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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-sixth Meeting
Montreal, 2-6 November 2020
Postponed to 8-12 March 2021[1]

PROJECT PROPOSALS: BOTSWANA

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

Phase-out

- HCFC phase-out management plan (stage I, third tranche) — UNEP and UNIDO
- HCFC phase-out management plan (stage II, first tranche) — UNEP and UNIDO

[1] Due to coronavirus disease (COVID-19)

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Botswana

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (Stage I)	UNEP (lead), UNIDO	75th	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2019	6.89 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2019
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					6.87				6.87
HCFC-141b					0.02				0.02

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	11.00	Starting point for sustained aggregate reductions:	11.00
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	3.85	Remaining:	7.15

(V) BUSINESS PLAN		2020	Total
UNEP	ODS phase-out (ODP tonnes)	0.38	0.38
	Funding (US $)	62,150	62,150

(VI) PROJECT DATA			2015	2016-2017	2018	2019	2020	Total
Montreal Protocol consumption limits			9.90	9.90	9.90	9.90	7.15	n/a
Maximum allowable consumption (ODP tonnes)			9.90	9.90	9.90	9.90	7.15	n/a
Agreed funding (US $)	UNEP	Project costs	135,000	0	90,000	0	55,000	280,000
		Support costs	17,550	0	11,700	0	7,150	36,400
	UNIDO	Project costs	140,000	0	140,000	0	0	280,000
		Support costs	9,800	0	9,800	0	0	19,600
Funds approved by ExCom (US $)		Project costs	275,000	0	230,000	0	0	505,000
		Support costs	27,350	0	21,500	0	0	48,850
Total funds requested for approval at this meeting (US $)		Project costs					55,000	55,000
		Support costs					7,150	7,150

Secretariat's recommendation:	Blanket approval

PROJECT DESCRIPTION

1. On behalf of the Government of Botswana, UNEP as the lead 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 $55,000, plus agency support costs of US $7,150 for UNEP only.[2] The submission includes a progress report on the implementation of the second tranche and the tranche implementation plan for 2020 to 2021.

<u>Report on HCFC consumption</u>

2. The Government of Botswana has reported a consumption of 6.89 ODP tonnes of HCFC-22 in 2019, which is 37 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Botswana (2015-2019 Article 7 data)

HCFC	**2015**	**2016**	**2017**	**2018**	**2019**	**Baseline**
Metric tonnes (mt)						
HCFC-22	176.30	170.60	156.00	140.67	124.91	200.00
HCFC-141b	0.50	0.40	0.01	0.40	0.18	0.10
Total (mt)	**176.80**	**171.00**	**156.01**	**141.07**	**125.09**	**200.10**
ODP tonnes						
HCFC-22	9.70	9.38	8.58	7.74	6.87	11.00
HCFC-141b	0.06	0.05	0.00	0.04	0.02	0.01
Total (ODP tonnes)	**9.75**	**9.43**	**8.58**	**7.78**	**6.89**	**11.00**

3. HCFC consumption has been decreasing due to the implementation of the activities under the HPMP, in particular, the enforcement of the licensing and quota system, capacity building of the servicing sector, and the introduction of low-global-warming potential (GWP) energy-efficient alternatives to HCFCs.

Country programme (CP) implementation report

4. The Government of Botswana reported HCFC sector consumption data under the 2019 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol.

<u>Progress report on the implementation of the second tranche of the HPMP</u>

Legal framework

5. The National Meteorological Services Act was revised in 2014 to support a licensing and quota system for the control of imports and exports of HCFCs and HCFC-based equipment. The Government also established an institutional framework and communication channels to involve stakeholders, including the national ozone committee, the national licensing committee and the national monitoring committee to manage the licensing and quota system for HCFC imports, and to promote public awareness on the protection of the ozone layer and related climate benefits. The training curriculum for customs officers has been updated to include new obligations under the Montreal Protocol.

6. A mandatory technician certification programme endorsed by the ODS Regulation of 2014 is in place, which specifies that no technician shall repair or service equipment or products that contain ODS

[2] As per the letter of 27 August 2020 from the Ministry of Environment, Natural Resources, Conservation and Tourism of Botswana to the Secretariat.

unless the technician has a permit issued under the Regulation. The Government of Botswana does not allow the retrofitting of HCFC-based equipment to flammable refrigerants.

7. The development of safety standards on flammable refrigerants has been discussed. The Botswana Bureau of Standards contacted the Zimbabwe Bureau of Standards with the aim of finding ways of adopting the standards recently approved in Zimbabwe.

8. The Government of Botswana ratified the Kigali Amendment in September 2020.

Refrigeration servicing sector

9. The following activities have been implemented:

(a) Two training sessions were conducted for 60 customs officers (including the participation of eight women officers) on Montreal Protocol issues. So far, a total of 815 customs officers have been trained in HCFC import control and prevention of illegal trade in stage I. Two joint border dialogue workshops with Zimbabwe and one joint border dialogue involving Angola, Botswana, Zambia and Zimbabwe were organized by the National Ozone Unit (NOU) to discuss ODS trade-related issues, with the participation of a total of 60 customs officers (including five women). Ten refrigerant identifiers have been procured and delivered (eight for the customs and two for the NOU training);

(b) Two trainers (representatives of the centres of excellence) were trained with a refresher course in Germany on new technologies (hydrocarbons (HCs), HFOs, carbon dioxide, ammonia), international standards, safety regulations and codes of practice for new refrigerants; two training workshops were held for 57 technicians (including 10 women) on ODS regulations, good servicing practices and servicing with alternative refrigerants. So far a total of 159 technicians have been trained in good servicing practice, safe handling of natural refrigerant, refrigerant recovery and reuse in stage I. In stage I, training equipment was also provided to two training institutions;

(c) Discussions were held between the NOU and the Francistown College of Technical and Vocational Education on the training programme for the adoption of HC and natural refrigerants and the need for additional training equipment; and

(d) Project coordination, monitoring and reporting is conducted by the NOU. One consultant was recruited to assist in monitoring HPMP activities and collecting data (UNEP) (US $10,000, with the following breakdown: staff and consultant, US $3,000; and travel (US $2,000).

10. The originally planned end-user incentive programme relating to the training of technicians in installing and servicing RAC equipment using low-GWP refrigerants had been changed to strengthening the regional centres of excellence through the provision of training equipment.

<u>Level of fund disbursement</u>

11. As of July 2020, of the US $505,000 approved so far, US $365,000 had been disbursed (US $175,000 for UNEP and US $190,000 for UNIDO), as shown in Table 2. The balance of US $140,000 will be disbursed in 2020-2021.

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

Agency	First tranche		Second tranche		Total approved	
	Approved	**Disbursed**	**Approved**	**Disbursed**	**Approved**	**Disbursed**
UNEP	135,000	135,000	90,000	80,000	225,000	175,000
UNIDO	140,000	140,000	140,000	50,000	280,000	190,000
Total	**275,000**	**275,000**	**230,000**	**130,000**	**505,000**	**365,000**
Disbursement rate (%)	100		57		72	

<u>Implementation plan for the third and final tranche of the HPMP</u>

12. The following activities will be implemented between November 2020 and December 2021:

(a) Training of 60 customs and enforcement officers in HCFC phase-out, control of ODS imports, identification of HCFCs and HCFC-based equipment, and new inspection techniques for detecting HCFCs (UNEP) (US $20,000);

(b) Two workshops to train 50 servicing technicians focusing on low-GWP technologies and good servicing practices for handling flammable refrigerants in the refrigeration and air-conditioning (RAC) system (UNEP) (US $30,000);

(c) Assessing the need for additional equipment for the regional centres of excellence; and procuring equipment based on the assessment to support the training conducted by the centres of excellence to provide hands-on training for craftsmen with low entry level; (UNIDO) (US $90,000 from the previous tranche); and

(d) Project coordination, monitoring and reporting of activities in the HPMP: a consultant will be employed to assist with monitoring and data collection (UNEP) (US $5,000, i.e., US $3,000 for the consultant and US $2,000 for travel).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

<u>Progress report on the implementation of the second tranche of the HPMP</u>

Legal framework

13. The Government of Botswana has already issued HCFC import quotas for 2020 at 7.04 ODP tonnes (128 mt), which is lower than the Montreal Protocol control target for the same year.

Refrigeration servicing sector

14. The implementation of stage I of the HPMP is progressing. With regard to the change in the plan, from implementing the end-user incentive programme to strengthening regional centres for refrigerant recovery and reuse, UNEP explained that there was a need to have more training centres supported with equipment to assist in long-term capacity development in the servicing sector, taking into consideration the guidance by the Executive Committee on end-user incentive programme and the challenges in implementing these end-user-related activities. The Government believes that this change serves the country better in achieving sustainable HCFC phase-out.

15. Noting that a small amount of HCFC-141b was being used as a flushing agent during repairs and servicing of RAC equipment, UNEP explained that the industry has introduced a number of non-ODS-based

flushing agents and solvents, thus HCFC-141b consumption has been decreasing. The Government is considering a ban on the import/use of HCFC-141b as a flushing agent from 1 January 2021.

Completion of stage I

16. UNEP has confirmed that stage I of the HPMP for Botswana will be completed by 31 December 2021 as established in paragraph 14 of the Agreement.

Gender policy implementation[3]

17. In line with the gender mainstreaming policies of the Multilateral Fund and UNEP, the implementation of the third tranche will take into account gender mainstreaming and equity to encourage the full engagement of women in various steps including planning, policy and decision-making, consultation and advisory activities, capacity-building and outreach, and monitoring and evaluation. Gender-disaggregated data has been (as shown in paragraph 9(a) and (b)) and will continuously be collected for reporting.

Sustainability of the HCFC phase-out

18. The Government of Botswana has included the compliance obligations under the Montreal Protocol in the curriculum for training customs officers. A mandatory technician certification system is being implemented to ensure continuous capacity development of the servicing sector. The Government has ratified the Kigali Amendment and will integrate HCFC phase-out with HFC phase-down to achieve synergy in a sustainable manner to address both the ozone and climate issues.

Conclusion

19. The Government of Botswana has established a licensing and quota system for the control of HCFC imports and exports and the system is being effectively enforced. Botswana has been in compliance with the control targets set in its Agreement with the Executive Committee. A mandatory certification system for technicians has been implemented through the RAC Association with the endorsement of the ODS Regulation of 2014; training has been provided to technicians to enable good servicing practices and the servicing of equipment using alternatives to HCFCs. The control of HCFC imports has been integrated into the training curriculum for customs officers, and refrigerant identifiers were also provided to facilitate the identification of chemicals. The disbursement rate has reached 72 per cent for of the funds approved and 57 per cent for the second tranche. The activities in the third tranche, in addition to those planned for stage II submitted to the 86th meeting, will further sustain the results achieved so far in stage I of the HPMP.

RECOMMENDATION

20. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the third tranche of stage I of the HCFC phase-out management plan (HPMP) for Botswana; and further recommends blanket approval of the third and final tranche of stage I of the HPMP for Botswana, and the corresponding 2020-2021 tranche implementation plan, at the funding level shown in the table below:

	Project title	Project funding (US $)	Support cost (US $)	Implementing agency
(a)	HCFC phase-out management plan (stage I, third tranche)	55,000	7,150	UNEP

[3] Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

BOTSWANA

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

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2019	6.89 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2019
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					6.87				6.87
HCFC-141b					0.02				0.02

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	11.0	Starting point for sustained aggregate reductions:	11.00
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	3.85	Remaining:	7.15

(V) BUSINESS PLAN		2020	2021	2022	Total
UNEP	ODS phase-out (ODP tonnes)	0.0	1.42	0.0	1.42
	Funding (US $)	0	117,520	0	117,520
UNIDO	ODS phase-out (ODP tonnes)	0.0	1.50	0.0	1.50
	Funding (US $)	0	111,280	0	111,280

(VI) PROJECT DATA			2020	2021-2022	2023	2024	2025-2026	2027	2028-2029	2030	Total
Montreal Protocol consumption limits			7.15	7.15	7.15	7.15	3.58	3.58	3.58	0	n/a
Maximum allowable consumption (ODP tonnes)			7.15	7.15	7.15	7.15	3.58	3.58	3.58	0	n/a
Projects costs requested in principle (US $)	UNEP	Project costs	150,000	0	192,500	0	0	192,500	0	105,000	640,000
		Support costs	18,844	0	24,183	0	0	24,183	0	13,190	80,400
	UNIDO	Project costs	100,000	0	150,000	0	0	150,000	0	0	400,000
		Support costs	7,000	0	10,500	0	0	10,500	0	0	28,000
Total project costs requested in principle (US $)			250,000	0	342,500	0	0	342,500	0	105,000	1,040,000
Total support costs requested in principle (US $)			25,844	0	34,683	0	0	34,683	0	13,190	108,400
Total funds requested in principle (US $)			275,844	0	377,183	0	0	377,183	0	118,190	1,148,400

(VII) Request for approval of funding for the first tranche (2020)		
Agency	Funds requested (US $)	Support costs (US $)
UNEP	150,000	18,844
UNIDO	100,000	7,000
Total	250,000	25,844

Secretariat's recommendation:	Individual consideration

PROJECT DESCRIPTION

Background

21. On behalf of the Government of Botswana, UNEP as the lead implementing agency has submitted a request for stage II of the HCFC phase-out management plan (HPMP), at a total cost of US $1,149,400, consisting of US $665,000, plus agency support costs of US $83,150 for UNEP, and US $375,000, plus agency support costs of US $26,250 for UNIDO, as originally submitted.[4] The implementation of stage II of the HPMP will phase out the remaining consumption of HCFCs by 2030.

22. The first tranche of stage II of the HPMP being requested at this meeting amounts to US $635,064, consisting of US $360,000, plus agency support costs of US $45,014 for UNEP and US $215,000, plus agency support costs of US $15,050 for UNIDO, as originally submitted.

Status of implementation of stage I of the HPMP

23. Stage I of the HPMP for Botswana was approved at the 75th meeting[5] to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US $560,000, plus agency support costs, to phase out 3.85 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector. An overview of the implementation of stage I, including an analysis of HCFC consumption; the progress and financial reports on the implementation of stage I, and the request for the third and final tranche submitted to the current meeting, are available in paragraphs 1 to 20 of the present document.

Stage II of the HPMP

Remaining consumption eligible for funding

24. After deducting 3.85 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding for complete phase-out amounts to 7.15 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

25. There are approximately 715 RAC technicians and 340 workshops servicing domestic, commercial and industrial RAC equipment, as shown in Table 3.

Table 3. Sectoral distribution of HCFC-22 in Botswana in 2019

Sector/Applications	Number of units	Average charge (kg/unit)	Installed capacity (mt)	Leakage rate (%)	Consumption (mt)
Domestic air-conditioning (AC)	769,230	1.3	1,000.00	10	100.00
Commercial RAC (stand-alone, condensing units and centralized systems)	22,142	4.2	93.00	20	18.60
Industrial refrigeration (medium to large condensing units, centralized systems)	2,970	10.1	30.00	20	6.00
Transport refrigeration	1,230	1.3	1.60	25	0.40
Total (mt)	**795,572**	**n/a**	**1,125.60**	**n/a**	**125.00**

[4] As per the letter of 17 July 2020 from the Ministry of Environment, Natural Resources, Conservation and Tourism of Botswana to the Secretariat.
[5] UNEP/OzL.Pro/ExCom/75/39 and Annex XXIV of document UNEP/OzL.Pro/ExCom/75/85.

26. HCFC-22 represents 35 per cent of the refrigerants used, followed by HFC-134a (22 per cent), R-404A (17 per cent), R-507 (14 per cent), R-410A (6 per cent), and minor amounts of R-407C and natural refrigerants.

Phase-out strategy in stage II of the HPMP

27. Stage II of the HPMP proposes to completely phase out HCFCs with a servicing tail. It will build upon the experience gained during implementation of stage I, and will focus on strengthening the HCFC licensing and quota system; promoting the transition to low-GWP technologies in the RAC sector; implementing legal instruments related to the safe use of new technologies; further strengthening the capacity of the servicing sector through training, providing equipment to four of the six training institutions in the country (the other two were supported under stage I), incorporating Montreal Protocol and ozone-layer protection issues into the training curriculum, and updating and implementing the certification scheme for technicians jointly with the Botswana Qualifications Authority.

Proposed activities in stage II of the HPMP

28. The following activities will be implemented during stage II:

(a) Strengthening policy enforcement; monitoring and control of ODS imports; conducting two border dialogues per year on ODS trade; updating the customs training manual; training 15 trainers and 180 customs officers in identifying ODS and in the safe handling of flammable refrigerants (UNEP) (US $140,000); and providing 10 refrigerant identifiers (UNIDO) (US $30,000);

(b) Developing standards and procedures to update the certification of technicians; certifying 300 technicians in handing flammable refrigerants; updating the training curriculum and national codes of conduct for technicians, and conducting 10 workshops to train 150 servicing technicians in good servicing practices and servicing with alternatives; conducting targeted awareness for commercial end-users on the transition to low-GWP alternatives; supporting the national RAC association and training institutions with tools and training equipment for their involvement in the certification process (UNEP) (US $225,000); and training five trainers in the proper handling of RAC equipment based on flammable refrigerants (UNIDO) (US $25,000);

(c) Analyzing and developing a business model for a refrigerant recovery, recycling and reclamation (RRR) scheme; establishing three RRR centres properly equipped (e.g., three reclamation units, refrigerant identifiers, laboratory accessories for quality check, cylinders, storage tanks, scales and recovery units); technical assistance and training for the operation of the first reclamation centre; and identifying needs and providing tools and equipment (e.g., charging station for HC, electronic leak detector for HC, electronic gauge manifold, brazing unit, compression fitting tools, safety related tools, miscellaneous tubing tools, personal protection equipment) to the centres of excellence (UNIDO) (US $320,000); and

(d) Providing the four training colleges with tools and equipment (e.g., flaring and swaging tools, tube cutters, expander tool sets, triple header tube benders, reamers, fitting brush sets) to enable efficient training of students in good servicing practices; and conducting targeted awareness and training for servicing industry on improving the energy efficiency of RAC equipment and the transition to low-GWP technologies (UNEP) (US $200,000).

Project implementation and monitoring

29. The system established under stage I of the HPMP will continue into stage II, where the NOU, with the assistance of UNEP, will monitor activities, report progress, and work with stakeholders to phase out HCFCs, at a total cost of US $100,000 (i.e., cost of staff and consultants (US $30,000), travel (US $10,000), meetings/workshops (US $50,000) and miscellaneous (US $10,000)).

Gender policy implementation[6]

30. Implementation of stage II will continue taking into account gender mainstreaming and equity to encourage the full engagement of women in various activities, and will also promote gender empowerment. Gender-disaggregated data will continuously be collected for reporting. Plans include having women represent at least 30 per cent of the trainees.

<u>Total cost of stage II of the HPMP</u>

31. The total cost of stage II of the HPMP for Botswana amounts to US $1,040,000 (plus agency support costs), as originally submitted for achieving the 67.5 per cent reduction from its HCFC baseline consumption by 2025 and 100 per cent reduction by 2030. The level of funds requested is in line with decision 74/50(c)(xii).

<u>Activities planned for the first tranche of stage II</u>

32. The first funding tranche of stage II of the HPMP at the total amount of US $575,000 will be implemented between November 2020 and November 2023 and will include the following activities:

(a) Reviewing training manuals for customs training; training 15 trainers and 45 customs officers in ODS import control and the prevention of illegal trade; conducting border dialogues (twice a year) with neighboring countries (UNEP) (US $70,000); and procuring 10 refrigerant identifiers (UNIDO) (US $30,000);

(b) Review the existing technician certification system, and conducting stakeholder consultations; updating training manuals and national codes of conduct for technicians, and conducting three workshops to train 45 servicing technicians in good servicing practices, the certification process and the national codes of conduct for servicing RAC systems; conducting one targeted awareness campaign for commercial end-users on the transition to low-GWP alternatives; updating the training curriculum in training colleges (UNEP) (US $110,000); and preparing training materials for trainers in the use of HC refrigerants (UNIDO) (US $25,000);

(c) Providing technical assistance to develop a business model for the RRR scheme; establishing one reclamation centre (e.g., refrigerant recovery machines, recovery cylinders, vacuum pumps, weighting scale, four valve manifold gauge, refractive index refractometer, nitrogen purge tools, oxygen free dry nitrogen cylinder, pressure regulator, ratchets wrench set); and procurement and distribution of complementary tools and equipment (e.g., charging station for HC, electronic leak detector for HC, electronic gauge manifold, brazing unit, compression fitting tools, safety related tools, miscellaneous tubing tools, personal protection equipment) to the centres of excellence (UNIDO) (US $160,000);

(d) Procurement and distribution of complementary tools and equipment for servicing

[6] Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

workshops and technical colleges (e.g., flaring and swaging tools, tube cutters, expander tool sets, triple header tube benders, reamers, fitting brush sets); conducting targeted awareness training for the servicing industry on matters related to energy efficiency during servicing of RAC equipment and the transition to low-GWP technologies (UNEP) (US $140,000); and

(e) Project implementation, monitoring and reporting (UNEP) (US $40,000): US $17,333 for staff and consultant, US $9,333 for travel, US $12,000 for meetings and workshops, and US $1,333 for miscellaneous expenses.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

33. The Secretariat reviewed stage II of the HPMP in light of stage I, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decision 74/50), and the 2020-2022 business plan of the Multilateral Fund.

Overarching strategy for stage II

34. The Government of Botswana proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, on the understanding that Botswana's consumption between 2030 and 2040 (i.e., the servicing tail) may exceed zero in any year so long as the sum of its calculated levels of consumption over the ten-year period from 1 January 2030 to 1 January 2040, divided by 10, does not exceed 2.5 per cent of Botswana's baseline, and provided that such consumption is restricted to the servicing of RAC equipment existing on 1 January 2030, as provided by the Montreal Protocol.[7] The Government further commits to ensuring that where consumption for the servicing tail may be required, it will make the best efforts to establish strict criteria within its existing licensing system to limit and monitor the amounts used to those allowed by the Protocol.

Regulations to support HCFC phase-out

35. The Government of Botswana has promulgated several measures to discourage the import and use of HCFCs, including mandatory reporting by importers and exporters, a fee for HCFC imports and covering all refrigerants in the licensing system. The Government will consider further policy measures to support the complete phase-out of HCFCs, including a ban on imports of HCFC-based equipment planned to go into effect by 1 January 2024, and a ban on the import and use of HCFC-141b for flushing planned to go into effect by 1 January 2021. It will also put in place legislation and systems to ban the import of HCFCs by 2030. These regulatory measures will enable the country to achieve complete phase-out of HCFCs by 2030.

Technical and cost-related issues

36. The total number of technicians to be trained in stage II (150 over 10 years) appears to be limited. UNEP explained that stage II has been developed with a focus on strengthening the training infrastructure and the implementation of technician certification to ensure the sustainability of capacity development in the servicing sector and a safe transition to low-GWP alternatives. The 150 technicians will act as trainers for further training of technicians. With the assistance of the RAC Association, it is expected that all technicians in the country (approximately 1,800) will be trained and certified in the long run. The regulatory measures and awareness programmes will motivate technicians to participate in the certification

[7] Article 5, paragraph 8 ter (e)(i) of the Montreal Protocol. Other applications where HCFCs can be used include the servicing of fire suppression and fire protection equipment existing on 1 January 2030; solvent applications in rocket engine manufacturing; and topical medical aerosol applications for the specialized treatment of burns.

programme.

37. To achieve a balanced funding distribution according to the needs of the country throughout the implementation period, and taking into consideration the restrictions of the COVID-19 pandemic, the funding tranche distribution has been adjusted as shown in Table 4.

Table 4. Adjustment of the funding tranche distribution for stage II of the HPMP for Botswana (US $)

Item	Agency	2020-2022	2023-2024	2025-2026	2027-2029	2030	Total
As requested	UNEP	360,000		200,000		105,000	665,000
	UNIDO	215,000		160,000			375,000
	Total	575,000		360,000		105,000	1,040,000
After adjustment	UNEP	150,000	192,500		192,500	105,000	640,000
	UNIDO	100,000	150,000		150,000		400,000
	Total	250,000	342,500	0	342,500	105,000	1,040,000

38. Accordingly, the activities to be implemented in the first tranche had been adjusted as follows: training 15 trainers and 45 customs officers, review of customs training manuals and border dialogues (twice a year) (US $70,000); review of existing technician certification system, updating national codes of conduct for technicians, a targeted awareness initiative for commercial end-users, support to RAC associations, updating the training manual (US $60,000); developing a business model for the RRR scheme establishing one centre, and providing tools and equipment to the centres of excellence (US $100,000); and project implementing, monitoring and reporting (US $20,000 (staff and consultant (US $11,000), travel (US $3,000), meetings and workshops (US $5,000), and miscellaneous (US $1,000)).

<u>Impact of COVID-19 on the implementation</u>

39. Upon inquiry about the impact of the COVID-19 pandemic on the implementation of the first tranche of stage II, UNEP explained that there were currently limited means to conduct virtual training. There are plans to install better internet connections at the NOU office and in major centres around the country to facilitate virtual training, stakeholder consultations and coordination meetings as well as monitoring and reporting. Local experts will be employed to help develop certification procedures, and to update training manuals and perform other work in line with international best practices and standards. The Government believes that the funding approval for the first tranche will support the country's post-pandemic economic recovery by creating jobs related to the activities implemented in the HPMP.

<u>Impact on the climate</u>

40. The proposed activities in the servicing sector, which include better containment of refrigerants through training and provision of equipment, will reduce the amount of HCFC-22 used for RAC servicing. Each kilogram of HCFC-22 not emitted due to better refrigeration practices results in savings of approximately 1.8 CO_2-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Botswana, including its efforts to establish refrigerant recovery and reclamation centres and promote the transition to low-GWP technologies indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

41. The Government's contribution to the HPMP will be through in-kind contributions in staffing, office space, utility bills, and transport vehicles for the operation of the NOU, estimated at US $100,000 per year.

2020-2022 draft business plan of the Multilateral Fund

42. UNEP and UNIDO are requesting US $1,040,000, plus agency support costs, for the implementation of stage II of the HPMP for Botswana. The total requested value of US $275,844, including agency support costs, for the period from 2020 to 2022, is US $47,044 above the amount in the business plan.

Draft Agreement

43. A draft Agreement between the Government of Botswana and the Executive Committee for the phase-out of HCFCs in stage II of the HPMP is contained in Annex I to the present document.

RECOMMENDATION

44. The Executive Committee may wish to consider:

(a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Botswana for the period from 2020 to 2030 for the complete phase-out of HCFC consumption, in the amount of US $1,148,400, consisting of US $640,000, plus agency support costs of US $80,400 for UNEP, and US $400,000, plus agency support costs of US $28,000 for UNIDO, on the understanding that no more funding would be provided from the Multilateral Fund for the phase-out of HCFCs;

(b) Noting the commitment of the Government of the Botswana:

(i) To completely phase out HCFCs by 1 January 2030, and have no HCFC imports after that date, except for the allowance for a servicing tail between 2030-2040 where required, and consistent with the provisions of the Montreal Protocol;

(ii) To impose a ban on the import and use of HCFC-141b for flushing by 1 January 2021 and a ban on imports of HCFC-based equipment by 1 January 2024;

(c) Deducting 7.15 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;

(d) Approving the draft Agreement between the Government of Botswana and the Executive Committee for the reduction in consumption of HCFCs, in accordance with stage II of the HPMP, contained in Annex I to the present document; and

(e) Approving the first tranche of stage II of the HPMP for Botswana, and the corresponding tranche implementation plan, in the amount of US $275,844, consisting of US $150,000, plus agency support costs of US $18,844 for UNEP, and US $100,000, plus agency support costs of US $7,000 for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF BOTSWANA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

Purpose

1. This Agreement represents the understanding of the Government of Botswana (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 zero ODP tonnes by 1 January 2030 in compliance with Montreal Protocol schedule.

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 row 4.1.3 (remaining consumption eligible for funding).

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 stage II of the HCFC phase-out management plan (HPMP) approved ("the Plan"). 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.

Conditions for funding release

5. The Executive Committee will only provide the Funding in accordance with the Funding Approval Schedule when 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 has 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 there are no due country programme implementation reports 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 for all relevant years, unless the Executive Committee decided that such verification would not be required;

(c) That the Country had submitted a Tranche Implementation Report in the form of Appendix 4-A ("Format of Tranche Implementation Reports and Plans") covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

(d) That the Country has submitted a Tranche 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.

Monitoring

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A ("Monitoring Institutions and Roles") will monitor and report on implementation of the activities in the previous Tranche Implementation Plans in accordance with their roles and responsibilities set out in the same appendix.

Flexibility in the reallocation of funds

7. The Executive Committee agrees that the Country may have the flexibility to reallocate part or all of the approved 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 a Tranche Implementation Plan as foreseen in sub-paragraph 5(d) above, or as a revision to an existing Tranche 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 activities not included in the current endorsed Tranche Implementation Plan, or removal of an activity in the Tranche 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 Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report;

(c) The Country agrees, in cases where HFC technologies have been chosen as an alternative to HCFCs, and taking into account national circumstances related to health and safety: to monitor the availability of substitutes and alternatives that further minimize impacts on the climate; to consider, in the review of regulations standards and incentives adequate provisions that encourage introduction of such alternatives; and to consider the potential for adoption of cost-effective alternatives that minimize the climate impact in the implementation of the HPMP, as appropriate, and inform the Executive Committee on the progress accordingly in tranche implementation reports; and

(d) Any remaining funds held by the bilateral or implementing agencies or the Country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

Considerations for the refrigeration servicing sector

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sector included in the Plan, 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 relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

Bilateral and implementing agencies

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 the Lead IA and Cooperating IA 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 Cooperating IA will support the Lead IA by implementing the Plan under the overall co-ordination of the Lead IA. The roles of the Lead IA and Cooperating IA are contained in Appendix 6-A and Appendix 6-B, respectively. 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.

Non-compliance with the Agreement

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 decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding 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 decisions 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 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.

Date of completion

14. The completion of the Plan 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 at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion of the Plan 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 of the Plan unless otherwise specified by the Executive Committee.

Validity

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.

16. This Agreement may be modified or terminated only by mutual written agreement of the Country and the Executive Committee of the Multilateral Fund.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	11.00

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2022	2023	2024	2025-2026	2027	2028-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	7.15	7.15	7.15	7.15	3.58	3.58	3.58	0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	7.15	7.15	7.15	7.15	3.58	3.58	3.58	0	n/a
2.1	Lead IA UNEP agreed funding (US $)	150,000	0	192,500	0	0	192,500	0	105,000	640,000
2.2	Support costs for Lead IA (US $)	18,844		24,183			24,183		13,190	80,400
2.3	Cooperating IA UNIDO agreed funding (US $)	100,000	0	150,000	0	0	150,000	0	0	400,000
2.4	Support costs for Cooperating IA (US $)	7,000	0	10,500	0	0	10,500	0	0	28,000

Row	Particulars	2020	2021-2022	2023	2024	2025-2026	2027	2028-2029	2030	Total
3.1	Total agreed funding (US $)	250,000	0	342,500	0	0	342,500	0	105,000	1,040,000
3.2	Total support costs (US $)	25,844	0	34,683	0	0	34,683	0	13,190	108,400
3.3	Total agreed costs (US $)	275,844	0	377,183	0	0	377,183	0	118,190	1,148,400
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)									7.15
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)									3.85
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)									0

*Date of completion of stage I as per stage I Agreement: 31 December 2021.

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

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

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

1. The submission of the Tranche Implementation Report and Plans for each tranche request will consist of five parts:

(a) A narrative report, with data provided by tranche, describing the progress achieved since 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 the amount of ODS phased 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 Tranche 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;

(b) An independent verification report of the Plan results and the consumption of the Substances, 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 during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and 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 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 Tranche Implementation Reports and Plans, submitted through an online database; and

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

2. In the event that in a particular year two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:

(a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and

(b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The Botswana Meteorological Services Department of the Ministry of Environment, Natural Resources Conservation and Tourism will be responsible for the overall project monitoring of all activities under the Plan. The national ozone unit (NOU), which is at the Botswana Meteorological Services Department, will be responsible for planning, coordinating, and carrying out the daily work of project implementation. It will also assist the Government and non-government organizations to streamline their activities for smooth implementation of the projects. The NOU will submit annual progress reports on the status of implementation to the Lead IA and the Cooperating IA to monitor the progress of implementation of the Plan.

2. Annual consumption of HCFCs and other ODS will be monitored through the Project Monitoring Unit (PMU) in collaboration with the Customs Department and the Ministry of Trade and Commerce. The Ministry of Trade and Commerce is a licensing authority that will issue import and export permits, while the Customs Department will control and monitor the import and export of HCFCs and other ODS at the point of entry. The NOU will liaise with importers of HCFCs and other ODS to obtain necessary data for the reconciliation of statistics on a periodic basis.

3. The NOU will undertake regular inspection of refrigeration and air-conditioning (RAC) training centres and RAC servicing workshops to monitor the condition of RAC servicing tools distributed under the Plan.

4. The NOU will also undertake a market survey to gauge the penetration of non-HCFC substitutes and alternative technologies in the RAC sector. The NOU will monitor the implementation of capacity-building activities with relevant agencies, e.g. RAC technician training and customs and enforcement officer training.

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 Tranche Implementation Reports and Plans as per Appendix 4-A;

(c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;

(d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;

(e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee, and should include the activities implemented by the Cooperating IA;

(f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;

(g) Ensuring that appropriate independent technical experts carry out the technical reviews;

(h) Carrying out required supervision missions;

(i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;

(j) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;

(k) 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 the Lead IA and each Cooperating IA;

(l) Ensuring that disbursements made to the Country are based on the use of the indicators;

(m) Providing assistance with policy, management and technical support when required;

(n) Reaching consensus with the Cooperating IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and

(o) Timely releasing funds to the Country/participating enterprises for completing the activities related to the project.

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 AGENCIES

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the 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;

(c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A; and

(d) Reaching consensus with the Lead IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan.

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/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, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.

2. In the event that the penalty needs to be applied for a year in which there are two Agreements in force (two stages of the HPMP being implemented in parallel) with different penalty levels, the application of the penalty will be determined on a case-by-case basis taking into consideration the specific sectors that lead to the non-compliance. If it is not possible to determine a sector, or both stages are addressing the same sector, the penalty level to be applied would be the largest.