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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Seventieth Meeting
Bangkok, 1-5 July 2013

PROJECT PROPOSAL: JAMAICA

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

Phase-out

HCFC phase-out management plan (HPMP (stage I, second tranche)

UNDP/UNEP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Jamaica

(I) PROJECT TITLE	AGENCY
HPMP (stage I)	UNDP (lead), UNEP

(II) LATEST ARTICLE 7 DATA	Year: 2011	4.54 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2012	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b in imported systems		3.08							3.08
HCFC-142b									
HCFC-22					3.22				3.22

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline estimate:	16.3	Starting point for sustained aggregate reductions:	16.3
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	8.1	Remaining:	3.6

(V) BUSINESS PLAN		2013	2014	2015	2016	2017	2018	2019	2020	Total
UNDP	ODS phase-out (ODP tonnes)	1.24	0.0	0.0	2.26	0.0	0.0		0.72	4.22
	Funding (US \$)	107,500	0	0	196,725	0	0		62,350	366,575
UNEP	ODS phase-out (ODP tonnes)	0.22			0.38				0.10	0.70
	Funding (US \$)	20,340			35,030				9,040	64,410

(VI) PROJECT DATA			2010	2011	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	16.3	16.3	16.3	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	0	0	0	0	0	0	0	0	0	257,450
	Support Costs	20,409	0	0	0	0	0	0	0	0	0	0	20,409
Total funds requested for approval at this meeting (US\$)	Project Costs	0	0	118,000	0	0		0	0	0	0	0	118,000
	Support Costs	0	0	9,840	0	0		0	0	0	0	0	9,840

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 70th meeting of the Executive Committee a request for funding for the second tranche of stage I of the HCFC phase-out management plan (HPMP) at a total cost of US \$127,840, consisting of US \$100,000, plus agency support costs of US \$7,500 for UNDP, and US \$18,000, plus agency support costs of US \$2,340 for UNEP. The submission includes a progress report on the implementation of the first tranche of the HPMP, and tranche implementation plans for 2013 to 2016.

Background

2. The HPMP for Jamaica was approved by the Executive Committee at its 64th meeting to reduce HCFC consumption by 35 per cent of the baseline by the end of 2020, at a total funding level approved in principle of US \$655,450 (US \$560,000 for the refrigeration servicing sector and US \$95,450 for a project to phase-out 3.6 ODP tonnes of HCFC-141b used in the manufacturing sector), plus agency support costs of US \$53,394. Also at the 64th meeting, the Executive Committee approved the first tranche of stage I of the HPMP, at the amount of US \$277,859, consisting of US \$237,450, plus agency support costs of US \$17,809 for UNDP, and US \$20,000, plus agency support costs of US \$2,600 for UNEP.

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

3. Stage I of the HPMP included the phase-out of 33 mt (3.6 ODP tonnes) of HCFC-141b used by only one enterprise, Seal Sprayed Solutions (Seal), for the production of sprayed polyurethane foam used in roofing systems, insulation and water proofing and sealing, and activities in the refrigeration servicing sector.

4. The Government of Jamaica has expanded the existing ODS licensing system to include *inter alia* a control trade/ban of HCFCs except under license Order 2013; guidelines on the prohibition of importing of HCFC-based equipment, and guidelines on the procedures for the export of HCFCs (submitted to the Ministry of Industry, Investment and Commerce). In addition, guidelines for the development of standards on transportation, handling and storage of HCFCs, and on labelling of HCFC-based equipment are currently being preparation under the purview of the Bureau of Standards.

5. Further to an initial visit to the foam enterprise Seal in 2011, the enterprise conducted a set of tests and trials with methyl formate, as the replacement blowing agent for HCFC-141b, which met and/or exceeded the technical and physical requirements of the enterprise and its clients. Technical specifications for equipment retrofit were concluded in 2012, and the procurement procedure for the equipment items needed for the retrofit of foam dispensers was undertaken during the first quarter of 2013. The retrofit of the foam dispensers, trials with first commercial batches of methyl formate-based foams and safety audit will be conducted during 2013. It is expected that by the end of 2013 the enterprise will be fully converted, and the project will be financially completed during the first quarter of 2014. The Government of Jamaica will ban the import of HCFC-141b in bulk and contained in imported pre-blended polyols once the enterprise is converted.

6. With regard to the refrigeration and air-conditioning servicing sector, the Government of Jamaica decided to give priority to the strengthening of the national capabilities for handling properly and securely flammable refrigerants. Accordingly, a train-the-trainers manual (including course outline) is being developed with the participation of the national refrigeration and air-conditioning association (JARVA), training institutions, importers and other key stakeholders. Equipment and accessories required for the training programmes on alternative technologies to HCFCs have been purchased (following the Government of Jamaica procurement guidelines). In total 20 customs officers and personnel from the

Bureau of Standards, Ministry of Industry, Investment and Commerce and Trade Board, were trained. Public awareness activities have also been undertaken to inform the refrigeration and air-conditioning servicing sector about the phase-out of HCFCs.

7. A project steering committee (PSC) has been established to ensure the proper implementation of the activities included in the HPMP. It comprises the National Environment and Planning Agency; the Planning Institute of Jamaica; the Ministry of Water, Land, Environment and Climate Change; the Ministry of Finance; and UNDP.

Level of funding disbursement

8. As of end of May 2013, of the US \$257,450 in funds approved for the first tranche, US \$88,378 had been disbursed or committed. The balance of US \$169,072 will be disbursed during implementation of the second tranche of the HPMP. Based on the memorandum of understanding between the Government of Jamaica and the project beneficiary Seal, capital costs for retrofitting the baseline equipment and trials have been paid; the remaining funds relating to payment for operating costs, additional trials and project completion activities will be disbursed upon completion of the conversion of the enterprise.

Annual plans for the second tranche of the HPMP

9. The main activities to be implemented during the second tranche of stage I of the HPMP include:
- (a) Complete conversion of the Seal Sprayed Solutions (Seal), resulting in the complete phase-out of HCFC-141b;
 - (b) Further strengthening the legal framework for management of HCFCs by establishing export controls of HCFC-based refrigerants and HCFC-based equipment, training of enforcement personnel and custom officers; introduction of market based incentives/disincentives; and establishment of procedures to monitor servicing of Jamaican flagged vessels (UNEP, US \$18,000);
 - (c) A technical assistance programme for the refrigeration servicing sector, preparation and distribution of 250 training manuals for technicians on hydrocarbon-refrigerants; procurement of training equipment and tools; implementation of three training programmes for trainers, and training of 250 service technicians; and awareness activities (UNDP, US \$80,000); and
 - (d) A project monitoring unit, featuring the implementation of a paperless monitoring system (UNDP, US \$20,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Operational licensing system

10. In line with decision 63/17 and as required under the Agreement between the Government of Jamaica and the Executive Committee, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and production and exports is in place and that the system is capable of ensuring compliance with the Montreal Protocol HCFC phase-out schedule for the duration of the Agreement. Importers are required to obtain an import permit from the

Ministry of Health and an import license from the Trade Board (Ministry of Industry, Investment and Commerce). Import quotas for HCFCs for 2013 and 2014 have been established according to the limits of the Montreal Protocol. For the period from 2015 onwards, the Government of Jamaica will set import quotas in accordance with the limits established under the Agreement between the Government of Jamaica and the Executive Committee.

HCFC consumption

11. The HCFC baseline for compliance has been established at 16.3 ODP tonnes, based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010 as shown in Table 1. The established baseline is equal to that in the Agreement between the Government of Jamaica and the Executive Committee; therefore, no adjustments to the Agreement are required. Based on preliminary figures, the consumption in 2012 has been estimated at 3.22 ODP tonnes.

Table 1. HCFC consumption in Jamaica (2006-2011 Article 7, 2012 estimated)

HCFC	2006	2007	2008	2009	2010	2011	2012*	Baseline
Metric tonnes								
HCFC-22	12.1	25.4	125.8	263.6	197.6	34.90	58.55	230.6
HCFC-141b				34.0	32.0	23.80	0.00	33.0
HCFC-142b	-	-	-	-	0.2	0.00	0.00	0.1
Total (metric tonnes)	12.1	25.4	125.8	297.6	229.8	58.70	58.55	263.7
ODP tonnes								
HCFC-22	0.7	1.4	6.9	14.5	10.9	1.92	3.22	12.7
HCFC-141b				3.7	3.5	2.62	0.00	3.6
HCFC-142b					0.0	0.00	0.00	0.0
Total (ODP tonnes)	0.7	1.4	6.9	18.2	14.4	4.54	3.22	16.3

12. Between 2006 and 2010, HCFC consumption increased from 12.1 mt (0.7 ODP tonnes) to 229.8 mt (14.4 ODP tonnes). However, in 2012 the consumption of HCFCs, in particular HCFC-22, decreased, to a total of 58.55 mt (3.22 ODP tonnes). As explained by UNDP, since 2007 when the Cricket World Cup took place in Jamaica, the Government focussed on the introduction of new energy efficient air-conditioning equipment, based on HFC-410A refrigerant (as the only available technology in the market). The effect of this change has resulted in a reduction in the consumption of HCFC-22.

Technical issues discussed

13. UNDP explained that the limited progress made in implementing activities in the servicing sector was due to the fact that the Government of Jamaica decided to speed up the implementation of the investment project in the foam sector so as to facilitate the country's ability to achieve the agreed reductions in HCFC consumption. Furthermore, upon approval of the HPMP, intense work was undertaken to assure that the legal baseline of 16.3 ODP tonnes would be in place to meet the first HCFC phase-out commitment by 2013. A team of national and international experts were hired and several meetings were held with key stakeholders to analyse their needs vis-à-vis the action plan proposed under the HPMP, and to adjust the course of action to the current reality in the field and setting priorities for the work that has initiated (the consultants were contracted during the first quarter of 2013, a process which took longer than expected).

14. On the reasons for the Government of Jamaica's decision to give priority to strengthening the national capabilities for handling flammable refrigerants, UNDP explained that prior to the preparation of the HPMP, service technicians were already retrofitting HCFC-based equipment to hydrocarbon refrigerant on a very limited scale. As a result, the Government considered of extreme importance that, to enhance the practice of handling flammable refrigerants, the technicians and end-users should have access

to the proper guidance, training, codes of practice and tools needed to minimize safety risks. In this case the Government decided to start the work with its experts and UNDP by setting a comprehensive training module for train-the-trainers, complemented with training of technicians, followed by the supply of proper tools and appropriate laboratory and field practicing. Also, it is strategic that guidelines and a revision of the existing code of practice be in place so that these can drive the adoption and popularization of low-global warming potential (GWP) alternatives by the private sector.

15. The Secretariat notes that the import licensing and quota systems are operational and will enable consumption reductions in line with the Montreal Protocol's phase-out schedule. The project for the conversion of the only foam manufacturing enterprise to methyl formate technology will be completed by the end of 2013, resulting in the issuance of an import ban on HCFC-141b by the Government and activities in the servicing sector have been developed with the participation of key stakeholders. The Government of Jamaica has drafted a set of guidelines for supporting the phase-out of HCFCs.

RECOMMENDATION

16. The Fund Secretariat recommends that the Executive Committee takes notes of the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan of (HPMP) in Jamaica, and further recommends blanket approval of the second tranche of stage I of the HPMP for Jamaica, and the corresponding tranche implementation plans, with associated support costs 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, second tranche)	100,000	7,500	UNDP
(b)	HCFC phase-out management plan (stage I, second tranche)	18,000	2,340	UNEP