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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Ninetieth Meeting  
Montreal, 20-23 June 2022  
Items 9(a) and (d) of the provisional agenda<sup>1</sup>

**PROJECT PROPOSAL: BAHAMAS (THE)**

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

Phase-out

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

\* Re-issued for technical reasons on 14 June 2022.

<sup>1</sup> UNEP/OzL.Pro/ExCom/90/1

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**

**Bahamas (the)**

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

<b>(II) LATEST ARTICLE 7 DATA (Annex C Group I)</b>	Year: 2021	2.10 (ODP tonnes)
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<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)</b>							<b>Year: 2021</b>	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration	Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing			
HCFC-22					2.10			2.10

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009 - 2010 baseline:	4.81	Starting point for sustained aggregate reductions:	4.81
<b>CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)</b>			
Already approved:	1.68	Remaining:	3.13

<b>(V) BUSINESS PLAN</b>		<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Total</b>
UNEP	ODS phase-out (ODP tonnes)	0.24	0.00	0.00	0.24
	Funding (US \$)	52,432	0	0	52,432
UNIDO	ODS phase-out (ODP tonnes)	0.58	0.00	0.90	1.48
	Funding (US \$)	84,000	0	110,000	194,000

<b>(VI) PROJECT DATA</b>			<b>2022</b>	<b>2023-2024</b>	<b>2025</b>	<b>2026-2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>Total</b>
Montreal Protocol consumption limits			3.13	3.13	1.56	1.56	1.56	1.56	0.00	n/a
Maximum allowable consumption (ODP tonnes)			3.13	3.13	1.56	1.56	1.56	1.56	0.00	n/a
Project costs requested in principle (US \$)	UNEP	Project costs	81,200	0	75,500	0	136,000	0	68,900	361,600
		Support costs	10,556	0	9,815	0	17,680	0	8,957	47,008
	UNIDO	Project costs	97,000	0	133,080	0	0	0	0	230,080
		Support costs	8,730	0	11,977	0	0	0	0	20,707
Total project costs requested in principle (US \$)			178,200	0	208,580	0	136,000	0	68,900	591,680
Total support costs requested in principle (US \$)			19,286	0	21,792	0	17,680	0	8,957	67,715
Total funds requested in principle (US \$)			197,486	0	230,372	0	153,680	0	77,857	659,395

<b>(VII) Request for approval of funding for the first tranche (2022)</b>		
<b>Implementing agency</b>	<b>Funds requested (US \$)</b>	<b>Support costs (US \$)</b>
UNEP	81,200	10,556
UNIDO	97,000	8,730
Total	178,200	19,286

<b>Secretariat's recommendation:</b>	Individual consideration
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## PROJECT DESCRIPTION

### Background

1. On behalf of the Government of the Bahamas, 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 \$659,395, consisting of US \$361,600, plus agency support costs of US \$47,008 for UNEP and US \$230,080, plus agency support costs of US \$20,707 for UNIDO, as originally submitted.<sup>2</sup> The implementation of stage II of the HPMP will phase out the remaining consumption of HCFCs by 2030.

2. The first tranche of stage II of the HPMP being requested at this meeting amounts to US \$217,106, consisting of US \$81,200, plus agency support costs of US \$10,556 for UNEP and US \$115,000, plus agency support costs of US \$10,350 for UNIDO, as originally submitted.

### Status of implementation of stage I of the HPMP

3. Stage I of the HPMP for the Bahamas was approved at the 65<sup>th</sup> meeting<sup>3</sup> to phase out 1.68 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector and to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$308,320, plus agency support costs. At the 88<sup>th</sup> meeting, in approving the fourth and final tranche, the Executive Committee approved, on an exceptional basis, the extension of the date of completion of stage I of the HPMP to June 2023, given the delay in implementing phase-out activities due to the COVID-19 pandemic, and noting that no further extension of project implementation would be requested.<sup>4</sup>

### HCFC consumption

4. The Government of the Bahamas reported a consumption of 2.10 ODP tonnes of HCFC in 2021, which is 56 per cent below the HCFC baseline for compliance. The 2017-2021 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in the Bahamas (2017-2021 Article 7 data)**

HCFC-22	2017	2018	2019	2020	2021	Baseline
Metric tonnes (mt)	50.00	49.40	48.82	47.70	38.20	87.54
ODP tonnes	2.75	2.72	2.69	2.62	2.10	4.81

5. The consumption reduction has been achieved mainly on account of implementation of the HPMP activities relating to enforcement of quotas for HCFCs and training of refrigeration service technicians, and the replacement of HCFC-based equipment with equipment mainly using high-global-warming-potential (GWP) refrigerants (e.g., HFC-134a, R-404A, R-410A, R-407C).

### *Country programme (CP) implementation report*

6. The Government of the Bahamas reported HCFC sector consumption data under the 2021 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

<sup>2</sup> As per the letter of 24 February 2022 from the Ministry of Environment and Natural Resources of the Bahamas to the Secretariat.

<sup>3</sup> Decision 65/22 and document UNEP/OzL.Pro/ExCom/65/22

<sup>4</sup> Blanket approval decision 88/40.

## Status of progress and disbursement

### *Legal framework*

7. HCFC trade is controlled by the Montreal Protocol (Import/Export Licensing System of Controlled Substances) Regulations (Cap. 216A) and the Customs Management (Amendment) Act of 2013. The Bahamas Customs and Excise Department enforces the regulations and submits consumption data to the national ozone unit (NOU).

8. Through the implementation of stage I of the HPMP, the Bahamas has established an enforceable licensing and quota system that ensures the country's compliance with the HCFC phase-out schedule. The NOU, located within the Department of Environmental Health Services (DEHS) in the Ministry of Environment and Natural Resources, establishes and monitors HCFC import quotas per substance based on authorisation of the Minister, distributes them to registered importers based on their historic market share and on consumption limits established in the HPMP Agreement with the Executive Committee, and issues licenses for the imports. The Customs Department is currently introducing an Electronic Single Window (ESW) system for the import of all restricted goods; implementation of the ESW system is expected to take time as the Government is still working on the integration process. Pending the operationalization of the ESW system, the NOU would be implementing their own e-licensing system for HCFCs and HCFC alternatives in stage II in close collaboration with the Customs Department.

9. The Government of the Bahamas is planning to prohibit import of new and second-hand HCFC-based equipment from 1 January 2023.

### *Refrigeration servicing sector*

10. Training of service technicians for the adoption of good service practices and the safe use of flammable low-GWP alternatives was undertaken. By the end of stage I, about 300 service technicians are expected to be trained. In addition, more than 700 students are trained by the Bahamas Technical and Vocational Institute (BTVI) on technical aspects relating to heating ventilation and air-conditioning (HVAC) equipment. Equipment and tools (e.g., infrared thermometers, hydrocarbon adapters, refrigerant identifiers, vacuum pumps, flaring tools, digital scales) were distributed to the BTVI and the Refrigeration Service Engineers Society (RSES). A two-day workshop for 60 technicians on good service practices including safe use of refrigerants was conducted.

## Level of fund disbursement

11. As of March 2022, of the total funds of US \$308,320<sup>5</sup> approved under stage I, US \$276,191 had been disbursed (US \$125,071 for UNEP and US \$151,120 for UNIDO), and the balance of US \$31,834 is expected to be disbursed by June 2023.

## **Stage II of the HPMP**

### Remaining consumption eligible for funding

12. After deducting 1.68 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding in stage II amounts to 3.13 ODP tonnes of HCFC-22.

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<sup>5</sup> Including US \$295 that was returned by UNIDO.

Sector distribution of HCFCs

13. There are approximately 3,000 technicians and 175 workshops in the servicing sector, consuming HCFC-22 to service unitary and split systems, chillers, and other commercial air-conditioning (AC), as shown in Table 2. HCFC-22 represents about 10 per cent of the refrigerants used in the servicing sector, followed by HFC-134a, R-410A and R-404A.

**Table 2. Estimation of demand for HCFC-22 in the RAC servicing sector in the Bahamas**

Sector/ Application	(a)	(b)	(c) = (a)*(b)	(d)	(c)*(d)
	Equipment inventory	Average charge (kg/unit)	HCFC bank (kg)	Estimated bank refilled during servicing (%)	Annual need for servicing (mt)
Room AC (unitary and split)	37,813	2.5	94,533	25	23.63
Commercial AC (rooftop, multi-split, chillers)	9,957	11.52	114,705	11	12.62
<b>Total</b>	47,770		209,238		36.25

Note: The difference between estimated annual need for servicing and the actual consumption reported under Article 7 may be on account of differences arising out of stockpiles and calculations that were used for estimating consumption.

Phase-out strategy in stage II of the HPMP

14. Stage II of the HPMP will focus on strengthening the HCFC licensing and quota system and national regulations for implementing HCFC phase-out, adopting good refrigeration servicing practices and promoting the transition to low-GWP technologies in the RAC sector, maximising recovery and reuse of refrigerants, further strengthening the capacity of the servicing sector, and establishing a certification scheme for technicians.

Proposed activities in stage II of the HPMP

15. Stage II proposes the following activities:

- (a) *Improved policy and legal framework*: Recruitment of a consultant to develop legislative package (amendment to the ODS Act and the ODS regulations) including ban on imports of HCFCs from 1 January 2030 except those required for service tail; organization of eight awareness and consultative workshops with stakeholders (customs, refrigeration technicians, the BTVI, RSES, and service shop owners) covering prohibition on imports of HCFC-based equipment from 1 January 2023 and other legislative measures; update code of practice for technicians on safe use of flammable refrigerants (UNEP) (US \$22,000);
- (b) *Control over import of HCFCs and HCFC-based equipment*: Update of the “Ozone Module”; development of pocket cards for customs and enforcement officers relating to HCFC import controls and monitoring; development and implementation of an e-licensing system; implementation of workshops with customs brokers (UNEP) (US \$31,200);
- (c) *Capacity building for refrigeration technicians*: Work with the Department of Inland Revenue to ensure that service workshops hire at least one certified technician and involvement of RAC association; training of 300 RAC technicians on good service practices and recovery and reuse of refrigerants; online course development for training technicians; development and implementation of certification programme for service technicians; monitoring of sale and use of R-22a to prevent unsafe use of R-22a (UNEP) (US \$238,400);

- (d) *Equipment support including recovery and reclamation:* Business viability assessment and business model development for recovery and reclamation; procurement of equipment (e.g., recovery machines, refrigerant cylinders, manifold gauge, leak detectors) for the facility at the BTVI; distribution of tools to refrigeration technicians for good servicing practices and recovery and reuse of refrigerants; procurement and distribution of five identifiers (for the second component in sub-paragraph (b) above) (UNIDO) (US \$230,080);
- (e) *Awareness campaign:* Print material for RAC technicians; development of public awareness activities (UNEP) (US \$12,000); and
- (f) *Gender mainstreaming:* Scholarships to seven to ten female technicians at the BTVI and/or RSES (UNEP) (US \$8,000).

*Project monitoring*

16. The system established under stage I of the HPMP will continue into stage II, where the NOU and UNEP monitor activities, report on progress, and work with stakeholders to phase out HCFCs. The cost of those activities for UNEP amounts to US \$50,000, and includes project staff and consultants (US \$26,000), progress reporting (US \$14,000), domestic travel (US \$5,000) and miscellaneous (US \$5,000).

*Gender policy implementation*

17. The Government of the Bahamas, UNEP and UNIDO are fully committed to implementing the gender policy of the Multilateral Fund in line with decision 84/92(d).<sup>6</sup> The Government would continue to provide equal opportunities for men and women to participate in HPMP activities. During stage II, the Government would implement activities to create more awareness on gender policy and encourage more women to participate in RAC technician training programmes and customs training (e.g., through scholarship support for RAC technician training for women), and monitor the results through collecting gender-disaggregated data, which would continue to be provided as part of progress reports during the implementation of stage II.

Total cost of stage II of the HPMP

18. The total cost of stage II of the HPMP for the Bahamas has been estimated at US \$591,680 (plus agency support costs), as originally submitted, for achieving a 67.5 per cent reduction from its baseline by 2025 and 100 per cent reduction from its HCFC baseline consumption by 2030.

**Table 3. Total cost of stage II of the HPMP for the Bahamas as submitted**

Activity	Agency	Cost (US \$)
Improved policy and legal framework	UNEP	22,000
Control over import of HCFCs and HCFC-based equipment	UNEP	31,200
Capacity building for refrigeration technicians	UNEP	238,400
Equipment support including recovery and reclamation	UNIDO	230,080
Awareness campaign	UNEP	12,000
Gender mainstreaming	UNEP	8,000
Monitoring and reporting	UNEP	50,000
<b>Total</b>		<b>591,680</b>

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

Activities planned for the first tranche of stage II

19. The first funding tranche of stage II of the HPMP in the total amount of US \$196,200 will be implemented between July 2022 and June 2025 and will include the following activities:

- (a) *Improved policy and legal framework*: Development of legislative package (amendment to the ODS Act and the ODS regulations) including ban on imports of HCFCs from 1 January 2030 except those required for service tail; organization of four awareness and consultative workshops with stakeholders (customs, refrigeration technicians, the BTVI, RSES, and service shop owners) covering prohibition on imports of HCFC-based equipment from 1 January 2023 and other legislative measures; update code of practice for technicians on safe use of flammable refrigerants (UNEP) (US \$18,000);
- (b) *Control over import of HCFCs and HCFC-based equipment*: Update of the “Ozone Module”; development of an e-licensing system (most of the development work will be done in the first tranche with minor work to be completed in the second tranche) (UNEP) (US \$18,200);
- (c) *Capacity building for refrigeration technicians*: Meetings with RAC association and Department of Inland Revenue on the implementation plan of HPMP activities in the service sector; training of approximately 50 RAC technicians on good service practices and recovery and reuse of refrigerants; market checks to monitor and prohibit **unsafe** use of R-22a (UNEP) (US \$32,000);
- (d) *Equipment support including recovery and reclamation*: Business viability assessment and business model development for recovery and reclamation; providing tools (e.g., recovery machines, refrigerant cylinders, manifold gauges) for service technicians training for adopting good service practices and recovery and reuse of refrigerants; procurement and distribution of five identifiers for customs and enforcement officers (UNIDO) (US \$115,000);
- (e) *Awareness campaign*: Print material for RAC technicians on good service practices and safe use of HCFC alternatives; development of public awareness activities on implementation of HPMP and adoption of low-GWP refrigerants (UNEP) (US \$3,000); and
- (f) *Project monitoring, evaluation and reporting* (UNEP) (US \$10,000): US \$4,000 for a consultant; US \$4,000 for monitoring implementation progress and reporting to the NOU and to the Fund Secretariat; and US \$2,000 for travel.

**SECRETARIAT’S COMMENTS AND RECOMMENDATION****COMMENTS**

20. 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 2022-2024 business plan of the Multilateral Fund.

Overarching strategy

21. The Government of the Bahamas proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, and to maintain a maximum annual consumption of HCFCs in the period of 2030 to

2040 at a level consistent with Article 5, paragraph 8 ter(e)(i) of the Montreal Protocol.<sup>7</sup> To achieve the above targets, the Government would continue to implement regulations for controlling and monitoring supply of HCFCs including a ban on import of HCFCs by 2030 except for service tail needs, and a ban on the import of HCFC-based RAC equipment from 1 January 2023, undertake capacity building and training of refrigeration technicians and customs and enforcement officers, implement programme to maximise recovery and reuse of HCFCs and upgrade facilities for two technical training institutions to provide training on handling low-GWP alternatives to HCFCs.

22. In line with decision 86/51, to allow for consideration of the final tranche of its HPMP, the Government of the Bahamas agreed to submit a detailed description of the regulatory and policy framework in place to implement measures to ensure that HCFC consumption is in compliance with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol for the 2030-2040 period, and the expected annual HCFC consumption in the Bahamas for the 2030-2040 period.

#### Regulations to support HCFC phase-out

23. The Government of the Bahamas has issued HCFC import quotas for 2022 at 2.75 ODP tonnes, which is lower than the Montreal Protocol control targets.

24. With the actual consumption of HCFC-22 in 2021 at 2.10 ODP tonnes and HCFC import quotas for 2022 at 2.75 ODP tonnes, the Secretariat discussed with UNEP the possibility of reducing the country's consumption targets for 2022 to 2024 at a level lower than the Montreal Protocol limits of 3.13 ODP tonnes. UNEP clarified that the Government considers that 2020, 2021 and 2022 are not typical years due to the COVID-19 pandemic, and to avoid the risk of potential non-compliance, it would retain its consumption targets for 2022-2024 at 3.13 ODP tonnes.

25. On the update of the ODS Act and ODS regulations in line with the recommendations of the verification report that was submitted to the 88<sup>th</sup> meeting along with the request for the fourth tranche of stage I of the HPMP,<sup>8</sup> UNEP mentioned that the following actions would be implemented:

- (a) The regulations would be revised by December 2023 to provide authority to the NOU to issue and monitor quotas to HCFC importers and verify HCFC import quotas in coordination with the Customs Department against reports submitted by the importers; other regulations including prohibiting venting of refrigerants while decommissioning HCFC-based equipment would also be considered;
- (b) The application for a license to import/export controlled substances would be modified by the NOU, by inserting a section requiring the applicant to declare all imports of controlled substances for the year up to the date of the application. The NOU would also work with the importers to monitor sales of HCFCs to avoid any illegal and unsafe use of the substances;
- (c) The NOU will work with the Department of Inland Revenue, that issues business licenses to service workshops, to ensure that service workshops hire at least one certified technician. In addition, recovery and recycling will be promoted in stage II; and

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<sup>7</sup> HCFC consumption 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 the HCFC baseline.

<sup>8</sup> Paragraph 5 of document UNEP/OzL.Pro/ExCom/88/37.



- (d) The NOU will work on any additional interventions needed for monitoring and controlling HCFCs based on specific issues identified during implementation of stage II of the HPMP.

#### Technical and cost-related issues

26. The Secretariat had detailed discussions with UNEP relating to the implementation of the training programme of RAC technicians, particularly the effectiveness of an online training programme, noting that the Government considers that this could help in cost-effectively delivering technical training to about 2,700 technicians. UNEP explained that the online training programme would help technicians in building certain basic skills and knowledge on good service practices and safe adoption of HCFC-free alternatives; the programme will have interactive features to demonstrate specific components and technical specifications of the equipment based on HCFC-free low-GWP technologies. The Government would work with other NOUs in the region to learn from their experience in designing and implementing such online training programmes. The NOU will work with the BTVI and RSES to deliver the training programmes; the Government would develop and implement a mechanism through which the technicians who had undergone the online training programme would work with those who were trained in person in different locations to ensure that those trained online would continue upgrading their skills and gain hands-on experience. Further, these technicians would need to pass tests to be qualified and certified under the national certification process. UNEP in consultations with the Government also confirmed that they would take steps, to the extent feasible within the available resources, to maximise the number of technicians trained in-person and to upgrade their hands-on skills.

27. Regarding the implementation of the certification programme, UNEP informed that the Government will develop a detailed plan including monitoring of the performance of certified technicians, during the first tranche of stage II; this would include development and enforcement of regulations related to certification for the servicing of flammable-refrigerant-based equipment and progressively for all RAC equipment. The revised codes of practices for servicing including servicing equipment using flammable and toxic substances would be incorporated in the training programme for certification. The certification programme would be appropriately structured with different categories of technicians who could undertake different types of installation, servicing and maintenance activities. Funds amounting to US \$15,000 are budgeted for establishing the certification institutions, and development of procedures for certification of technicians.

28. The Secretariat requested clarification from UNIDO relating to the viability of the recovery and reclamation programme, originally budgeted at US \$110,000. UNIDO clarified that the business viability would be first assessed and based on the outcomes of this assessment, the recovery and reclamation programme will be implemented. If the business viability is not proven, the funds allocated for this component would be reallocated to equipment support for service technicians for adoption of good practices and/or equipment support for BTVI. After detailed consultations on the budgets, UNIDO agreed to revise the budget for the business viability assessment of the recovery and reclamation programme in the first tranche to US \$17,000 (instead of US \$35,000) and to allocate the remaining US \$93,000 to the equipment support and other activities in the second tranche; UNIDO will also present the details of the outcomes of the business viability assessment during the submission of the request for the second tranche of stage II.

29. In light of the revisions of the recovery and reclamation component, the tranche distribution for stage II of the HPMP has been adjusted as shown in Table 4.

**Table 4. Original and revised tranche distribution for stage II of the HPMP for the Bahamas (US \$)**

<b>Funding agency</b>	<b>2022</b>	<b>2025</b>	<b>2028</b>	<b>2030</b>	<b>Total</b>
<b>Original</b>					
UNEP	81,200	75,500	136,000	68,900	361,600
UNIDO	115,000	115,080	0	0	230,080
<b>Total</b>	<b>196,200</b>	<b>190,580</b>	<b>136,000</b>	<b>68,900</b>	<b>591,680</b>
<b>Revised</b>					
UNEP	81,200	75,500	136,000	68,900	361,600
UNIDO	97,000	133,080	0	0	230,080
<b>Total</b>	<b>178,200</b>	<b>208,580</b>	<b>136,000</b>	<b>68,900</b>	<b>591,680</b>

*Sustainability of the activities proposed under stage II*

30. UNEP explained that to ensure the sustainability of the customs training beyond the HPMP timeline, the training topics relating to ODS and other controlled substances will be updated periodically and included in the training curricula by the Customs Department; the Government of the Bahamas will continue to provide training support with its own resources for customs and enforcement officers on an ongoing basis.

31. On the sustainability of the service technician training programme, UNEP explained that the capacity building of the BTVI and RSES would be undertaken during stage II; measures will be taken to maximise participation of service technicians in the training programme on good service practices and safe use of alternative refrigerants. The content of the training programme would be periodically updated and included in the regular training courses of BTVI and RSES. In addition, implementation of a certification programme and the requirement for service workshops to hire at least one certified technician, would also support sustainability of certification programme and training of service technicians.

Total project cost

32. The total cost for stage II of the HPMP amounts to US \$591,680, based on decision 74/50(c)(xii) on the eligible funding level for a low-volume-consuming country, after deducting US \$308,320 approved for stage I of the HPMP, based on decision 60/44(f)(xii). The funding for the first tranche was revised as per paragraph 29 and Table 4 above at US \$178,200.

Impact on the climate

33. The activities proposed 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 the savings of approximately 1.8 CO<sub>2</sub>-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by the Bahamas, including its efforts to promote low-GWP alternatives, as well as refrigerant recovery and reuse indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

**Co-financing**

34. The Government of the Bahamas would provide in-kind contribution (office space and utilities for the reclamation centre, technical support for developing training modules for enforcement training and technician capacity building) at an estimated value of US \$33,000.

## 2022-2024 draft business plan of the Multilateral Fund

35. UNEP and UNIDO are requesting US \$591,680, plus agency support costs, for the implementation of stage II of the HPMP for the Bahamas. The total requested value of US \$197,486, including agency support costs for the period of 2022–2024, is US \$48,946 below the amount in the business plan.

### Draft Agreement

36. A draft Agreement between the Government of the Bahamas and the Executive Committee for stage II of the HPMP is contained in Annex I to the present document.

### RECOMMENDATION

37. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for the Bahamas for the period from 2022 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$659,395, consisting of US \$361,600, plus agency support costs of US \$47,008 for UNEP and US \$230,080, plus agency support costs of US \$20,707 for UNIDO, on the understanding that no more funding from the Multilateral Fund would be provided for the phase-out of HCFCs;
- (b) Noting the commitment of the Government of the Bahamas:
  - (i) To completely phase out HCFCs by 1 January 2030 and to ban the import of HCFCs after that date, except for those allowed for a servicing tail between 2030 and 2040, where required, consistent with the provisions of the Montreal Protocol;
  - (ii) To ban the import of new and second-hand HCFC-based equipment from 1 January 2023;
- (c) Deducting 3.13 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Approving the draft Agreement between the Government of the Bahamas 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;
- (e) That, to allow for consideration of the final tranche of its HPMP, the Government of the Bahamas should submit:
  - (i) A detailed description of the regulatory and policy framework in place to implement measures to ensure that HCFC consumption was in compliance with paragraph 8 ter(e)(i) of Article 5 of the Montreal Protocol for the 2030-2040 period;
  - (ii) The expected annual HCFC consumption in the Bahamas for the 2030-2040 period; and
- (f) Approving the first tranche of stage II of the HPMP for the Bahamas, and the corresponding tranche implementation plan, in the amount of US \$197,486, consisting of US \$81,200, plus agency support costs of US \$10,556 for UNEP, and US \$97,000, plus agency support costs of US \$8,730 for UNIDO.



## Annex I

### **DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF THE BAHAMAS 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 Bahamas (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; and
- (c) 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/or 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, 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	4.81

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

Row	Particulars	2022	2023-2024	2025	2026-2027	2028	2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	3.13	3.13	1.56	1.56	1.56	1.56	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	3.13	3.13	1.56	1.56	1.56	1.56	0.00	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	81,200	0	75,500	0	136,000	0	68,900	361,600
2.2	Support costs for Lead IA (US \$)	10,556	0	9,815	0	17,680	0	8,957	47,008
2.3	Cooperating IA (UNIDO) agreed funding (US \$)	97,000	0	133,080	0	0	0	0	230,080
2.4	Support costs for Cooperating IA (US \$)	8,730	0	11,977	0	0	0	0	20,707
3.1	Total agreed funding (US \$)	178,200	0	208,580	0	136,000	0	68,900	591,680
3.2	Total support costs (US \$)	19,286	0	21,792	0	17,680	0	8,957	67,715
3.3	Total agreed costs (US \$)	197,486	0	230,372	0	153,680	0	77,857	659,395
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)								3.13
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)								1.68
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)								0.00

\*Date of completion of stage I: 30 June 2023



### **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 National Ozone Unit (NOU), located within the Environment Monitoring and Risk Assessment Division (EMRAD), which is part of the Department of Environmental Health Services (DEHS) under the Ministry of the Environment and Housing, will be responsible for the day-to-day execution of project activities.

2. In carrying out this function, the NOU will follow the supervision and reporting procedures established by the Ministry. The head of the NOU (National Ozone Officer (NOO)) provides monthly reports on the Plan implementation to the head of EMRAD which directly supervises the NOU. In addition, for the Plan implementation specifically, the NOO consults and submits comprehensive annual reports on the Plan implementation directly to the Director of the DEHS.

#### **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 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 AGENCY**

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 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, 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.

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