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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-fifth Meeting
Montreal, 25-29 May 2020
Postponed to 19-22 July 2020*

PROJECT PROPOSAL: JAMAICA

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

Phase-out

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

* 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

Jamaica

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2019	0.11 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2019	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b									
HCFC-142b									
HCFC-22					2.86				2.86

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	16.3	Starting point for sustained aggregate reductions:	16.3
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	8.1	Remaining:	8.2

(V) BUSINESS PLAN		2020	Total
UNDP	ODS phase-out (ODP tonnes)	0.72	0.72
	Funding (US \$)	62,350	62,350
UNEP	ODS phase-out (ODP tonnes)	0.10	0.10
	Funding (US \$)	9,040	9,040

(VI) PROJECT DATA		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
Montreal Protocol consumption limits		n/a	n/a	16.3	16.3	14.7	14.7	14.7	14.7	14.7	10.6	n/a	
Maximum allowable consumption (ODP tonnes)		n/a	n/a	16.3	16.3	11.4	11.4	11.4	11.4	11.4	8.2	n/a	
Agreed funding (US\$)	UNDP	Project costs	237,450	0	100,000	0	0	183,000	0	0	0	58,000	578,450
		Support costs	17,809	0	7,500	0	0	13,725	0	0	0	4,350	43,384
	UNEP	Project costs	20,000	0	18,000	0	0	31,000	0	0	0	8,000	77,000
		Support costs	2,600	0	2,340	0	0	4,030	0	0	0	1,040	10,010
Funds approved by ExCom (US\$)	Project costs	257,450	0	118,000	0	0	214,000	0	0	0	0	589,450	
	Support costs	20,409	0	9,840	0	0	17,755	0	0	0	0	48,004	
Total funds requested for approval at this meeting (US\$)	Project costs	0	0	0	0	0	0	0	0	0	66,000	66,000	
	Support costs	0	0	0	0	0	0	0	0	0	5,390	5,390	

Secretariat's recommendation:	Blanket approval

PROJECT DESCRIPTION

1. On behalf of the Government of Jamaica, UNDP as the lead implementing agency, has submitted:
 - (a) A request for funding for the fourth and final tranche of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US \$71,390, consisting of US \$58,000, plus agency support costs of US \$4,350 for UNDP, and US \$8,000, plus agency support costs of US \$1,040 for UNEP;¹ the submission includes a progress report on the implementation of the third tranche, the verification report on HCFC consumption for 2015 to 2019 and the tranche implementation plan for 2020; and
 - (b) A request for stage II of the HPMP, at a cost of US \$1,040,000, plus agency support costs of US \$78,000 for UNDP. The implementation of stage II of the HPMP will phase out 7.94 ODP tonnes of HCFCs by 2025.

Discrepancy on reported HCFC consumption

2. The Secretariat reviewed the HCFC consumption reported under Article 7 of the Montreal Protocol (Table 1) and noted:
 - (a) The HCFC baseline for compliance consisted of HCFC-22 (78 per cent based on ODP tonnes) and HCFC-141b (22 per cent), and a minute amount of HCFC-142b (0.01 ODP tonnes);
 - (b) HCFC consumption in 2011 decreased by 72 per cent from the HCFC baseline due to decrease in import demand in the country; HCFC consumption in 2012 (6.30 ODP tonnes) represented the highest consumption between 2011 and 2019, possibly due to increased imports for stockpiles prior to the 2013 freeze in consumption;
 - (c) HCFC consumption in 2013 decreased by 58 per cent from the previous year, due to the complete phase-out of HCFC-141b (i.e., 3.63 ODP tonnes in base years), and a reduction in consumption of HCFC-22. Since 2013, HCFC-141b has not been imported;
 - (d) HCFC consumption in 2019 decreased by 96 per cent from the previous year, and represented 0.7 per cent of the HCFC baseline for compliance.

Table 1. HCFC consumption in Jamaica reported under Article 7 of the Montreal Protocol

HCFC	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Baseline
Metric tonnes												
HCFC-22	263.60	197.60	34.90	58.55	47.61	55.17	53.16	64.19	72.10	55.70	2.00	230.60
HCFC-141b	34.00	32.00	23.80	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.00
HCFC-142b	0.00	0.20	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.08	0.00	0.09
Total (mt)	297.60	229.80	58.70	86.55	48.25	55.17	53.16	65.52	72.10	55.81	2.00	263.69
ODP tonnes												
HCFC-22	14.50	10.90	1.92	3.22	2.62	3.03	2.92	3.53	3.97	3.06	0.11	12.68
HCFC-141b	3.70	3.50	2.62	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63
HCFC-142b		0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01
Total (ODP t.)	18.20	14.40	4.54	6.30	2.63	3.03	2.92	3.56	3.97	3.07	0.11	16.32

¹ As per the letter of 21 August 2019 from the National Environment and Planning Agency of Jamaica to UNDP.

3. Similarly, the Secretariat reviewed the HCFC sector consumption data under the 2019 country programme implementation submitted by the Government of Jamaica and noted that the consumption reported was different from that reported under Article 7 of the Protocol.

4. The Secretariat also reviewed the verification report submitted together with the request for funding the fourth tranche of stage I of the HPMP and the request for stage II of the HPMP, and noted the HCFC consumption reported under Article 7 for 2015 to 2019 was significantly lower than the amounts verified by the independent verifier for those years, as shown in Table 2.

Table 2. HCFC consumption reported under Article 7 report and the verification report

Particulars	2015	2016	2017	2018	2019
Metric tonnes					
Article 7 data	53.16	65.52	72.10	55.81	2.00
Verified data	138.67	146.25	149.83	181.29	51.98
Difference (mt)	(85.51)	(80.73)	(77.73)	(125.48)	(49.98)
ODP tonnes					
Article 7 data	2.92	3.56	3.97	3.07	0.11
Verified data	7.63	8.04	8.24	9.97	2.86
Difference (ODP tonnes)	(4.71)	(4.48)	(4.27)	(6.90)	(2.75)

5. The verifier reported that the data differences were due to the use of incorrect customs codes for recording HCFC imports, incorrect data reporting by importers and customs brokers and limited coordination and communication between Customs authorities, the Ministry of Health and Wellness (responsible for issuing import permits) and the national ozone unit (NOU).

6. Noting the information contained in the verification report, the Secretariat raised a major concern and requested a number of clarifications on the observations made in the verification report regarding inaccuracies in HCFC data reported under Article 7 of the Montreal Protocol, and the challenges faced by the Government in implementing a robust data collection and reporting system. Furthermore, the Secretariat analyzed the HCFC consumption data against socio-economic indicators (e.g., distribution of the urban/rural population, economic activities of the population, electrification rate) and the estimated number of HCFC-22 refrigeration and air-conditioning (RAC) units in operation, and noted that the consumption of HCFCs, particularly for the baseline years, could not be justified based on demand of HCFC-22. Accordingly, the starting point for aggregate reduction on HCFC consumption, and associated funding levels, should be adjusted.

7. In addressing the Secretariat's concerns, UNDP explained that the survey on HCFC consumption for the preparation of stage I of the HPMP was conducted after consultations with the refrigeration service industry, field visits to several servicing workshops and assessments by the consultants who assisted in the collection and analysis of data; there were no indication that HCFCs were stockpiled, as this is not a practice in the country. UNDP also mentioned that the data on HCFC consumption contained in the verification report is an accurate representation of the consumption in Jamaica; the overall quota for HCFCs issued by the Government is usually higher than the actual amount imported; in addition, data reporting errors on account of inaccurate recording of HCFC imports under other customs codes, resulted in an underreporting of HCFC consumption.

8. Based on the above, the Secretariat informed UNDP that it would not be able to review the request for stage II of the HPMP until the data discrepancies had been addressed, the starting point for aggregate reduction on HCFC consumption had been adjusted and the remaining consumption eligible for funding for future stages of HPMPs had been determined. The Secretariat also noted that the last tranche of stage I of the HPMP should address all the issues related with data discrepancies and implement all the recommendations included in the verification report, and that stage II of the HPMP could be considered once the issues had been addressed and the recommendations had been implemented.

9. Subsequently, UNDP indicated that the following actions would be implemented during the fourth tranche of stage I based on the recommendations in the verification report:

- (a) Communication from the NOU to the Jamaica Customs Academy (JCA) on discontinuing use of tariff codes that should not be used to register HCFC imports and not allow imports of HCFCs through tariff codes that are not meant for HCFCs; this action will strengthen accuracy of the reported HCFC consumption;
- (b) Development of a data reporting template to importers for providing HCFC import data for every calendar year to the NOU, so that actual imports with the customs import data can be accurately compared; this action will help in HCFC data reconciliation and accurate data reporting;
- (c) Importing companies and their brokers will manage each invoice for each refrigerant, particularly for HCFCs and their blends, specifying the composition of the blends, in order to avoid data reporting errors and the risk of illegal imports;
- (d) Strengthening the communication between the customs authorities, the Ministry of Health and Wellness and the NOU through periodic dialogues, to *inter alia* allocate import quotas according to the actual needs of the country and in accordance to the levels allowed under the Montreal Protocol and the Agreement between the Government of Jamaica and the Executive Committee; accurately record actual amounts of HCFCs imported; and monitoring imports; and
- (e) The Government of Jamaica submitted a request to the Ozone Secretariat to revise the HCFC consumption data for 2015 to 2019 based on the verified consumption included in the verification report submitted to the 85th meeting (a letter from the Government was sent on 11 March 2020).

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

Legal framework

10. A licensing system to monitor and control trade in ODS has been introduced since 1998. The system was revised through the Trade Order in 2014 to include control over the import and export of HCFCs, and superseded earlier regulations. Importers of HCFCs are required to obtain an import permit from the Ministry of Health and Wellness and a license to import from the Trade Board/Ministry of Industry, Investment and Commerce.

11. The Government has issued an order prohibiting imports of HCFC-141b in bulk and contained in pre-blended polyols effective from 1 January 2016. The verification report and CP data report show that there were no imports of HCFC-141b during the period 2015 to 2019.

Polyurethane (PU) foam

12. The progress report submitted with the third tranche request of stage I of the HPMP,² indicated that the conversion to methyl formate at Seal Sprayed Solutions Limited was operationally completed in December 2015, resulting in the phase-out of 3.63 ODP tonnes of HCFC-141b.

² UNEP/OzL.Pro/ExCom/76/37

Refrigeration servicing sector

13. The following activities have been conducted:

- (a) A total of 26 customs and enforcement officers were trained on monitoring and reporting HCFCs; two consultative dialogues were held with the shipping industry on procedures to service Jamaican flagged vessels using HCFCs; and two refrigerant identifiers were purchased and provided to JCA;
- (b) A total of 90 service technicians and seven trainers were trained on good service practices while servicing RAC equipment and safe use of alternatives in six workshops;
- (c) A total of 268 sets of equipment and service tools (e.g., refrigerant scales, manifold gauges with hoses, leak detectors and ampere meters) were procured and delivered to service enterprises and technicians for better practices in servicing RAC equipment; and
- (d) Finalization of the Report on retrofit of HCFC-22-based air-conditioning equipment with flammable refrigerants, providing recommendations on safe handling of flammable refrigerants, safe practices while retrofitting equipment, training of technicians and cost-benefit analysis of retrofits vis-à-vis replacement of equipment.

Project implementation and monitoring unit (PMU)

14. The National Environment and Planning Agency (NEPA) is the implementing partner, where the PMU is located within NEPA. The NOU and consultants who are engaged for specific project activities, manage the PMU activities; they report to the project steering committee that meets on a quarterly basis. The technical working group provides advice to NEPA and PMU on *inter alia* issues relating to refrigerant disposal and destruction, licensing of RAC technicians, strengthening of the Jamaica air-conditioning, refrigeration and ventilation association (JARVA). The PMU expenditures amount to US \$6,000 for staff and consultant expenses, US \$26,500 for travel and workshops and US \$1,500 for miscellaneous expenses; this is less than the funding allocated for the PMU.

Level of fund disbursement

15. As of February 2020, of the US \$589,450 approved so far, US \$505,374 had been disbursed (US \$458,632 for UNDP and US \$46,742 for UNEP) as shown in Table 3. The balance of US \$84,076 will be disbursed in 2020 and 2021.

Table 3. Financial report of stage I of the HPMP for Jamaica (US \$)

Tranche		UNDP	UNEP	Total	Disbursement rate (%)
First	Approved	237,450	20,000	257,450	100.0
	Disbursed	237,450	20,000	257,450	
Second	Approved	100,000	18,000	118,000	97.0
	Disbursed	100,000	14,447	114,447	
Third	Approved	183,000	31,000	214,000	62.4
	Disbursed	121,182	12,295	133,477	
Total	Approved	520,450	69,000	589,450	85.7
	Disbursed	458,632	46,742	505,374	

Implementation plan for the fourth tranche of the HPMP

16. The following activities will be implemented until December 2021:

- (a) Training for 30 customs and enforcement officers, customs brokers and Ministry of Health

and Wellness officers, covering procedures for recording ODS imports based on customs data, and coordination with other institutions on import export monitoring; and implementation of verification recommendations as detailed in paragraph 9(a) to 9(d) above (UNEP) (US \$8,000 and funding remaining under the policy and enforcement component of the third tranche);

- (b) Training of 30 RAC supervisors on theory and practical aspects of non-ODS and low-/zero-global-warming potential cooling technologies; training of 15 master trainers on refrigerant technologies and good servicing practices and techniques on delivery of training; consultations with stakeholders including JARVA on establishment of recovery and recycling centres; establishment of one recovery and recycling centre equipped with *inter alia*, recovery and recycling units, refrigerant identifier, storage cylinders, vacuum pumps, leak detectors (UNDP) (US \$46,000); and
- (c) Project management and coordination on implementation of the work plan and periodic monitoring and reporting of project activities including developing gender-sensitive indicators (UNDP) (US \$12,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

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

Legal framework

17. The Government of Jamaica has established HCFC import quotas for 2020 not exceeding 8.2 ODP tonnes in line with its national regulatory framework that requires setting the quotas equal to HCFC consumption targets; however, the actual quotas for HCFCs to be issued and utilised by importers are expected to be significantly lower as the actual demand for HCFCs is low in the country.

Refrigeration servicing sector

18. Noting the report on retrofitting prepared during implementation of the third tranche, the Secretariat asked whether the country was considering retrofitting HCFC-based equipment with flammable refrigerants, and how the decisions on retrofitting had been taken into account. In clarifying, UNDP mentioned that the Government is not encouraging retrofit of equipment with flammable refrigerants but rather supports import and use of RAC equipment designed for using flammable refrigerants; the code of practice for the RAC sector is currently being revised to address the safe handling and use of flammable refrigerants. UNDP also confirmed that the Government is fully aware of decisions 72/17 and 73/34.

19. With regard to the report on feasibility of recovery and reuse of HCFCs, UNDP explained that it would be finalized during the fourth tranche; the NOU is currently working with refrigeration technicians, institutions and service associations, on conceptualisation of the national network for recovery and reuse of refrigerants, so that the recovery and recycling scheme could be fully implemented during stage II of the HPMP.

20. Upon request for clarification on use of the US \$310,500 approved for technical assistance for retrofit and recovery and recycling component, UNDP explained the funds have been fully used for development and implementation of training for trainers and technicians on good service practices, recovery and reuse of refrigerants and safe practices in handling RAC equipment based on flammable refrigerants, equipment procurement for four technical institutes and technicians, and activities relating to recovery and recycling including procurement of equipment for one center.

Gender policy implementation³

21. UNDP informed that the Government of Jamaica and UNDP are fully committed to implementing the gender policy. There are at least 30 women working in RAC service trade and around 100 women working in dealership and distribution set-up of HCFCs and HCFC-based products; the Government would take active steps to promote women participation in HPMP activities including project management and capacity building activities. The NOU will also keep track of female technicians and customs officers trained.

Sustainability of the HCFC phase-out

22. With regard to ensuring sustainability of the HPMP, UNDP mentioned that actions that are planned to strengthen the monitoring and reporting of HCFC data, which will include capacity building of customs and enforcement officers, Ministry of Health and Wellness officers, importers and customs brokers, will address outstanding issues related to data reporting and will strengthen the monitoring and reporting mechanism. Building capacity of vocational training institutes and technical institutes and including updated Montreal Protocol information in training curriculum would help in continued training of service technicians; and additional activities to strengthen JARVA and their greater role in the HPMP would help in achieving faster HCFC phase-out and adoption of alternative technologies in the RAC sector. Public awareness and outreach activities would ensure that HCFC phase-out is sustained and HCFC-free alternatives are adopted.

Conclusion

23. Jamaica is implementing HPMP activities and has achieved sustained reductions in HCFC consumption; the verification report confirms that the country is in compliance with its HCFC consumption targets and has identified important activities for strengthening HCFC data monitoring and reporting system in the country, which will be implemented during the last tranche of stage I of the HPMP. About 86 per cent of funds approved under stage I were disbursed. The activities so far implemented and those planned under the fourth and final tranche will further strengthen the servicing sector and continue to help the country meet its compliance obligations under the Protocol. Stage I of the HPMP will be completed in December 2021 as established in the Agreement and stage II of the HPMP for Jamaica would be presented once all the issues identified by the verifier have been addressed.

RECOMMENDATION

24. The Fund Secretariat recommends that the Executive Committee:
- (a) Takes note of the progress report on the implementation of the third tranche of stage I of the HCFC phase-out management plan of (HPMP) for Jamaica;
 - (b) Notes that stage II of the HPMP for Jamaica could only be considered once the data reporting issues identified in the verification report had been addressed and the recommendations by the verifier had been implemented;
 - (c) Further notes that the starting point for aggregate reduction on HCFC consumption and associated funding levels would be reviewed upon submission of stage II of the HPMP; and

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

- (d) Requests the Government of Jamaica, UNDP and UNEP to report on progress of actions taken following recommendations of the verification report when submitting stage II of the HPMP.

25. The Fund Secretariat further recommends blanket approval of the fourth and final tranche of stage I of the HPMP for Jamaica, and the corresponding 2020-2021 tranche implementation plan, at the funding levels shown in the table below:

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage I, fourth tranche)	58,000	4,350	UNDP
(b)	HCFC phase-out management plan (stage I, fourth tranche)	8,000	1,040	UNEP