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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-fifth meeting
Bali, Indonesia, 13-17 November 2011

PROJECT PROPOSAL: MOROCCO

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

Phase-out

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

UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Morocco

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

(II) LATEST ARTICLE 7 DATA	Year: 2010	51.4 (ODP tonnes)
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(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				
HCFC123									
HCFC124									
HCFC141b				10.8	0.3				11.1
HCFC141b in		8.6							8.6
HCFC142b									
HCFC22					31.7				31.7

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	59.67	Starting point for sustained aggregate reductions:	68.0
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	11.0	Remaining:	42.90

(V) BUSINESS PLAN		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
UNIDO	ODS phase-out (ODP tonnes)	1.1		1.1								2.2
	Funding (US \$)	88,290	0	88,290	0	0	0	0	0	0	0	176,580

(VI) PROJECT DATA			2010	2011	2012	2013	2014	2015	Total
Montreal Protocol consumption limits (estimate)			n/a	n/a	n/a	59.67	59.67	53.70	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	n/a	59.67	57.67	53.70	n/a
Project Costs requested in principle(US\$)	UNIDO	Project costs	951,740	80,000	220,000		35,000		1,286,740
		Support costs	71,381	6,000	16,500		2,625		96,506
Total project costs requested in principle (US \$)			951,740	80,000	220,000	0	35,000	0	1,286,740
Total support costs requested in principle (US \$)			71,381	6,000	16,500	0	2,625	0	96,506
Total funds requested in principle (US \$)			1,023,121*	86,000	236,500	0	37,625	0	1,383,246

* Approved at the 62nd meeting.

(VII) Request for funding for the first tranche (2011)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNIDO	80,000	6,000

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

PROJECT DESCRIPTION

1. On behalf of the Government of Morocco, UNIDO as the designated implementing agency has submitted to the 65th meeting of the Executive Committee stage I of the HCFC phase-out management plan (HPMP) at a total cost of US \$1,286,540 plus agency support costs of US \$96,491, as originally submitted, to meet the freeze in HCFC consumption in 2013 and the 10 per cent reduction step by 2015. This amount includes US \$951,740 plus agency support costs of US \$71,381 for UNIDO for the phase-out of 11.00 ODP tonnes of HCFC-141b used in the manufacture of polyurethane rigid insulation foam for domestic refrigerators at Manar Company, approved at the 62nd meeting.
2. The first tranche for stage I being requested at this meeting amounts to US \$300,000 plus agency support costs of US \$22,500 for UNIDO, as originally submitted.

Background

3. Morocco, with a total population of 35.3 million inhabitants, has ratified the London and Copenhagen amendments of the Montreal Protocol and expects the ratification process for the Montreal and Beijing amendments to be completed soon.

ODS regulations

4. ODS, including HCFCs, are controlled through import and export licences issued by the Ministry of Foreign Trade based on a review by the Ministry of Industry, Commerce and New Technologies (MICNT). The licensing system, established in 2006 and monitored by Moroccan customs, was used successfully to control CFC imports and exports and is currently applied to the HCFCs used in Morocco (HCFC-141b and HCFC-22).
5. The National Ozone Office (NOU) coordinates ODS phase-out activities and liaises with other ministries (such as MICNT, Environment, Agriculture and Fisheries) and stakeholders (customs, the relevant refrigeration, air-conditioning and fisheries sector associations, and the Moroccan Cleaner Production Centre). The Government will implement a new licensing system and impose quotas to control imports of pure HCFC-141b and HCFC-22 for the servicing sector by the end of 2011. HCFC-141b contained in imported polyols will be included from 1 January 2013 when a quota system will be established.

HCFC consumption and sector distribution

6. HCFC-141b and HCFC-22 are the only HCFCs consumed in Morocco. The amount of HCFC-141b contained in imported polyols has been reported under Article 7 since 2009 and, is therefore, subject to compliance (Table 1). HCFC consumption in Morocco fell in 2010 due to reduced demand for refrigeration equipment. However, consumption in 2011 is estimated to increase to 64.67 ODP tonnes and then decrease to 63.50 ODP tonnes in 2012 when the Manar Company HCFC-141b investment project is completed. The HCFC baseline for compliance has been estimated at 59.67 ODP tonnes.

Table 1: HCFC consumption reported under Article 7 of the Montreal Protocol in Morocco

HCFC	2006	2007	2008	2009	2010	Baseline
Metric tonnes						
HCFC-22	453.00	471.00	674.73	834.10	576.52	705.31
HCFC-141b	226.00	66.00	125.64	200.90	178.80	189.85
Total (mt)	679.00	537.00	800.37	1,035.00	755.32	895.16
ODP tonnes						
HCFC-22	24.92	25.91	37.11	45.88	31.71	38.79
HCFC-141b	24.86	7.26	13.82	22.10	19.67	20.88

HCFC	2006	2007	2008	2009	2010	Baseline
Total ODP tonnes	49.78	33.17	50.93	67.98	51.38	59.67

Foam sector

7. Pure HCFC-141b is used for the production of insulation foam in the manufacture of domestic refrigerators by Manar Company and Fagor (foreign owned). Sixteen small and medium sized enterprises (SMEs) also use imported polyols containing HCFC-141b as shown in Table 2. Eleven companies producing insulation foam for commercial refrigerators were funded by the Multilateral Fund to convert from CFC-11 as a blowing agent and CFC-12 as a refrigerant to HCFC-141b and HFC-134a respectively.

Table 2. HCFC-141b used by SMEs foam enterprises in Morocco

Enterprise	HCFC-141b (mt)			HCFC-141b (ODP tonnes)		
	2007	2008	2009	2007	2008	2009
Siafmo	0.50	0.50	0.50	0.06	0.06	0.06
Comafro	-	1.10	1.30	-	0.12	0.14
Promaghreb	36.00	36.00	-	3.96	3.96	-
CFL	0.45	0.50	0.40	0.05	0.06	0.04
Engequife	0.52	0.50	0.60	0.06	0.06	0.07
Smifam	0.70	0.80	0.80	0.08	0.09	0.09
AMF	1.15	1.10	0.90	0.13	0.12	0.10
Polytech	15.10	17.60	25.20	1.66	1.94	2.77
Alom du Nord	0.80	1.40	1.20	0.09	0.15	0.13
Mafidec (Frimac)	0.30	0.20	0.20	0.03	0.02	0.02
Sonyafroid	6.30	6.70	7.10	0.69	0.74	0.78
First clim	4.50	4.80	5.10	0.50	0.53	0.56
Lahdar	4.50	4.80	5.10	0.50	0.53	0.56
Scultex	1.60	1.90	1.20	0.18	0.21	0.13
Panaf	19.00	19.00	19.00	2.09	2.09	2.09
Interfer	5.00	3.99	4.90	0.55	0.44	0.54
Total	96.42	100.89	73.50	10.61	11.10	8.09

Refrigeration servicing sector

8. HCFC-22 is imported by 14 companies for the following three servicing sub-sectors (Table 3):
- The fishing sub-sector consists of some 350 fishing vessels and on-shore cold stores. HCFC consumption in this sub-sector, representing 60 per cent of the total consumption in the country, is very high due to the frequent recharge of the refrigeration equipment in vessels as a result of constant vibration and the rough conditions at sea. Most of the vessels are over 40 years old and must be retrofitted or replaced following a safety regulation issued by the Ministry of Fisheries in 2005;
 - The industrial refrigeration (agriculture and food) sub-sector, representing 25 per cent of the total consumption, comprises cold stores for fresh and perishable commodities. HCFC-22 is used to charge/re-charge newly assembled refrigeration equipment and to service existing equipment in different facilities (cold storage plants, supermarkets); and
 - The residential and commercial air conditioning sub-sector (15 per cent of the HCFC-22 consumption) includes both large and small servicing workshops. An estimated 100,000 residential air conditioning units are added annually to the local market. Refrigerant leakage rate varies from 2 per cent in newer equipment to 15 per cent in older units.

Table 3. Sector distribution of HCFC-22 in Morocco

HCFC-22	2006	2007	2008	2009	2010
Metric tonnes					
Fishing	272.00	283.00	405.00	500.00	345.50
Industrial refrigeration	113.00	118.00	169.00	209.00	105.00
Air-conditioning	68.00	71.00	101.00	125.00	125.00
Total (mt)	453.00	472.00	675.00	834.00	575.50
ODP tonnes					
Fishing	14.96	15.57	22.28	27.50	19.00
Industrial refrigeration	6.22	6.49	9.30	11.50	5.78
Air-conditioning	3.74	3.91	5.56	6.88	6.88
Total (ODP tonnes)	24.92	25.97	37.14	45.88	31.66

9. In addition to HCFC-22 used in the refrigeration servicing sector, 10.00 mt (1.10 ODP tonnes) of HCFC-141b are used by the National Rail Bureau to clean air-conditioning circuits.

HCFC overarching strategy and proposed phase-out activities

10. The Government of Morocco has decided to phase out its HCFC consumption through a combination of investment projects and policies, using also lessons learned during CFC phase-out activities.

11. Stage I of the HPMP will eliminate 14.30 ODP tonnes of HCFCs by 2015 by phasing out: HCFC-141b used by Manar Company and Fagor (foam) and the National Railway Bureau (as a solvent); freezing the consumption of HCFC-141b contained in imported polyols; and reducing HCFC-22 consumption through the quota system, training of custom officials and awareness raising activities. Stage II will phase-out an additional 25.67 ODP tonnes of HCFCs by banning the import of and phasing out the use of HCFC-141b contained in imported polyols; and banning imports of HCFC-22 based equipment and components and promoting best refrigeration servicing practices. In stage II, a pilot project to retrofit HCFC-22 refrigeration equipment used in the industrial and commercial refrigeration and in the fishing sub-sectors to alternative refrigerants will be implemented. In stage III, an additional pilot project to retrofit HCFC-22 in commercial air conditioning systems will be implemented, added to the continued enforcement of the licensing and quota systems, training of refrigeration service technicians, recycling and recovery operations, and banning HCFC-22 from all applications.

Conversion of the foam enterprises

12. Stage I proposes to phase out a total of 119.09 mt (13.10 ODP tonnes) of HCFC-141b at Manar Company and at Fagor by conversion to cyclopentane technology. A project for the conversion of Manar Company was approved at the 62nd meeting. UNIDO has reported that the project document has been signed and the bids for the equipment required for the conversion have been prepared. A contract should be awarded in September 2011; the new equipment will be tested in June 2012; and the project will be completed by the end of 2012.

13. Fagor is currently consuming 19.09 mt (2.1 ODP tonnes) of HCFC-141b as a foam blowing agent. The enterprise is planning to self-finance the conversion of its foam production lines to cyclopentane technology before 1 January 2015. Fagor agreed to limit its import of HCFC-141b to 22.10 mt (2.43 ODP tonnes) in 2013, in order to assist the Government of Morocco to meet the 2013 HCFC consumption freeze.

Activities in the refrigeration servicing sector

14. The National Rail Bureau proposes to replace HCFC-141b used for flushing refrigeration equipment with alternative solvents (Genesolv S-T and Vertrel C-HD), which use the same flushing process but recycle the solvent. The cost to phase out 16.70 mt (1.84 ODP tonnes) of HCFC-141b is estimated at US \$217,800 including the purchase of flushing kits, cylinders, alternative solvents and training of technicians.

15. During stage I, awareness raising activities coordinated with trade and industry associations will be targeted at stakeholders in the foam and fishing sectors, and training programmes for customs officials will be implemented by 2013. An electronic licensing system to improve efficiency and allow users to keep track of their importation limits will be introduced once the quota system is in place. The costs of these activities are estimated at US \$117,000.

Cost of the HPMP

16. The total cost of the HPMP has been estimated at US \$6,197,671 to phase out 68.00 ODP tonnes of HCFCs, as shown in Table 4. The total cost of the stage I of the HPMP for Morocco has been estimated at US \$1,286,540, to meet the 10 per cent of HCFC reduction step by 2015, of which US \$951,740 was approved at the 62nd meeting. Implementation of the projects in stage I of the HPMP will result in the phase-out of 14.3 ODP tonnes of HCFCs.

Table 4. Total cost of the HPMP for Morocco

Description	Stage I	Stage II	Stage III	Total
HCFC phase out (ODP tonnes)	14.30	25.67	28.03	68.00
Total cost (US \$)	1,286,540(*)	2,388,203	2,522,928	6,197,671

(*) US \$951,740 was approved at the 62nd meeting for the phase-out of 11.00 ODP tonnes of HCFCs.

SECRETARIAT'S COMMENTS AND RECOMMENDATION**COMMENTS**

17. The Secretariat reviewed the HPMP for Morocco 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 60th meeting (decision 60/44), subsequent decisions on HPMPs and the 2011-2014 business plan of the Multilateral Fund. The Secretariat discussed technical and cost related issues with UNIDO which were satisfactorily addressed as summarized below.

Starting point for aggregate reduction in HCFC consumption

18. At the 62nd meeting the Government of Morocco had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the consumption of 68.00 ODP tonnes reported for 2009 under Article 7 of the Montreal Protocol, which was the latest data available when the project proposal for the phase-out of HCFC-141b used by Manar Company had been approved.

Technical and cost related issues

19. During stages I and II of the HPMP, a quota for HCFC-141b contained in imported polyols is proposed to apply from 2013 to 2020 at which point no more imports would be allowed. Given that the HCFC-141b used by Manar Company and Fagor will be phased out prior to 2015, UNIDO was asked what mechanisms would be put in place for disallowing the use of imported polyols containing HCFC-141b. UNIDO explained that once the two foam projects of Manar Company and Fagor are

converted to cyclopentane technology and the use of HCFC-141b by the National Rail Bureau is phased out, the Government of Morocco will ban the import of pure HCFC-141b into the country. Furthermore, Manar Company and Fagor will have to report annually the levels of HCFC-141b used (both pure and/or contained in pre-blended polyols) until the ban on HCFC-141b is in place in 2020. The Government will also monitor the import of polyols containing HCFC-141b and will not authorize Manar Company and Fagor to import them. Finally, the Government will periodically visit both companies in order to ensure compliance.

20. Considering that an umbrella project covering all the foam enterprises is proposed for stage II (with a project implementation timeframe of 2 to 3 years), the Secretariat suggested that the complete phase-out of HCFC-141b could be achieved earlier than 2020. UNIDO responded that for now the proposal to ban HCFC-141b contained in imported polyols in 2020 would remain. However, bringing forward the date of the complete phase-out of HCFC-141b would be further considered during the design and implementation of stage II of the HPMP.

21. With regard to the phase-out of HCFC-141b used for flushing refrigeration systems, UNIDO explained that the HCFC-141b consumption dropped from 14.17 mt (1.56 ODP tonnes) to 9.10 mt (1.00 ODP tonne) in 2010 due to the financial crisis. With the recovery of the economy, HCFC consumption is increasing and may reach 16.36 mt (1.80 ODP tonnes) by 2012. In further discussions with UNIDO it was agreed to consider the 2008-2010 average consumption of 10.00 mt (1.10 ODP tonnes) HCFC-141b used for this application as the project impact.

22. In addition to the US \$951,740 approved at the 62nd meeting funding for the phase-out of HCFC-141b used by Manar Company, the Government of Morocco is requesting an additional US \$335,000 for the phase-out of HCFC-141b used for flushing refrigeration circuits, and for activities for capacity building and enforcement. Given the high emissivity rate of HCFC-141b used for flushing refrigeration systems and the intensive use of HCFC-22 in the fishery subsector, an alternative approach was suggested by the Secretariat on a technical assistance programme in the refrigeration servicing sector, which could include:

- (a) Complete phase-out of HCFC-141b used for flushing refrigeration systems at a cost of US \$45,000 (based on the actual consumption of 10.0 mt at US \$4.50/kg);
- (b) Training programmes for refrigeration service technicians on good service practices, including introduction of alternative methods for flushing refrigeration systems; refrigerant leakage prevention and control particularly in equipment used in the fishery sub-sector; and provision of basic service tools for technicians, at a cost of US \$190,000 with an associated phase-out of 42.22 mt (2.32 ODP tonnes) of HCFC-22 (at US \$4.50/kg);
- (c) Training programme for customs officers and enforcement of HCFC legislation at a total cost of US \$20,000 with an associated phase-out of 4.44 mt (0.24 ODP tonnes) of HCFC-22; and
- (d) A project monitoring unit at a cost of US \$80,000.

23. In response, UNIDO indicated that the Government of Morocco has given priority to the phase-out of HCFC-141b and to address the servicing sector in stage II, as requested by the Executive Committee. This approach was proposed to all stakeholders during the preparation of the HPMP. UNIDO also advised that the long-term strategy for the fishing sub-sector is under assessment by the national authorities; furthermore, synergies linking the servicing sectors with energy efficiency programmes are under consideration. However, the Government agreed to start implementing activities in the servicing sector as suggested by the Secretariat.

24. As a result of the discussions between the Secretariat and UNIDO, stage I of the HPMP will result in the phase-out of 177.98 mt (16.89 ODP tonnes) as shown in Table 5.

Table 5. Agreed level of funding in stage I of the HPMP for Morocco

Phase-out activities	HCFCs to be phased out		Funding (US \$)
	(mt)	(ODP tonnes)	
Phase-out of HCFC-141b used by Manar(*)	100.00	11.00	951,740
Phase-out of HCFC-141b used by Fagor (**)	19.09	2.10	
Phase-out of HCFC-141b used for flushing equipment	10.00	1.10	45,000
Technical assistance in the refrigeration servicing sector	42.22	2.32	190,000
Training for customs officers and enforcement of legislation	4.44	0.24	20,000
Project monitoring unit			80,000
Total	175.76	16.77	1,286,740

(*) Approved at the 62nd meeting of the Executive Committee.

(**) To be funded by the enterprise (foreign-owned) prior to 1 January 2015.

25. Given the relatively high level of HCFC consumption to be phased out by 2015 (i.e., 16.77 ODP tonnes representing 28.1 per cent of the baseline consumption or 24.6 per cent excluding the 2.10 ODP tonnes to be phased out by Fagor with its own resources), the Secretariat noted that implementation of stage I of the HPMP could assist Morocco to make progress in meeting the control measures beyond 2015. In responding to this observation, UNIDO indicated that the low level of HCFC consumption in 2010 resulted in a baseline for compliance that does not reflect the actual level of consumption and thus should be reviewed with special consideration. The Government has selected the HCFC consumption of 68.00 ODP tonnes in 2009 as the starting point for aggregate reduction in HCFC consumption. The total amount to be phased out in stage I represents 24.7 per cent of the starting point which includes 2.10 ODP tonnes of HCFC-141b that will be phased-out by Fagor with its own resources.

Impact on the climate

26. A calculation of the impact on the climate of the HCFC-141b used by the foam enterprise in Morocco, based only on the global warming potential (GWP) values of the blowing agents and their level of consumption before and after conversion, is as follows: 119.1 mt of HCFC-141b will be phased out, 74.7 tonnes of cyclopentane will be phased in, and 84,853 tonnes of CO₂ that would have been emitted into the atmosphere will have been avoided (Table 6). Furthermore, the phase-out of 10.00 mt of HCFC-141b used for flushing refrigeration circuits will avoid the emission of an additional 7,250 tonnes of CO₂ into the atmosphere.

Table 6. Calculation of the impact on the climate associated with the foam sector

Substance	GWP	Tonnes/year	CO ₂ -eq (tonnes/year)
Before conversion			
HCFC-141b (*)	725	119.1	86,348
After conversion			
Cyclopentane	20	74.7	1,494
Net impact			(84,853)

(*) Including 100.00 mt (11.00 ODP tonnes) of HCFC-141b used by Manar Company.

27. The proposed technical assistance activities in the HPMP, which include 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 CO₂-equivalent tonnes saved. 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

28. 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 19th meeting of the Parties, the Government of Morocco has stated its strong commitment to seeking support from other environmental programmes, institutions and market instruments to maximize the environmental benefits of HCFC phase-out in areas where synergies with other environmental agreements are possible. Additional resources will be sought from e.g., Global Environment Facility, Strategic Approach to International Chemicals Management, and European institutions/programmes, and market instruments such as the Clean Development Mechanism and voluntary carbon markets.

2011-2014 business plan of the Multilateral Fund

29. UNIDO is requesting an additional US \$335,000 plus support costs for the implementation of stage I of the HPMP. This amount is above that in the business plan of US \$176,580, given that the total amount to be phase-out of 5.77 ODP tonnes (including 2.10 ODP tonnes covered by the foreign-owned enterprise Fagor) is 3.57 ODP tonnes more than the amount proposed in the business plan.

Draft Agreement

30. A draft Agreement between the Government of Morocco and the Executive Committee for HCFCs phase-out is contained in Annex I of the present document.

RECOMMENDATION

31. In light of the Secretariat's comments above in particular paragraph 25, the Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Morocco for the period 2011 to 2015 to meet the 10 per cent reduction in HCFC consumption, at the amount of US \$335,000 plus agency support costs of US \$25,125 for UNIDO;
- (b) Noting that stage I of the HPMP also covered US \$951,740 plus agency support costs of US \$71,381 for UNIDO for the phase-out of 11.00 ODP tonnes of HCFC-141b used in the manufacture of polyurethane rigid insulation foam for domestic refrigerators at Manar Company approved at the 62nd meeting;
- (c) Noting that the Government of Morocco has agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the consumption of 68.00 ODP tonnes reported for 2009 under Article 7 of the Montreal Protocol, which were the latest data available when the HCFC phase-out project for Manar Company had been approved at the 62nd meeting;
- (d) Noting the deduction of 11.00 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption for the project approved at the 62nd meeting, and deducting a further 5.77 ODP tonnes of HCFCs for the implementation of stage I of the HPMP;

- (e) Approving the draft Agreement between the Government of Morocco and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document; and
- (f) Approving the first tranche of stage I of the HPMP for Morocco, and the corresponding implementation plan, at the amount of US \$80,000 plus agency support costs of US \$6,000 for UNIDO.

Annex 1

DRAFT AGREEMENT BETWEEN THE THE KINGDOM OF MOROCCO AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUROCARBONS

1. This Agreement represents the understanding of the Government of the Kingdom of Morocco (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 53.70 ODP tonnes by 1 January 2015 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 and 4.2.3.
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 68th 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;
- (c) Should the Country decide during implementation of the agreement to introduce an alternative technology other than that proposed in the approved HPMP, this would require approval by the Executive Committee as part of an Annual Implementation Plan or the revision of the approved plan. Any submission of such a request for change in technology would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable. The Country agrees that potential savings in incremental costs related to the change of technology would decrease the overall funding level under this Agreement accordingly; and

- (d) 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. UNIDO has agreed to be the lead implementing agency (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). The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 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 and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead 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	C	I	38.79
HCFC-141b	C	I	20.88
Total			59.67

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2010	2011	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a-			59.67	59.67	53.70	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a-			59.67	57.67	53.70	n/a
2.1	Lead IA (UNIDO) agreed funding (US \$)	951,740	80,000	220,000		35,000		1,286,740
2.2	Support costs for Lead IA (US \$)	71,381	6,000	16,500		2,625		96,506
3.1	Total agreed funding (US \$)	951,740	80,000	220,000		35,000		1,286,740
3.2	Total support cost (US \$)	71,381	6,000	16,500		2,625		96,506
3.3	Total agreed costs (US \$)	1,023,121*	86,000	236,500		37,625		1,383,246
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)							2.57
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)							0.00
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)							36.22
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)							3.20
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)							11.00
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)							6.68

(*) Approved at the 62nd meeting for Manar Company.

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) will appoint a national institution to monitor all activities of the HPMP. This institute will submit annual progress reports of status of implementation of the HPMP through the NOU to the Lead IA.
2. Verification of the achievement of the performance targets, specified in the Plan, will be undertaken, upon specific request of the Executive Committee, by an independent local company or independent local consultants contracted by the Lead IA.

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;
 - (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) 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, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;
 - (j) Ensuring that disbursements made to the Country are based on the use of the indicators; and
 - (k) 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 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 \$200 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.
