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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-second Meeting
Montreal, 23-27 July 2007

**ACCELERATED PHASE-OUT PLAN FOR THE CFC PRODUCTION IN ARGENTINA
(SUBMITTED BY THE WORLD BANK)**

1. Attached for information to the Committee is a proposed accelerated phase-out plan for the CFC production in Argentina. The Government of Argentina is proposing to accelerate the phase-out of production for FIASA by two years. Under the accelerated phase-out plan (APP), FIASA would shut down production of CFC-11 and CFC-12 by December 2007. This accelerated phase-out plan, if approved, will prevent the production of 1,372 metric tones (MT) of CFC-11 and CFC-12 in Argentina at an additional cost of \$4,112,834 to the Multilateral Fund.
2. This proposal is being circulated as an information item at this time as the document was submitted late and did not allow time for the Secretariat to review it in line with accepted procedures. However given the importance of phasing out production and the timeline being proposed by the Government of Argentina, the World Bank would welcome any direction that the Committee would be willing to provide at this meeting with the view to the possibility of circulating the proposal for inter-sessional approval .

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issue of the document.

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.

**The Accelerated Phase-out Plan
for CFC Production in Argentina**

**For Implementation of the Montreal Protocol
on Substances that Deplete the Ozone Layer**

July 2, 2007

The Accelerated Phase-out Plan for CFC Production in Argentina

I. Introduction

1. The CFC Production Phase-out Plan for Argentina (ARG/PRO/38/INV/133) was approved at the 38th meeting of the Executive Committee (ExCom) of the Multilateral Fund for the implementation of the Montreal Protocol and involves a sole production facility at Frío Industrias Argentinas S.A. (FIASA). During this meeting, the Executive Committee approved, in principle, a total of US\$8.3 million in funding for the phased reduction and closure of the entire CFC production capacity in Argentina. This is broken down with US\$7 million to production closure, US\$800,000 for labour compensation, and US\$500,000 as technical assistance for the project management unit.

2. Through this project, the Government of Argentina agreed to phase out the production of 3,020 MT CFC-11 and -12 by the year 2010. The phase-out schedule, the actual production, and disbursement schedule are shown in Table 1 below. As per the Agreement, independent verification to the ExCom has been taking place yearly.

Table 1: Phase-out schedule as per the Agreement with ExCom

Year	Production of CFC-11 and CFC-12 [in metric tonnes]		MLF Funding [in million USD]	
	Target ⁽¹⁾	Actual	Project funding	Support costs
2002	3,020	3,015	0.5	0.020
2003	3,020	3,018	3.5	0.110
2004	3,020	3,016	0.0	0.090
2005	1,647	1,645	0.3	0.120
2006	1,647	1,645 ⁽²⁾	2.0	0.100
2007	686	-	0.0	0.120
2008	686	-	1.0	0.120
2009	686	-	1.0	0.047
2010	0	-	0.0	0.000
Total Impact	3,020	1,373	8.3	0.727

Notes:

⁽¹⁾ Save for any CFC production that may be agreed by the Parties to meet essential uses for Argentina

⁽²⁾ Figures according to national independent audit performing by the Argentine Government - Verification by an International auditor is scheduled for July 2007.

3. To date, FIASA has been meeting the production quotas. The Multilateral Fund has approved 6.3 million dollars under the CFC Production Phase-out Plan in Argentina. The remaining 2 million dollars are expected to be approved by the MLF for the 2008 and 2009 Work Programmes, after evidence is provided that FIASA has met the quotas for 2007 and 2008.

II. Description of the Accelerated Phase-out Plan

a. Objective

4. The Government of Argentina is proposing to accelerate the phase-out plan for FIASA by two years. Under the Accelerated Phase-out Plan (APP), FIASA would shut down production of CFC-11 and CFC-12 by December 2007. This accelerated phase-out plan, if approved, will prevent the production of 1,372 metric tonnes (MT) of CFC-11 and CFC-12 in Argentina.

b. Compensation

5. By shutting down CFC production by the end of 2007, FIASA will lose profits on the 1,372 MT it is allowed to produce during 2008 and 2009 under the current phase-out schedule (see Table 1 above). Note, in Table 2, that FIASA has been producing very close to 100% of the established quota. This trend is expected to continue over the next years, as there are no technical reasons to believe that FIASA will not be able to meet its production quota for the period 2007-2009. Note also that 95% of the production in FIASA is CFC-12, and only 5% is CFC-11, therefore the analysis of lost profits will be based on CFC-12 production.

Table 2. Verified production of CFC-11 and CFC-12 in FIASA, in metric tonnes

Production	Year				
	2002	2003	2004	2005	2006 ⁽¹⁾
Target	3,020	3,020	3,020	1,647	1,647
Actual CFC-11 production	128	133	112	67	52.06
Actual CFC-12 production	2,887	2,887	2,904	1,579	1593.14
Total CFC production	3,015	3,018	3,015	1,646	1,645

Notes:

⁽¹⁾ Figures according to national independent audit performed by the Argentine Government - Verification by an International auditor is scheduled for July 2007.

6. Lost profits. Lost profits are defined as total revenue minus total cost. Total cost is calculated by multiplying production costs on a per-tonne-basis by total production. Table 3 below provides a description of the inputs needed to produce one tonne of CFC-12. The estimated cost of producing one tonne of CFC-12 in FIASA is \$2,684 dollars. Annex 1 contains further details on the estimation of these costs.

Table 3. Estimation of production costs

Production costs	Dollars per MT of CFC-12
Cost of CTC	912.40
Cost of HF	522.37
Cost of other inputs	27.11
Direct administrative costs	166.45
Fixed Costs	1,055.68
Total production costs	2,684.00

7. Total revenue is obtained by multiplying the price of CFC-12 by total production. FIASA reported an average sale price of US\$6 per kg CFC-12 during 2006. Table 4 below provides the expected lost profits due to the proposed accelerated phase out plan. It is estimated that FIASA will lose \$4.1 million dollars at net present value (assuming a 7% discount rate) if it does not produce the 1362 MT allowed under the current agreement. The proposed compensation to FIASA is therefore the \$4.1 million dollars it will forego by shutting CFC production at the end of 2007.

Table 4. Proposed compensation to FIASA for APP

Description		Year	
		2008	2009
[1]	Allowed production of CFC-12, in MT	686	686
[2]	Sale price of CFC-12, in dollars/MT	6,000	6,000
[3] = [1] x [2]	Total revenue	4,116,000	4,116,000
[4]	Cost per MT of CFC-12,	2,684	2,684
[5] = [1] x [4]	Total Costs	1,841,226	1,841,226
[6] = [3] - [5]	Lost profit per year	2,274,774	2,274,774
[7]	Discount rate	7%	7%
[8]	Net present value of lost profits	2,125,957	1,986,876
[9]	Total Compensation to FIASA for APP (sum of NPV for lost profits per year)	4,112,834	

c. Disbursement of funds

8. It is requested that the proposed compensation under the APP be released after production at FIASA for 2007 is audited and the Government of Argentina announces the permanent closure of CFC production at FIASA. This announcement is expected for the end of 2007. In addition, the remaining funds under agreement ARG/PRO/38/INV/133 are requested to be released once the government announces the permanent closure of CFC production at FIASA.

d. Equipment disposal

9. Under the existing agreement between the GOA and the MLF Secretariat (ARG/PRO/38/INV/133, Annex 2), the following equipment must be dismantled:

- Two carbon steel reactors connected in series. Constructive Standards (ASME VII Division 1)
- Equipment for storage/handling of CTC
- Process control instrumentation

10. FIASA has requested that the dismantling of the two carbon steel reactors and the storage tank previously used to store/handle CTC be reconsidered, since it has recently started production of HCFC-22. The government agrees with this requirement and, will instead closely monitor the import of CTC via its ODS import/export licensing system. In addition, the government will carry out annual local audits to FIASA until the year 2010 and the subsequent years during the production of HCFC-22 to verify that no CFCs are produced.

Annex 1
Detailed Costs of Inputs

Cost of CTC	
Input	US\$ per Ton of CTC
Cost and transportation	511.00
Taxes and other levies	52.48
Import expenses	8.63
Transport to Villa Mercedes	32.93
Subtotal	605.04
CTC to CFC-12 ratio (from 2005 audit report)	1.508
Subtotal 1 – Cost of CTC per ton of CFC	912.40

Cost of HF	
Input	US\$ per Ton of HF
Cost and transportation	1,095.00
Taxes and other levies	114.97
Import expenses	42.64
Transport to Villa Mercedes	49.40
Subtotal	1,302.01
HF to CFC-12 ratio (from 2005 audit report)	0.4012
Subtotal 2 – Cost of HF per ton of CFC	522.37

Direct Administrative Costs (DAC)	
Input	US\$ per Ton of CFC
Cost of transportation from origin (CIF)	7.90
Taxes and other levies	1.17
Import expenses	0.28
Transport to Villa Mercedes	0.65
Subtotal 3 – DAC costs	10.00

Cost associated to Other inputs			
Product	Consumption	Price US\$ per unit	US\$ per ton of CFC
Caustic soda (kg/ton of CFC)	7.29	0.40	2.94
Sulphuric acid (kg/ton of CFC)	38.20	0.12	4.47
Chlorine (kg/ton of CFC)	2.45	0.44	1.07
Gas (m ³ /ton of CFC)	107.50	0.08	9.03
Energy (kw/ton of CFC)	320.00	0.03	9.60
Subtotal 4 – Cost of other inputs			27.11