UNITED NATIONS



United Nations Environment Programme Distr. GENERAL

UNEP/OzL.Pro/ExCom/63/54 21 March 2011

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Sixty-third Meeting Montreal, 4-8 April 2011

PROJECT PROPOSAL: VENEZUELA (BOLIVARIAN REPUBLIC OF)

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

Phase-out

• HCFC phase-out management plan (stage I, first tranche)

UNIDO and UNEP

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 issuance of the document.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Venezuela (Bolivarian Republic of)

(I) PROJECT TITLE	AGENCY
HCFC phase-out management plan (stage I, first tranche)	UNEP, UNIDO (lead)

(II) LATEST ARTICLE 7 DATA	Year: 2009	216.2 (ODP tonnes)

(III) LATEST	(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)					Year: 200				
Chemical	Aerosol	Foam	Fire fighting	<i>C</i>		Solve nt	Process agent	Lab Use	Total sector consumption	
				Manufacturing	Servicing					
HCFC-123					0.1				0.1	
HCFC-124										
HCFC-141b		37.7							37.7	
HCFC-142b					7.5				7.5	
HCFC-22				1.9	160.1				162.0	

(IV) CONSUMPTION DATA (ODP tonnes)

2009 - 2010 baseline (estimate):						
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)						
Already approved:	0.0	Remaining:	199.46			

(V) BUS	INESS PLAN	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
UNIDO	ODS phase-out (ODP tonnes)	4.5	12.7	2.0	1.0	1.0						21.2
	Funding (US \$)	430,000	1,183,876	178,450	87,613	87,613						1,967,551

(VI) PROJECT DATA	2011	2012	2013	2014	2015	Total		
Montreal Protocol consumption limits (est	n/a	n/a	220.7	220.7	198.6			
Maximum allowable consumption (ODP tonnes)				n/a	220.7	220.7	198.6	
Project Costs requested in	UNIDO	Project costs	654,854	603,339	324,875	0	175,432	1,758,500
principle(US \$)		Support						
		costs	49,114	45,250	24,366	0	13,157	131,888
	UNEP	Project costs	50,646	46,661	25,125	0	13,568	136,000
		Support						
costs		costs	6,584	6,066	3,266	0	1,764	17,680
Total project costs requested in principle (US \$)				650,000	350,000	0	189,000	1,894,500
Total support costs requested in principle (US \$)			55,698	51,316	27,632	0	14,921	149,568
Total funds requested in principle (US \$)				701,316	377,632	0	203,921	2,044,068

(VII) Request for funding for the first tranche (2011)							
Agency	Funds requested (US \$)	Support costs (US \$)					
UNIDO	654,854	49,114					
UNEP	50,646	6,584					

Funding request:	Approval of funding for the first tranche (2011) as indicated above
Secretariat's recommendation:	For individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of the Bolivarian Republic of Venezuela, UNIDO as the lead implementing agency, has submitted to the 63rd Meeting of the Executive Committee an HCFC phase-out management plan (HPMP) (stage I) at a total cost of US \$1,763,228 plus agency support costs of US \$134,445 comprising of US \$1,723,177 plus agency support costs of US \$129,238 for UNIDO and US \$40,051 plus agency support costs of US \$5,207 for UNEP, as originally submitted. In stage I of the HPMP the Government of the Bolivarian Republic of Venezuela intends to phase out a total of 22.07 ODP tonnes of HCFCs, consisting of 83.9 metric tonnes (mt) (9.23 ODP tonnes) of HCFC-141b in the manufacturing sector and 233.5 mt (12.84 ODP tonnes) of HCFC-22 in the servicing sector, enabling the country to meet the 2013 and 2015 control targets under the Montreal Protocol.

2. The Government of the Bolivarian Republic of Venezuela is requesting at the 63rd Meeting approval of US \$1,097,353, plus agency support costs of US \$82,301 for UNIDO and US \$15,248 plus agency support costs of US \$1,982 for UNEP for the implementation of the annual implementation plan for 2011-2012 of stage I of the HPMP.

3. This document presents an overview of the HPMP itself, followed by the overview of the two projects for the phase out of HCFC-141b used in the manufacturing sector. The section on comments has been arranged similarly.

HPMP

ODS legislation and institutional framework

4. The Bolivarian Republic of Venezuela has ratified the Montreal Protocol and all its amendments. National Decree N° 4.335 together with the Organic Law of Customs, administer ODS imports, the licensing and quota system and related control measures for all ODS including HCFCs. Comprehensive legal regimes govern ozone, climate change, chemical substances and energy. The responsibilities of the national ozone unit (NOU) are divided into a political role covered by the Direction of Air Quality Control of the Ministry of Environment, and the technical and operational role carried out by FONDOIN, a government body. Since March 2009 FONDOIN reports to the Ministry of Popular Power for Science, Technology and Intermediate Industries.

HCFC consumption and production

5. The Bolivarian Republic of Venezuela produces, imports and exports HCFCs¹. The total HCFC consumption (production and imports minus consumption and minus exports) reported under Article 7 of the Montreal Protocol for 2008 and 2009 is shown in Table 1. Of the total HCFC consumption (measured in ODP tonnes, almost 79 per cent was HCFC-22 in 2009. Preliminary data for 2010 indicates an increase in HCFC consumption in 2010 compared to 2009. According to the information provided in the HPMP, the country does not export HCFCs.

¹ The HPMP was prepared during 2009 using 2008 consumption data as the reference. During preparation of the HPMP 2009 consumption data became available and was included where applicable.

		2008		•	2009	· · ·
HCFC*	Import	Production	Total	Import	Production	Total
Metric tonnes (mt)						
HCFC-22	763.5	1,391.1	2,154.6	800.84	2,306.93	3,107.8
HCFC-141b	186.0		186.0	342.8		342.8
HCFC-142b	139.0		139.0	115.2		115.2
HCFC-123	10.1		10.1	5.0		5.0
HCFC-124	14.5		14.5			
Total (mt)	1,113.1	1,391.1	2,504.2	1,263.8	2,306.9	3,570.8
ODP tonnes						
HCFC-22	42.0	76.5	118.5	44.0	126.9	170.9
HCFC-141b	20.5	-	20.5	37.7		37.7
HCFC-142b	9.0	-	9.0	7.5		7.5
HCFC-123	0.2	-	0.2	0.1		0.1
HCFC-124	0.3	-	0.3			
Total (ODP tonnes)	71.5	76.5	148.5	89.2	126.9	216.2

Table 1. HCFC production and consumption in the Bolivarian Republic of Venezuela (2008-2009)

(*) Data reported under Article 7 of the Montreal Protocol.

6. HCFC-22 is the only HCFC being produced in the Bolivarian Republic of Venezuela. Production has increased from 492.7 mt (27.1 ODP tonnes) in 2002 to 2,306.9 mt (126.9 ODP tonnes) in 2009 as shown in Table 2.

Table 2. Levels of HCFC production in the Bolivarian Republic of Venezuela*

Tonnes	2002	2003	2004	2005	2006	2007	2008	2009
mt	492.7	443.6	994.5	636.4	1,003.6	1,161.8	1,391.1	2,306.9
ODP	27.1	24.4	54.7	35.0	55.2	63.9	76.5	126.9

(*) Data reported under Article 7 of the Montreal Protocol.

7. Over 85 per cent of the 2008 reported consumption of 2,504.2 mt of HCFCs was used for servicing refrigeration and air conditioning systems, while 14 per cent was used for manufacturing foams as shown in Table 3. Based on the results of the survey carried out for the preparation of the HPMP, 39.3 per cent of total HCFC consumption is for servicing commercial refrigerators and air-conditioning systems; 36.7 per cent for servicing domestic air-conditioning equipment and 10.4 per cent for servicing industrial refrigeration equipment.

Table 3. Sector	· distribution	of HCFCs in 2008
-----------------	----------------	------------------

HCFC	F	Refriger	Total	
	Foams	Manufacturing	Servicing	Total
Metric tonnes				
HCFC-22		23.8	2,130.8	2,154.6
HCFC-141b	186.0			186.0
HCFC-142b			139.0	139.0
HCFC-123			10.1	10.1
HCFC-124			14.5	14.5
Total (mt)	186.0	23.8	2,294.4	2,504.2
ODP tonnes				
HCFC-22		1.3	117.2	118.5
HCFC-141b	20.5			20.5
HCFC-142b			9.0	9.0
HCFC-123			0.2	0.2
HCFC-124			0.3	0.3
Total (ODP tonnes)	20.5	1.3	126.8	148.5

8. In 2008, the Bolivarian Republic of Venezuela had nine licensed HCFC importers, two of which were responsible for 70 per cent of imported HCFCs, and only three of them imported HCFC-141b to supply the foam sector, with one of the three being a specialized systems house. There are another two systems houses manufacturing pre-blended polyol systems for use in the country. Additionally, five manufacturing enterprises (Puntoplas, Euroquim, Dow Venezuela, Quirexa and Central Fibras) imported pre-blended polyols containing 17.34 mt (1.91 ODP tonnes) of HCFC-141b (based on the 2007-2009 average consumption). The project submission provided no indication whether the Bolivarian Republic of Venezuela intends to report this consumption under Article 7.

Baseline

9. In preparing the HPMP, the Government of the Bolivarian Republic of Venezuela applied a linear equation based on the past specific consumption of the 5 HCFCs consumed in the country to predict the future HCFC consumption. On this basis, the 2010 consumption was estimated at 225.2 ODP tonnes. This estimate and the reported 2009 consumption of 216.2 ODP tonnes were used to calculate the estimated baseline for the country at a level of 220.7 ODP tonnes.

An overview of the HCFC phase-out strategy

10. The HCFC compliance strategy will strive to enable the country to reduce HCFC consumption beyond its Montreal Protocol obligations while preventing any adverse impact on the national economy or the welfare of its population. The strategy will span a 20-year period and during a first five-year stage will focus on strengthening the national institutions, policies and regulations in order to control the market for HCFCs while promoting the cost-effective reduction of their market demand by providing technical assistance and creating awareness. The proposed compliance strategy for the 2011-2015 period will focus on six specific components: institutional; legal; social; manufacturing (refrigeration and foams); refrigeration and air conditioning servicing; other industry sectors; and the production sector, as shown in Table 4.

Component	Initiative							
Institutional	Strengthen the cooperation with the customs department (SENIAT) and provide coordination,							
	implementation and monitoring services for the action plan in order to improve the timeliness							
	and accuracy of HCFC consumption data.							
Legal	In order to support the HCFC compliance the country will establish HCFC quotas for							
	consumption, production and import bans on HCFC-22 and any HCFCs that are not used in							
	the country. Preparatory activities for the establishment of separate import quotas for							
	equipment running on HCFCs, the establishment of ban on new installations of equipment							
	running on HCFCs, and establishment of related norms and requirements for presentation of							
	mandatory "Studies of Environmental Impact" that include impact of RAC equipment based							
	on HCFC.							
Social	Awareness to promote the adoption of alternative technologies.							
Manufacturing	The country will eliminate the consumption of HCFC-141b in the main consumers of							
sector	polyurethane (PU) foams i.e. 24 per cent of domestic consumption of HCFC-141b (83.90 mt)							
Servicing sector	Reductions in HCFC consumption in the refrigeration and air conditioning sector will be							
	attained through training on responsible use of HCFCs. The training will be integrated into							
	the technicians certification programme within the NPP though a new module, and will also							
	include the appropriate equipment for training centres when necessary.							
Other sectors	Legal measure will be taken to prevent HCFC consumption in other sectors.							
Production	Increased monitoring and coordination with the national producer and other stakeholders in							
	order to ensure meeting the strategy's HCFC consumption targets in production plus imports							
	minus exports							

11. The action plan for the production sector component will ensure that HCFC production levels, as a more controllable component of HCFC consumption, conform to the country's HCFC compliance strategy. It will consist of the following elements:

- (a) The HCFC import/export licensing and quota system which will establish HCFC consumption quotas consisting of production plus imports minus exports for each stakeholder. Consumption quotas for each substance will be fixed, while consumption quotas by origin (import, production or export) will be flexible and interchangeable, running in bands in order to allow responding to verified export demand;.
- (b) A consumption monitoring system that will consist of a computerized registry of main stakeholders and their transactions (importers, producer and exporters). Quarterly meetings between the HCFC production enterprise, various Government departments including Customs, for verification of objectives. Corrective actions would be introduced as needed, consisting of fines, obligation to re-export, suspension of licenses, or re-assignment of abandoned quotas. The flexibility in import or production quotas will only be granted against formally verifiable export demands.

Manufacturing sector

12. Stage I of the HPMP proposes to phase out HCFC consumption used by the largest manufacturers of polyurethane (PU) foam in commercial refrigeration and panels and one manufacturer of air conditioning equipment in its production of panels for air conditioning ducts.

13. The HPMP includes a group project for the phase-out of HCFC-141b consumption used by the four main manufacturers of PU foam for panels and commercial refrigeration, namely Pinova S.A., Invitrel C.A., Líder Frío C.A., and Industrias Niveral C.A. The four locally owned enterprises received assistance from the Multilateral Fund to convert from CFC-12 to HFC-134a as a refrigerant, and from CFC-11 to HCFC-141b as a blowing agent. The companies use fully formulated polyols manufactured by the local systems houses and/or from distributers that import pre-blended polyols.

14. Following a review of available technologies the enterprises chose to replace HCFC-141b with a mixture of HFC-365mfc/HFC-227ea. The enterprises were not willing to invest in hydrocarbon technology due to the cost and their level of consumption. Technical assistance for the conversion will be provided by the local systems houses. Incremental capital costs have been originally requested at US \$424,600 including refrigerated rooms to store the PU system (except Líder Frío); retrofit of the high pressure foaming machines and moulds/presses; training, trials and technical assistance. Incremental operating costs had been estimated at US \$88,795. The project will phases out the use of 55.49 mt (6.10 ODP tonnes) of HCFC-141b and increase the emissions of 40,937 tonnes of CO_2 -equivalent (Table 5).

Entonneigo	Consumption (tonnes)*			CE		
Enterprise	Metric	ODP	Capital	Operating	Total	(US \$/kg)
Pinova S.A.	15.05	1.66	96,800	24,084	120,884	8.03
Invitrel C.A.	11.96	1.32	157,300	19,139	176,439	14.75
Líder Frío C.A.,	13.60	1.50	71,500	21,764	93,264	6.86
Industrias Niveral C.A.	14.88	1.64	99,000	23,808	122,808	8.25
Total	55.49	6.10	424,600	88,795	513,395	9.25

Table 5. Cost for the conversion of four foam enterprises in the commercial refrigeration sector

* In 2009.

15. In addition to the group foam project, stage I of the HPMP includes the conversion of the enterprise P3 Venezolana, a wholly locally owned company founded in 1994 and the largest producer of PU foam panels for air-conditioning ducts ($360,792 \text{ m}^2$ in 2009). The company consumes 28.4 mt

(3.12 ODP tonnes) of HCFC-141b and uses fully formulated polyol supplied by a local systems house. This company has special features that justify its presentation as an individual project (continuous production of polyisocyanurate foams, application type, technology type) and not as part of the group project. Following a review of alternative technologies the enterprise chose a water-based system. Hydrocarbon technology was considered too expensive for the level of consumption of this company and due to safety considerations given the location of the enterprise in an urban area. Conversion to water-based technology includes retrofit of the high pressure foaming machine and continuous conveyor; modifications to moulds/presses; training, trials and technical assistance, at a total cost of US \$99,000. Incremental operating costs have been estimated at US \$201,345. Implementation of this project will avoid the emissions of 20,591 tonnes of CO₂-equivalent into the atmosphere.

Refrigeration servicing sector

16. Three programmes comprise the action plan for the refrigeration and air conditioning servicing sector within the HCFC compliance strategy, namely: a technical assistance programme for reduction of HCFC use; a technical assistance programme for enhanced control of trade of HCFC-based substances and equipment; and implementation, monitoring and control. All programmes were provided with costs for their complete implementation and reduced cost based on the available budget for the servicing sector. A brief description of these programmes is presented below:

- (a) The technical assistance programme for reduction of HCFC use proposes to implement training programmes for the responsible use of HCFCs, such as good service, maintenance and servicing practices (including containment, recovery and recycling of refrigerants). A new training and certification module will be introduced into the existing "refrigeration training and certification programme" in order to emphasize HCFCs. The on-going technician certification system will be revised with the view of ensuring its sustainability through an increased formalization and integration into the existing national quality certifications, technical information, and provision of tools and equipment to technical training institutions and refrigeration technicians. The total cost of this programme has been estimated at US \$5,580,000. Of this amount, the Government is requesting US \$942,979 from the Multilateral Fund;
- (b) The technical assistance programme for enhanced control of trade in HCFC-based substances and equipment, intends to improve the control of HCFC consumption to enable the country to meet the compliance targets of the Montreal Protocol through the following initiatives: redesign of the ODS import licensing and quota system in order to include quotas for HCFCs and their blends as well as export controls; modification of the legal framework for ODS trade; technical assistance to the Customs department to improve the control on ODS trade; frequent and regular monitoring of the ODS import quota system; and continuous training and information of Customs officers and other staff directly related to ODS import procedures. The total cost of this programme has been estimated at US \$237,000. Of this amount, the Government is requesting US \$40,051 from the Multilateral Fund; and
- (c) Implementation, monitoring and control, to provide the platform for the successful implementation of the HPMP and the country's compliance with its obligations under the Montreal Protocol. This includes the timely implementation of all the HPMP activities; close and regular monitoring of project results and objectives; regular monitoring of market developments and trends; provision of technical guidance to the project beneficiaries on a regular basis; periodic reporting on project activities and results including progress reports to the Executive Committee. The total cost of this programme has been estimated at US \$400,000. Of this amount, the Government is requesting US \$67,597 from the Multilateral Fund.

Total cost of the HPMP

17. The total estimated cost of the implementation of the HPMP for the Bolivarian Republic of Venezuela as submitted is US \$17,796,549 comprising of US \$3,156,430 for the total phase-out of 403.1 mt (44.3 ODP tonnes) of HCFCs used in the manufacturing sector and US \$14,640,120 for the total phase-out of 3,253.4 mt (178.9 ODP tonnes) of HCFC-22 used in the refrigeration and air conditioning servicing sector (estimated at US \$4.50/kg). The total funding requested for implementation of stage I of the HPMP as originally submitted is presented in Table 6.

Table 6.	Total	cost of	'stage I	of the	нрмр
I able 0.	I Otal	COSt OI	stage I	or the	

Ducient	Agonov	Impact (ODP	Total cost (US \$)			
Project	Agency	tonnes)	Estimated	Requested		
Manufacturing sector						
HCFC phase out in the commercial refrigeration sector	UNIDO	6.10	513,394	434,565		
HCFC phase out in P3 Venezolana	UNIDO	3.12	300,345	278,036		
Servicing sector						
Technical assistance programme for reduction of	UNIDO	11.53	5,580,000	942,979		
HCFC use	UNIDO					
Technical assistance programme for enhanced control	UNEP	0.49	237,000	40,051		
of trade in HCFC-based substances and equipment	UNLI					
Implementation, monitoring and control	UNIDO	0.83	400,000	67,597		
Total		22.06	7,030,739	1,763,228		
Overall cost effectiveness (US \$/kg)				5.56		

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

18. The Secretariat reviewed the HPMP for the Bolivarian Republic of Venezuela in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60^{th} Meeting (decision 60/44), subsequent decisions on HPMPs made at the 62^{nd} Meeting and the 2011-2014 business plan of the Multilateral Fund.

Starting point for aggregate reduction in HCFC consumption

19. The Government of the Bolivarian Republic of Venezuela agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the average level of actual consumption reported in 2009 of 216.20 ODP tonnes and estimated consumption in 2010 of 225.2 ODP tonnes, which under Article 7 had been estimated at 220.70 ODP tonnes. To this average level, a further 1.91 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems not reported under Article 7 of the Montreal Protocol are to be added, resulting in a starting point of 222.61 ODP tonnes. The business plan indicated a baseline of 221.5 ODP tonnes.

Communications and coordination

20. The Secretariat noted that the HPMP proposal referred to sub-optimal communications between the National Ozone Unit and Customs department. This had also been noted in the recent audit reports regarding the consumption of CFCs in 2008 and 2009. UNIDO explained that the communications with the Customs department was already being strengthened and that the action plan within the HPMP consists of several initiatives to improve matters. More Customs offices will be connected to the on-line system and thus import data will be more easily available. The Ozone Unit will request direct access to the Customs Integrated System in order to speed up access to timely import data. High-level meetings are

being arranged to facilitate a formal agreement with the Customs department and to include successful environmental cooperation as one of the key indicators in the objectives of the Customs department.

Foam sector

21. The Secretariat requested clarification on whether there is a direct relation between foam manufacturing enterprises and the import of pre-blended polyol in order to ascertain which enterprises are using imported pre-blended polyols and whether the imports of pre-blended polyols are possibly done by distributors. UNIDO advised that it was not possible to define which enterprises are using imported or locally mixed pre-blended polyols. The importers of pre-blended polyols function as their own distributors, but the business structure is quite complex because the end-users can also import their own material if they so wish. Of the three systems houses operating in the country two dominate the market and have pledged to participate in the umbrella project during stage II of the HPMP.

22. The Secretariat advised UNIDO that decision 61/47 specifies that quantities of HCFC-141b in imported pre-blended polyol systems that had not been included in the overarching strategy would not be eligible for funding. The Government of the Bolivarian Republic of Venezuela has provided a written commitment to put in place, by the time the last foam manufacturing plant had been converted to a non-HCFC technology, regulations or policies banning the import and/or the use of HCFC-141b pre-blended polyol systems.

23. In responding to questions on the selection of HFC technologies for four foam enterprises, UNIDO explained that alternative technologies were discussed with the enterprises, the local systems houses and UNIDO's consultants. In regard to the methyl formate technology, it was pointed out by the Secretariat that it is a validated technology and that the assessment by UNDP had been presented to the Executive Committee at its 62nd Meeting. However, as far as UNIDO knew, its actual use is limited to certain foam applications such as flexible and integral skin; for other foam applications, such as rigid polyurethane panels or insulation for commercial refrigeration equipment, UNIDO stated some remaining doubts about the dimensional stability, its long-term isolation capacity, and the potential hydrolysis that leads to formation of formic acid. Major stakeholders in the country were concerned about the use of methyl formate and its availability in the local market given the sole representative for South America is located in Brazil. Therefore, the technology chosen for the four enterprises is HFC-365mfc/HFC-227ea.

24. The Secretariat indicated that in terms of climate impact, the project will increase the emission of greenhouse gases by nearly 41,000 tonnes of CO₂-equivalent. The long-term climate impact of the conversion makes it critical for the companies to consider more environmentally friendly technology such as methyl formate (which has negligible impact on the climate). UNIDO recognized the climate impact of the HFC-based technology; however the current polyurethane foam systems market in the Bolivarian Republic of Venezuela does not supply other blowing agents. A hydrocarbon-based technology cannot be used due to a higher investment cost as compared to HFC technology.

25. A number of technical issues were raised with UNIDO. These included the request for a chiller for the introduction of HFC-based technologies which the Secretariat felt should be part of the baseline when using HCFC-141b; the retrofitting for high-pressure foaming machines, where the Secretariat believes that the equipment requirements are the same as with HCFC-141b and retrofit would not be needed; the request for funding for systems optimization at the enterprise level, while in the opinion of the Secretariat this activity is done at the systems house level; and the level of funding requested for trials and training. Given the technical and cost related issues; the higher operating costs associated with the introduction of HFC-based technologies as compared to HCFC-141b throughout the life time of the enterprises; and the negative impact to the climate associated with the higher GWP of the alternative substances as compared to HCFC-141b, the Secretariat and UNIDO assessed an alternative approach for stage I of the HPMP (as explained in paragraph 31 below).

Servicing sector

26. The Secretariat pointed to the fact that in the long run, dependency on HCFC-22 in the service sector can only be substantially reduced if the amount of HCFC-based equipment is declining through, in effect, attrition due to retirement without replacement by the same technology. This demands the introduction of an effective ban on the import and possibly the installation of new HCFC-22 equipment. UNIDO advised that the country is aware of the need to restrain further growth of the installed base of HCFC-based equipment, and that this matter was thoroughly examined during the HPMP preparation. UNIDO also advised about the concerns of the Government regarding the high GWP of presently available HCFC alternatives. According to UNIDO, the existence of low-cost AC units is also perceived as an opportunity for the less affluent population to improve life standards; hence, any measure by the Government that will result in an obstacle for such socio-economic developments is seen sceptically. Nevertheless, the government plans to establish a monitoring system for the installed bank of HCFC-based equipment and its impact on the national HCFC needs, as a basis for subsequently devising a reduction schedule for imports of HCFC-based equipment.

Co-financing

27. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties, UNIDO explained that the Bolivarian Republic of Venezuela will seek alternative sources for co-financing the HCFC phase-out initiatives through bilateral assistance programmes.

28. The Secretariat had noted in the strategy that significant investments for tools and recovery equipment were foreseen in the overall budget, but a large portion of those were meant to be paid from non-MLF sources, which could at this time not be specified. To a related question, UNIDO advised that the Government has established working links with a series of national, regional and international development-related organizations, such as the Industrial Bank of Venezuela, the Andean Corporation of Development, the Latin American Economic System, the ALBA Bank, and the Inter-American Development Bank, and that the Government is also looking into other bilateral co-financing sources; it was also recognised that results of expected discussions with the different institutions will take time to come to fruition.

Impact on the climate

29. A calculation of the impact on the climate of HCFC conversion through the foam group project based on the GWP values of the blowing agents (i.e., from HCFC-141b to HFC-365mfc/HFC-227ea) and their level of consumption before and after conversion indicates that an additional 40,937 tonnes of CO_2 .equivalent would be emitted into the atmosphere, while the project for the conversion of P3 Venezolana from HCFC-141b to water blown systems would avoid the emission of 20,591 tonnes of CO_2 -equivalent. This would result in a net impact of 20,346 tonnes of CO_2 -equivalent being emitted into the atmosphere annually because of conversions in the foam sector.

30. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogramme (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO_2 -equivalent tonnes saved. A precise forecast of the impact on the climate of the activities in the servicing sector is presently not available. The impact might be established through an assessment of implementation reports by, *inter alia*, comparing the levels of refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22 based equipment being retrofitted. The potential climate impact of the HPMP indicated in the 2011-2014 business plan is that 39,480 CO_2 -equivalent tonnes annually would not be emitted into the

atmosphere, based on an assumed phase-out in the service sector of 218.2 mt. However, a change in the approach to the HPMP provided in paragraphs 31 to 34 leads, using the methodology of the business plan, to an accordingly larger reduction of the impact on the climate, as per paragraph 33 below.

Changes to the approach of the HPMP during the review period

31. The Secretariat noted that the foam sector could be only partially addressed in the first stage of the HPMP due to concerns by stakeholders about the replacement technologies, and the lack of confidence into the new technologies now available, which are cost-effective and/or have benefits for the climate as compared to HCFC-141b. The Secretariat also noted that the operating cost of the solutions using HFC were substantially higher than operating costs using HCFC-141b technology, to a degree which casts doubt on the sustainability of the conversions. For the only activity not planned to convert to HFC, the cost effectiveness was in ODP terms actually worse than the cost effectiveness of service sector activities, due to the very high operating cost. It became also apparent the foam sector activities that were possible at this time would lead to a phase-out of, in ODP terms, less than 10 per cent of the baseline consumption, and that consequently significant efforts would have to be undertaken in the service sector.

32. The Secretariat took also decision 60/44 into account, which specifies that Article 5 countries that have total HCFC consumption above 360 mt should first address consumption in the manufacturing sector to meet the reduction steps in 2013 and 2015, but also allows for assistance in the refrigeration servicing sector to comply with these targets. In light of the fact that the conversions foreseen might not be economically sustainable, will not lead to the complete phase-out of the consumption of HCFC-141b in the country, and will increase the climate impact, the Secretariat suggested to the country to consider focussing in stage I of the HPMP solely on activities in the service sector while the new foam technologies are maturing. Stage II of the HPMP could then address larger portions of the foam sector or the complete foam sector at once, and could use probably economically sustainable, climate friendly alternatives to HCFC-141b, with possibly also a higher cost effectiveness. The country took on this suggestion, and removed activities in the foam sector from the stage I of the HPMP. The plan had already foreseen significant activities for the service sector well beyond the level for which funding was originally requested, and the newly focussed plan activated these activities.

33. To achieve an improved consistency across the various HPMPs and to provide a safety margin for achieving the objective of the stage I of the HPMP, the Secretariat also suggested to phase out instead of exactly 10 per cent of the forecasted baseline a slightly higher amount, i.e. 10.5 per cent of the baseline, equivalent to 421.0 mt (23.16 ODP tonnes) of HCFC-22. Using the business plans calculation methodology for the climate impact this reduces the emissions further than originally assumed, by 76,196 CO₂-equivalent tonnes annually. The qualifications to this number remain as stated in paragraph 30 above. The total agreed costs of this plan are US \$1,894,500 plus agency support cost amounting to US \$149,568. UNIDO revised the costs of the HPMP stage I as compared to the cost provided in Table 6 above as shown in Table 7. UNIDO proposed to apply the reverse cost effectiveness of US \$4.50/kg to the budget below, leading to a phase-out of 421 mt (23.16 ODP tonnes) of HCFC-22. The detailed activities are described in paragraph 16 above.

Activity	Agency	Revised funding (US \$)
Technical assistance for reduction of HCFC use	UNIDO	1,614,903
Technical assistance for enhanced control of trade of HCFC-based	UNEP	136,000
substances and equipment		
HPMP implementation, monitoring and control	UNIDO	143,597
Total	1,894,500	

 Table 7. Revised cost of stage I of the HPMP

2011-2014 business plan of the Multilateral Fund

34. UNIDO and UNEP are requesting after revision of the proposal US \$2,044,068 including support cost for implementation of stage I of the HPMP. The total value requested is below the total amount in the business plan of US \$1,967,600. The difference of US \$76,468 or 3.7 per cent of the project value is due to the increase in tonnage to be phased out (10.5 per cent of the baseline instead of 10 per cent of the baseline).

Draft Agreement

35. A draft Agreement between the Government of the Bolivarian Republic of Venezuela and the Executive Committee for HCFCs phase-out is provided in Annex I to the document.

RECOMMENDATION

- 36. The Executive Committee may wish to consider:
 - (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for the Bolivarian Republic of Venezuela for the period 2011 to 2015, at the amount of US \$2,044,068, comprising of US \$1,758,500 and agency support costs of US \$131,888 for UNIDO, and US \$136,000 and agency support costs of US \$17,680 for UNEP;
 - (b) Noting that the Government of the Bolivarian Republic of Venezuela agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the average of the actual reported level of consumption in 2009 of 216.2 ODP tonnes and estimated level for 2010 of 225.2 ODP tonnes which resulted in an estimate of 220.70 ODP tonnes, plus 1.91 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems not reported under Article 7 of the Montreal Protocol, resulting in 222.6 ODP tonnes;
 - (c) Deducting 23.16 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption;
 - (d) Approving the draft Agreement between the Government of the Bolivarian Republic of Venezuela and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
 - (e) Requesting the Fund Secretariat, once the baseline data were known, to update Appendix 2-A to the draft Agreement to include the figures for maximum allowable consumption, and to notify the Executive Committee of the resulting levels of maximum allowable consumption;
 - (f) Requesting UNIDO to submit the fourth (2015) tranche with a verification of the 2013 consumption which would include, *inter alia*, comparisons between data from the National Ozone Unit and from the customs authority as well as other input by the customs authority, as necessary; and
 - (g) Approving the first tranche of stage I of the HPMP for the Bolivarian Republic of Venezuela, and the corresponding implementation plan, at the amount of US \$761,198, comprising of US \$654,854 and agency support costs of US \$49,114 for UNIDO, and US \$50,646 and agency support costs of US \$6,584 for UNEP.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF THE BOLIVARIAN REPUBLIC OF VENEZUELA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

1. This Agreement represents the understanding of the Government of the Bolivarian Republic of Venezuela (the "Country") and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A ("The Substances") to a sustained level of 198.6 ODP tonnes prior to 1 January 2015 in compliance with Montreal Protocol schedules, with the understanding that this figure is to be revised one single time in 2011, when the baseline consumption for compliance would be established based on Article 7 data.

2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A ("The Targets, and Funding") in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances which exceeds the level defined in row 1.2 of Appendix 2-A ("maximum allowable total consumption of Annex C, Group I Substances"; the Target) as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances which exceeds the level defined in rows 4.1.3, 4.2.3, 4.3.3, 4.4.3, and 4.5.3 (remaining eligible consumption).

3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees in principle to provide the funding set out in row 3.1 of Appendix 2-A ("Targets and Funding") to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A ("Funding Approval Schedule").

4. The Country will accept independent verification, to be commissioned by the relevant bilateral or implementing agency, of achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A ("The Targets, and Funding") of this Agreement as described in sub-paragraph 5(b) of this Agreement.

5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least 60 days prior to the applicable Executive Committee meeting set out in the Funding Approval Schedule:

- (a) That the Country has met the Targets for all relevant years. Relevant years are all years since the year in which the hydrochlorofluorocarbons phase-out management plan (HPMP) was approved. Exempt are years for which no obligation for reporting of country programme data exists at the date of the Executive Committee Meeting at which the funding request is being presented;
- (b) That the meeting of these Targets has been independently verified, except if the Executive Committee decided that such verification would not be required;

- (c) That the Country had submitted tranche implementation reports in the form of Appendix 4-A ("Format of Tranche Implementation Reports and Plans") covering each previous calendar year, that it had achieved a significant level of implementation of activities initiated with previously approved tranches, and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and
- (d) That the Country has submitted and received approval from the Executive Committee for a tranche implementation plan in the form of Appendix 4-A ("Format of Tranche Implementation Reports and Plans") covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A ("Monitoring Institutions and Roles") will monitor and report on implementation of the activities in the previous tranche implementation plan in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in sub-paragraph 5(b).

7. The Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the smoothest phase-down and phase-out of the Substances specified in Appendix 1-A. Reallocations categorized as major changes must be documented in advance in a Tranche Implementation Plan and approved by the Executive Committee as described in sub-paragraph 5(d). Major changes would relate to reallocations affecting in total 30 per cent or more of the funding of the last approved tranche, issues potentially concerning the rules and policies of the Multilateral Fund, or changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the Tranche Implementation Report. Any remaining funds will be returned to the Multilateral Fund upon closure of the last tranche of the plan.

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sub-sector, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the plan.

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNIDO has agreed to be the lead implementing agency (the "Lead IA") and UNEP has agreed to be cooperating implementing agency (the "Cooperating IA") under the lead of the Lead IA in respect of the Country's activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of any of the agencies taking part in this Agreement.

10. The Lead IA will be responsible for carrying out the activities of the plan as detailed in the first submission of the HPMP with the changes approved as part of the subsequent tranche submissions, including but not limited to independent verification as per sub-paragraph 5(b). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the

activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have entered into a formal agreement regarding planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amounts set out in Appendix 7-A in respect of each ODP tonne of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once these decisions are taken, this specific case will not be an impediment for future tranches as per paragraph 5.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee, the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to information necessary to verify compliance with this Agreement.

14. The completion of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption has been specified in Appendix 2-A. Should at that time activities be still outstanding which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per Appendix 4-A (a), (b), (d) and (e) continue until the time of the completion if not specified by the Executive Committee otherwise.

15. All of the agreements set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

APPENDICES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	С	Ι	172.51
HCFC-123	С	Ι	0.05
HCFC-124	С	Ι	0.09
HCFC-141b	С	Ι	40.53
HCFC-142b	С	Ι	9.43
Total			222.61

APPENDIX 1-A: THE SUBSTANCES

		2011	2012	2013	2014	2015	Total
	Montreal Protocol reduction						
1.1	schedule of Annex C, Group I						
	substances (ODP tonnes)	n/a	n/a	220.7	220.7	198.6	n/a
	Maximum allowable total						
1.2	consumption of Annex C Group I						
	substances (ODP tonnes)	n/a	n/a	220.7	220.7	198.6	n/a
2.1	Lead IA UNIDO agreed						
	funding(US \$)	654,854	603,339	324,875	0	175,432	1,758,500
2.2	Support costs for Lead IA (US \$)	49,114	45,250	24,366	0	13,157	131,888
2.3	Cooperating IA UNEP agreed						
2.5	funding (US \$)	50,646	46,661	25,125	0	13,568	136,000
2.4	Support costs for Cooperating IA						
	(US \$)	6,584	6,066	3,266	0	1,764	17,680
3.1	Total agreed funding (US \$)	705,500	650,000	350,000	0	189,000	1,894,500
3.2	Total support cost	55,698	51,316	27,632	0	14,921	149,568
3.3	Total agreed costs (US \$) 761,198 701,316 377,632 0 203,921						2,044,068 23.16
4.1.1	1 Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)						
4.1.2	2 Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)						n/a
4.1.3						149.35	
4.2.1	Total phase-out of HCFC-124 agreed to be achieved under this agreement (ODP tonnes)						n/a
4.2.2							n/a
4.2.3	Remaining eligible consumption for HCFC-124 (ODP tonnes)						0.09
4.3.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)					n/a	
4.3.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)					n/a	
4.3.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)					40.53	
4.4.1						n/a	
4.4.2	2 Phase-out of HCFC-142b to be achieved in previously approved projects (ODP tonnes)					n/a	
4.4.3						9.43	
4.5.1						n/a	
4.5.2	Phase-out of HCFC-123 to be achieved in previously approved projects (ODP tonnes)				n/a		
4.5.3						0.05	

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval not earlier than the first meeting of the year specified in Appendix 2-A.

APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

- 1. The submission of the Tranche Implementation Report and Plan will consist of five parts:
 - (a) A narrative report regarding the progress in the previous tranche, reflecting on the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it and how they relate to each other. The report should further highlight successes, experiences and challenges related to the different activities included in the Plan, reflecting on changes in the circumstances in the Country, and providing other relevant information. The report should also include information about and justification for any changes vis-à-vis the previously submitted tranche plan, such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes. The narrative

report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information about activities in the current year;

- (b) A verification report of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
- (c) A written description of the activities to be undertaken in the next tranche, highlighting their interdependence, and taking into account experiences made and progress achieved in the implementation of earlier tranches. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall plan foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain any revisions to the overall plan which were found to be necessary;
- (d) A set of quantitative information for the report and plan, submitted into a database. As per the relevant decisions of the Executive Committee in respect to the format required, the data should be submitted online. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), and will cover the same time periods and activities; it will also capture the quantitative information regarding any necessary revisions of the overall plan as per sub-paragraph 1(c) above. While the quantitative information is required only for previous and future years, the format will include the option to submit in addition information regarding the current year if desired by the Country and the Lead IA; and
- (e) An Executive Summary of about five paragraphs, summarizing the information of above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The monitoring activities will be carried out within the HPMP implementation, monitoring and control project, and will include:

- (a) The implementation of all the projects within the HPMP;
- (b) The regular monitoring of the project implementation and results;
- (c) The production of periodic reports on project results in order to facilitate corrective actions;
- (d) The production of timely project progress reports to the Executive Committee; and
- (e) Regular monitoring of market developments and trends at the national and international levels.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities. These can be specified in the project document further, but include at least the following:

- (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's phase-out plan;
- (b) Assisting the Country in preparation of the Tranche Implementation Plans and subsequent reports as per Appendix 4-A;
- (c) Providing verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;
- (d) Ensuring that the experiences and progress is reflected in updates of the overall Plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
- (e) Fulfilling the reporting requirements for the tranches and the overall Plan as specified in Appendix 4-A as well as project completion reports for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;
- (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
- (g) Carrying out required supervision missions;
- (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
- (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IAs, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;
- (k) Ensuring that disbursements made to the Country are based on the use of the indicators; and
- (l) Providing assistance with policy, management and technical support when required.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent organization to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities can be specified in the respective project document further, but include at least the following:

- (a) Providing policy development assistance when required;
- (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
- (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$163 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met.
