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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-sixth Meeting
Doha, 8-12 November 2008

PROJECT PROPOSAL: ECUADOR

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Phase-out

- National CFC phase-out plan: 2008 annual programme

World Bank

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Ecuador

(I) PROJECT TITLE	AGENCY
CFC phase out plan	IBRD

(II) LATEST ARTICLE 7 DATA (ODP Tonnes)				Year: 2007	
CFC: 28.3	CTC: 0	Halons: 0	MB: 122.4	TCA: 0	

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP Tonnes)										Year: 2007			
Substances	Aerosol	Foam	Halon	Refrigeration		Solvent	Process Agent	MDI	Lab Use	Methyl Bromide		Tobacco fluffing	Total Sector Consumption
				Manufacturing	Servicing					QPS	Non QPS		
CFC					28.2				0.1				28.3
CTC													0
Halons													0
Methyl Bromide										122.4			122.4
TCA													0

(IV) PROJECT DATA			2003	2004	2005	2006	2007	2008	2009	2010	Total
Montreal Protocol Consumption Limits			CFC	301.4	301.4	150.7	150.7	45.2	45.2	45.2	0.
Maximum Allowable Consumption (ODP Tonnes)			CFC	246.	235.	150.	80.	42.	21.	21.	0.
Project Costs (US\$)			IBRD	Project Costs	777,326.	439,319.	227,410.	227,411.	18,334.		1,689,800.
				Support Costs	58,300.	32,349.	17,055.	17,056.	1,375.		126,135.
Total Funds Approved in Principle (US\$)				Project Costs	777,326.	439,319.	227,410.	227,411.	18,334.		1,689,800.
				Support Costs	58,300.	32,349.	17,055.	17,056.	1,375.		126,135.
Total Funds Released by the ExCom (US\$)				Project Costs	777,326.	439,319.	227,410.	227,411.	0.		1,671,466.
				Support Costs	58,299.5	32,349.	17,055.	17,056.	0.		124,759.5
Total Funds Requested for Current Year (US\$)				Project Costs					18,334.		18,334.
				Support Costs					1,375.		1,375.

(V) SECRETARIAT'S RECOMMENDATION:	Pending
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Ecuador, the World Bank has submitted a request amounting to US \$18,334 plus agency support cost of US \$1,375 for the fifth tranche of the national CFC phase-out plan. The World Bank has also submitted a verification report prepared by a national consulting company on follow-up of the license system for import/export of ODS and import quotas in 2007, together with the 2007 progress report and 2008 annual implementation programme.

2. The national CFC phase-out plan for Ecuador (NPP) was approved at the 41st Meeting of the Executive Committee in December 2003 at a level of US \$1,689,800 to completely phase out the country's CFC consumption. To achieve this, a series of investment, non-investment, technical assistance, and capacity building activities are being implemented. No activities akin to a refrigeration management plan have been funded previously, therefore, the NPP included support for training refrigeration technicians and customs officers, and the establishment of an import licensing system.

Verification report

3. The report on the annual audit of the national CFC phase-out plan for Ecuador (verification report) has been prepared by the ENYA Corporation. The report indicates that 2007 import quotas have been established at 41.5 metric tonnes of CFCs, i.e. below the annual CFC consumption limit of 42 ODP tonnes set up in the Agreement. The report shows that 1.4 ODP tonnes of CFC-11, 20.3 ODP tonnes of CFC-12 and 0.1 ODP tonne of CFC-113 were imported in 2007 and specifies the source of the imports. The 2007 consumption is therefore 21.8 ODP tonnes, well below the maximum allowable under the Agreement.

2007 progress report

4. The 2007 annual implementation programme, approved by the 52nd Meeting of the Executive Committee, outlined activities to be accomplished and performance indicators to facilitate the monitoring of the progress achieved. The following activities have been undertaken:

- (a) Most of manufacturing companies in the foam and refrigeration sectors initially identified in the NPP have been found ineligible for funding since they closed down their operations or switched to non-CFC alternatives by themselves. The resources available have been diverted to other activities described below. Conversion of three eligible manufacturing companies in the foam sector has been completed and CFC-free foam manufacturing started in September 2006. The investment component in this sector was completed in 2007;
- (b) The "train-the-trainers" programme for 15 professional refrigeration instructors was implemented in 2004. Since then, regular training activities have been undertaken on good practices in refrigeration servicing, including recovery/recycling operations. During 2006-2007, 45 training workshops were completed resulting in training of 590 refrigeration technicians. Training of the remaining 418 technicians will be completed at about the time of the 56th Meeting;
- (c) It was planned to provide 130 recovery and recycling (R&R) machines under this programme, to be delivered by the end of 2008. Forty eight machines were delivered to workshops in January 2008. A second batch of 48 machines was delivered to the country in June 2008, for distribution in August 2008 and the remaining 34 R&R machines will be delivered by December 2008;

- (d) The World Bank has approved the purchase of a gas chromatograph and hydrogen generator for the amount of US \$39,565 for the customs office in Guayaquil. The construction of a related laboratory has been finished and the equipment was installed and tested;
- (e) A survey has been conducted in the chiller sector consuming approximately 1.78 ODP tonnes. About US \$360,000 has been allocated for the incentive programme in replacing CFC-based chillers. The financial arrangements for the replacement of two chillers are under discussion with a beneficiary. Another beneficiary proposed to replace two CFC chillers with 120 window air-conditioners. The study on the impact of this option on energy efficiency is presently ongoing;
- (f) Information related to the Government of Ecuador's policies in phasing-out CFCs has been disseminated to the industrial sectors and public in general through a variety of media;
- (g) The purchase of the distillation column for a CFC reclamation centre was cancelled since the local demand for R12 has substantially decreased in the last years due to the existence of alternative drop-in refrigerants; and
- (h) The ratification of the Beijing Amendment has been deferred due to a process of reorganization in the Government.

5. Of the total funding, US \$478,155 was disbursed in the years 2004 to 2006. In the reported year 2007, another US \$750,175 was disbursed, leaving a balance of US \$443,136 plus the funds requested for approval for the remaining project duration.

2008 Annual Implementation Programme

6. In 2008, the consumption has to remain at or below 21 ODP tonnes. Ecuador is requesting the release of the remaining US \$18,334 to achieve this objective, making this the final tranche. The activities to be implemented in 2008-2009 are a follow-up on the Import/Export licensing system and import quotas, the development and implementation of a training programme on R&R, and training courses on good practices. Further, a chillers replacement component will be implemented, and a training course on chiller maintenance and best practices conducted. Other activities will include dissemination of information related to the phase-out of CFCs in the manufacturing sector by the end of 2008, raising public awareness and encouraging the hiring of only certified technicians to repair refrigeration systems.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

7. The Secretariat noted from the verification report prepared by ENYA that the 2007 CFC imports were below the cumulative quotas issued and below the annual CFC consumption limit of 42 ODP tonnes set up in the Agreement.

8. The original submission had contained an HCFC survey as part of the annual plan 2009. The Secretariat raised the issue of using funding for HCFCs. This may require a decision from the Executive Committee, and possibly a change in the Agreement, since it is stated there that "the Country may have the flexibility to reallocate the approved funds, or part of the funds [...] to achieve the goals prescribed under this Agreement". The Agreement also specifies in its Appendix 1-A only substances in Annex A

Group I and Annex B Group I, not substances in Annex E (HCFC). The World Bank subsequently changed the related elements of the 2009 plan and allocated the related funding to the chiller component.

9. The implementation of the large-scale R&R programme in Ecuador (at a cost of US \$676,736) was one focus of the Secretariat's attention for the last two of years. The Secretariat commented on the scope of this programme in 2006 and 2007 respectively, referring to Article 8 (b) of the Agreement and decision of 41/100 requiring a sound estimate of the likely demand for R&R equipment and the procurement and distribution of the equipment in several stages, as well as a review of the utilization of equipment to ensure further demand.

10. The World Bank consistently advised the Secretariat that the related recommendations have been followed. The Secretariat requested information on the amount of CFCs recovered and reused, and how that figure was taken into account when deciding on the purchase of further R&R machines. This data had not yet been received by the time of issuance of this document. The World Bank clarified that the number of machines required was determined on the basis of the number of eligible workshops and the funds available. Under a different item, the World Bank advised that the purchase of a distillation column enhancing the reclamation capability of the country has been cancelled because of the declining demand in CFC refrigerants.

11. The Secretariat requested clarification regarding a number of other issues. One related to the maintenance of a gas chromatographer - a complex analytical instrument - installed in a customs office. While this issue is resolved, the Secretariat was notified that the same customs office requires a further upgrade of its analytical capacity to include a mass spectrometer; the plan foresees the related purchase if there are remaining funds, with a final decision to be taken by June 2009. A second issue raised by the Secretariat was the possible replacement of two chillers with 120 individual window air-conditioners, and the impact on energy consumption, as well as the choice of alternative refrigerants. The World Bank's response made clear that a study is ongoing covering, *inter alia*, an energy consumption estimate, the possible climate impact of different scenarios from refrigerant emissions, the required control systems and the infrastructure within the country to support service and maintenance. Support of this undertaking through the NPP will be decided taking into account the results of the study.

12. The requested information on the recovered and recycled refrigerants and its influence on the funding of recovery and recycling equipment will not be available until mid-October. Since this relates to a specific clause in the agreement, the Secretariat can presently not finalise its recommendation. The Secretariat will at the same time try to achieve an understanding of the results of the study on the potential replacement of CFC-based chillers with window air-conditioners, which might also be available mid-October.

RECOMMENDATION

13. Pending.
