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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-sixth Meeting  
Montreal, 9-13 May 2016

**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, third tranche) UNDP and UNEP

**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 <sup>th</sup>	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2014	3.03 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2014	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b									
HCFC-141b in Imported Pre-blended Polyol									
HCFC-142b									
HCFC-22					3.03				3.03

(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		2016	2017	2018	2019	2020	Total
UNDP	ODS phase-out (ODP tonnes)	2.3	0.0	0.0	0.0	0.7	3.0
	Funding (US \$)	196,725	0	0	0	62,350	259,075
UNEP	ODS phase-out (ODP tonnes)	0.4				0.1	0.5
	Funding (US \$)	35,030				9,040	44,070

(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	0	0	0	0	0	0.0	375,450
	Support costs	20,409	0	9,840	0	0	0	0	0	0	0	0.0	30,249
Total funds requested for approval at this meeting (US\$)	Project costs	0	0	0	0	0	214,000	0	0	0	0	0	214,000
	Support costs	0	0	0	0	0	17,755	0	0	0	0	0	17,755

Secretariat's recommendation:	Blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of Jamaica, UNDP as the lead implementing agency, has submitted to the 76<sup>th</sup> meeting a request for funding for the third tranche of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US \$231,755, consisting of US \$183,000, plus agency support costs of US \$13,725 for UNDP, and US \$31,000, plus agency support costs of US \$4,030 for UNEP. The submission includes a progress report on the implementation of the second tranche and the tranche implementation plan for 2016 to 2019.

### Report on HCFC consumption

#### *HCFC consumption*

2. The Government of Jamaica reported a consumption of 3.03 ODP tonnes of HCFC in 2014, and estimated a consumption of 4.86 ODP tonnes for 2015 which was 11.4 ODP tonnes below the baseline. The 2011-2015 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in Jamaica (2011-2014 Article 7 data, 2015 estimate)**

HCFC	2011	2012	2013	2014	2015*	Baseline
<b>Metric tonnes</b>						
HCFC-141b	23.80	28.00	0.00	0.00	0.00	33.0
HCFC-22	34.90	58.55	47.61	55.17	88.36	230.6
HCFC-123	0.00	0.00	0.64	0.00	0.00	0.0
<b>Total (mt)</b>	<b>58.70</b>	<b>86.55</b>	<b>48.25</b>	<b>55.17</b>	<b>88.36</b>	<b>263.6</b>
<b>ODP tonnes</b>						
HCFC-141b	2.62	3.08	0.00	0.00	0.00	3.6
HCFC-22	1.92	3.22	2.62	3.03	4.86	12.7
HCFC-123	0.00	0.00	0.01	0.00	0.00	0.0
<b>Total (ODP tonnes)</b>	<b>4.54</b>	<b>6.30</b>	<b>2.63</b>	<b>3.03</b>	<b>4.86</b>	<b>16.3</b>

\*Estimate

3. The data provided for 2015 is an estimate and will be reported in the country programme data that will be submitted by 1 May 2016.

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

4. The Government of Jamaica reported HCFC sector consumption data under the 2014 CP implementation report which is 0.67 ODP tonnes lower than the data reported under Article 7. This difference is due to additional information provided by the Jamaica Customs Agency to the NOU after the CP data was submitted that showed a final import figure of 3.03 ODP tonnes in 2014, which was officially reported under Article 7.

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

#### *Legal framework*

5. A comprehensive 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 a license to import from the Trade Board/Ministry of Industry, Investment and Commerce.

6. All planned activities under the legal and institutional framework were completed including the finalization of a ministerial order for the restriction on importation of HCFCs (quota system); guidelines for the prohibition of importation of equipment containing HCFCs, and guidelines on the procedures for export of HCFCs. The “Jamaican Standard Specification for the Labelling of Products and Equipment Containing, or Manufactured with ODS and/or their Substitutes” was also revised to include HCFCs, and was published in the National Gazette in 2015.

7. Training for customs and enforcement officers were also carried out during this period, resulting in 22 trained officers.

#### *Manufacturing sector*

##### Polyurethane (PU) foam

8. Stage I of the HPMP included an investment project to replace 33 metric tonnes (3.63 ODP tonnes) of HCFC-141b with methyl formate used by Seal Sprayed Solutions Ltd (SEAL) for the production of sprayed PU foam in roofing systems, insulation and water proofing and sealing. The project has been completed; the first commercial batches were produced in 2014; and the project was operationally completed in December 2015. Only final reimbursement of trials and the services of the international expert are pending payment, which is expected to be completed by the end of the first quarter of 2016. The Government has banned the import of HCFC-141b in bulk and contained in imported pre-blended polyols since January 2016.

#### *Refrigeration servicing sector*

9. Activities under the refrigeration servicing sector progressed well with the completion of the training manual for technicians for good practices in refrigeration; and implementation of six train-the-trainers courses resulting in 87 trained technicians. The Government also gave priority to strengthening capacities related to the safe use of flammable refrigerants by providing two sets of training equipment and distribution of 37 sets of tools (e.g., manifold gauges, base, scale) to technicians. Additional equipment suited for servicing with hydrocarbons would be procured under the third tranche.

#### *Project implementation and monitoring unit (PMU)*

10. A project steering committee (PSC) was established, and meets quarterly to coordinate the implementation of the project and to ensure the achievement of project outcomes. A technical committee was also established to provide technical advice to the National Environment and Planning Agency and the PSC on project implementation. Monitoring of project progress is undertaken by the PSC through submission of quarterly and annual financial and progress reports to UNDP.

#### Level of fund disbursement

11. As of March 2016, of the US \$375,450 so far approved, US \$278,744 had been disbursed (US \$267,010 for UNDP and US \$11,734 for UNEP) as shown in Table 2. The balance of US \$76,826 will be disbursed in 2016.

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

Agency	First tranche		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNDP	237,450	192,439	100,000	74,571	337,450	267,010
UNEP	20,000	11,734	18,000	0	38,000	11,734
<b>Total</b>	<b>257,450</b>	<b>204,173</b>	<b>118,000</b>	<b>74,571</b>	<b>375,450</b>	<b>278,744</b>
<b>Disbursement rate (%)</b>	<b>79</b>		<b>63</b>		<b>74</b>	

Implementation plan for the third tranche of the HPMP

12. The third tranche of the HPMP includes the following activities that will be implemented between June 2016 and December 2019:

- (a) Additional technical assistance to the refrigeration servicing sector through the implementation of six training workshops for 90 technicians; provision of 90 sets of servicing kits (gauge manifold for HCs and other refrigerants, amp/clamp meters, refrigerant weight scales); updating the retrofit plan for the country; and developing two case studies assessing retrofit options for Jamaica (UNDP) (US \$153,000);
- (b) Review and strengthen the regulatory framework supporting the implementation of the HPMP; provide training to 15 customs and enforcement officers and two refrigerant identifiers; finalize 100 booklets on code of practice for distribution; and conduct awareness activities (UNEP) (US \$31,000); and
- (c) Project management and monitoring (UNDP) (US \$30,000).

**SECRETARIAT'S COMMENTS AND RECOMMENDATION**

**COMMENTS**

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

*Legal framework*

13. The Government of Jamaica has already issued the HCFC import quotas for 2016 at 11.4 ODP tonnes.

*Manufacturing sector*

PU foam

14. Upon request for clarification on the delays in the operational completion of the foam project (planned to be completed by the end of 2013 as reported to the 70<sup>th</sup> meeting), UNDP explained that the company wanted to follow up with a second trial for methyl formate systems in order to optimize production and finalize adjustments in the process for low density foam. Since these systems are supplied by system houses located in Mexico, it required closed coordination of activities between the HPMP of Mexico and the HPMP of Jamaica.

*Refrigeration servicing sector*

15. The Secretariat asked whether the country was considering retrofitting HCFC-based equipment with flammable refrigerants, and how the relevant decisions of the Executive Committee on retrofitting<sup>1</sup> had been taken into account in these activities. In clarifying, UNDP mentioned the increased availability of HC-600a-based domestic refrigerators in the country, and demand for HC-290a, HFC-32 and low-global warming potential HFOs-based air conditioning systems. Accordingly the Government of Jamaica proposes to strengthen capacities of the local technicians to service such equipment in case these become widely available. UNDP also indicated that elements of decisions 72/17 and 73/34 would be taken into consideration when these actions are implemented.

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<sup>1</sup> Decisions 72/17 and 73/34.

16. With regard to the strategy to ensure the sustainability of the training programme, UNDP emphasized that it continues to assess and monitor the technicians trained to determine if further training or other targeted interventions are required. The national ozone unit (NOU) maintains close collaboration and consultation with the refrigeration association and the private sector to ensure that the training adapts to changes in the market for new refrigerants. Furthermore, the NOU is developing a strategy to integrate these training programmes into the relevant government agencies programmes, universities and training institutions to ensure sustainability.

### Conclusion

17. The Secretariat noted that Jamaica continues to be in compliance with the HCFC consumption targets, has an effective licensing and quota system, and continues to progress in the implementation of the activities approved under stage I. The completion of the foam project has resulted in the phase-out of all HCFC-141b in the country, and a ban on the import of HCFC-141b in bulk and contained in imported pre-bended polyols has been in place since January 2016.

### **RECOMMENDATION**

18. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan (HPMP) for Jamaica; and further recommends blanket approval of the third tranche of stage I of the HPMP for Jamaica, and the corresponding 2016-2019 tranche implementation plan, at the funding levels shown in the table below, on the understanding that if Jamaica were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and air-conditioning equipment originally designed for non-flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols:

	<b>Project title</b>	<b>Project funding (US \$)</b>	<b>Support cost (US \$)</b>	<b>Implementing agency</b>
(a)	HCFC phase-out management plan (stage I, third tranche)	183,000	13,725	UNDP
(b)	HCFC phase-out management plan (stage I, third tranche)	31,000	4,030	UNEP