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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-ninth Meeting
Montreal, 15-19 April 2013

PROJECT PROPOSAL: DOMINICAN REPUBLIC

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

Phase-out

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

UNDP/UNEP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Dominican Republic

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage I)	UNDP (lead), UNEP

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2011	50.11 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2011	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123					0.1				0.1
HCFC-124									
HCFC-141b					1.1				1.1
HCFC-141b in Imported Pre-blended Polyol		33.6							33.6
HCFC-142b									
HCFC-22				49.0					49.0

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	51.2	Starting point for sustained aggregate reductions:	70.71
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	27.14	Remaining:	43.38

(V) BUSINESS PLAN		2013	2015	Total
UNDP	ODS phase-out (ODP tonnes)	8.0	2.9	10.9
	Funding (US \$)	498,209	182,750	680,959
UNEP	ODS phase-out (ODP tonnes)	0.4		0.4
	Funding (US \$)	28,250		28,250

(VI) PROJECT DATA			2010	2011	2013	2014	2015	Total
Montreal Protocol consumption limits			n/a	n/a	51.2	51.2	46.1	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	51.2	51.2	46.1	n/a
Agreed Funding (US\$)	UNDP	Project costs	332,775	680,000	463,450		170,000	1,646,225
		Support costs	24,958	51,000	34,759		12,750	123,467
	UNEP	Project costs		25,000	25,000			50,000
		Support costs		3,250	3,250			6,500
Funds approved by ExCom (US\$)		Project Costs	332,775	705,000	0	0	0	1,037,775
		Support Costs	24,958	54,250	0	0	0	79,208
Total funds requested for approval at this meeting (US\$)		Project Costs	0	0	488,450	0	0	488,450
		Support Costs	0	0	38,009	0	0	38,009

Secretariat's recommendation:	Blanket Approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Dominican Republic UNDP, as the lead implementing agency, has submitted to the 69th 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 \$526,459, consisting of US \$463,450, plus agency support costs of US \$34,759 for UNDP, and US \$25,000, plus agency support costs of US \$3,250 for UNEP. The submission includes a progress report on the implementation of the first tranche of the HPMP together with the tranche implementation plan for 2013 and 2014.

Background

2. The HPMP for Dominican Republic was approved by the Executive Committee at its 65th meeting, to reduce HCFC consumption by 10 per cent of the baseline by the end of 2014, at a total funding level approved in principle of US \$1,696,225, plus agency support costs of US \$129,967. This included US \$332,775, plus agency support costs of US \$24,958 for UNDP approved at the 61st meeting to phase out 3.74 ODP tonnes of HCFC-141b used in the polyurethane rigid insulation foam for the manufacture of commercial refrigerators at Fábrica de Refrigeradores Comerciales (FARCO). Also at the 65th meeting, the Executive Committee approved the first tranche of stage I of the HPMP, at an amount of US \$759,250, consisting of US \$680,000, plus agency support costs of US \$51,000 for UNDP, and US \$25,000, plus agency support costs of US \$3,250 for UNEP.

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

3. Stage I of the HPMP for Dominican Republic includes the complete phase-out of HCFC-141b used by foam enterprises, and phase-out of HCFC-22 used in the refrigeration servicing sector. In addition, regulatory actions are also included in stage I. The results achieved so far are described below.

Regulatory action

4. The Government of Dominican Republic has strengthened the legal and institutional framework to control the import and trade of HCFCs and HCFC-based equipment as follows:

- (a) Decree 567-11 establishing a gradual reduction on imports of HCFC-22 based refrigeration and air-conditioning equipment. The Ozone Unit is already working with key stakeholders to establish import quotas for refrigeration and air-conditioning equipment into the country;
- (b) Resolution 10-2012 establishing HCFC import licenses and quotas to registered companies based on the average amounts of HCFCs that were imported in 2010 and 2011. Import quotas will always be lower than the established HCFC baseline for compliance and should follow the commitment under the Montreal Protocol; and
- (c) Ozone Regulation 027-12 issued by the Ministry of Environment and Natural Resources (November 2012), setting rules and procedures for users of ODS in accordance with the country's commitment to the Montreal Protocol.

5. Furthermore, the Ministry of Environment and Natural Resources, with the support of UNEP, held meetings with the Custom General Directorate to coordinate training activities for customs officers on the ODS legal framework, HCFC license and quota systems, and improve the control on HCFC imports at ports and border points.

Activities in the foam manufacturing sector

6. Implementation of the stand-alone foam project to phase out the use of 3.74 ODP tonnes (34.0 metric tonnes (mt)) of HCFC-141b at FARCO in the manufacture of polyurethane rigid insulation foam for commercial refrigerators is progressing well. Pilot trials with hydrocarbon have been performed; engineering plans for modifications to the production line have been completed; and the required equipment has been installed. Training of staff, safety audits, trials and verification of the complete phase-out of HCFC-141b is expected to be completed by May/June 2013 with the financial and operational closure of the project during May 2013. FARCO provided US \$140,385 for equipment items and also covered expenditures related to infrastructure modifications, civil works and venting for foaming jigs.

7. With regard to other foam enterprises, the HCFC-141b contained in imported polyol systems used as a blowing agent will be replaced by methyl formate and will be provided mainly through systems houses in China and/or Mexico¹. It is expected that these systems will be commercially available in the second half of 2013.

8. For the phase-out of HCFC-141b used for waterproofing and heat insulation, a field study to assess the requirements of each foam enterprise was conducted in June 2012. The study concluded that methyl formate is the best technology requiring only retrofitting the foam dispensers. A training programme on the use of methyl formate-based system is planned for 2013.

Activities in the refrigeration servicing sector

9. The following activities in the refrigeration and air-conditioning servicing sector have been implemented:

- (a) A training course in recovery and recycling of refrigerants for 16 technicians was organized jointly with the Association of Refrigeration Technicians. The course was awarded with two credit hours in the National Institute for Technical and Professional Formation (INFOTEP);
- (b) A training course in retrofitting HCFC-22-based refrigeration equipment to hydrocarbon was conducted for 18 technicians who were chosen in collaboration with the Association of Refrigeration Technician. The course was also awarded with two credit hours in INFOTEP;
- (c) A survey on the status of the recovery and recycling equipment distributed to technicians during the phase-out of CFCs was conducted. Preliminary results indicate that while most of the equipment is in good working conditions, it is not being used at its maximum potential. Technicians usually reuse the refrigerant without recycling and do not record the amount of refrigerant being recovered; and
- (d) The establishment of a National Certification System for the refrigeration and air-conditioning sector is progressing well. A memorandum of understanding has been prepared and discussed with key stakeholders. This system will complete the certification process of about 2,000 technicians who were trained during the phase-out of CFCs and will train and certificate 1,000 additional technicians during implementation of the HPMP.

¹ At the 64th meeting, the Executive Committee approved the HPMP for Mexico, which included assistance for the adaptation of the baseline equipment in the systems houses to allow for the production of methyl formate-based systems. At the 68th meeting, the Executive Committee approved the second tranche of the HPMP for Mexico.

Project implementation and monitoring unit

10. The project implementation and monitoring unit has become operational. This unit operates under the guidance of the Vice Ministry of Environmental Management and the UNDP local office in coordination with the Ozone Office.

Status of fund disbursement

11. As of January 2013, of the US \$1,037,775 approved for the first tranche (including US \$332,775 approved for the phase-out of HCFC-141b at FARCO at the 61st meeting), US \$420,184 had been disbursed and US \$336,281 had been committed mainly for completing the conversion of the foam enterprises covered under the first tranche (of the total amount committed, US \$110,000 will be disbursed by mid-April 2013). The balance of US \$281,310 will be disbursed in 2013 mainly for activities in the refrigeration servicing sector.

Annual plans for the second tranche of the HPMP

12. In addition to the completion of the activities initiated with the first tranche of the HPMP for Dominican Republic, the following phase-out activities associated with the second tranche of the HPMP will be implemented:

- (a) Completing the conversion of all foam enterprises manufacturing insulation foam for cold rooms, and refrigerated trucks and spray applications to non-HCFC-141b technologies (US \$319,982);
- (b) Strengthening import and trade controls of HCFCs, and HCFC-based equipment; establishing an electronic system for imports of ODS; procurement of ODS identification kits; drafting legislation banning HCFC emissive uses (e.g., cleaning agents, solvents and fire extinguishers) and the use of HCFC-141b in the manufacture of polyurethane foams (US \$25,000);
- (c) Implementation of a training programme and certification system for technicians from the refrigeration and air-conditioning sector; certification of 1,000 technicians with the norm for proper handling and management of refrigerants in accordance with national and international legislation; and awareness-raising activities supporting the certification programme (US \$60,000); and
- (d) Implementation of the recovery, recycling programme and establishment of reclamation centres, including the distribution of additional recovery/recycling machines and recovery cylinders for the machines currently in operation; technical assistance for end-users on the proper use and correct disposal of HCFC-22 refrigerants; demonstration projects for the application of good servicing practices including recovery and recycling procedures; an incentives programme for replacement of HCFC-based equipment; and educational information and awareness-raising on HCFC phase-out (US \$66,000).

13. The project implementation and monitoring unit will continue to be operational (US \$17,468).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Operational licensing system

14. In line with decision 63/17, and as required under the Agreement between the Government of Dominican Republic and the Executive Committee, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and exports is in place and that the system is capable of ensuring compliance with the Montreal Protocol. The Government has already issued import quotas for HCFC-22 and HCFC-123 for 2013 to 2015. Quotas for 2013 and 2015 are in accordance with the Montreal Protocol while the quota for 2014 is 2.2 ODP tonne below the maximum level allowed.

15. With regard to HCFC-141b contained in imported pre-blended polyols, each foam enterprise had committed to completely phase out its use once the conversion is completed. Furthermore, the Government has already informed the foam enterprises that imports will not be allowed as of 1 January 2016. Relevant authorities have already initiated consultation and awareness campaigns on the future ban of HCFC-141b with all relevant foam and refrigeration service users.

HCFC consumption

16. The HCFC baseline for compliance has been established at 51.2 ODP tonnes, based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010 as shown in Table 2. The established baseline is equal to that in the Agreement between the Government of Dominican Republic and the Executive Committee. Therefore, no adjustments to the Agreement are required. HCFC-22 consumption decreased from 53.8 ODP tonnes in 2010 to 38.50 ODP tonnes in 2012, mainly due to the replacement of HCFC-22-based refrigeration and air-conditioning equipment by R-404A and R-410A-based equipment. However, imports of HCFC-141b contained in pre-blended polyols increased from 15.7 ODP tonnes in 2007 to 30.80 ODP tonnes in 2012, as roof sealing/insulation applications have increased and wooden doors have been replaced by polyurethane foam doors.

Table 2 HCFC consumption in Dominican Republic (2007-2011 Article 7; 2012 estimated)

HCFC	2007	2008	2009	2010	2011	2012	Baseline
Metric tonnes							
HCFC-22	903.2	874.3	854.2	978.9	890.60	700.00	916.5
HCFC-141b	3.2	8.9	10.9	-	10.20	11.47	5.4
HCFC-123	0.1	16.4	15.4	4.0	0.23	3.00	9.7
Total	906.4	899.6	880.4	982.9	901.0	714.47	931.6
HCFC-141b in polyol	143.0	177.0	212.0	227.0	250.0	280.00	177.3*
ODP tonnes							
HCFC-22	49.7	48.1	47.0	53.8	48.98	38.50	50.4
HCFC-141b	0.3	1.0	1.2	-	1.12	1.26	0.6
HCFC-123	-	0.3	0.3	0.1	-	0.06	0.2
Total (ODP tonnes)	50.0	49.4	48.5	53.9	50.11	39.82	51.2
HCFC-141b in polyol	15.7	19.5	23.3	25.0	27.50	30.80	19.5

(*) 2007-2009 average consumption.

17. With regards to the reduction in the consumption of HCFC-22, UNDP indicated that it will continue to decrease as the new equipment for the tourist sector and refrigeration industry imported into the country is based on R-410A and R-404A technologies. However, HCFC importers can, in principle, import HCFC-22 up to the established quota. Although most of the new equipment uses HFC-based refrigerants, it is an initiative of the Government of the Dominican Republic to support the introduction of low global warming potential (GWP) refrigerants. The memorandum of agreement signed with INFOTEP

specifically indicates training on the use and proper handling of hydrocarbon-based refrigerants in the maintenance of refrigeration systems.

18. The Secretariat notes that the consumption of HCFC-22 has been progressively reducing since 2010 and that an import licensing and quota systems is operational and will enable consumption reductions in line with the Montreal Protocol's phase-out schedule. Conversion of the foam enterprises is progressing well. It also notes that methyl formate pre-blended polyols will be available in the country during the second half of 2013.

19. The activities in the servicing sector have been developed with the participation of key stakeholders. The Ozone Unit has worked very closely with end-users to ensure that the reductions on HCFC consumption are achieved, including meetings with custom officers and importers. It has also assessed the training needs with the Association of Refrigeration Technicians and hired INFOTEP for implementing the training and certification programme. Relevant authorities in the country are addressing the limitations of the refrigerant recovery and recycling network in place. A portion of the funding available from the second tranche will be used to reinforce the network and to strengthen the certification programme while promoting the adoption of good service practices in refrigeration including recovery and recycling of refrigerants.

RECOMMENDATION

20. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan of (HPMP) in Dominican Republic, and further recommends blanket approval of the second tranche of stage I of the HPMP, 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)	463,450	34,759	UNDP
(b)	HCFC phase-out management plan (stage I, second tranche)	25,000	3,250	UNEP

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