UNITED NATIONS





# United Nations Environment Programme

Distr. GENERAL

UNEP/OzL.Pro/ExCom/66/43 15 March 2012

**ORIGINAL: ENGLISH** 

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-sixth Meeting
Montreal, 16-20 April 2012

# PROJECT PROPOSAL: NICARAGUA

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)

UNEP/UNIDO

# PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

# Nicaragua

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage I)	UNEP (lead), UNIDO

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2010	7.5 (ODP tonnes)
--	------------	------------------

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2010		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption		
				Manufacturing Servicing							
HCFC-123					0.0				0.0		
HCFC-124					0.1				0.1		
HCFC-141b					0.9				0.9		
HCFC-141b in Imported Pre-blended Polyol		0.1							0.1		
HCFC-142b											
HCFC-22					6.6				6.6		

(IV) CONSUMPTION DATA (ODP tonnes)									
2009 - 2010 baseline: 6.74 Starting point for sustained aggregate reductions: 7.05									
	CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)								
Already approved:	0.0	Remaining:	4.38						

(V) BUSINESS PLAN		2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)	0.3	0	0	0.3	0	0	0.3	0	0.3	1.2
	Funding (US \$)	45,000	0	0	29,000	0	0	28,000	0	14,000	116,000
UNIDO	ODS phase-out (ODP tonnes)	0.8	0	0	0.4	0	0	0.4	0	0.2	1.8
	Funding (US \$)	125,000	0	0	59,950	0	0	59,950	0	23,980	268,880

(VI) PROJECT	(VI) PROJECT DATA		2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protoco	Montreal Protocol consumption limits		n/a	6.74	6.74	6.07	6.07	6.07	6.07	6.07	4.38	n/a
Maximum allow tonnes)	able consumpt	ion (ODP	n/a	6.74	6.74	6.07	6.07	6.07	6.07	6.07	4.38	n/a
Project Costs UNEP Project requested in		Project costs	38,000	0	0	30,000	0	0	30,000	0	10,000	108,000
principle(US\$)		Support costs	4,940	0	0	3,900	0	0	3,900	0	1,300	14,040
	UNIDO	Project costs	96,500	0	0	50,000	0	0	50,000	0	25,500	222,000
		Support costs	8,685	0	0	4,500	0	0	4,500	0	2,295	19,980
Total project cos (US \$)	Total project costs requested in principle (US \$)		134,500	0	0	80,000	0	0	80,000	0	35,500	330,000
Total support costs requested in principle (US \$)		13,625	0	0	8,400	0	0	8,400	0	3,595	34,020	
Total funds requ	ested in princip	ole (US \$)	148,125	0	0	88,400	0	0	88,400	0	39,095	364,020

(VII) Request for funding	(VII) Request for funding for the first tranche (2012)										
Agency	Agency Funds requested (US \$) Support costs (US \$)										
UNEP	38,000	4,940									
UNIDO	96,500	8,685									

Funding request:	Approval of funding for the first tranche (2012) as indicated above
Secretariat's recommendation:	Individual consideration

#### PROJECT DESCRIPTION

1. On behalf of the Government of Nicaragua UNEP, as the lead implementing agency, has submitted to the 66<sup>th</sup> meeting of the Executive Committee stage I of the HCFC phase-out management plan (HPMP) at a total cost of US \$359,068 as originally submitted, consisting of US \$78,500, plus agency support costs of US \$10,205 for UNEP, and US \$251,500 plus agency support costs of US \$18,863 for UNIDO, as originally submitted, to implement activities that will enable the country to comply with the Montreal Protocol's 35 per cent reduction step in HCFC consumption by 2020. The first tranche for stage I being requested at this meeting amounts to US \$28,000 plus agency support costs of US \$3,640 for UNEP, and US \$106,500 plus agency support costs of US \$7,988 for UNIDO.

#### **Background**

2. Nicaragua, with a total population of about 5.9 million inhabitants, has not ratified the Montreal and Beijing amendments to the Montreal Protocol.

# **ODS** regulations

- 3. The regulation for control of ODS entered into force in September 2002 and *inter alia* established a registry of importers and exporters of ODS; required mandatory registration and authorization for import and export of ODS; banned import of new or used CFC-based refrigeration equipment; established CFC import quotas; and required mandatory identification and labelling of ODS. The ODS licensing system is in operation. The HCFC compliance strategy is based on a policy and regulatory framework that includes a new ODS control regulation, which incorporates HCFCs and their latest control measures, and controls imports of HCFC-based equipment. The regulation has been forwarded to the Presidency of the Republic and its approval is expected to be at the end of April 2012.
- 4. The National Ozone Unit (NOU) located in the Ministry of Environment and Natural Resources is responsible for the implementation of the Montreal Protocol. The NOU has a consultative and counselling body, the Ozone Commission that supports its decision-making process and is formed by representatives from different ministries of the Government, the industrial and commercial sectors, and academia.

#### HCFC consumption and sector distribution

5. The levels of consumption reported under Article 7 of the Montreal Protocol are shown in Table 1. The HCFC baseline for compliance has been calculated at 6.74 ODP tonnes.

Table 1. HCFC consumption in Nicaragua

HCFC	2007	2008	2009	2010	Baseline
Metric tonnes					
HCFC-22	2.72	66.00	102.72	119.63	111.18
HCFC-141b	-	2.00	2.72	8.00	5.36
HCFC-123	-	-	-	1.00	0.5
HCFC-124	-	2.72	0.45	2.27	1.36
Total (mt)	2.72	70.72	105.89	130.90	118.39
ODP tonnes					
HCFC-22	0.15	3.63	5.65	6.58	6.11
HCFC-141b	-	0.22	0.30	0.88	0.59
HCFC-123	-	-	-	0.02	0.01
HCFC-124	-	0.06	0.01	0.05	0.03
Total (ODP tonnes)	0.15	3.91	5.96	7.53	6.74

6. Nearly 91 per cent of the total consumption (in ODP tonnes) is HCFC-22 used for servicing refrigeration and air conditioning equipment, as shown in Table 2. HCFC-123 is used as a refrigerant in

chillers located in hospitals and HCFC-124 is a component of refrigeration blends that are used as replacement of CFC-12. Small quantities of HCFC-141b are used for flushing refrigeration equipment. This equipment is serviced by 1,000 technicians working in some 500 service workshops. About 15 per cent of the workshops are dedicated to servicing mobile air conditioning systems, while the remaining 85 per cent service all types of refrigeration equipment.

Table 2. Distribution of HCFC-22 in Nicaragua (2010)

Cubaaatan		Consumption (mt	t)	Cons	<b>Consumption ODP tonnes</b> )				
Subsector	Total	Refrigeration	A/C	Total	Refrigeration	A/C			
Domestic									
Air-conditioning	7.18	-	7.18	0.39	-	0.39			
Commercial				-	-	-			
Hospitals	18.14	2.18	15.96	1.00	0.12	0.88			
Hotels	13.92	1.67	12.25	0.77	0.09	0.67			
Restaurants	5.29	2.27	3.01	0.29	0.13	0.17			
Super markets	9.45	2.46	6.99	0.52	0.14	0.38			
Butcher	16.47	16.47	-	0.91	0.91	-			
Other	5.82	2.91	2.91	0.32	0.16	0.16			
Industrial				-	-	_			
	26.33	22.38	3.95	1.45	1.23	0.22			
Stockpiled	16.81	-	-	0.92	-	-			
Total	119.40	50.33	52.25	6.57	2.77	2.87			

7. Additionally, HCFC-141b is also imported in pre-blended polyols from Argentina and Brazil, for the production of rigid foams, mainly for small reparations in floats and used boat, or cold room insulation walls. The consumption is located in small craft manufacturing companies and refrigeration cold rooms assemblers. No funding has been approved for the phase-out of CFC-11 used as a blowing agent in Nicaragua.

Table 3. HCFC-141b imported in pre-blended polyols

Year	2007	2008	2009	2010	Avg. (2007-2009)
Metric tonnes	6.56	1.30	0.61	1.16	2.82
ODP tonnes	0.72	0.14	0.07	0.13	0.31

8. The increase in the consumption of HCFC-22 is due to the sharp upswing in the tourism sector, resulting in the installation and servicing of larger numbers of air conditioners in small and medium sized hotels, as well as the need to charge new refrigeration equipment and air conditioners that are being imported empty. The increase in HCFC-141b is related to the flushing of refrigeration equipment, which was done with CFC-11 prior to 2010. The 2011-2020 forecast of HCFC consumption is shown in Table 4.

Table 4. 2011-2020 forecast of HCFC consumption

Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Metric tonnes										
Unconstrained	154.31	182.08	214.86	253.53	299.17	353.02	416.56	491.55	580.02	684.43
Constrained	154.31	182.08	118.36	118.36	106.52	106.52	106.52	106.52	106.52	76.93
ODP tonnes										
Unconstrained	8.89	10.48	12.37	14.6	17.23	20.33	23.99	28.3	33.4	39.41
Constrained	8.89	10.48	6.74	6.74	6.07	6.07	6.07	6.07	6.07	4.38

9. The current prices of HCFCs and alternative refrigerants per kilogram in the country are: US \$7.38 for HCFC-22, US \$10.78 for HFC-134a; US \$14.60 for R-404a; US \$20.148 for R-407c; and US \$7.37 for HCFC-141b.

# **HCFC** phase-out strategy

- 10. The overarching strategy proposed in the HPMP is based on the regulatory, institutional and technical infrastructure established so far. The objective of stage I is to meet the Montreal Protocol's HCFC control targets, up to and including the 35 per cent reduction in 2020, through the implementation of the following activities:
  - (a) Improved control of ODS trade, in cooperation with the General Direction of Customs by adapting the legal framework to support the HCFC overarching strategy including the establishment of import quotas and new regulations such as import ban of HCFC-141b for flushing and foam applications; adoption of the common Central American customs code and continued cooperation with Ozone Offices in neighbouring countries; training of customs officers and other staff involved in ODS import procedures; and monitoring of the ODS import quota system;
  - (b) Technical assistance for the refrigeration and air conditioning servicing sector to strengthen technical capacity through certification and training of technicians and engineers in best practices, refrigerant conservation and alternative technologies;
  - (c) Incentive programme for the conversion of refrigeration and air conditioning systems; establishment of a centre of excellence in refrigeration and air conditioning, with capacity-building for national experts; continued operation, updating and maintaining of the recovery and recycling network; and technical assistance for phasing out the use of HCFC-141b in flushing refrigeration circuits;
  - (d) Technical assistance in the foam sector to phase out the use of HCFC-141b contained in imported polyols through the introduction of non-HCFC alternatives and technical assistance to users, supported by import controls, regulations, and training; and
  - (e) Implementation, monitoring and control of the activities in the HPMP.
- 11. After 2020, the strategy will be based on: the promotion of HCFC alternatives and replacement technologies, in particular natural refrigerants in the air conditioning sector; good service practices; end-user conservation and conversion plans to enable efficient management of equipment and refrigerant banks; management of unwanted ODS in order to respond to the needs of refrigerant recovery and recycling systems; and eventual HCFC-based equipment decommissioning.

### Cost of stage I of the HPMP

12. The total cost of stage I of the HPMP is US \$330,000 as shown in Table 5.

Table 5. Total cost of stage I of the HPMP for Nicaragua

		Cost
Activity	Agency	(US\$)
Improved control of ODS trade,	UNEP	47,000
Technical assistance for the refrigeration and air conditioning service sector	UNIDO	34,500
Incentive programme for conversion of refrigeration and air conditioning		
systems	UNIDO	170,500
Technical assistance in the foam sector	UNIDO	15,000
Implementation monitoring and control	UNEP/UNIDO	63,000
Total		330,000

#### SECRETARIAT'S COMMENTS AND RECOMMENDATION

#### **COMMENTS**

13. The Secretariat reviewed the HPMP for Nicaragua 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<sup>th</sup> Meeting (decision 60/44), subsequent decisions on HPMPs and the 2012-2014 business plan of the Multilateral Fund. The Secretariat discussed with UNEP and UNIDO technical and cost-related issues, which were addressed as summarized below.

# Status of implementation of the CFC phase-out plan

14. All of the activities included in the CFC phase-out plan have been implemented. As of December 2011, of the US \$520,000 approved for the terminal phase-out management plan (TPMP), US \$509,000 had been disbursed with an uncommitted balance of US \$11,000. UNEP reported that this funding has already been committed through an agreement with the vocational institution of Nicaragua for launching a training programme on non-ODP and low-global-warming potential (GWP) alternative technology in the refrigeration and air-conditioning sector.

# Status of ratification of the Montreal and Beijing amendments

15. Noting that the Government of Nicaragua has not yet ratified the Montreal and Beijing amendments to the Montreal Protocol, the Secretariat suggested that UNEP and UNIDO discuss the implications of not being a Party to these Amendments with the relevant Government authorities, and provide all necessary assistance to the Government for ratification. In responding to this suggestion, the agencies reported that the documents for ratification of the two amendments had been submitted by the Ministry of Environment and Natural Resources to the Executive Branch in 2010. The National Assembly is expected to approve the documents in the second quarter of 2012.

# HCFC consumption

16. As explained in the HPMP, the HCFC consumption of 2.72 mt (0.15 ODP tonnes) reported under Article 7 for 2007, which was much lower than that reported subsequently, was due to a reporting error since the actual consumption for that year was 50.90 mt (2.80 ODP tonnes). Noting that the consumption of 50.90 mt was indeed correct based on the HCFC-based equipment in operation and the historical levels of consumption reported by the country, upon a suggestion by the Secretariat, UNIDO and UNEP assisted the Government to submit an official request to the Ozone Secretariat to change the reported HCFC consumption for 2007. The official letter was sent on 24 February 2012.

#### Starting point for aggregate reduction in HCFC consumption

17. The Government of Nicaragua agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 6.74 ODP tonnes, calculated using actual consumption of 5.96 ODP tonnes and 7.53 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol, plus 0.31 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems, resulting in 7.05 ODP tonnes.

### Technical and cost-related issues

18. The Secretariat noted that consultation meetings were held with all stakeholders during HPMP preparation, during which the HCFC phase-out schedule was explained. The potential introduction of high energy-efficiency refrigeration equipment was briefly discussed with the main conclusion that it will be market driven, as well as by the availability of technologies and their costs. The Secretariat was also

informed that the Ozone Office is coordinating policy measures with the Ministry of Mines and Energy, which promotes an energy efficiency programme for all appliances and equipment. The Ozone Office is also discussing a proposal with the Ministries of Development, Industry and Trade, and Finance and Public Credit to leverage the existing incentive mechanism for the tourism sector for the introduction of new non-HCFC air conditioners imported under this mechanism.

- 19. The sustainability of the end-users incentive programme was discussed in view of the low price of HCFC-22 as compared to any other alternative refrigerants and the major losses of refrigerants due to poor servicing practices. As indicated by UNEP and UNIDO, the first and most urgent action is to continue implementing training programmes on good service practices, followed by an update of the recovery and recycling centres to offer recycling (or potentially reclaiming) to end-users. To the extent possible, all existing equipment will be allowed to remain in service up until the end of its natural life. Technical skills for retrofitting HCFC-based equipment with viable alternatives will be provided; however, a retrofit programme *per se* will not be implemented at this stage. As technicians acquire the knowledge, they will be able to retrofit equipment when requested by the owners. If market conditions cause the HCFC-22 supply to fall below demand, then the trained technicians will have the option of retrofitting HCFC-based equipment.
- 20. Stage I of the HPMP proposes to phase out the 5.36 mt (0.59 ODP tonnes) of HCFC-141b reported under Article 7 used to flush refrigeration systems, and 2.82 mt (0.31 ODP tonnes) of HCFC-141b contained in imported pre-blended polyols, used by a few number of very small users. In further discussions, UNIDO reported that the Government of Nicaragua is committed to banning imports of HCFC-141b, both raw and contained in imported pre-blended polyols, once alternative technologies have been introduced in the foam and refrigeration servicing sectors by the end of 2016.
- 21. In view of the technical issues discussed, and within the level of funding available, UNEP and UNIDO, in consultation with the Government, revised the activities to be implemented in stage I as follows:
  - (a) Technical assistance for improved control of ODS trade: to establish and implement quotas for HCFCs, import controls on HCFC-based technology and HCFC-141b uses, prevent illegal trade of HCFCs including training to customs officers, develop and enforce regulations for operations with refrigerants, and develop information and awareness material;
  - (b) Technical assistance for refrigeration and air conditioning service sector: to train service technicians in good service practices, recovery and recycling operations, and use of alternative low-GWP refrigerants, and establish a certification scheme;
  - (c) Incentive programme for conversion of refrigeration and air conditioning systems: to establish a centre of excellence in refrigeration and air conditioning, update the equipment of the recycling and recovery network, and provide technical support for phasing-out HCFC-141b used for flushing refrigeration systems;
  - (d) Technical assistance in foam manufacturing sector to introduce non-HCFC-based pre-blended polyols; and
  - (e) Monitoring and control of the HPMP to coordinate, monitor and assess all activities of the HPMP among key stakeholders.
- 22. The total agreed funding of stage I of the HPMP is US \$330,000 with the distribution shown in Table 6.

Table 6. Total agreed cost of stage I of the HPMP for Nicaragua

Activity	Agency	Cost (US \$)
Improved control of ODS trade	UNEP	48,000
Technical assistance for the refrigeration and air conditioning service sector	UNIDO	36,500
Incentive programme for conversion of refrigeration and air conditioning		
systems	UNIDO	170,500
Technical assistance in the foam sector	UNIDO	15,000
Implementation monitoring and control	UNEP	60,000
Total		330,000

#### Impact on the climate

- 23. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices, recovery and recycling of refrigerants and the enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogram (kg) of HCFC-22 not emitted due to better refrigeration practices results in approximately 1.8  $CO_2$ -equivalent tonnes saved. Furthermore, the phase-out of 1.16 mt of HCFC-141b contained in imported pre-blended polyols by the foam enterprises will avoid the emission of 809 tonnes of  $CO_2$  into the atmosphere<sup>1</sup>, while the phase-out of 8.00 mt of HCFC-141b used for flushing refrigeration circuits will avoid the emission of an additional 5,800 tonnes of  $CO_2$  into the atmosphere. These figures are lower than the potential climate impact of the HPMP indicated in the 2012-2014 business plan of 9,645  $CO_2$ -equivalent tonnes.
- 24. A more 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 beginning of HPMP implementation, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22-based equipment being retrofitted.

#### Co-financing

25. 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, during implementation of stage I of the HPMP the Government of Nicaragua, with the assistance of UNIDO and UNEP, will identify potential sources of funding that will both benefit ozone protection and mitigate the impact on the climate. So far the Ozone Unit and the implementing agencies have been unsuccessfully searching for potential sources of funding for the project. However, any further resources required during stage I not covered by the Multilateral Fund will be sought from other sources of bilateral cooperation in line with the national policy of environmental protection.

#### 2012-2014 business plan of the Multilateral Fund

26. UNEP and UNIDO are requesting US \$364,020 (including agency support costs) for implementation of stage I of the HPMP. The total value requested for the 2012-2014 period of US \$148,125 including support costs is below the total amount in the business plan of US \$170,000 requested by UNEP and UNIDO. Furthermore, based on the HCFC baseline consumption in the servicing sector of 118.39 mt, Nicaragua' allocation up to the 2020 phase-out should be US \$315,000 in line with decision 60/44.

<sup>&</sup>lt;sup>1</sup> Based only on the GWP values of the blowing agents and their level of consumption before and after conversion.

# **Draft Agreement**

27. A draft Agreement between the Government of Nicaragua and the Executive Committee for HCFC phase-out is contained in Annex I of the present document.

#### RECOMMENDATION

- 28. The Executive Committee may wish to consider:
  - (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Nicaragua for the period 2012 to 2020 to reduce HCFC consumption by 35 per cent of the baseline, at the amount of US \$364,020, consisting of US \$108,000, plus agency support costs of US \$14,040 for UNEP, and US \$222,000, plus agency support costs of US \$19,980 for UNIDO on the understanding that:
    - (i) US \$315,000 were provided to address HCFC consumption in the refrigeration servicing sector to reach up to and include the 35 per cent reduction in 2020 in line with decision 60/44; and
    - (ii) US \$15,000 were provided for the investment component for the phase-out of 0.31 ODP tonnes of HCFCs used in the foam manufacturing sector;
  - (b) Noting that the Government of Nicaragua had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 6.74 ODP tonnes, calculated using actual consumption of 5.96 ODP tonnes and 7.53 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol, plus 0.31 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems, resulting in 7.05 ODP tonnes;
  - (c) Noting the commitment of the Government of Nicaragua to ban imports of HCFC-141b, both pure and contained in pre-blended polyols, no later than 1 January 2017;
  - (d) Deducting 2.67 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption;
  - (e) Approving the draft Agreement between the Government of Nicaragua and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
  - (f) Approving the first tranche of stage I of the HPMP for Nicaragua, and the corresponding implementation plan, at the amount of US \$148,125, consisting of US \$38,000, plus agency support costs of US \$4,940 for UNEP, and US \$96,500, plus agency support costs of US \$8,685 for UNIDO.

-----

#### Annex I

# DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF NICARAGUA 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 Nicaragua (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 4.38 ODP tonnes by 1 January 2020 in compliance with Montreal Protocol schedules.
- 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 that exceeds the level defined in row 1.2 of Appendix 2-A 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 that 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 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 agrees to implement this Agreement in accordance with the HCFC phase-out sector plans submitted. In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.
- 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 eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
  - (a) That the Country had met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. 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 are exempted;
  - (b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;

- (c) That the Country had submitted annual implementation reports in the form of Appendix 4-A ("Format of 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;
- (d) That the Country has submitted an annual implementation plan in the form of Appendix 4-A 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; and
- (e) That, for all submissions from the 68<sup>th</sup> meeting onwards, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and, where applicable, production and exports is in place and that the system is capable of ensuring the Country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this Agreement.
- 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 annual implementation plans 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 paragraph 4 above.
- 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 reduction of consumption and phase-out of the Substances specified in Appendix 1-A:
  - (a) Reallocations categorized as major changes must be documented in advance either in an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual implementation plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
    - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
    - (ii) Changes which would modify any clause of this Agreement;
    - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and
    - (iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
  - (b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and
  - (c) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.
- 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. UNEP has agreed to be the lead implementing agency (the "Lead IA") and UNIDO has agreed to be the 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 ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, 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 reached consensus on the arrangements regarding inter-agency 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 amount set out in Appendix 7-A ("Reductions in Funding for Failure to Comply") in respect of each ODP kg 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 above.
- 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 the information necessary to verify compliance with this Agreement.
- 14. The completion of stage I 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 level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and 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 sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee.

15. All of the conditions 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

# APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes			
HCFC-22	С	I	6.11			
HCFC-141b	С	I	0.59			
HCFC-123	С	I	0.01			
HCFC-124	С	I	0.03			
Sub-total	С	I	6.74			
HCFC-141b in imported polyols			0.31			
Total			7.05			

#### APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2012	2013- 2014	2015	2016- 2017	2018	2019	2020	Total
1.1	Montreal Protocol reduction schedule								
	of Annex C, Group I substances (ODP tonnes)	n/a	6.74	6.07	6.07	6.07	6.07	4.38	n/a
1.2	Maximum allowable total								
	consumption of Annex C, Group I substances (ODP tonnes)	n/a	6.74	6.07	6.07	6.07	6.07	4.38	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	38,000	0	30,000	0	30,000	0	10,000	108,000
2.2	Support costs for Lead IA (US \$)	4,940	0	3,900	0	3,900	0	1,300	14,040
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	96,500	0	50,000	0	50,000	0	25,500	222,000
2.4	Support costs for Cooperating IA (US \$)	8,685	0	4,500	0	4,500	0	2,295	19,980
3.1	Total agreed funding (US \$)	134,500	0	80,000	0	80,000	0	35,500	330,000
3.2	Total support costs (US \$)	13,625	0	8,400	0	8,400	0	3,595	34,020
3.3	Total agreed costs (US \$)	148,125	0	88,400	0	88,400	0	39,095	364,020
4.1.1	1 Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)							1.77	
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)						0		
4.1.3							4.34		
4.2.1	1   1   2   3						0.59		
4.2.2							0		
4.2.3							0		
4.3.1	Total phase-out of HCFC-123 agreed to be achieved under this agreement (ODP tonnes)							0	
4.3.2	Phase-out of HCFC-123 to be achieved in previously approved projects (ODP tonnes)							0	
4.3.3							0.01		
4.4.1							0		
4.4.2								0	
4.4.3							0.03		
4.5.1	(ODP tonnes)						0.31		
4.5.2							0		
4.5.3	5.3 Remaining eligible consumption for polyols (ODP tonnes)						0		

#### APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the last meeting of the year specified in Appendix 2-A.

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

- 1. The submission of the Implementation Report and Plan for each tranche request will consist of five parts:
  - (a) A narrative report, with data provided by calendar year, regarding the progress since the year prior to the previous report, reflecting 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 include ODS phase-out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Annual Implementation Plan(s), 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 on 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 until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
  - (d) A set of quantitative information for all annual implementation reports and annual implementation plans, submitted through an online database. 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), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and

(e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

#### APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

- 1. The National Ozone Unit (NOU) of Nicaragua, which is within the Ministry of Environment, will coordinate the implementation of the project and will be responsible for the national coordination of the whole HPMP program with the assistance of the implementing agencies. The NOU will be responsible for the monitoring of the phase-out implementation plan, making the follow-up of the promulgation, and the enforcement of the policies and legislation. The NOU will support the Lead IA and the Cooperating IA in the preparation of the annual implementation plans and progress reports for the Executive Committee.
- 2. The implementation of the phase-out plan will need to be aligned and closely coordinated with the different general instructions, regulatory and fiscal actions, capacity creation and awareness that the government of Nicaragua executes, to ensure the consistency of the Governmental priorities. The phase-out plan will be managed by a team dedicated to this job that consists of a coordinator that will be designated by the NOU and have the support of the representatives and experts of the implementation agencies and the necessary support infrastructure. In addition, the local distribution of service equipment that will be purchased through the Cooperating IA's acquisition procedure will also be implemented by the coordinator.

#### APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

- 1. The Lead IA will be responsible for a range of activities, including 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 HPMP;
  - (b) Assisting the Country in preparation of the Implementation Plans and subsequent reports as per Appendix 4-A;
  - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the 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 annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
  - (e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A 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 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 IA, 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
- (1) 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 entity 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 THE COOPERATING IMPLEMENTING AGENCY

- 1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the overall plan, including at least the following:
  - (a) Providing assistance for policy development 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 \$180 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.

- - - - .