UNITED NATIONS

EP

United Nations Environment Programme

Distr.
LIMITED

UNEP/OzL.Pro/ExCom/38/23
28 October 2002

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-eighth Meeting
Rome, 20-22 November 2002

PROJECT PROPOSALS: ARGENTINA

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

Aerosol

- Conversion from CFC-11, CFC-12, CFC-113 and MCF into HCFC for technical aerosols at Servex S.R.L. — World Bank

Foam

- Foam sector ODS phase-out plan — UNDP

PROJECT EVALUATION SHEET
ARGENTINA

SECTOR: Aerosol ODS use in sector (2000): 116 ODP tonnes

Sub-sector cost-effectiveness thresholds: US $4.40/kg

Project Title:

(a) Conversion from CFC-11, CFC-12, CFC-113 and MCF into HCFC for technical aerosols at Servex S.R.L.

Project Data	**Contract filler**
	Servex
Enterprise consumption (ODP tonnes)	36.40
Project impact (ODP tonnes)	36.40
Project duration (months)	36
Initial amount requested (US $)	185,174
Final project cost (US $):	
Incremental capital cost (a)	
Contingency cost (b)	
Incremental operating cost (c)	899,627
Total project cost (a+b+c)	899,627
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US $)	160,160
Cost effectiveness (US $/kg.)	4.40
Counterpart funding confirmed?	Yes
National coordinating agency	OPROZ
Implementing agency	World Bank

Secretariat's Recommendations	
Amount recommended (US $)	160,160
Project impact (ODP tonnes)	36.40
Cost effectiveness (US $/kg)	4.40
Implementing agency support cost (US $)	20,821
Total cost to Multilateral Fund (US $)	180,981

PROJECT DESCRIPTION

Conversion from CFC-11, CFC-12, CFC-113 and MCF into HCFC for technical aerosols at Servex S.R.L

1. The Government of Argentina is submitting a project proposal for the conversion of technical aerosols manufactured for the maintenance of electronic and industrial equipment by Servex (98,000 cans/year) to non-CFC technologies. Implementation of this project will result in the phase out of 36.4 ODP tonnes of ODSs (7.6 ODP tonnes of CFC-11, 23.3 ODP tonnes of CFC-12, 5.3 ODP tonnes of CFC-113, and 0.2 ODP of MCF).

2. Servex is requesting assistance from the Multilateral Fund to cover only incremental operating costs associated with the replacement of CFC-11 and CFC-12 (as a propellant) by a mixture of HCF-134a (as propellant) and HCFC-141b (as solvent), and CFC-113 by vertrel, a non-ODS solvent.

3. The total incremental operating costs (NPV for 4 years) have been estimated at US $970,876; however, based on the cost-effectiveness threshold (US $4.40/kg), the maximum funding requested is US $209,246.

4. A letter regarding justification for the use of HCFC technologies from the Government of Argentina is attached.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

5. The Secretariat sought a clarification on whether the project proposal for Servex will complete the phase out of ODSs in the aerosol sector in Argentina. The World Bank indicated that it will assist the Government of Argentina in the preparation of the country programme update to establish the remaining level of ODS consumption in the country, including the aerosol sector.

6. The Secretariat noted that there were errors in calculation of ODP tonnes to be phased out and their incremental operation costs. Subsequently, the World Bank reviewed the operating costs on the basis of a consumption of 36.4 ODP tonnes.

7. The Secretariat also pointed out that the technical reviewer of the project proposal raised technical issues related to solvency and pressure and cost issues regarding the blend of HFC-134a and HCFC-141b selected for use. The reviewer recommended an alternative blend, which would satisfy the requirement of solvency and pressure without the need for more costly reinforced cans. The World Bank indicated that tests so far undertaken by the company indicated that the use of HCFC-22 needs a special package and, therefore, decided to use the blend proposed in the project proposal.

RECOMMENDATION

8. 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)	Conversion from CFC-11, CFC-12, CFC-113 and MCF into HCFC for technical aerosols at Servex S.R.L.	160,160	20,821	World Bank

PROJECT EVALUATION SHEET
ARGENTINA

SECTOR: Foam | ODS use in sector (2001): 1,110.0 ODP tonnes

Sub-sector cost-effectiveness thresholds: Integral skin US $16.86/kg; Rigid US $7.83/kg

Project Titles:

(a) Foam sector ODS phase-out plan

Project Data	**Multiple-subsectors**
	Sector plan
Enterprise consumption (ODP tonnes)	233.10
Project impact (ODP tonnes)	210.30
Project duration (months)	36
Initial amount requested (US $)	1,579,933
Final project cost (US $):	
Incremental capital cost (a)	2,208,304
Contingency cost (b)	196,050
Incremental operating cost (c)	126,500
Total project cost (a+b+c)	2,530,854
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US $)	1,579,933
Cost effectiveness (US $/kg.)	7.51
Counterpart funding confirmed?	
National coordinating agency	OPROZ
Implementing agency	UNDP

Secretariat's Recommendations	
Amount recommended (US $)	1,324,843
Project impact (ODP tonnes)	192.30
Cost effectiveness (US $/kg)	6.89
Implementing agency support cost (US $)	155,733
Total cost to Multilateral Fund (US $)	1,480,576

PROJECT DESCRIPTION

Sector background

CFC (Annex A Group I) Consumption and Phase-out Profile

According to Decision 35/57 Argentina has selected Option 1 as starting point amounting to:	**4,697.2 ODP tonnes**
- Remaining consumption of CFCs eligible for funding as at 38th Meeting (per Decision 35/57, proviso B)	2,549.1 ODP tonnes
- Impact of ALL CFC projects submitted for funding at the 38th Meeting	249.1 ODP tonnes
- Maximum remaining consumption of CFCs eligible for funding following approval of projects submitted to 38th Meeting	2,300.0 ODP tonnes

Foam Sector Profile

- Consumption of CFCs in the foam sector in 2001*	1,110.0 ODP tonnes
- Amount of CFCs to be phased out in on-going foam projects	525.0 ODP tonnes
- Impact of foam projects submitted for funding at the 38th Meeting on remaining CFC consumption	210.3 ODP tonnes

* Based on data reported to the Fund Secretariat on 29 April 2002 by the Government of Argentina.

Foam sector ODS phase-out plan

9. UNDP has submitted a foam sector phase-out plan to the 38th Meeting for the Government of Argentina. UNDP indicated that with the approval of the plan, the Government of Argentina is committed to allow no further use of CFCs and not to request any further funding for the sector.

CFC consumption

10. The CFC consumption covered by the sector plan is estimated to be 233.1 ODP tonnes with project impact (accounting for use of HCFC-141b) of 210.3 ODP tonnes. 98 rigid polyurethane foam producing enterprises account for 211.5 ODP tonnes of the CFC-11, while 1.6 tonnes is consumed by one integral skin foam producing enterprise. Out of the 98 rigid foam enterprises 8 have CFC-11 consumption ranging from 6.0 tonnes to 11.3 tonnes. The rest have CFC-11 consumption ranging from 100 kg – 4 tonnes (with two of them consuming 4.5-5 tonnes). The consumption of 45 out of the 99 identified enterprises (about 45%) has been verified by the Government. The total consumption of 233.1 tonnes also includes 20 tonnes estimated for a group of 17 enterprises described as nominally identified. It is explained that during identification of the enterprises it was discovered that there are a few enterprises that are not possible to quantify currently but who are likely to be eligible for funding. The amount of

20 tonnes was estimated as the consumption of such enterprises which may surface during implementation of the plan.

11. For purposes of calculating the eligible incremental cost of the project and for implementation of the plan the enterprises have been grouped by foam application. In addition, there are two groups of enterprises grouped by size, namely larger enterprises (consuming 6 tonnes to about 11 tonnes each of CFC-11 per year) and very small enterprises (consuming 200-400 kg of CFC-11 each per year).

12. The table below provides a summary of the group of enterprises and their CFC consumption.

Description	**No. of companies**	**Type of foam / application**	**CFC consumption ODP tonnes**	**Project impact ODP tonnes**
larger (individual) companies	8	Spray foam, injection (cavity filling)	73.6	66.4
Spray	42	Sprayfoam	65.1	58.7
Panels/doors	18	Injection/ cavity filling	36.2	32.6
Multiple applications	18	Sprayfoam/ injection	34.1	30.7
Very small enterprises	10	Sprayfoam/ injection	2.5	2.3
Nominally identified	17	Various	20	18.0
Integral skin	1	Integral skin foam molding for furniture	1.6	1.6
Total	114		233.1	210.3

Baseline equipment

13. The majority of the companies who have foam machines use low pressure sprayfoam machines irrespective of foam type (mainly locally-made SATH and AISTEC). There are a few enterprises that use Gusmer and Graco high pressure sprayfoam machines.

Phase-out strategy

14. The Government enacted a national law in 1991 which serves as the framework for the use of CFCs and halons in the country and is preparing to implement a number of regulations to exercise control of ODS consumption in each sector. The national law prohibits the establishment of new CFC and halon facilities. Under the foam sector ODS phase-out plan the remaining CFC in the sector will be eliminated through measures such as:

- awareness campaigns;
- verification visits to confirm ODS use and conversion plans;
- adoption of regulatory measures to tighten the quota system and ban CFC use;

- technical and financial assistance from the Multilateral Fund.

Calculation of project costs

Investment component

15. The costs of the projects for enterprises having CFC consumption exceeding 0.5 tonnes/year were calculated based on standard calculations for rigid and integral skin foam projects. The following criteria were used for provision of equipment in the project.

Foam production	Baseline machine	Replacement machine	Unit cost US $
Injection/panel	low pressure dispenser	12-15 kg/min HP PIP*	25,000
Sprayfoam	low pressure dispenser	7.5 kg/min spray	15,000
Panel	manual	30 kg/min LPD*	20,000
Integral skin foam	manual	30 kg/min LPD*	20,000

* HP PIP: high pressure pour-in-place dispenser; LPD: low pressure dispenser.

16. Trial costs were taken to be US $3,000 per enterprise while technical assistance was calculated as US $73,500 and included in non-investment component of the project. The standard deductions for old age or lack of equipment in the baseline were factored into the calculation. Incremental operating costs were calculated using standard methods.

Non-investment component

17. The non-investment component was estimated to be US $139,150. It includes costs of meetings, eligibility verification, project management etc. and the technical assistance component of the investment projects.

18. The summary of the costs of the projects in the plan is as shown in the table below. The amounts requested as grants for individual enterprises were capped by the threshold funding limit for the respective sub-sector:

	Impact ODP tonnes	Project Cost US $	Requested Grant US $	Cost-effectiveness US $/kg
Rigid foam				
Larger enterprises	66.4	317,607	317,607	4.78
Sprayfoam	58.7	793,753	459,621	7.83
Panels/door	32.6	556,049	255,258	7.83
Multiple applications	30.7	553,964	240,381	7.83
Nominally identified	18	140,940	140,940	7.83
Integral skin	1.6	29,391	26,976	16.86
Total	**210.3**	**2,391,704**	**1,440,783**	**6.85**

Funding requested

19. The total amount of US $1,579,933 is requested as the grant amount for the sector plan. This is made up of US $1,440,783 and US $139,150 for investment and non-investment components respectively. With the CFC-11 phase-out impact of 210.3 ODP tonnes the projects' overall cost-effectiveness would be US $7.51/kg. The schedule of payment and associated CFC phase-out target is as follows:

Year	2002	2003	2004
Amount requested US $	1,076,312	495,921	7,700
CFC phase-out target ODP tonnes	151.6	58.7	

Justification for the use of HCFC-141b

20. Justification for the use of HCFC-141b by the foam companies in the sector plan has been provided by UNDP based on technological and economic analysis of the operation of each enterprise. UNDP stated that its technical expert who pre-appraised the projects prior to preparation of the project document had discussions with government representatives on the choice of technology for replacing the CFC-based technology. The representatives were briefed in detail about the existing decisions and technological and economic impacts of the use of alternatives. The conclusions reached during the discussion formed the basis for the choice of HCFC-141b.

21. A letter of transmittal from the Government of Argentina endorsing the use of HCFC-141b by the enterprises is attached to the project document consistent with Decision 27/13.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

22. During the review of the sector plan the Secretariat identified some technical and cost issues to be addressed by UNDP. These included the calculation of the cost of non-investment component and some aspects of the investment component, the scope and duration of the projects in relation to the request for approval of funding for a sector plan. The Secretariat and UNDP discussed the issues raised and agreed as follows:

- the project will be considered as an terminal umbrella project with one-time funding to be implemented in 36 months;
- the CFC-consumption of 20 ODP tonnes attributed to the nominally identified enterprises will be taken out of the calculation of the eligible incremental costs;

- the Government will be provided an amount of US $25,000 as management cost in view of the terminal nature of the project which could require co-ordination and supervision on the part of the government;
- the Government's undertaking not to request further assistance for projects in the sector still holds. However, the Government requests flexibility in the application of the approved funds to the phase-out of the remaining CFC in the foam sector.

23. Based on the above considerations the cost of the project was agreed as follows:

Investment component	US $1,299,843
Non-investment component	US $25,000
Total	US $1,324,843
Project impact	192.3 ODP tonnes
Cost-effectiveness	US $6.89/kg
Agency support cost	US $155,733
Total cost to the Multilateral Fund	US $1,480,576

RECOMMENDATIONS

24. The Fund Secretariat recommends:

(a) blanket approval of the Argentina foam sector ODS phase-out plan with the level of funding and associated support cost as indicated below;

(b) that the Executive Committee takes note that the project has been approved as a terminal umbrella project rather than a ODS phase-out sector plan with multi-year funding agreement;

(c) that the Executive Committee grants the Government of Argentina flexibility in the use of the approved funds for the phase-out of the remaining CFCs in the foam sector;

(d) that the Executive Committee takes note of the undertaking made by the Government of Argentina not to seek further assistance for any activity in the foam sector upon approval of this project.

	Project Title	Project Funding (US$)	Support Cost (US$)	Implementing Agency
(a)	Foam sector ODS phase-out plan	1,324,843	155,733	UNDP

GOVERNMENT NOTE
OF TRANSMITTAL OF INVESTMENT PROJECTS

PROJECTS OF THE GOVERNMENT OF ARGENTINA

The Government of Argentina requests the WORLD BANK to submit the project listed in Table 1 below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol for consideration at its 38th Meeting.

Section I: ODS Consumption Data

1. The ODS consumption figures of the project have been validated by the National Ozone Unit (NOU).

2. The consumption data have been retained in the records of the NOU for reference and/or future verification.

3. The Government has been advised by the NOU that the agreement to the projects indicates a commitment to ensure that the validated phaseout figures will be realized and will yield a sustained reduction from the 2001 consumption.

Table 1: AEROSOL Project Submitted to the 38th Meeting of the Executive Committee

	PROJECT TITLE	Type of ODS	Consumption 2001 (ODP t)	Amount to be Deducted (ODP t)	Implementing Agency
SERVEX		CFC-11	6.7	6.7	WORLD BANK
		CFC-12	25.4	25.4	
		CFC-113	5.449	5.449	
		MCF	0.2362	0.2362	
	TOTAL		37.785	37.785	

Section II: Other Relevant Actions Arising from Decision 33/2

4. It is understood that, in accordance with the relevant guidelines, the funding received for a project would be partly or fully returned to the Multilateral Fund in cases where technology was changed during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;

5. The National Ozone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation of CFCs and to combine this monitoring with occasional unscheduled visits to importers and foam companies to check invoices and storage areas for unauthorized use of CFCs.

6. It is understood that the National Ozone Unit might conduct a determined number of unscheduled visits to the recipient enterprises.

7. The National Ozone Unit will cooperate with the relevant implementing agencies to conduct safety inspections where applicable and keep reports on incidences of fires resulting from conversion projects.

Section III: Projects Requiring the Use of HCFCs for Conversion

In line with Decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, the Government

(a) has reviewed the specific situations involved with the projects as well as its HCFC commitments under Article 2F; and

(b) has nonetheless determined that, at the present time, the projects needed to use HCFCs for an interim period with the understanding that no funding would be available for the future conversion from HCFCs for the company/companies involved.

Name and signature of Responsible Officer:

Ambassador Raúl Estrada Oyuela

Designation:

Date: 24/9/2002

Special Representative for Environmental Negotiations

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GOVERNMENT NOTE
OF TRANSMITTAL OF INVESTMENT PROJECTS

PROJECTS OF THE GOVERNMENT OF ARGENTINA

The Government of Argentina requests UNDP to submit the project listed in Table 1 below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol for consideration at its 38th Meeting.

Section I: ODS Consumption Data

1. The ODS consumption figures of the project have been validated by the National Ozone Unit (NOU) to the level required under this performance agreement.

2. The consumption data have been retained in the records of the NOU for reference and/or future verification.

3. The Government has been advised by the NOU that the agreement to the projects indicates a commitment to ensure that the validated phaseout figures will be realized and will yield a sustained reduction from the 2001 consumption.

Table 1: Foam Project Submitted to the 38th Meeting of the Executive Committee

PROJECT TITLE	Type of ODS	Consumption (ODP t)	Amount to be Deducted (ODP t)	Implementing Agency
Foam Sector ODS Phaseout Plan	CFC-11	209.75	236.1	UNDP
TOTAL		**209.75**	**236.1**	

Section II: Other Relevant Actions Arising from Decision 33/2

4. It is understood that, in accordance with the relevant guidelines, the funding received for a project would be partly or fully returned to the Multilateral Fund in cases where technology was changed during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;

5. The National Ozone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation of CFCs and to combine this monitoring with occasional unscheduled visits to importers and foam companies to check invoices and storage areas for unauthorized use of CFCs.

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Name and signature of responsible Officer:

Ambassador Raúl Estrada Oyuela

Designation:

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