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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-second Meeting  
Montreal, 12-16 May 2014

**PROJECT PROPOSAL: COLOMBIA**

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

Phase-out

- HCFC phase-out management plan (stage I, third tranche) UNDP and UNEP

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**  
**Colombia**

<b>(I) PROJECT TITLE</b>	<b>AGENCY</b>
HCFC phase out plan (Stage I)	UNDP (lead), UNEP

<b>(II) LATEST ARTICLE 7 DATA (Annex C Group I)</b>	<b>Year: 2012</b>	285.5 (ODP tonnes)
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<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)</b>							<b>Year: 2012</b>		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC	0.2	181.7	10.7	2.2	89.8	0.8			285.5

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009 - 2010 baseline:	225.6	Starting point for sustained aggregate reductions:	225.6
<b>CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)</b>			
Already approved:	78.91	Remaining:	146.63

<b>(V) BUSINESS PLAN</b>		<b>2014</b>	<b>Total</b>
UNDP	ODS phase-out (ODP tonnes)	2.9	2.9
	Funding (US \$)	161,250	161,250

<b>(VI) PROJECT DATA</b>		<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>	
Montreal Protocol consumption limits		n/a	n/a	n/a	225.60	225.60	203.04	n/a	
Maximum allowable consumption (ODP tonnes)		n/a	n/a	n/a	225.60	225.60	203.04	n/a	
Agreed funding (US \$)	UNDP	Project costs	6,021,483	0	550,000	0	150,000	0	6,721,483
		Support costs	451,611	0	41,250	0	11,250	0	504,111
	UNEP	Project costs	50,000	0	50,000	0	0	0	100,000
		Support costs	6,500	0	6,500	0	0	0	13,000
Funds approved by ExCom (US \$)	Project costs	6,071,483	0	600,000	0	0	0	6,671,483	
	Support costs	458,111	0	47,750	0	0	0	505,861	
Total funds requested for approval at this meeting (US \$)	Project costs	0	0	0	0	150,000	0	150,000	
	Support costs	0	0	0	0	11,250	0	11,250	

<b>Secretariat's recommendation:</b>	For blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of Colombia, UNDP as the lead implementing agency, has submitted to the 72<sup>nd</sup> meeting of the Executive Committee a request for funding for the third tranche of stage I of the HCFC phase-out management plan (HPMP)<sup>1</sup> at the amount of US \$150,000, plus agency support costs of US \$11,250 for UNDP only. The submission includes a progress report on the implementation of the second tranche of the HPMP and implementation plans for 2014 and 2015. This tranche is the final tranche of stage I of the HPMP.

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

2. A project approved at the 60<sup>th</sup> meeting in advance of the HPMP for the phase-out of 46.20 ODP tonnes of HCFC-141b and 9.82 ODP tonnes of HCFC-22 as blowing agents in the manufacture of domestic refrigerators was completed since January 2013. The activities for the consolidation of the recovery, recycling and reclamation (RR&R) network have led to the selection of 18 collection centres, which received additional equipment; the operational business models for the RR&R network were also defined. Nine hundred sixty-eight technicians were certified according to the standards for “environmental handling of refrigerants”, and 100 instructors were trained. In addition, 19 trainers participated in a workshop on the “ASHRAE operations and performance management standard”. Twenty regional workshops on good practices in refrigeration including hydrocarbon drop-in and hydrogen-based flushing kit demonstration were carried out with the participation of 762 technicians. In order to phase-out the use of HCFC-141b for flushing of refrigeration cycles during servicing, 165 flushing kits were delivered to technicians, and 23 related training workshops were conducted. In addition, 5,000 technical manuals on nitrogen-based flushing kits were provided.

3. The HPMP included technical assistance for the phase-out of HCFC-141b consumption as solvent in the manufacture of hypodermic needles and as a cleaning agent in electronic equipment. The manufacturer of hypodermic needles revised its manufacturing process, and a preliminary evaluation of available low-climate impact alternatives was carried out. A technical report on alternatives that could be considered to replace the use of HCFC-141b as a cleaning agent for electronic equipment was prepared, and a similar one was prepared for the aerosol sector.

4. In order to strengthen the regulatory framework for HCFC phase-out, a resolution established at the end of 2012 adopted a quota system for HCFC imports within the existing control measures for ODS. In 2013 a resolution established the ban on manufacturing and import of HCFC-based refrigerators, freezers and combined refrigerator freezers. The customs department has been provided with five refrigerant identifiers to identify refrigerant mixtures, 19 workshops for prosecutors, environmental lawyers and judges have been conducted and the country participates in the voluntary programme of electronic information exchange on ODS trade in 2012 and 2013<sup>2</sup>. Under the HPMP, seven ozone bulletins were published describing the different activities under the HPMP, 10 radio interviews were given and activities for the celebration of the international ozone day were carried out in twelve cities.

5. Of the US \$600,000 approved for the second tranche, US \$178,330 (29.7 per cent) was disbursed, and US \$304,742 is not yet programmed. The first tranche of US \$450,000 has been disbursed at a level of 97.8 per cent, and 99.3 per cent of the US \$5,621,483 approved at the 60<sup>th</sup> meeting prior to approval of the HPMP for the project in the foam sector, have been disbursed.

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<sup>1</sup> The HPMP for the Colombia was approved by the Executive Committee at its 62<sup>nd</sup> meeting to reduce HCFC consumption by 10 per cent of the baseline by 1 January 2015.

<sup>2</sup> UNEP initiative on Informal Prior-Informed Consent to better control trade in ODS

### Annual implementation plans

6. The consolidation of the RR&R network through workshops, guides and information dissemination will be completed. Fifteen national and regional training workshops in good practices for refrigeration technicians will be provided. Certification for 600 refrigeration technicians in labour competency standards will be carried out. Two national seminars will provide information to end-users to promote low-global warming potential (GWP) technologies and to improve energy efficiency; and 16 workshops for end-users (e.g. supermarket and hotel chains) will be conducted. It is planned to visit 200 HCFC end-users and carry out two demonstration pilot projects. Fifteen additional training workshops on the use of the flushing and cleaning kit will be provided to technicians and refrigeration sector enterprises, jointly with the workshops in good practices and refrigeration. Another 1,000 copies of the good practices in refrigeration guidelines will be provided, emphasizing on flushing and cleaning activities.

7. A strategy for replacing HCFC as propellants, solvents, fire suppressants and cleaning agents will be finalized and a technical report on alternatives for these uses will be published, and a database regarding HCFC consumption in emissive uses will be upgraded. A workshop for end-users on alternatives will be conducted.

8. The national ODS legislation will be organized into one administrative act including all legal dispositions adopted until now. Awareness activities to the general public will continue to be provided. The project management unit will continue to prepare implementation report and carry out its monitoring programme.

9. The budget foreseen for the above activities exhausts the available funds under stage I of the HPMP, and the activities should be completed by the end of 2015.

## **SECRETARIAT'S COMMENTS AND RECOMMENDATION**

### **COMMENTS**

#### Licensing and quota system

10. The Secretariat has received a letter from the Government confirming that an enforceable national system of licensing and quotas for HCFC imports is in place and that the system is capable of ensuring the country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this Agreement.

#### 2013 consumption and verification report

11. The Secretariat requested UNDP to provide the available data relevant to the 2013 consumption and to advise whether a verification report could be provided in time for the 72<sup>nd</sup> meeting. UNDP included in its response the quota for HCFC imports for 2013, as well as information from the "database of foreign trade" of the Ministry of Commerce, Industry and Tourism. While the quota of 225.04 ODP tonnes for 2013 is slightly below the baseline of 225.04 ODP tonnes, the actual imports recorded in the database of foreign trade amount to less than 183.30 ODP tonnes (i.e. 18.7 per cent below the baseline). Consequently, Colombia is likely to be in compliance with the maximum allowable consumption under the Protocol.

12. UNDP also indicated that the country's consumption data is expected to be finalized before the 72<sup>nd</sup> meeting, and a verification report to be available during the week of the meeting. The Secretariat will inform of any such developments during the 72<sup>nd</sup> meeting. In this context, the Secretariat would like to point out that the requested tranche is the final one for stage I of the HPMP for Colombia, and that

verification of the first year with a compliance target appears to be meaningful as a pre-condition for the final release of the tranche. The Secretariat has included a provision in the recommended decision which would allow the Executive Committee to approve the tranche request, but would delay the transfer of funding to UNDP until the Secretariat had sufficient time to establish whether the report fulfils the requirements of the verification, and whether the compliance target has actually been met.

#### End-user activities

13. The Secretariat requested additional information regarding activities linked to end-users. UNDP advised that in the exchange with refrigeration and air-conditioning sector end-users, the national ozone unit (NOU) informs end-users on ODS policies and regulation, alternatives, and activities under implementation; collects information on installed technology, maintenance practices used; and on market trends; and advises of the replacement of existing refrigeration or air-conditioning systems. UNDP advised further that currently, the NOU is working with the Association of Colombian Flower Exporters to convert a cold room for flower storing to hydrocarbon refrigerant at one farm, and explore procedures, safety requirements and conditions for replication. The NOU is also exploring with a financial institution the adoption of low-GWP alternative technologies in one of its branches and to replicate it throughout the organization. The originally envisioned conversion of a supermarket towards CO<sub>2</sub> as refrigerant has been discussed but has not evolved further.

14. Regarding the progress in sectors with emissive uses, UNDP clarified that subsequent to the finalization of the technical assistance activities for the solvent, cleaning agent and aerosol manufacturers, these end-users will have some time to change their process and adopt a HCFC-free alternative. The NOU has already discussed with the stakeholders the ban of these applications, and related regulations will be issued, once respective alternative are available in the local market.

#### Business model for RR&R network

15. The Secretariat requested more detailed information on the business model for the RR&R network that was developed. UNDP advised that the network is comprised of five reclaiming centres and 18 collection centres, with regional coverage. The model defines the roles of the different stakeholders and the flows of collected and reclaimed refrigerants. It includes the cost and prices for the different interactions of the stakeholders and how the mechanism should operate.

#### Training on retrofit to hydrocarbon technology

16. With regard to the workshops where drop-in of hydrocarbons into existing refrigeration equipment is presented, UNDP advised that the reported workshops had a particular emphasis on promoting the use of flushing kits; however, one of the topics is on how to charge and discharge domestic refrigeration and air-conditioning systems with hydrocarbon. This is, according to UNDP, related to the availability of imported and domestically manufactured refrigerators with HC-600a in the Colombian market. UNDP advised that the main objective is to increase a technician's awareness and provide greater emphasis on the aspects of security, especially for flammable refrigerants. UNDP also advised that some technicians are undertaking hydrocarbon drop-ins to refrigerators originally operated with CFC-12 and air-conditioners operated with HCFC-22. Therefore, it was considered that training on good practices and safety measures to handle hydrocarbon are needed in the country.

#### Conclusion

17. The country appears to be in compliance with the Montreal Protocol control targets and the targets specified in its HPMP Agreement for 2013. The licensing and quota system seems to function. The implementation of the second tranche progressed as planned. The conversion activities in the foam sector have been completed. Five hundred sixty-eight technicians or 142 per cent more than originally planned have been trained and certified in the previous two years. The number of workshops targeting

refrigeration technicians also increased, from 14 to 20. The technical assistance activities are expected to be completed by early 2015. A significant level of implementation of the activities initiated with previously approved tranches has been achieved. Almost 30 per cent of the funding approved in the previous tranche has been disbursed. The HPMP implementation as well as the plan of activities for the next year appear to address the objectives set for stage I of the HPMP, ending in 2015.

## RECOMMENDATION

18. The Fund Secretariat recommends the Executive Committee:
- (a) Takes note of the progress report on the implementation of the second tranche of stage I of the HCFC phase out management plan of (HPMP) for Colombia; and
  - (b) Requests the Government of Colombia, UNDP and UNEP to submit the project completion report to the second meeting of the Executive Committee in 2016.
19. The Fund Secretariat further recommends blanket approval of the third tranche of stage I of the HPMP for Colombia, and the corresponding 2014-2015 tranche implementation plan, with associated support costs at the level shown in the table below, on the understanding that the approved funds will not be transferred to UNDP until the Secretariat has received a verification report confirming that in 2013 the Government of Colombia was in compliance with the Montreal Protocol and the Agreement between the Government and the Executive Committee.

	<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)	150,000	11,250	UNDP

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