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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Eighty-third Meeting Montreal, 27–31 May 2019

PROJECT PROPOSAL: MOROCCO

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

Phase-out

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

UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Morocco

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE	
HCFC phase out plan (Stage I)	UNIDO	65 th	20% by 2017	

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2017	32.64 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2017		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption		
				Manufacturing	Servicing						
HCFC-141b											
HCFC-141b in Imported Pre- blended Polyol		12.90							12.90		
HCFC-22					32.64				32.64		

(IV) CONSUMPTION DATA (ODP tonnes)								
2009 - 2010 baseline:	51.4	Starting point for sustained aggregate reductions:	68.00					
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)								
Already approved:	14.20	Remaining:	53.80					

(V) BUSINESS PLAN		2018	2019	Total
UNIDO	ODS phase-out (ODP tonnes)		0.60	0.60
	Funding (US \$)		37,625	37,625

(VI) PROJI	ECT DATA*		2010	2011	2012	2013	2014	2015	2017	2018	2019	2020	Total
Montreal Pr	otocol consun	nption limits	n/a	n/a	n/a	51.35	51.35	46.22	46.22	46.22	43.33	43.33	n/a
	llowable cons P tonnes)	umption	n/a	n/a	n/a	51.35	49.35	46.22	41.08	41.08	41.08	41.09	n/a
Agreed Funding	UNIDO	Project costs	951,740	80,000	220,000	0	0	0			35,000		1,286,740
(US\$)		Support costs	71,381	6,000	16,500	0	0	0			2,625		96,506
Funds appro ExCom (US	•	Project costs	951,740	80,000	220,000	0	0	0	0	0	0		1,251,740
		Support costs	71,381	6,000	16,500	0	0	0	0	0	0		93,881
Total funds for approval		Project costs	0	0	0	0	0	0	0	0	35,000**		35,000
meeting (US	S\$)	Support costs	0	0	0	0	0	0	0	0	2,625**		2,625

^{*}In accordance with the updated Agreement to be approved at the $83^{\rm rd}$ meeting

^{**}The third and final tranche was due for submission in 2017.

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

1. On behalf of the Government of Morocco, UNIDO as the designated implementing agency has submitted a request for funding for the third and final tranche of stage I of the HCFC phase-out management plan (HPMP) at the amount of US \$35,000, plus agency support costs of US \$2,625¹. The submission includes a progress report on the implementation of the third tranche, the verification report on HCFC consumption for 2016 to 2018, and the tranche implementation plan for 2019 and 2020.

Submission of the third and final tranche at the 82nd meeting

- 2. The request for funding for the third and final tranche of stage I of the HPMP for Morocco was first submitted to the 82nd meeting. During the project review process, it was suggested that the request be withdrawn and be resubmitted to a future meeting for *inter alia* the inclusion of a revision of the Agreement between the Government of Morocco and the Executive Committee to reflect the change of the HCFC consumption baseline from 59.67 ODP tonnes (at the time of the approval of stage I of the HPMP) to 51.35 ODP tonnes; the redundancy of an activity to phase out 1.1 ODP tonnes (10 mt) of HCFC-141b used for flushing equipment of refrigeration circuits given that since 2014 the reported consumption of HCFC-141b has been zero; and the low level of disbursements of the second tranche (only 11.5 per cent) and of all the funding that had been approved (23 per cent).²
- 3. The revised funding tranche request submitted by UNIDO on behalf of the Government of Morocco to the 83^{rd} meeting, has addressed all issues raised at the 82^{nd} meeting.

Change of baseline

- 4. At its 65th meeting, the Executive Committee approved, in principle, stage I of the HPMP for Morocco for the period 2011 to 2017 to reduce HCFC consumption by 20 per cent of the baseline, at the amount of US \$335,000, plus agency support costs of US \$25,125 for UNIDO. In approving stage I, the Committee note that the project to phase out 11.00 ODP tonnes of HCFC-141b used in the manufacture of polyurethane rigid insulation foam for domestic refrigerators at Manar Company at the amount of US \$951,740, plus agency support costs of US \$71,381 for UNIDO, had already been approved at the 62nd meeting and had been included in stage I of the HPMP (decision 65/42).
- 5. In submitting its HPMP, the Government of Morocco had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption, the consumption of 68.0 ODP tonnes reported for 2009 under Article 7 of the Montreal Protocol (i.e., 45.9 ODP tonnes of HCFC-22 and 22.1 ODP tonnes of HCFC-141b), which were the latest data available when the HCFC phase-out project for Manar Company had been approved.
- 6. Subsequently, the HCFC baseline for compliance was adjusted from 59.67 ODP tonnes to 51.35 ODP tonnes, after deducting 8.32 ODP tonnes of HCFC-141b contained in imported pre-blended polyols. Table 1 shows the revised HCFC consumption baseline and the estimated consumption of HCFC-141b in imported pre-blended polyols

Table 1. Revised HCFC-baseline for consumption in Morocco

HCFC	2009	2010	Baseline	
Metric tonnes				
HCFC-141b	127.38	100.8	114.09	
HCFC-22	834.1	576.52	705.45	
Total (mt)	961.48	677.32	819.54	
HCFC-141b in imported pre-blended polyols*	73.52	78.00		

¹ As per the letter of 14 March 2019 from the Ministry of Industry, Trade and Digital Economy of Morocco to UNIDO

² Paragraph 5 of document UNEP/OzL.Pro/ExCom/82/31

HCFC	2009	2010	Baseline
ODP tonnes			
HCFC-141b	14.01	11.09	12.55
HCFC-22	45.88	31.71	38.80
Total (ODP tonnes)	59.89	42.80	51.35
HCFC-141b in imported pre-blended polyols*	8.10	8.58	

^{*}Country programme (CP) data

Report on HCFC consumption

7. The Government of Morocco reported a consumption of 23.40 ODP tonnes of HCFC in 2018, which is 54 per cent below the HCFC baseline for compliance. The 2013-2018 HCFC consumption is shown in Table 2.

Table 2: HCFC consumption in Morocco (ODP tonnes)

HCFC	2014	2015	2016	2017	2018*	Baseline
Metric tonnes						
HCFC-141b	0.00	0.00	0.00	0.00	0.00	114.09
HCFC-22	695.67	306.89	488.66	593.46	425.45	705.45
Total (mt)	695.67	306.89	488.66	593.46	425.45	819.54
HCFC-141b in imported polyols**	98.50	104.41	110.67	117.31		
ODP tonnes						
HCFC-141b	0.00	0.00	0.00	0.00	0.00	12.55
HCFC-22	38.26	16.88	26.88	32.64	23.40	38.80
Total (ODP tonnes)	38.26	16.88	26.88	32.64	23.40	51.35
HCFC-141b in imported polyols**	10.84	11.49	12.17	12.90		

^{*} Data from the verification report on HCFC consumption

- 8. Since 2014, consumption of HCFC-141b (in bulk) has been zero, as a result of the successful conversion of Manar Company to cyclopentane supported by an import ban issued by the Government of Morocco. However, import of HCFC-141b contained in imported pre-blended polyols has increased from 8.58 ODP tonnes in 2010 to 12.90 ODP tonnes in 2017. The Government is considering addressing this use under stage II of the HPMP.
- 9. The total consumption of HCFC-22 is used in the refrigeration and air-conditioning (RAC) sector, and mostly for servicing equipment. The overall consumption has been decreasing due to the enforcement of the licensing and quotas systems, activities in the refrigeration servicing sector included in stage I and the import of non-HCFC-based RAC equipment into the country. Yearly fluctuations of HCFC-22 consumption are due to market demands, the availability of use of stocks from previous years, and the local economic situation.

Country programme (CP) implementation report

10. The Government of Morocco reported HCFC sector consumption data under 2017 CP implementation report, which is consistent with the data reported under Article 7 of the Montreal Protocol. The country has not yet submitted its 2018 CP data.

Verification report

11. The verification report, confirmed that the Government had an effective licensing and quota system for HCFC imports and exports, and that the total HCFC consumption for 2016 was 26.88 ODP tonnes and for 2017 was 32.64 ODP tonnes; for 2018, the estimated consumption was 23.40 ODP tonnes. The verification did not provide recommendations, but was complementary of the licensing and quota system. The control of ODS imports was electronically managed through a system called PortNet, which linked

^{**} CP data

about 20,000 importers, banks, customs and enforcement authorities. The system was introduced in 2015 and the data is reliable. The expanded harmonized system (HS) customs code used by the Government ensured the proper identification of refrigerants for control and reporting purposes.

Progress report on the implementation of the second tranche of the HPMP

Legal framework

- 12. Since 2006, the Government of Morocco has an operational licensing and quota system, which covers the import of all ODS substances. Import licenses are issued by the Ministry of Foreign Trade and the National Ozone Unit (NOU) in consultation with importers and associations. The license issuance followed technical assessment and recommendation by the Ministry of Commerce, Industry, Investment, and Digital Technologies. The country's Customs Department enforced the quota system.
- 13. Since 1 January 2015, the Government of Morocco issued a ban on the import of HCFC-141b (in bulk).

Manufacturing sector

14. Conversion of the Manar Company resulted in the phase-out of 11.00 ODP tonnes of HCFC-141b. Assurance has been received from UNIDO that the equipment that was used in the manufacture of rigid insulation foam for domestic refrigerators in the company, was destroyed.

Refrigeration servicing sector

- 15. HCFC-22 was mainly used in the RAC servicing sector. A total of 20 customs officers were trained on the use of refrigerant identifiers to enhance enforcement of the licensing system and compliance with the country's phase-out targets.
- 16. At the National Railways Office (ONCF), the phase-out of 3.2 ODP tonnes of HCFC-141b used for flushing of refrigeration circuits originally planned for 2013, was delayed due to communication breakdown with ONFC. When communication was re-established in 2018, the company had already phased out HCFC-141b with its own resources due to the import ban of 1 January 2015. Training of ONCF technicians on servicing and safe handling of refrigerants will be provided.
- 17. The Government is planning *inter alia* to conduct an inventory of HCFC-22-based equipment, and introduce energy efficiency standards in order to encourage the phase-out of HCFC-22 and increase the uptake of low- and zero-GWP alternative technologies.

Project implementation and monitoring unit (PMU)

18. The Government of Morocco has not established a PMU for the HPMP. Implementation is within the responsibility of the Ministry of Industry, Investment, Commerce and Digital Technologies, with assistance from UNIDO.

Level of fund disbursement

19. As of March 2019, of the US \$300,000 approved so far, US \$124,265 had been disbursed for UNIDO (US \$59,358 for the first tranche and US \$65,267 for the second tranche) as shown in Table 2. The balance of US \$175,375 will be disbursed between 2019 and 2020.

Table 2. Financial report of stage I of the HPMP for Morocco (US \$)

Agency	First tranche		Second	tranche	Total approved		
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed	
UNIDO	80,000	59,358	220,000	65,267	300,000	124,625	
Disbursement rate (%)	7	74		0	42		

- 20. The following activities will be implemented between June 2019 and December 2020:
 - (a) Training and capacity-building for 20 additional customs officers on the enforcement of licensing system, monitoring HCFC import, and data reporting to the NOU, and measures to control illegal HCFC imports; and the use of the refrigerant identifiers to enhance enforcement of the licensing system and compliance with the country's phase-out targets, and evaluation of the training and assessment of additional training needs (US \$15,000);
 - (b) Training, in cooperation with the Moroccan Refrigeration Association, of 80 technicians on low- and zero-GWP alternative technologies in the RAC sector, focusing on issues related to market penetration of the refrigerants, safe handling of flammable refrigerants, and best practices in servicing (recovery, recycling and re-use); procurement of refrigeration servicing tools and equipment, including recovery and recycling units, for distribution to trained technicians (US \$90,000);
 - (c) Procurement of 26 refrigerant identifiers for distribution to training of customs officers and main customs ports of entry (10 units), and members of the refrigeration association (16 units) (US \$65,000);
 - (d) Awareness raising activities, including the production, publication and translation of materials (US \$15,000); and
 - (e) Project monitoring and management (US \$20,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Legal framework

21. The Government of Morocco has issued an import quota of 27 ODP tonnes of HCFC for 2019, which is 47 per cent below the HCFC baseline for compliance. lower than the Montreal Protocol control targets.

Delays on implementation of the HPMP

- 22. UNIDO has indicated that the issues that had delayed implementation of activities associated with previous tranches of stage I of the HPMP, in particular in the refrigeration servicing sector have been satisfactorily addressed.
- 23. As a result of discussions with UNIDO since the 82nd meeting when the funding request for the third tranche was submitted, the proposed activities in the servicing sector has been adjusted and will incorporate technicians from the railway company that used HCFC-141b for flushing refrigeration circuits. Additional ODS identification kits and tools and basic equipment for customs officers and refrigeration technicians will be provided. Stage II of the HPMP (with preparation funding approved at the 73rd meeting) will be submitted to the 84th or 85th meeting and will address the phase-out of the remaining consumption of HCFC-22 and HCFC-141b contained in imported pre-blended polyols.

Revision to the Agreement

24. Noting the level of funding still available from the first two tranches, and that the date for the completion of stage I of the HPMP was in 2017, the Government of Morocco has requested an extension of its Agreement until the end of 2020. Furthermore, the starting point for aggregate reduction (based on the consumption reported under Article 7 of the Montreal Protocol for 2009), has to be adjusted in order to separate the HCFC-141b contained in imported polyols from the HCFC-141b reported in bulk. Based on these, relevant paragraphs and Appendices of the Agreement between the Government and the Executive Committee have been updated, as shown in Annex I to this document. The full revised Agreement will be appended to the final report of the 83rd meeting.

Conclusion

25. The Government of Morocco has an effective import licensing and quota system in place. The current consumption of HCFCs in the country is 54 per cent below the HCFC baseline for compliance. The conversion of Manar Company manufacturing domestic refrigerators resulted in the phase-out of 11.00 ODP tonnes of HCFC-141b; the Government has issued an import ban of HCFC-141b in bulk, resulting in the complete phase-out of HCFC-141b since 2014. Delays in the implementation of activities in the refrigeration servicing sector has been addressed; funding available from the previous tranches and from the third and final tranche will complete the activities proposed in stage I of the HPMP. Stage II of the HPMP will address consumption of HCFC-141b contained in imported pre-blended polyols.

RECOMMENDATION

- 26. The Executive Committee may wish to consider:
 - (a) Noting the progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan (HPMP) for Morocco;
 - (b) Approving the extension of the duration of stage I of the HPMP from 2017 to 2020;
 - (c) Noting that the Secretariat had updated the Agreement between the Government of Morocco and the Executive Committee, contained in Annex I to the present document, specifically paragraph 1, Appendices 1-A and 2-A, to reflect the revised HCFC baseline for compliance of 51.35 ODP tonnes and the extension of the duration of stage I, and paragraph 16 was added to indicate that the updated Agreement superseded that reached at the 65th meeting;
 - (d) Requesting the Government of Morocco and UNIDO to submit progress reports on a yearly basis on the implementation of the work programme associated with the third and final tranche until the completion of the project, verification reports until approval of stage II of the HPMP, and the project completion report to the first meeting of the Executive Committee in 2022;
 - (e) Approving the third tranche of stage I of the HPMP for Morocco, and the corresponding 2019-2020 tranche implementation plan, at the amount of US \$35,000, plus agency support costs of US \$2,625 for UNIDO.

Annex I

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF MOROCCO AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE EXTENTION OF THE DURATION OF STAGE I

(Relevant changes are in **bold** font for ease of reference)

- 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 **41.08** ODP tonnes by 1 January **2020** in compliance with Montreal Protocol schedules.
- 16. This updated Agreement supersedes the Agreement reached between the Government of Morocco and the Executive Committee at the 65th meeting of the Executive Committee.

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	С	I	45.88
HCFC-141b	С	I	14.01
Total			59.89
HCFC-141b in imported pre-blended polyol			8.10

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2010	2011	2012	2013	2014	2015	2017	2018	2019	2020	Total
1.1	Montreal Protocol reduction	n/a	n/a	n/a	51.35	51.35	46.22	46.22	46.22	43.33	43.33	n/a
	schedule of Annex C, Group I											
	substances (ODP tonnes)											
1.2	Maximum allowable total	n/a	n/a	n/a	51.35	49.35	46.22	41.08	41.08	41.08	41.09	n/a
	consumption of Annex C, Group I											
	substances (ODP tonnes)											
2.1	Lead IA (UNIDO) agreed funding	951,740	80,000	220,000	0	0	0	0	0	35,000		1,286,740
	(US \$)											
2.2	Support costs for Lead IA (US \$)	71,381	6,000	16,500		0	0	0	0	2,625		96,506
3.1	Total agreed funding (US \$)	951,740	80,000	220,000	0	0	0	0	0	35,000		1,286,740
3.2	Total support cost (US \$)	71,381	6,000	16,500	0	0	0	0	0	2,625		96,506
3.3	Total agreed costs (US \$)	1,023,121*	86,000	236,500	0	0	0	0	0	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)										43.31	
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)										3.01	
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)											0.00
4.3.1	Total phase-out of HCFC-141b in imported polyols agreed to be achieved under this agreement (ODP tonnes)											0.00
4.3.2	Phase-out of HCFC-141b in imported to be achieved in previously approved projects (ODP tonnes)											0.00
4.3.3	Remaining eligible consumption for HCFC-141b in imported polyols (ODP tonnes)											8.10

^(*) Approved at the 62nd meeting for Manar Company and herewith subsumed into this Agreement.