



**United Nations
Environment
Programme**

Distr.
LIMITED

UNEP/OzL.Pro/ExCom/38/52
24 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 PROPOSAL: VENEZUELA

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

Foam:

- Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of rigid P.U. foams: Umbrella No. 2 project.

UNIDO

**PROJECT EVALUATION SHEET
VENEZUELA**

SECTOR: Foam ODS use in sector (2001): 540.6 ODP tonnes

Sub-sector cost-effectiveness thresholds: Rigid US \$7.83/kg

Project Titles:

- (a) Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of rigid p.u. foams:
Umbrella No. 2 project.

Project Data	Rigid
	Umbrella No. 2
Enterprise consumption (ODP tonnes)	149.01
Project impact (ODP tonnes)	135.46
Project duration (months)	24
Initial amount requested (US \$)	1,026,072
Final project cost (US \$):	
Incremental capital cost (a)	613,000
Contingency cost (b)	21,300
Incremental operating cost (c)	407,632
Total project cost (a+b+c)	1,041,932
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	851,432
Cost effectiveness (US \$/kg.)	6.29
Counterpart funding confirmed?	
National coordinating agency	FONDOIN
Implementing agency	UNIDO

Secretariat's Recommendations	
Amount recommended (US \$)	851,432
Project impact (ODP tonnes)	135.46
Cost effectiveness (US \$/kg)	6.29
Implementing agency support cost (US \$)	103,658
Total cost to Multilateral Fund (US \$)	955,090

PROJECT DESCRIPTION

Sector background

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

According to Decision 35/57 Venezuela has selected Option 2 as starting point amounting to:	2,235.9 ODP tonnes
- Remaining consumption of CFCs eligible for funding as at 38 th Meeting (per Decision 35/57, proviso B)	2,180.3 ODP tonnes
- Impact of ALL CFC projects submitted for funding at the 38 th Meeting	135.46 ODP tonnes
- Maximum remaining consumption of CFCs eligible for funding following approval of projects submitted to 38 th Meeting	2,044.84 ODP tonnes

Foam Sector Profile

- Consumption of CFCs in the foam sector in 2001*	540.6 ODP tonnes
- Amount of CFCs to be phased out in on-going foam projects	192.7 ODP tonnes
- Impact of foam projects submitted for funding at the 38 th Meeting on remaining CFC consumption	135.46 ODP tonnes

* Based on data reported to the Fund Secretariat on 27 September 2002 by the Government of Venezuela.

Rigid polyurethane foam

Umbrella No. 2 project

1. The umbrella project is submitted in accordance with the foam sector strategy submitted by the Government of Venezuela to the 36th Meeting of the Executive Committee. However, instead of two umbrella projects and a terminal umbrella project foreseen in the strategy, the Government has decided to combine two umbrella projects and submit as one project to this meeting. The remaining companies in the sector will be included in a national phase-out plan which is planned to be submitted in the future.

2. UNIDO has indicated that the project when approved will be completed in two years, namely end of 2004.

3. The project covers 21 rigid foam producing companies consuming a total of 149 ODP tonnes of CFC-11. The consumption per enterprise ranges from about 4 to 20 tonnes per year. They produce polyurethane rigid foam for a variety of applications. Six of the enterprises mix the foam and pour by hand while the rest use a variety of old and relatively new foaming equipment. The profile of the 21 enterprises is shown in Table 1 below.

Table: 1 Profile of Enterprises in the Venezuela Umbrella-2 Project

Company	Foam Product	Baseline Equipment/ (Date of Installation	Consumption ODP tonnes	Project Impact ODP tonnes	ICC * US \$	IOC US \$	Total Project Cost US\$	Requested Grant US \$	CE US \$/kg	
1	Cabicar	Truck bodies	Handmix	3.64	3.24	34,000	10,448	44,448	24,448	7.55
2	Corp Lelli		Handmix	4.83	4.3	42,000	13,873	55,873	33,373	7.76
3	Corp Quooler	Spray	7 kg/min Gusmer FF-1600 (1989)	4.59	4.09	8,500	11,954	20,454	20,454	5.00
4	Fanametal	Water boilers	25 kg/min SAIP LPD (1990)	12.22	10.88	52,000	35,075	87,075	82,075	7.54
5	Fibrosteel	Panels	Handmix	20.37	18.13	85,300	58,458	143,758	141,758	7.82
6	Fibrocaven	Truck bodies	15, 30 kg/min Decker LPD (1986, 1993)	4.38	3.9	41,850	12,562	54,412	30,412	7.80
7	Firecon	Ice cream carts	40 kg/min Decker LPD (1995)	12.09	10.76	11,250	34,701	45,951	45,951	4.27
8	J.F. y Asociados	Spray	3 Glasscraft 10 kg/min (1985, 1986(2))	11.18	9.95	19,500	29,097	48,597	48,597	4.88
9	Medina Plásticos C.A.	Cool boxes	Gusmer FF-1600 (1990)	13.09	11.65	8,500	34,059	42,559	42,559	3.65
10	Sandrin C.A.	Panels	60 kg/min Cannon LPD	5.07	4.51	44,550	14,552	59,102	34,602	7.67
11	Metal. Sudameris	Truck bodies	Handmix	4.42	3.93	41,850	12,687	54,537	30,537	7.77
12	Air Gomez	Air cond. Insulation	15 kg/min Decker LPD, Gusmer FF-1600	6.2	5.52	16,750	16,127	32,877	32,877	5.96
13	Indus. Fibrepoxi	Truck bodies	30 kg/min Decker LPD	4.29	3.82	46,800	12,313	59,113	29,613	7.75
14	Grupo Celta	Air cond. Insulation	Handmix	5.94	5.28	23,625	8,880	32,505	32,505	6.16
15	Industrias Mitani	Rigid foam-flower industry	40 kg/min Decker	3.68	3.28	34,500	6,076	40,576	25,576	7.80
16	Inyectofibra	Truck bodies	Decker LPD, Glasscraft (1993, 1995)	5.07	4.51	16,750	13,195	29,945	29,945	6.64
17	Oficina Tec. Calas	Tank Insulation	Gusmer FF-1600, Gusmer H-2000	12.35	10.99	14,000	32,142	46,142	46,142	4.20
18	Talleres Carabobo	Truck bodies	15, 40 kg/min Decker LPD (1990, 1994)	4.29	3.82	17,500	12,313	29,813	29,813	7.80
19	Talleres Martini	Truck bodies	15 kg/min Decker LPD (1991)	4.59	4.09	11,250	13,184	24,434	24,434	5.97
20	Talleres Roa	Sports goods	Glasscraft (1990)	5.33	4.74	40,800	13,872	54,672	36,672	7.74
21	Thermoaislantes	Pipe insulation	Handmix	4.2	3.74	23,025	12,065	35,090	29,090	7.78
Total	21			151.82	135.46	634,300	407,632	1,041,932	851,432	6.29

LPD = Low pressure dispenser

* ICC includes contingency

4. All the enterprises will convert their production to HCFC-141b technology through the use of low pressure machines and high pressure sprayfoam machines. The total incremental capital cost of the project (including contingency) is US \$634,300 while the total incremental operating cost amounts to US \$407,632 for a total project cost of US \$1,041,932.

Justification for the use of HCFC-141b

5. Justification for the use of HCFC-141b based on technological and economic analysis of the operations of the enterprises is provided in the project document. UNIDO indicated that the choice of HCFC-141b as interim technology was made by the enterprises following discussions with them on available alternatives and relevant decisions of the Executive Committee regarding the use of HCFC-141b as interim substitute foam blowing agent. Consistent with Decision 36/56 (c) commitment letters from all 21 enterprises attesting to the information received from UNIDO have been attached to the project document.

6. A letter of transmittal from the Government of Venezuela endorsing the use of HCFC-141b by the companies is also attached to the project document. The Government further provided assurances that the transition period selected (30 years) notwithstanding, the enterprises will subsequently phase-out HCFC-141b to non-ODS substances when economically feasible alternatives become available in the country and consistent with the rules of the Montreal Protocol or the Multilateral Fund. UNIDO also indicated that the issue will be further addressed during the projects' implementation.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS**COMMENTS**

7. The project was not included in UNIDO's 2002 business plan. However, UNIDO informed the Secretariat that it was submitted to replace two projects of the same value planned for Argentina which the Government of Argentina by a letter dated 11 September 2002 requested UNIDO to defer to its 2003 business plan.

8. The Fund Secretariat and UNIDO discussed the umbrella project against the background of the scale of the enterprises' foam production, foam application, baseline processes and their conversion to HCFC-141b and agreed to calculate the incremental costs of conversion machines as follows.

Where an enterprise:

- (a) is currently using low pressure machine which is not older than 10 years it will continue to use such machine after conversion with retrofit cost of US \$7,500;
- (b) is using a low pressure machine older than 10 years it will be replaced with new low pressure machine. The eligible cost of such machine will be calculated on the basis of a 5% deduction from the cost of the machine per year for each year exceeding 10 years;
- (c) does not have any machine in the baseline it will be provided with a low pressure machine with 25% deduction from the cost of the machine for technology upgrade;

- (d) currently uses high pressure machine the conversion will be based on retrofit cost of the baseline machine.

9. The summary of the project costs is as follows:

Total project cost:	US \$1,041,932
Eligible grant:	US \$ 851,432
Project impact:	135.46 ODP tonnes
Cost-effectiveness:	US \$6.29/kg

RECOMMENDATIONS

10. The Fund Secretariat recommends blanket approval of the Venezuela foam sector Umbrella No. 2 project with the funding level and associated support cost as indicated below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of rigid p.u. foams: Umbrella No. 2 project.	851,432	103,658	UNIDO

**GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE
EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

**PROJECT(S) OF THE GOVERNMENT OF REPUBLICA BOLIVARIANA DE
VENEZUELA**

The Government of República Bolivariana de Venezuela requests the United Nations Industrial Development Organization (UNIDO) to submit the project(s) listed in Table 1 below/attached Table 1 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 figure(s) of the project(s) has/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 project(s) indicates a commitment to ensure that the validated phase-out figure(s) was/were realized and yielded a sustained reduction from the 2000 consumption of 269,30 ODP tonnes for the (foam) sector.

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

Project Title/Sector	Type of ODS	Consumption (ODP Tonnes), (Year)	Amount to be Phased Out (ODP Tonnes), (Year)	Implementing Agency
Foam Sector				
Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of Rigid P.U. foams: UMBRELLA N° 2 PROJECT.	CFC-11	149,03	135,46	UNIDO
Total	CFC-11	149,03	135,46	UNIDO

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;

Projects of the Government of República Bolivariana de Venezuela Date: August 30, 2002

Av. Libertador, Centro Comercial Los Cedros, piso 5, La Florida Sur, 1050. Caracas – Venezuela
Tel. (58-212) 7313932 / 7312992 Fax (58-212) 7310015 E-mail: fondoin@cantv.net

5. The National Ozone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation and use of CFCs and to combine this monitoring with occasional unscheduled visits to importers and recipient manufacturing companies to check invoices and storage areas for unauthorized use of CFCs.
6. 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

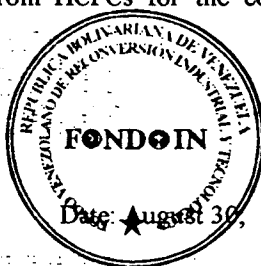
7. In line with Decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, the Government
 - (a) has reviewed the specific situations involved with the project(s) Cabicar S.R.L., Coop. Lelli C.A., Coop. Quooler C.A., Fanametal C.A., Fibrosteel S.A., Fibrocaven C.A. Firecon C.A., JF y Asociados C.A., Medina Plásticos C.A., Sandrin C.A., Sudameris C.A., Air Gomez C.A., Ind. Fibrepoxi C.A., Grupo Celta C.A, Ind. Mitani C.A., Inyectofibra C.A., Of. Técnica Calas C.A., Talleres Carabobo C.A., Talleres Martini C.A., Talleres Roa C.A., and Thermoaislantes C.A., 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:

Econ. Víctor Álvarez

Designation: President (E) of FONDOIN

Fondo Venezolano de Reconversión Industrial y Tecnológica (FONDOIN)



Telephone: (58-212) 731-29-92 / 731-39-32

Fax: (58-212) 731-00-15

E-mail: fondoin@cantv.net

Projects of the Government of República Bolivariana de Venezuela Date: August 30, 2002

Av. Libertador, Centro Comercial Los Cedros, piso 5, La Florida Sur, 1050. Caracas – Venezuela
Tel: (58-212) 7313932 / 7312992 Fax (58-212) 7310015 E-mail: fondoin@cantv.net

FONDOIN

FONDO VENEZOLANO DE RECONVERSION
INDUSTRIAL Y TECNOLÓGICA

Caracas, October 21, 2002

M.L.F.S.
Montreal.

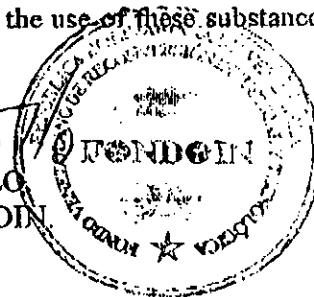
Att.: Mr. Richard Abrowka-Ampadu.

Subject: Use of HCFC as transitional substance.

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

- a) Verifies that it had reviewed the specific situation at the enterprises (Cabicar S.R.L., Coop. Lelli C.A., Coop. Quooler C.A., Fanametal C.A., Fibrosteel S.A., Fibrocaven C.A. Firecon C.A., J.F y Asociados C.A., Medina Plásticos C.A., Sandrin C.A., Sudameris C.A., Air Gomez C.A., Ind. Fibrepxi C.A., Grupo Celta C.A, Ind. Mitani C.A., Inyectofibra C.A., Of. Técnica Calas C.A., Talleres Carabobo C.A., Talleres Martini C.A., Talleres Roa C.A., and Thermoaislantes C.A.) as well as its HCFC commitments under the article 2F;
- b) States that based on the prevailing circumstances at (Cabicar S.R.L., Coop. Lelli C.A., Coop. Quooler C.A., Fanametal C.A., Fibrosteel S.A., Fibrocaven C.A. Firecon C.A., J.F y Asociados C.A., Medina Plásticos C.A., Sandrin C.A., Sudameris C.A., Air Gomez C.A., Ind. Fibrepxi C.A., Grupo Celta C.A, Ind. Mitani C.A., Inyectofibra C.A., Of. Técnica Calas C.A., Talleres Carabobo C.A., Talleres Martini C.A., Talleres Roa C.A., and Thermoaislantes C.A.) at the present time the conversion of these enterprises requires the use of HCFC-141b for the interim period as stipulated in the Montreal Protocol;
- c) Notwithstanding the transitional period stated by the companies in their commitment letters (interim period of 30 years) mentioned in paragraph (b).
- d) The Government of the Republica Bolivariana de Venezuela will ensure that the companies abide by any limitation imposed by decisions of the parties to the Multilateral Fund of the Montreal Protocol or by the rules of the M.L.F.S. regarding the use of HCFC as transitional substance.
- e) The companies will convert to non ODS substances when the use of these substances become economically feasible in the country.


OSMER CASTILLO
President of FONDOIN



C.C: Tamas Grof and Enrique Puerto-Ferre. (UNIDO)