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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 2021¹

PROJECT PROPOSALS: TRINIDAD AND TOBAGO

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, fifth and final tranche) UNDP
- HCFC phase-out management plan (stage II, first tranche) UNDP

¹ Due to coronavirus disease (COVID-19)

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Trinidad and Tobago

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNDP (lead)	64 th	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2019	20.85 (ODP tonnes)
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(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					20.85				20.85
HCFC-123					0.01				0.01

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	46.00	Starting point for sustained aggregate reductions:	46.00
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	17.70	Remaining:	28.30

(V) BUSINESS PLAN		2020	Total
UNDP	ODS phase-out (ODP tonnes)	1.08	1.08
	Funding (US \$)	94,600	94,600

(VI) PROJECT DATA			2011	2013	2015	2017	2018*	2020	Total
Montreal Protocol consumption limits			n/a	46.10	41.60	41.60	41.60	30.00	n/a
Maximum allowable consumption (ODP tonnes)			n/a	46.10	39.50	39.50	39.50	28.50	n/a
Agreed funding (US \$)	UNDP	Project costs	559,900	198,000	471,833	145,000	0	88,000	1,462,733
		Support costs	41,993	14,850	35,387	10,875	0	6,600	109,705
Funds approved by ExCom (US \$)		Project costs	559,900	198,000	471,833	0	145,000	0	1,374,733
		Support costs	41,993	14,850	35,387	0	10,875	0	103,105
Total funds requested for approval at this meeting (US \$)		Project costs	0	0	0	0	0	88,000	88,000
		Support costs	0	0	0	0	0	6,600	6,600

*The fourth tranche should have been submitted in 2017.

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Trinidad and Tobago, UNDP as the designated implementing agency, has submitted a request for funding for the fifth and final tranche of stage I of the HCFC phase-out management plan (HPMP), at the amount of US \$88,000, plus agency support costs of US \$6,600.² The submission includes a progress report on the implementation of the fourth tranche, the verification report on HCFC consumption for 2018 and 2019 and the tranche implementation plan for 2021.

Report on HCFC consumption

2. The Government of Trinidad and Tobago reported a consumption of 20.85 ODP tonnes of HCFC in 2019, which is 55 per cent below the HCFC baseline for compliance. The 2013-2019 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Trinidad and Tobago (2013-2019 Article 7 data)

HCFC	2013	2014	2015	2016	2017	2018	2019	Baseline
Metric tonnes (mt)								
HCFC-22	717.46	473.47	229.16	377.10	214.65	284.52	379.07	782.86
HCFC-123	1.97	1.27	0.70	2.78	0.87	0.25	0.25	6.74
HCFC-124	0.00	6.37	0.00	0.00	0.00	0.00	0.00	23.60
HCFC-141b	0.00	1.36	0.00	0.00	3.57	0.00	0.00	20.55
HCFC-142b	0.00	3.00	0.40	0.00	0.00	0.00	0.00	0.00
Total (mt)	719.43	485.47	230.26	379.88	219.09	284.77	379.32	833.75
ODP tonnes								
HCFC-22	39.46	26.04	12.60	20.74	11.81	15.65	20.85	43.10
HCFC-123	0.04	0.03	0.01	0.06	0.02	0.01	0.01	0.10
HCFC-124	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.50
HCFC-141b	0.00	0.15	0.00	0.00	0.39	0.00	0.00	2.30
HCFC-142b	0.00	0.19	0.03	0.00	0.00	0.00	0.00	0.00
Total (ODP tonnes)	39.50	26.55	12.64	20.80	12.22	15.65	20.85	46.00

3. The consumption of HCFCs is showing a decreasing trend over the last 10 years due to implementation of HCFC import controls and monitoring; training and capacity building activities for customs officers and refrigeration technicians under the HPMP; ban on import of HCFC-based equipment since 1 January 2015; and the increasing adoption of refrigeration and air-conditioning (RAC) equipment. The majority of the new air-conditioners being imported in recent years are based on HFC-410A refrigerant; the refrigeration equipment in cold rooms and other applications are based on HFC-134a, R-404A and R-407C refrigerants; and there is very limited use of RAC equipment based on R-290. The increases in consumption in 2016, 2018 and 2019 were mainly due to higher imports of HCFCs for servicing RAC equipment which was driven by local weather and economic conditions; these fluctuations are temporary. HCFC-141b consumption has been completely phase-out with the implementation of the conversion of the foam sector supported; although no ban has been imposed on imports of HCFC-141b in bulk or contained in pre-blended polyols, no license is issued for import of these substances. HCFC-123 is used for servicing large commercial and industrial chillers.

Country programme (CP) implementation report

4. The Government of Trinidad and Tobago 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.

² As per the letter of 13 July 2020 from the Ministry of Planning and Development, Republic of Trinidad and Tobago, to UNDP.

Verification report

5. The verification report confirmed that the Government of Trinidad and Tobago is implementing a licensing and quota system for HCFC imports and exports that ensures the country's compliance with the control targets set in the Agreement with the Executive Committee, and that the total consumption of HCFCs reported under Article 7 of the Montreal Protocol for 2018 and 2019 was correct (as shown in Table 1 above) and lower than the control targets for those years.

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

Legal framework

6. The Import and Export Control Regulations for the import of ODS, mixtures containing ODS, and ODS-based equipment including HCFCs, was amended in 2013 to include HCFC blends. Since 1 January 2015, HCFC-based equipment cannot be imported into the country; and HCFC-141b in bulk or contained in pre-blended polyols cannot be imported as no license is issued for import of these substances. The Government has a climate policy to reduce and avoid the emission of greenhouse gases, which applies to HCFCs to the extent feasible. In March 2018, the Government approved the national guidelines for good refrigeration servicing and maintenance practices to avoid leakage of refrigerants.

7. The national ozone unit (NOU) developed and enforced standards related to handling, storage and technical specifications for refrigerant cylinders and equipment used in the RAC sector, in coordination with the Trinidad and Tobago Bureau of Standards (TTBS), and is currently developing safety requirements for handling flammable refrigerants.

Foam sector

8. The project for the phase-out of HCFC-141b contained in imported pre-blended polyols in the foam sector covers five enterprises. Conversion of three enterprises (Vetter Boxes, Tropical Marine and Seal Spray Solutions), has been completed with the introduction of methyl formate/water-based technologies, resulting in the phase-out of 13.95 mt; and the conversion project to methyl formate in another enterprise (Ice Fab with a consumption of 3.0 mt) is expected to be completed by the end of 2020. However, one enterprise (Ice Con with a consumption of 6.3 mt), decided to withdraw from the project due to internal organisational reasons, and the funding balance amounting to US \$30,600, has been returned to the 86th meeting, in line with decision 83/15(b). Low-global-warming potential (GWP) technologies in foam applications are available in the country.³

Refrigeration servicing sector

9. The following activities have been implemented:

- (a) *Training of customs and border control agencies:* Training of 180 officers from border control agencies, including TTBS and the Ministry of Trade and Industries (Trade Licensing Unit) on ODS regulations implementation and control of illegal ODS trade; and support for software upgrade related to controls and operation of three refrigerant identifiers; during the implementation of stage I, approximately 305 enforcement officers were trained;
- (b) *Technical support to the RAC servicing sector:* Training of 10 trainers and 305 technicians focusing on alternative refrigerants and hydrocarbon (HC)-based refrigerant technologies;

³ Decision 84/30(b).

certification of 211 technicians based on a certification scheme established by the NOU with the Air-conditioning and Refrigeration Industry Association (ARIA) and other national stakeholders; provision of training equipment (e.g., vacuum pumps, weighing scales, refrigerant cylinders, tools for recovery of refrigerant and maintenance, HC-based equipment for hands-on training) to 11 technical training institutions; and purchase and distribution of 107 units of equipment (e.g., servicing tools and gauges) to service enterprises; during the implementation of stage I, 32 trainers and approximately 1,600 technicians were trained; and

- (c) *Education and awareness*: sensitization of the public and the sector through publication of public notices, public displays, educational articles in newspapers, broadcasting of information videos in televisions and sector-specific lectures on implementation of HPMP and alternative technologies.

Project implementation and monitoring

10. The NOU is responsible for HPMP implementation with support from a project manager with a team of two personnel. The total cumulative expenditures as of July 2020 amounted to US \$87,600 (i.e., US \$25,000 for staff and consultants, US \$22,600 for travel and workshops, and US \$40,000 for verification and other operational expenses).

Level of fund disbursement

11. As of July 2020, of the US \$1,374,733 approved so far, US \$1,293,214 had been disbursed as shown in Table 2. The balance of US \$81,519 will be disbursed in 2021.

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

Funding tranche	Funds approved	Funds disbursed	Disbursement rate (%)
First	559,900	529,847	95
Second	198,000	198,000	100
Third	471,833	471,833	100
Fourth	145,000	93,534	65
Total	1,374,733	1,293,214	95

Implementation plan for the fifth and final tranche of the HPMP

12. The following activities will be implemented between January and December 2021 with funds from the last tranche and balances from the previous tranches:

- (a) *Completion of the Ice Fab conversion project by the end of 2020* (funds from the previous tranche);
- (b) *Technical support to the RAC servicing sector*: Training of 120 RAC technicians on good service practices and safe handling of HC-based equipment and certification of 55 technicians; provision of recovery units and other servicing equipment for training institutions and service sector enterprises; and support, where applicable, to developing a blended learning/training approach (online and in-person) for the RAC sector (US \$20,000);
- (c) *Policy, legal and institutional framework*: Continued implementation of the professional certification system for RAC technicians that is under implementation with support from ARIA; and development of an online tool (in light of the COVID-19 pandemic situation) to assist RAC technicians and end-users on technical information relating to good

installation, maintenance and servicing of equipment, recovery and reuse of refrigerants and registry of certified technicians (US \$27,000);

- (d) *Education and awareness*: Implementation of at least 25 online and in-person (where possible) seminars/lectures; public advisories on HPMP implementation and alternative technologies (US \$17,000); and
- (e) *Project management and implementation* (US \$24,000): Project management and coordination on implementation of the work plan and periodic monitoring and reporting of activities.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption

13. Upon request for additional information on the use of HCFC-free alternative technologies in the RAC sector, UNDP informed that currently, HFC-based technologies are extensively available for many RAC applications at a competitive price; the use of HC-based equipment is seeing a marginal increase in domestic refrigeration applications, and very limited in air-conditioning applications. Training and technical information on the safe use of flammable refrigerants has been provided, in case technicians need to service RAC equipment based on flammable refrigerants.

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

Legal framework

14. The Government of Trinidad and Tobago has already issued HCFC import quotas for 2020 at 22.09 ODP tonnes (402.85 mt), which is lower than the Montreal Protocol targets.

Refrigeration servicing sector

15. In respect of the retrofitting activities to HC refrigerants, UNDP explained that the Government of Trinidad and Tobago is well aware of the relevant decisions of the Executive Committee.⁴ Market penetration of flammable refrigerants is limited mainly because the sector uses HFCs and non-flammable refrigerants. Training on safe handling of flammable refrigerants focuses on flammability issues relating to refrigerant storage, transportation and usage in new refrigeration equipment or equipment designed for using flammable refrigerants; it is expected that the import of RAC equipment based on HC refrigerants would increase in the future with the phase-out of HCFCs and the phase-down of HFCs. ARIA is closely involved in training on safety issues associated with HCs and the trainers are attached to the Association.

Completion of stage I

16. UNDP has confirmed that stage I for Trinidad and Tobago will be completed on 31 December 2021 as established in paragraph 14 of the Agreement.

⁴ Decisions 72/17 and 73/34.

Gender policy implementation

17. The Government of Trinidad and Tobago and UNDP are fully committed to implementing the gender policy;⁵ over 50 per cent of the persons participation in project planning, and implementation and supervision of HPMP activities are women. UNDP informed that the participation of female practitioners (e.g., consultants, supervisors, trainers and project coordination staff) would actively be encouraged in various activities and that the Government is targeting about 5 per cent of women participation in the servicing sector and enforcement training activities during the implementation of the fifth tranche.

Sustainability of the HCFC phase-out

18. With regard to ensuring the sustainability of the HPMP, the Government has prohibited the import of HCFC-based equipment since 1 January 2015 and no license is issued for imports of HCFC-141b in bulk or contained in pre-blended polyols; the implementation, monitoring and reporting system for HCFCs, the training programmes for technicians and enforcement officers, the close cooperation with the RAC association and the continuous implementation of awareness and information outreach programme on HCFC phase-out, would further ensure the sustainability of HCFC phase-out.

Conclusion

19. The Secretariat noted that the country's import licensing and quota system is operational. The 2019 HCFC consumption is 55 per cent below the HCFC baseline for compliance. Over 95 per cent of the funds approved have been disbursed. The activities planned under the fifth tranche will result in the completion of the foam sector by the end of 2020 and the complete phase-out of HCFC-141b contained in imported pre-blended polyols; these enterprises have adopted low-GWP foam blowing agents to replace HCFC-141b, and UNDP has returned the funds balance from one enterprise to the 86th meeting. The Government has adopted national guidelines for good refrigeration practices and safety standards for refrigerant cylinders and RAC equipment, and is currently implementing the certification system for RAC technicians in cooperation with ARIA, training programmes for RAC technicians on good service practices, awareness programmes on HPMP activities and the promotion of the adoption of HCFC-free alternatives. These aforementioned activities combined with equipment support for technicians will further strengthen the servicing sector and ensure the long-term sustainability of HPMP activities. Stage II is also being submitted for consideration at the present meeting.

RECOMMENDATION

20. The Fund Secretariat recommends that the Executive Committee:

- (a) Takes note of the progress report on the implementation of the fourth tranche of stage I of the HCFC phase-out management plan (HPMP) for Trinidad and Tobago;
- (b) Further notes that UNDP had already returned to the 86th meeting the remaining balances amounting to US \$30,600, plus agency support costs of US \$2,295, associated with the foam enterprise Ice Con that withdrew from the HPMP, in line with decision 83/15(b); and
- (c) Requests the Government of Trinidad and Tobago and UNDP to submit a progress report on the implementation of the work programme associated with the final tranche and the project completion report to the first meeting of the Executive Committee in 2022.

⁵ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

21. The Fund Secretariat further recommends blanket approval of the fifth and final tranche of stage I of the HPMP for Trinidad and Tobago, 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, fifth tranche)	88,000	6,600	UNDP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**Trinidad and Tobago**

(I) PROJECT TITLE	AGENCY
HCFC phase-out plan (stage II)	UNDP (lead)

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2019	20.85 (ODP tonnes)
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(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					20.85				20.85
HCFC-123					0.01				0.01

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:		46.00	Starting point for sustained aggregate reductions: 46.00
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:		17.70	Remaining: 28.30

(V) BUSINESS PLAN		2020	2021	2022	Total
UNDP	ODS phase-out (ODP tonnes)	n/p	n/p	n/p	n/p
	Funding (US \$)	n/p	n/p	n/p	n/p

n/p: not provided.

(VI) PROJECT DATA			2020	2021-2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Montreal Protocol consumption limits			29.90	29.90	29.90	29.90	15.00	15.00	15.00	15.00	15.00	0.00	n/a
Maximum allowable consumption (ODP tonnes)			28.50	28.50	28.50	28.50	15.00	15.00	15.00	1.15	1.15	0.00	n/a
Projects costs requested in principle (US \$)	UNDP	Project costs	498,756	0	665,008	0	0	332,504	0	0	166,252	0	1,662,520
		Support costs	34,913	0	46,551	0	0	23,275	0	0	11,638	0	116,376
Total project costs requested in principle (US \$)			498,756	0	665,008	0	0	332,504	0	0	166,252	0	1,662,520
Total support costs requested in principle (US \$)			34,913	0	46,551	0	0	23,275	0	0	11,638	0	116,376
Total funds requested in principle (US \$)			533,669	0	711,559	0	0	355,779	0	0	177,890	0	1,778,896

(VII) Request for approval of funding for the first tranche (2020)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNDP	498,756	34,913

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

22. On behalf of the Government of Trinidad and Tobago, UNDP as the designated implementing agency, has submitted a request for stage II of the HCFC phase-out management plan (HPMP), at the amount of US \$2,002,149, plus agency support costs of US \$140,150, as originally submitted.⁶ The implementation of stage II of the HPMP will phase out the remaining consumption of HCFCs by 2039.

23. The first tranche of stage II of the HPMP being requested at this meeting amounts to US \$674,458, plus agency support costs of US \$50,584 for UNDP, as originally submitted.

Status of implementation of stage I of the HPMP

24. Stage I of the HPMP for Trinidad and Tobago was approved at the 64th meeting⁷ to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$1,462,733, plus agency support costs, to phase out 17.70 ODP tonnes of HCFCs used in the foam manufacturing and the refrigeration servicing sectors. An overview of the implementation of stage I, including an analysis of the HCFC consumption; the progress and financial reports on the implementation; and the request for the fifth and final tranche submitted to the current meeting, are presented in paragraphs 1 to 20 of the present document.

Stage II of the HPMP

Remaining consumption eligible for funding

25. After deducting 17.70 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding amounts to 28.30 ODP tonnes of HCFC-22, HCFC-123 and HCFC-124.

Sector distribution of HCFCs

26. There are 2,000 RAC technicians working in 330 workshops servicing residential and commercial air-conditioners; commercial and industrial refrigeration units; and chillers as shown in Table 3. HCFC-22 represents 21.8 per cent of the refrigerants used in the servicing sector; consumption of HFC-134a and R-410A is higher than HCFC-22, and R-404A and R-407C is lower than HCFC-22.

Table 3. Demand in 2019 for HCFC-22 in the RAC servicing sector in Trinidad and Tobago

Sector/Applications	Number of units	Average charge/unit (kg)	Leakage rate (%)	Consumption	
				(mt)*	%
Room AC (unitary and split)	354,000	1.8	30	191.20	53.1
Commercial AC (roof top, multi-split, chillers)	18,000	13.0	40	93.60	26.0
Commercial refrigeration (medium condensing units)	8,000	15.0	50	60.00	16.7
Chillers	700	60.0	30	12.60	3.5
Transport refrigeration	750	8.0	45	2.70	0.7
Total	381,450	n/a	n/a	360.10	100.0

(*) Best estimates based on information available from industry representatives and field surveys; an additional 65.5 mt is emitted during servicing.

⁶ As per the letter of 6 July 2020 from the Ministry of Planning and Development, Republic of Trinidad and Tobago, to UNDP.

⁷ UNEP/OzL.Pro/ExCom/64/46 and Annex XXVI.

Phase-out strategy in stage II of the HPMP

27. Stage II of the HPMP will build upon the experience gained during implementation of stage I; it will focus on strengthening of regulations for reducing dependence on HCFC-based equipment; capacity building of enforcement officers for implementation of HCFC regulations; strengthening of the certification system for RAC technicians; capacity building and implementation of training activities in the servicing sector; provision of RAC equipment for the adoption of good service practices; the establishment of a recovery and reclamation programme; the promotion of low-GWP alternatives to HCFCs; awareness and outreach programme on HPMP activities; and project management and monitoring activities. As submitted, stage II proposes to reduce HCFC consumption with annual consumption target of 13.50 ODP tonnes for the period 2021 to 2024; 13.85 ODP tonnes for the period 2025 to 2027; and 1.15 ODP tonnes for the period 2028 to 2039 that will include service tail for HCFCs allowed under the Montreal Protocol.

Proposed activities in stage II of the HPMP

28. Stage II proposes the following activities:

- (a) *Strengthening of the enforcement of ODS regulations:* Five training courses for about 125 customs and enforcement officers on regulations for HCFC controls and preventing illegal trade of HCFCs; three training programmes for about 75 brokers and importers on regulations and compliance with reporting and documentation requirements; and procurement of four refrigerant identifiers for customs (US \$51,000);
- (b) *Development and implementation of regulations for prohibiting imports of components for HCFC-based equipment:* Development of regulations on prohibiting import of components (e.g., compressors, controls, heat-exchangers) for HCFC-based RAC equipment including national consultations with stakeholders including equipment importers for finalisation of regulations (US \$26,000);
- (c) *Strengthening of the certification programme for RAC technicians:* Upgrade of the certification programme to include regulations for the purchase of refrigerants by certified technicians and continued development of an online database for certified technicians; and awareness and outreach programme for certification of technicians (US \$72,500);
- (d) *Implementation of training programme for RAC technicians:* One train-the-trainer programme for 20 trainers and 50 training programmes for 1,250 RAC technicians on good servicing practices (through the training facilities that were supported during stage I and stage II) and the promotion of recovery and reuse of HCFCs; equipment support to two training centres (e.g., recovery machines, vacuum pump, training boards and servicing tools, air-conditioning equipment) (US \$460,597);
- (e) *Implementation of training and provision of equipment support to RAC technicians for the safe use of low-GWP RAC equipment:* Technical training support to 1,500 technicians through 50 training courses for handling low-GWP refrigerants and servicing equipment using low-GWP alternatives that are expected to be adopted in different RAC applications in the future; and procurement of equipment for servicing low-GWP refrigerant-based equipment for approximately 500 technicians (e.g., HC-based charging equipment, leak detectors, gauge manifolds and safety devices for safe handling and use of low-GWP refrigerants) (US \$788,956);
- (f) *Implementation of a recovery, recycling and reuse programme:* Procurement of equipment for three recovery centres (e.g., recovery machines, recovery cylinders, refrigerant identifier, tools and other accessories) and one reclamation centre (e.g., reclamation

machine, recovery machine, recovery cylinders, testing equipment for laboratory, tools and accessories); and training workshops and outreach programme for operationalising recovery and reclamation equipment (US \$313,096); and

- (g) *Awareness and information outreach programme*: Planning and implementation of awareness and outreach programmes for the general public on HPMP implementation and new RAC equipment using HCFC-free technologies; awareness programme for RAC technicians on HPMP activities and recovery and reclamation programmes; five meetings and workshops with large equipment users, hotels and supermarkets on different RAC technologies; awareness activities for children through school programmes; and printing and dissemination of awareness materials including brochures, newspaper advertisement and other mass media campaigns (US \$110,000).

Project implementation and monitoring

29. Project management and monitoring will be undertaken under the overall management and supervision of the NOU with the assistance of one technical specialist and one logistics and administrative specialist. The activities handled by the project management technical staff will include: implementation of training of customs and RAC technicians; equipment support for technical training and RAC technicians; recovery and reuse activities; data collection and monitoring on project related activities; coordination of implementation of activities with different institutions and stakeholders on HPMP activities; and project monitoring and reporting. The cost of those activities amounts to US \$180,000 (i.e., US \$100,000 for staff/consultants, US \$60,000 for monitoring and travel, and US \$20,000 for consultative meetings).

Gender policy implementation

30. The Government of Trinidad and Tobago is committed to implementing the gender policy in line with decision 84/92(d).⁸ During the implementation of stage II, the Government will work closely with training institutions including customs and enforcement training centres, and the RAC association, and implement measures to maximise participation of women in all activities. The Government would target participation of approximately 30 per cent of women in the training programmes and work with vocational training colleges to encourage women joining these colleges.

Total cost of stage II of the HPMP

31. The total cost of stage II of the HPMP for Trinidad and Tobago amounts to US \$2,002,149, as originally submitted, for achieving 67.5 per cent reduction from its HCFC baseline consumption by 2025, 97.5 per cent by 2028 and 100 per cent reduction by 2039, which is in accordance with decision 74/50(c)(xiii). The proposed activities and cost breakdown are summarized in Table 4 below.

Table 4. Total cost of stage II of the HPMP for Trinidad and Tobago as submitted (US \$)

Activity	Cost
Training of enforcement personnel on HCFC monitoring and control and prevention of illegal trade	51,000
Regulations development and capacity building to ban import of HCFC-based equipment	26,000
Strengthening implementation of certification of technicians	72,500
Training of technicians on good service practices and recovery and reclamation	460,597
Training and equipment support on low-GWP refrigerant technology for service sector	788,956
Installation of spent refrigerant recovery recycling and storage programme	313,096

⁸ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

Activity	Cost
General public education and information dissemination on HPMP activities and new technologies	60,000
Education and awareness programmes with large end-users to promote adoption of good practices and emerging RAC technologies in air-conditioning and commercial refrigeration	50,000
Project management, monitoring, evaluation and reporting	180,000
Total	2,002,149

Activities planned for the first tranche of stage II

32. The first tranche of stage II of the HPMP, at the total amount of US \$674,458, as submitted, will be implemented between January 2021 and December 2023, and will include the following activities:

- (a) *Strengthening of the enforcement and monitoring of ODS regulations and related policies:* Training of 30 enforcement officers on HCFC monitoring, control and reporting, prevention of illegal trade and implementation of control measures; consultations on the update of the legal framework and Harmonized System (HS) codes among key Government officials; and procurement and distribution of two refrigerant identifiers to customs border posts (US \$24,000);
- (b) *Development and implementation of regulations for prohibiting imports of components for HCFC-based equipment:* Initiation of development and enforcement of a policy for the prohibition of components for HCFC-based RAC equipment, based on discussions at three consultative meetings with stakeholders and importers (US \$4,000);
- (c) *Strengthening of the certification programme for RAC technicians:* Initiation of the development of procedures for strengthening of the certification programme, through one consultative meeting with the service industry, service sector association and regulatory aspects relating to handling of refrigerants and recovery and reuse by certified technicians; information outreach on expected changes and improvements in the implementation of the certification programme (e.g., controls on handling flammable refrigerants, specific provisions related to recovery and reuse of refrigerants) (US \$12,500);
- (d) *Implementation of training programme on good service practices and recovery and reclamation:* Design of the overall training programme including the upgrading of technical manuals and information; one train-the-trainers programme for 20 trainers and eight training courses for about 200 RAC technicians; and procurement of one training kit for a training centre (US \$205,798);
- (e) *Implementation of a capacity building programme for low-GWP refrigerants:* Implementation of at least four training programmes for 80 to 100 RAC technicians on the safe use of low-GWP refrigerants; and procurement and distribution of 60 tool kits for trained RAC technicians (US \$156,083);
- (f) *Implementation of a recovery, recycling and reuse programme:* Design of the business model of the recovery, recycling and reuse scheme including a consultative workshop; identification of a site for locating a recovery and recycling centre and procurement of equipment and tools; provision of equipment support for service workshops; and workshops on management of recovered refrigerant for service technicians, Government authorities and large users (US \$219,900);

- (g) *Awareness programmes for RAC technicians of large end-users and children:* Design an overall awareness programme before starting implementation of activities for RAC technicians on certification programmes and new regulations relating to ODS phase-out, and for children and youth on Montreal Protocol activities and environment friendly technologies; implementation of one technical seminar for large end-users and regulatory authorities on HCFC-free alternative technologies in different applications (US \$33,667); and
- (h) *Monitoring and evaluation* (US \$18,510): Monitoring and follow-up activities (including operation cost for the meetings with stakeholders).

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 Trinidad and Tobago proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2028, except 2.5 per cent of its baseline (1.15 ODP tonnes), which would be consumed annually from 2028 to 2039. The Secretariat had extensive discussions with UNDP on several issues related to the overarching strategy of stage II as explained below.

35. Given that HCFC consumption has increased between 2017 and 2019; that the Government proposes to maintain the consumption targets as close as possible to those allowed under the Montreal Protocol up to 2027 without any interim additional reductions; and that there were uncertainties associated with the commercial availability of HCFC-free low-GWP technologies in the local market; the Secretariat suggested that stage II of the HPMP addresses only up to the 67.5 per cent reduction of the HCFC baseline by 2025; the Government then could submit stage III addressing the full phase-out of HCFCs. After further discussions with the Government, UNDP explained that the strategy for stage II was proposed by the Government after detailed consultations with national stakeholders and keeping in view the national circumstances; the Government proposes to adopt a complete phase-out approach and commits to a consumption target of 2.5 per cent of the baseline in 2028, as this would assist in implementation of activities, without the need for interim project submissions and administrative processes. The Government could continue to build on their existing HCFC licensing and quota system, give policy direction on HCFC phase-out to RAC technicians on the adoption of low-GWP technologies, and take actions based on the technology evolution and the market assessment to achieve cost-effective and sustainable HCFC phase-out.

Consumption increase in 2018 and 2019

36. With regard to the increase on the level of consumption in 2018 and 2019, UNDP explained that as a result of the earthquake in the second half of 2018, a larger number of residential and commercial RAC equipment needed additional repair and servicing, resulting in an increase in consumption; however, the ban on import of HCFC-based equipment in place since 1 January 2015 had resulted in reduced dependence on HCFC-22-based RAC equipment which will result in faster reduction of HCFC consumption in future years.

37. The Secretariat had detailed discussions with UNDP on the assessment of the actual use of HCFC-22 in the country, noting that the funding level is directly linked to the actual use of HCFC-22 and not on the remaining consumption eligible for funding, as Trinidad and Tobago is a non-low volume

consuming country. Following these discussions, it was agreed to use the average of 2016-2019 consumption of HCFC-22 and HCFC-123, as shown in Table 5, as a reasonable assessment of the actual use of HCFCs, noting that this approach takes into account excess consumption/stockpiles in 2019 and the lower consumption in 2017 due to the adverse economic situation, which would have affected regular servicing of RAC equipment in that year.

Table 5. Average 2016-2019 HCFC-22 and HCFC-123 consumption in Trinidad and Tobago

HCFC (mt)	2016	2017	2018	2019	Average
HCFC-22	377.10	214.65	284.52	379.07	313.83
HCFC-123	2.78	0.87	0.25	0.25	1.04
Total (mt)	379.88	215.52	284.77	379.32	314.87

Reduction targets for stage II

38. The Secretariat also held discussions with UNDP regarding the phase-out targets for stage II of the HPMP for the period 2021 to 2039, as originally submitted. Subsequently, UNDP informed the Secretariat that after further consultations it had with the Government, the Government agreed to a consumption target of zero ODP tonnes from 2030, as shown in Table 6, on the understanding that the HCFC 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 Trinidad and Tobago'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.⁹

Table 6. Control targets for stage II of the HPMP for Trinidad and Tobago (ODP tonnes)

Targets	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Montreal Protocol	29.90	29.90	29.90	29.90	15.00	15.00	15.00	15.00	15.00	0.00
Stage II	28.50	28.50	28.50	28.50	15.00	15.00	15.00	1.15	1.15	0.00

Legal framework

39. With regard to the implementation of regulations relating to promoting recovery and reuse of HCFCs, UNDP explained that the Government would introduce provisions in the technician certification process to ensure mandatory recovery of refrigerants while decommissioning HCFC-based refrigeration equipment and reporting of quantities of recovered refrigerants; these provisions would be enforced upon finalisation of the database of certification of technicians and updating of technician certification regulations. UNDP confirmed that the import ban of components for HCFC-based equipment would be implemented from 1 January 2025; while no specific regulations for prohibiting the adoption of HFC-based equipment are proposed under stage II, the Government would consider such regulations during the implementation of the HFC phase-down plan when submitted.

40. UNDP also explained that the Government would continue strengthening the certification system for RAC technicians with additional provisions planned under stage II with a view to maximise operations of certified technicians and restrict the handling and use of refrigerants to certified technicians only. Given the market conditions in the country, the certification system would be strengthened over time and would facilitate the adoption of low-GWP refrigerants as they become available in the market.

⁹ 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.

Technical and cost-related issues

41. The Secretariat sought additional information on the feasibility and sustainability of the recovery and reuse component under stage II, in view of the current high availability of HCFCs in the country. UNDP explained that the scheme would be successful with decreasing supply of HCFC-22 over time and higher price of HCFCs; the Government would implement measures to actively promote recovery and reuse practices during stage II. Following consultations relating to operationalisation of the programme, UNDP agreed that the funding for the recovery and reuse programme would be included in the second tranche request, after making an assessment of the business model for operationalising the programme; if necessary, the project component would be restructured to provide more equipment support to service technicians, training of RAC technicians, certification programme implementation and infrastructure for training institutions.

42. The Secretariat requested additional information on training of RAC technicians on low-GWP flammable refrigerants and equipment support for servicing such equipment, noting that such training could be incorporated under the training programme of service technicians on good practices and that the use of equipment based on low-GWP refrigerants in the country is very limited. UNDP explained that the proposed training on low-GWP refrigerants will focus only on the safe handling of these refrigerants, while the training programme on good service practices will focus on maximising recovery and reuse of HCFCs. Regarding the tools and equipment for servicing low-GWP flammable refrigerants, UNDP mentioned that it is needed so that technicians can service RAC equipment based on low-GWP flammable refrigerants when they become available in the market; the specific requirement for the equipment will be discussed with the refrigeration servicing industry based on update of low-GWP flammable refrigerants in the country in air-conditioning and other RAC applications covered under HPMP.

43. The Secretariat had detailed discussions with UNDP on costs allocated for the different components of stage II, resulting in the following adjustments to maximise the impact of the proposed activities: the number of technicians trained was increased from 1,250 to 1,600 technicians; the cost of equipment support to the technical institutions for training of technicians, recovery and reuse of refrigerants was adjusted; the number of technicians to receive equipment support for good service practices and safe adoption of low-GWP technologies was reduced from 500 to 350; and the project management and monitoring costs was estimated to 10 per cent of the revised project costs. Table 7 presents the revised cost allocation for the different components.

Table 7. Revised cost allocation by activity of stage II of the HPMP for Trinidad and Tobago (US \$)

Activity	Original	Revised
Training of enforcement personnel on HCFC monitoring and control and prevention of illegal trade	51,000	51,000
Regulations development and capacity building to ban import of HCFC-based equipment	26,000	26,000
Strengthening implementation of certification of technicians	72,500	72,500
Training of technicians on good service practices and recovery and reclamation	460,597	473,901
Training and equipment support on low-GWP refrigerant technology for service sector	788,956	532,539
Installation of spent refrigerant recovery recycling and storage programme	313,096	245,442
General public education and information dissemination on HPMP activities and new technologies	60,000	60,000
Education and awareness programmes with large end-users to promote adoption of good practices and emerging RAC technologies in air-conditioning and commercial refrigeration	50,000	50,000
Project management, monitoring, evaluation and reporting	180,000	151,138
Total	2,002,149	1,662,520

44. As a result of the agreed cost allocations, the tranche distribution for stage II of the HPMP was adjusted as shown in Table 8. The revised tranche distribution shows that the last tranche of stage II is scheduled in 2029 instead of 2030.¹⁰ Given that a reduction of 97.5 per cent of the HCFC consumption baseline will need to be achieved by 1 January 2028, most of the substantive activities need to be implemented by 2027. On this basis, in order to allow for last payments, it was agreed to have the last tranche in 2029 rather than in 2030, as usually done. While the country has committed to completely phase out HCFCs in 2030, there is a possibility that some amount may be reported in 2030 consistent with the provisions of the Montreal Protocol for the servicing tail.

Table 8. Revised tranche distribution for stage II of the HPMP for Trinidad and Tobago (US \$)

Funding	2020	2021	2022	2023	2024	2025	2026	2028	2029	Total
Original	674,458	0	0	527,283	0	600,857	0	199,550	0	2,002,149
Revised	498,756	0	0	665,008	0	0	332,504	0	166,252	1,662,520

Activities planned for the first tranche

45. The funding for the first tranche was revised as per Table 8 above. The funding for the different components was revised to include equipment support to five training kits to one technical institution, training of 15 trainers and 200 technicians on good service practices (US \$208,193), training of 240 technicians on safe use of low-GWP refrigerants and equipment support for about 115 technicians for good service practices and safe use of HCFC-free alternatives (US \$196,652), technical assessment of refrigerant recovery programme including one consultation workshop on implementation requirements (US \$6,000); one workshop for the strengthening of the certification programme and consultations on components and implementation process (US \$12,500); training of 60 customs and enforcement officers and customs clearing agents on ODS regulations, reporting requirements and prevention of illegal trade (US \$24,000); two consultative meetings on regulations for prohibiting imports of components for HCFC-based equipment (US \$4,000); awareness programmes for RAC technicians on HPMP activities, for children and general public on HCFC phase-out and implementation of HPMP activities, one technical seminar targeted at users of HCFC-based equipment in commercial establishments, supermarkets and tourism sector on HCFC-free environment friendly technologies and development and dissemination of brochures on HPMP activities and HCFC-free technologies (US \$33,667) and project management and monitoring activities (US \$13,744).

Total project cost

46. The total cost for stage II of the HPMP amounts to US \$1,662,520, plus agency support costs, which includes: US \$1,511,382 for the servicing sector calculated at US \$4.80/metric kg using the estimated HCFC consumption eligible for funding of 314.87 mt, in line with decision 74/50(c)(xiii); and US \$151,138 for project management and monitoring, for the total phase-out of HCFCs in Trinidad and Tobago in 2030.

Impact of the COVID-19 pandemic on HPMP implementation

47. In 2020, the COVID-19 pandemic has affected the overall pace of implementation of business and economic activities, including HPMP activities. The Government of Trinidad and Tobago proposes to initiate implementation of stage II after its approval, as part of post-COVID-19 recovery measures, in a phased manner taking into consideration constraints on implementation of activities that involve higher levels of personal contacts and interaction, noting that the situation is expected to improve by the second quarter of 2021. The Government proposes to initiate HPMP activities for stage II (e.g., overall project

¹⁰ At its 62nd meeting, the Executive Committee requested the bilateral and implementing agencies, when preparing multi-year HPMPs, to ensure that the last tranche comprised 10 per cent of the total funding for the refrigeration servicing sector in the agreement and was scheduled for the last year of the plan (decision 62/17).

planning for stage II, finalisation of quotas for HCFC imports for 2021, engaging consultants for preparing technical documents relating to training programs, equipment specifications for training equipment, formal consultations with select Government authorities), while maintaining minimum levels of personal contacts following the guidelines of national health authorities. The plan for the first tranche of stage II has already taken into account the constraints for implementation of activities in a timely manner.

Impact on the climate

48. 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 CO₂-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Trinidad and Tobago, including its efforts to promote low-GWP alternative technologies, 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

49. Co-financing would be provided by the training centres for operational aspects and maintenance of equipment in those centres. In addition, technicians who would not be able to access equipment support due to budget limitations would spend their own internal resources for managing their operations.

2020-2022 draft business plan of the Multilateral Fund

50. UNDP did not include funding for the implementation of stage II of the HPMP for Trinidad and Tobago in the business plan and informed the Secretariat that this was inadvertently missed out in the business plan.

Draft Agreement

51. A draft Agreement between the Government of Trinidad and Tobago 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

52. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Trinidad and Tobago for the period from 2020 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$1,662,520, plus agency support costs of US \$116,376 for UNDP, 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 Trinidad and Tobago to reduce HCFC consumption by 38 per cent of the country's baseline by 1 January 2021, 67.5 per cent by 1 January 2025, 97.5 per cent by 2028 and completely phase out HCFCs by 1 January 2030, and that HCFCs would not be imported 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;
- (c) Further noting that the Government of Trinidad and Tobago would implement regulations to prohibit import of components for HCFC-based equipment by 1 January 2025, after necessary national consultations;

- (d) Deducting 28.30 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (e) Approving the draft Agreement between the Government of Trinidad and Tobago 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
- (f) Approving the first tranche of stage II of the HPMP for Trinidad and Tobago, and the corresponding tranche implementation plan, in the amount of US \$498,756, plus agency support costs of US \$34,913 for UNDP.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF TRINIDAD AND TOBAGO 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 Trinidad and Tobago (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 rows 4.1.3 and 4.2.3 (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;
 - (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; and
 - (v) Changes in alternative technologies, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;
- (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. UNDP has agreed to be the lead implementing agency (the “Lead IA”) in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead 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 role of the Lead IA is contained in Appendix 6-A. The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 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 to facilitate implementation of this Agreement. In particular, it will provide the Lead IA with access to the information necessary to verify compliance with this Agreement.

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	43.10
HCFC-123	C	I	0.10
HCFC-124	C	I	0.50
HCFC-141b	C	I	2.30
Total	C	I	46.00

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)	29.90	29.90	29.90	29.90	15.00	15.00	15.00	15.00	15.00	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	28.50	28.50	28.50	28.50	15.00	15.00	15.00	1.15	1.15	0.00	n/a
2.1	Lead IA (UNDP) agreed funding (US \$)	498,756	0	665,008	0	0	332,504	0	0	166,252	0	1,662,520
2.2	Support costs for Lead IA (US \$)	34,913	0	46,551	0	0	23,275	0	0	11,638	0	116,376
3.1	Total agreed funding (US \$)	498,756	0	665,008	0	0	332,504	0	0	166,252	0	1,662,520
3.2	Total support costs (US \$)	34,913	0	46,551	0	0	23,275	0	0	11,638	0	116,376
3.3	Total agreed costs (US \$)	533,669	0	711,559	0	0	355,779	0	0	177,890	0	1,778,896
4.1.1	Total phase-out of HCFC-22, HCFC-123, HCFC-124 agreed to be achieved under this Agreement (ODP tonnes)											28.30
4.1.2	Phase-out of HCFCs to be achieved in the previous stage (ODP tonnes)											15.40
4.1.3	Remaining eligible consumption for HCFCs mentioned in 4.1.1 (ODP tonnes)											0.00
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)											0.00
4.2.2	Phase-out of HCFC-141b to be achieved in the previous stage (ODP tonnes)											2.30
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)											0.00

*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 no later than the second 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 entity of the implementation of the Montreal Protocol in Trinidad and Tobago is the Ministry of Planning and Development, through the national ozone unit (NOU). The responsibilities of the NOU are designing and proposing all the policy measures, including adjustments to the current regulations, coordination with other stakeholders, institutions and relevant sectors involved in the implementation of the Protocol; following up on all the programmes and projects and preparation of reports including relevant reports to the Ministry and Secretariats of the Montreal Protocol.

2. The monitoring activities related to the Plan will be carried out by the NOU with project management staff and support staff; all projects under the Plan will be planned, coordinated and monitored by the technical staff under the direct supervision of the NOU. The NOU and the technical staff would also collaborate closely with technical experts/consultants on service sector activities specifically relating to training and capacity building for minimizing use of HCFCs and safe adoption of alternatives, and regulations enforcement. The NOU will also provide support for reporting progress in a timely manner to the Executive Committee, overall coordination of verification activities and regular monitoring of market developments and technology trends at the national and international levels.

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;
 - (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) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country the allocation of the reductions to the different budget items and to the funding of the Lead IA;
- (k) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (l) Providing assistance with policy, management and technical support when required; and
- (m) 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 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 \$192.4 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.