importation of these if not correctly labeled.

5. In addition, the Ministry of the Environment proposes to enact legislation to prohibit and sanction the purposeful emission of ODS, once refrigerant recovery and recycling operations during servicing practices are put in place (through the recovery/recycling project included in the RMP. The Ministry of the Environment also proposes to enact legislation to prohibit the manufacture or assembly of new CFC-based refrigeration or air conditioning equipment once the conversion of the commercial refrigeration enterprises have been completed.

Sub-projects within the RMP

6. The RMP includes the following sub-projects:

- (a) Training programme for monitoring and control of ODS and ODS based equipment for customs officers and other inspection officers to identify ODS and ODS-based equipment imported into the country to understand the impact of ODS on the environment; development of statistics on national ODS consumption on an on-going basis, effective implementation of legislation, regulations and economic instruments to control and phase-out the import and consumption of ODS and implementation and enactment of regulations and controls over the import of CFC-based products/equipment.
- (b) Policy dialogue programme on complementary policy and enforcement aimed at launching a policy dialogue process amongst the various stakeholders to further develop the policy framework (legislative and regulatory aspects) that will need to be implemented within the country to complete the phase-out of ODS. Such a process will provide local stakeholders with a voice, thereby encouraging their ownership and the development of an effective and practical policy framework based on national circumstances.
- (c) "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 for retrofit of CFC-based equipment; updating existing refrigeration training curriculum; registering, certifying and licensing of technicians; reduction of CFCs used for flushing and due to leaks and bad servicing practices.
- (d) Establishment of a recovery and recycling network comprising 78 refrigerant recovery and 7 recycling machine units for servicing commercial and industrial refrigeration equipment, at a total cost of US \$102,650. This subproject also provides for five training workshops for service technicians on practical demonstrations on recovery and recycling equipment. Implementation of this project will lead to recovery and recycling of 23 tonnes of CFC each year. This amount would be additional to the amount of refrigerant which would be saved from the teaching of good service and maintenance practices at the training seminars.
- (e) Additional activities, such as extension of training programmes, conversion of

refrigeration installations and end-user applications will be submitted to a later meeting of the Executive Committee.

Monitoring

7. The Ozone Unit will be responsible for the monitoring, co-ordination and implementation of proposed phase-out activities within the approved RMP. It will monitor the overall programme, distribute the recovery equipment and establish the recycling centers, monitor the amount of CFC recycled and redistribute the equipment as necessary. The project also includes a request in the amount of US \$9,500 for engaging a local consultant to collect data from all the service workshops that are included in the recovery and recycling project.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The Fund Secretariat sought clarification from UNDP on whether the Government of Paraguay was made aware of the commitments, responsibilities and financial implications associated with decision 31/48 (i.e., 50 per cent reduction of CFC baseline by 2005 and 85 per cent reduction by 2007; that all refrigeration sub-sectors have been carefully assessed; and a system established for monitoring and reporting on progress for delivering the phase out targets). UNDP stated that the Government of Paraguay was fully informed of decision 31/48 and understands the importance of effective monitoring and enforcement of the legislation approved, to continue the policy dialogue amongst stakeholders and successfully implement the training programmes proposed in the RMP, specially to customs officials.

2. UNDP also informed the Secretariat that during the preparation of the project, UNDP assisted the Government of Paraguay to include in the legislation (approved in July 1999) elements that would sustain ODS phase out activities in the servicing sector. The legislation in place has established a licensing system and mandates importers to be registered; prohibits imports of CFC-based refrigeration equipment and of recycled ODS; bans installation of new ODS production plants, provides for labeling ODS containers; and establishes a quota system with ODS reduction until end of 2005, when ODS consumption should be zero.

3. The Secretariat pointed out that additional activities, such as extensions of training, conversion of key refrigerant installations and end-user applications will be submitted later. UNDP considered it more convenient to finalize the RMP project, and prepare activities to address the end-user sector at a future date. Only after the sub-projects included in the RMP have been initiated, the appropriate conditions for the types of projects envisioned for the future, especially those relating to end-users (commercial or industrial refrigeration equipment and food processing facilities), will be known and understood. As a consequence, at present these projects could not be reliably identified and costed.

4. UNDP also informed the Secretariat that during the preparation of the RMP project, a number of commercial refrigeration manufacturing plants using 32.5 ODP tonnes were identified

(an umbrella project for the conversion of these enterprises has been included in the UNDP 2001 Business Plan).

5. The Secretariat and UNEP also discussed cost issues related to logistical arrangements and training material for the customs training, refrigeration service technicians and the policy dialogue programmes. Subsequently, it was agreed to adjust the costs for the programmes accordingly (as indicated in Table 1 above).

6. The Fund Secretariat also requested an explanation for the request for assessment and co-ordination of technical and policy issues included in the training programmes (at a total cost of US \$30,000). UNEP informed the Secretariat that the request for assistance and coordination of policy and technical issues represents UNEP's substantive management work (which is not covered under the agency's support cost), which includes: detailed definition of responsibilities of each stake-holder; definition of characteristics of the products and deliverables; guidance to local governments and experts on the work carried out at national level; review and comments on products and deliverables; preparation and delivery of targeted presentations at the workshops; follow-up and assistance on activities to be implemented after the workshop.

7. Upon a request by the Secretariat regarding the responsibilities of the implementing agencies in the overall implementation of the RMP, UNDP stated that as definitely bound by its agreement with the Executive Committee, it will indeed facilitate compliance by Paraguay with its commitments to the Protocol. As regarding the ODS phaseout resulting from legislative measures and the implementation of activities stipulated in the RMP, these are definitely country driven.

RECOMMENDATION

1. The Fund Secretariat, having taken into consideration the commitment by the Government of Paraguay that through the RMP project the country will be able to achieve the 50 per cent reduction of the CFC baseline by 2005 and 85 per cent reduction by 2007 without further assistance from the Multilateral Fund, recommends blanket approval of the training projects at the funding level indicated below:

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Implementation of the RMP: national programme for recovery and recycling of CFC-12 refrigerant	285,158	37,071	UNDP
(b)	Implementation of the RMP: policy dialogue programme on complementary policy and enforcement	10,000	1,300	UNEP
(c)	Implementation of the RMP: monitoring and control of ODS and ODS based equipment/training customs and other inspection officers	44,920	5,840	UNEP
(d)	Implementation of the RMP: training of trainers and refrigeration technicians	168,020	21,843	UNEP