



**United Nations
Environment
Programme**

Distr.
LIMITED

UNEP/OzL.Pro/ExCom/43/41
4 June 2004



ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-third Meeting
Geneva, 5-9 July 2004

PROJECT PROPOSALS: PERU

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

Refrigeration

- Refrigerant management plan update: technical assistance for the refrigeration sector UNDP
- Refrigerant management plan update: refrigeration technicians certification and licensing system UNEP
- Refrigerant management plan update: technical assistance for prevention of illegal CFC trade UNEP
- Refrigerant management plan update: monitoring programme UNEP

For reasons of economy, this document is printed in a limited number. Delegates are kindly requested to bring their copies to the meeting and not to request additional copies.

PROJECT EVALUATION SHEET
PERU

SECTOR: Refrigeration servicing sector ODS use in sector (2003): 140.2 ODP tonnes (preliminary figures)

Sub-sector cost-effectiveness thresholds: n/a

Project Title:

- (a) Refrigerant management plan update: technical assistance for the refrigeration sector
- (b) Refrigerant management plan update: refrigeration technicians certification and licensing system
- (c) Refrigerant management plan update: technical assistance for prevention of illegal CFC trade
- (d) Refrigerant management plan update: monitoring programme

Project Data	RMP update			
	(a)	(b)	(c)	(d)
Enterprise consumption (ODP tonnes)				
Project impact (ODP tonnes)(*)		42		
Project duration (months)				
Initial amount requested (US \$)	153,500	159,400	49,300	72,900
Final project cost (US \$):	123,000	86,000	26,000	40,000
Incremental capital cost (a)				
Contingency cost (b)				
Incremental operating cost (c)				
Total project cost (a+b+c)	123,000	86,000	26,000	40,000
Local ownership (%)		100		
Export component (%)		0		
Amount requested (US \$)	123,000	86,000	26,000	40,000
Cost effectiveness (US \$/kg.)				
Counterpart funding confirmed?				
National coordinating agency	Ozone Technical Office (OTO), Ministry of Production			
Implementing agency	UNDP	UNEP		

Secretariat's Recommendation				
Amount recommended (US \$)	123,000	86,000	26,000	40,000
Project impact (ODP tonnes)				
Cost effectiveness (US \$/kg)				
Implementing agency support cost (US \$)	11,070	11,180	3,380	5,200
Total cost to Multilateral Fund (US \$)	134,070	97,180	29,380	45,200

(*) The total amount of CFCs to be phased out from the RMP update project is 106.6 ODP tonnes.

PROJECT DESCRIPTION

1. In 2003, the total CFC consumption in Peru was estimated at 179.1 ODP. Currently, CFC is used in the refrigeration-servicing sector (over 71 per cent), the refrigeration manufacturing sector (12 per cent in on-going projects) and the foam sector (over 16 per cent) with a marginal consumption of CFC-113 in the solvent sector. The CFC baseline for compliance is 289.5 ODP tonnes.

2. The Peru country programme, approved by the Executive Committee at its 17th Meeting (July 1995), proposed the complete phase-out of CFCs by 2007. The accelerated phase-out was to be achieved through voluntary agreements with the industrial sector, providing technical assistance to major stakeholders and public awareness programmes.

3. Since the approval of the country programme, the Government of Peru has implemented several activities related to the phase-out of ODSs, which have resulted in:

- (a) A reduction in the CFC consumption from 367.0 ODP tonnes in 1995 to 179.1 ODP tonnes in 2003 (about 49 per cent reduction) through implementation of 27 ODS phase-out investment projects and other activities;
- (b) The complete conversion of the domestic refrigerator manufacturing plants to non-CFCs technologies;
- (c) Establishment of a comprehensive legal framework to promote, support and sustain the ODS phase out efforts;
- (d) A close working relation with industrial sectors involved in the use of ODSs;
- (e) The successful implementation of the refrigerant management plan (RMP) project to address CFC consumption in the refrigeration sector (the RMP consists of five projects approved separately, namely, a national programme for recovery and recycling of refrigerants, approved in May 1996; a national training programme on for refrigeration service technicians, approved in February 1997; the RMP project, approved in March 1999, which included three sub-projects: code of good practices in refrigeration, assistance for the development of a licensing system and training programme for customs officers); and
- (f) An increase in the prices of CFCs (current (2003) prices of refrigerants per kg are: US \$4.30 for CFC-11, US \$4.80 for CFC-12, US \$6.00 for HFC-134a and US \$2.90 for HCFC-22).

4. Notwithstanding the results so far achieved, the Government of Peru would need to address additional challenges to meet the 2005 and 2007 CFC reduction obligations under the Montreal Protocol. Specifically:

- (a) The country will need to reduce its CFC consumption by 34.4 ODP tonnes and 135.7 ODP tonnes by 2005 and 2007, respectively;

- (b) After several years of economic depression, the Peruvian economy is gathering momentum, which could result in an increase in the consumption of CFCs mainly used for servicing refrigeration equipment;
- (c) Even though training has been provided to refrigeration technicians and the code of good practices has been distributed to the technicians, there is still widespread use of poor maintenance practices that increase the use of CFCs;
- (d) Outstanding issues in the implementation of the ODS import licensing system that will need to be addressed, and the threat of illegal trade of CFCs and CFC-based equipment; and
- (e) Lack of appropriate monitoring and control of the activities.

5. In order to meet the 2005 and 2007 phase-out targets, the Government of Peru proposes to provide technical assistance to the private sector (end-users and refrigeration service technicians) to encourage their voluntary reduction of CFC consumption; promote information and awareness to support the phase-out of CFCs and enhanced the legal framework to uphold the CFC reduction initiatives, including support to the Customs Office to control illegal trade of CFCs; and establish a comprehensive monitoring and control programme.

6. The above strategy will be implemented through the RMP update, at a total cost of US \$511,600, which consists of the following sub- projects:

- (a) Technical assistance for the refrigeration sector (US \$153,500), to promote the use of good practices in manufacturing, installation, servicing and maintenance of refrigeration equipment, provide basic service tools and spare parts; and redistribute the recovery and recycling equipment already in operation;
- (b) Technical assistance for recovery and recycling of refrigerants in the MAC and military sub-sectors (US \$76,500), to reduce CFC consumption by facilitating the containment and re-use of CFCs, and distribute recovery/recycling machines to the sectors that were not benefited from the previous project;
- (c) Refrigeration technician certification and licensing system (US \$159,400), to promote the use of good practices in the refrigeration sector, by providing a set of agreed rules and the system to promote and enforce them;
- (d) Technical assistance for prevention of illegal trade of CFCs (US \$49,300), to further formalize the CFC trade control duties of both Governmental and private organizations, and further assist in disseminating the information necessary to prevent illegal trade; and
- (e) Monitoring programme (US \$72,900), to ensure the effectiveness of all the sub-projects within the RMP.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

7. The Secretariat notes that the project proposal has been submitted in accordance with the provisos of Decision 31/48 and subsequent decisions taken by the Executive Committee regarding RMP proposals, except for the level of funding requested.

Status of the original RMP

8. It is reported that Customs officers do not assign enough priority to attending the training programmes organized by the Ozone Unit, or do not take any action related to the illegal trade of CFCs since these activities are not perceived as part of their main duties. The Secretariat was informed that through the proposed technical assistance programme for prevention of illegal trade of CFCs, the perceived lack of institutionalization of CFC issues will be addressed with Customs authorities. A proposal will be made for the creation of an Ozone Protection Information and Enforcement Unit within the Customs Office, which will be the counterpart for all projects carried out by the Ozone Unit.

9. According to the refrigeration servicing technicians interviewed during the preparation of the RMP update, CFCs have not been recycled and recovered due to low prices of CFCs and insufficient recovery/recycling equipment. The Secretariat was informed that the lack of (i) economic incentives, (ii) stricter regulations and, (iii) a monitoring system were the main causes that limited the expected results of the recovery/recycling programme. Through the proposed technical assistance programme for the refrigeration sector the recovery/recycling equipment previously distributed within the original RMP will be redistributed among service workshops addressing the commercial and industrial refrigeration sub-sectors.

10. It is also reported that the train the trainer programme on good practices already implemented did not have the expected results due to insufficient training and to the large percentage of informal activity in the sector and, therefore, bad practices are still widely present in the country. The Secretariat was informed that the lack of institutionalization of good refrigeration practices is preventing their widespread adoption by the servicing sector. This issue will be addressed through activities that are proposed within the RMP update.

CFC consumption in the refrigeration servicing sector

11. The Secretariat discussed with UNEP and UNDP issues related with the calculation of the level of CFC consumption in the refrigeration servicing sector. Specifically, the amounts of CFCs used during servicing domestic and commercial refrigeration systems, the number of vehicles with a CFC-based MAC unit still in operation; the estimated life-time of the CFC-based MAC units taking into account the climatic conditions in the country (high relative humidity) and the bad condition of the national road network; and the consumption of CFCs in refrigeration systems used by the Armed Forces. All these issues were addressed and further documented by UNDP and UNEP.

Cost of the RMP project

12. The total funding so far approved for Peru in the refrigeration servicing sector amounts to US \$552,000. As per Decision 31/48, the total maximum funding for the RMP update for Peru would be US \$275,000 (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 for the refrigeration sector (US \$123,000);
- (b) Refrigeration technician certification and licensing system (US \$86,000);
- (c) Technical assistance for prevention of illegal trade of CFCs (US \$26,000); and
- (d) Monitoring programme (US \$40,000).

RECOMMENDATION

13. The Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level shown in the table below, on the understanding that:

- (a) The Government of Peru would have flexibility in utilizing the resources available under the technical assistance for the refrigeration sector sub-project, to address specific needs that might arise during project implementation;
- (b) To the extent possible, the technical assistance for the refrigeration sector sub-project would be implemented in stages so that resources can be diverted to other activities, such as additional training or procurement of service tools, if the proposed results are not achieved; and
- (c) UNDP and UNEP would provide appropriate monitoring throughout project implementation.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Refrigerant management plan update: technical assistance for the refrigeration sector	123,000	11,070	UNDP
(b)	Refrigerant management plan update: refrigeration technicians certification and licensing system	86,000	11,180	UNEP
(c)	Refrigerant management plan update: technical assistance for prevention of illegal CFC trade	26,000	3,380	UNEP
(d)	Refrigerant management plan update: monitoring programme	40,000	5,200	UNEP
