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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-eighth Meeting
Montreal, 3-7 December 2012

PROJECT PROPOSAL: PERU

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, first tranche) UNDP and UNEP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Peru

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2011	32.5 (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									
HCFC-124		0.1							0.1
HCFC-141b		1.8							1.8
HCFC-141b in imported pre-blended polyols		23.0							23.0
HCFC-142b		1.1							1.1
HCFC-22				3.0	26.7				29.6
HCFC-225ca									

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	26.88	Starting point for sustained aggregate reductions:	26.88
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	24.19

(V) BUSINESS PLAN		2012	2013	2014	2015	Total
UNDP	ODS phase-out (ODP tonnes)	2.1	2.1	1.6	0.6	6.4
	Funding (US \$)	125,249	125,249	93,400	50,351	394,249
UNEP	ODS phase-out (ODP tonnes)	0.3	0.3			0.6
	Funding (US \$)	55,744	42,965			98,709

(VI) PROJECT DATA			2012	2013	2014	2015	Total
Montreal Protocol consumption limits			n/a	26.88	26.88	24.19	n/a
Maximum allowable consumption (ODP tonnes)			n/a	26.88	26.88	24.19	n/a
Project Costs requested in principle(US \$)	UNDP	Project costs	108,000	100,000		24,671	232,671
		Support costs	9,720	9,000		2,220	20,940
	UNEP	Project costs	25,000	20,000		5,000	50,000
		Support costs	3,250	2,600		650	6,500
Total project costs requested in principle (US \$)			133,000	120,000		29,671	282,671
Total support costs requested in principle (US \$)			12,970	11,600		2,870	27,440
Total funds requested in principle (US \$)			145,970	131,600		32,541	310,111

(VII) Request for funding for the first tranche (2012)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNDP	108,000	9,720
UNEP	25,000	3,250

Funding request:	Approval of funding for the first tranche (2012) as indicated above
Secretariat's recommendation:	For individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of Peru UNDP, as the lead implementing agency, has submitted to the 68th meeting of the Executive Committee stage I of the HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$1,111,557, consisting of US \$986,035 plus agency support costs of US \$69,022 for UNDP, and US \$50,000 plus agency support costs of US \$6,500 for UNEP, to implement activities that will enable the country to comply with the Montreal Protocol's 10 per cent reduction step in HCFC consumption by 2015.
2. The first tranche for stage I being requested at this meeting amounts to US \$881,061, consisting of US \$797,020 plus agency support costs of US \$55,791 for UNDP and US \$25,000 plus agency support costs of US \$3,250 for UNEP.

Background

3. Peru, with an estimated population of 29.55 million inhabitants, has ratified all the amendments to the Montreal Protocol. Peru has phased out the consumption of all ozone depleting substances (ODS) except for HCFCs. The consumption of CFCs was phased out in 2007.

ODS policy and regulatory framework

4. The Ozone Technical Office (OTO) under the authority of the Ministry of Production is responsible for implementing the activities under the Montreal Protocol including the HPMP. The OTO is located within the General Environment Direction in the Vice Ministry of Industry of the Ministry of Production, and collaborates closely with the Ministry of Environment (created in 2008), the Ministry of Foreign Affairs, the National Environmental Council, the National Commission on Climate Change and the Customs Office.
5. Peru has established a comprehensive set of Decrees and Ministerial Resolutions to control ODS. Supreme Decree 033/2000 established, among other things, a licensing system to control the import and export of ODS including HCFCs. Other measures established include a licensing system for ODS-based equipment, bans on imports of recycled CFC-11 and CFC-12, a ban on imports of vehicles with ODS-based air conditioning, a ban on venting ODS into the atmosphere, mandatory sales record keeping for importers and distributors of ODS, mandatory registration with the OTO for refrigeration technicians and authorization by the OTO for the import of non-ODS refrigeration and air-conditioning equipment. The HCFC quota system is in place and will enter into force on 1 January 2013.

HCFC consumption

6. All the HCFCs consumed in Peru are imported. The HPMP survey showed that the country uses mostly HCFC-22 and HCFC-141b, representing 87.7 per cent and 9.3 per cent of total consumption respectively. The remaining 3.0 per cent is represented by HCFC-124 and HCFC-142b, and a negligible percentage by HCFC-225ca and HCFC-225cb. The levels of consumption reported under Article 7 of the Montreal Protocol are shown in Table 1. The HCFC baseline for compliance has been calculated at 26.88 ODP tonnes based on actual consumption of 27.3 ODP tonnes and 26.45 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol.

Table 1: HCFC consumption in Peru

HCFC	2006	2007	2008	2009	2010	2011	Baseline
Metric tonnes							
HCFC-22	214.4	363.0	496.0	444.9	421.67	538.66	433.29
HCFC-124				4.1	1.43	3.72	2.77
HCFC-141b	4.6	(*) 213.0	6.7	10.1	22.4	15.70	16.25
HCFC-142b				24.6	11.69	16.34	18.15
Total (mt)	219.0	576.0	502.7	483.6	457.19	574.42	470.45
ODP tonnes							
HCFC-22	11.8	20.0	27.3	24.5	23.19	29.63	23.85
HCFC-124	-	-	-	0.1	0.03	0.08	0.06
HCFC-141b	0.5	(*) 23.4	0.7	1.1	2.46	1.73	1.79
HCFC-142b				1.6	0.76	1.06	1.18
Total (ODP tonnes)	12.3	43.4	28.0	27.3	26.45	32.50	26.88

(*) This figure includes 207 mt (22.77 ODP tonnes) of HCFC-141b contained in imported pre-blended polyols. HCFC-141b continued to be imported in pre-blended polyols during subsequent years, but it was no longer reported under Article 7

7. The growing trend in HCFC-22 consumption between 2006 and 2008 is explained by the increase in demand for refrigeration and air-conditioning equipment and servicing triggered by a positive economic situation. This trend was interrupted between 2009 and 2010 due to the 2008 global economic crisis. In 2011 HCFC-22 consumption grew by 27.7 per cent and a similar trend is expected in subsequent years based on historical reactions by consumers to expected reductions in supply and the need to maintain the installed banks of HCFC equipment. HCFC-141b consumption shows a milder growth trend with a peak in 2007 that was the result of HCFC-141b contained in pre-blended polyols that were reported under Article 7. Although the import of HCFC-141b in pre-blended polyols continued during subsequent years, it was no longer reported under Article 7.

8. HCFCs used in Peru are imported by 16 enterprises, the two largest controlling 50.5 per cent and 17.5 per cent of the market, respectively. HCFC-22 represents 55 per cent of total refrigerant imports including alternatives, followed by HFC-134a (12 per cent). HCFCs are mainly imported from China (78 per cent), followed by Mexico and India.

HCFC use in the polyurethane (PU) foam manufacturing sector

9. The HCFC-141b used by the foam manufacturing sector in Peru is contained in imported pre-blended polyols, which are brought in by chemicals distributors from Brazil, Chile, Colombia, Mexico and Panama. As there is no consistent recording practice established at customs for this product, polyols are registered under different tariff codes.

10. There are 91 foam manufacturing enterprises in Peru that use HCFC-141b contained in imported pre-blended polyols. Most of the HCFC-141b is used in rigid foam applications: domestic refrigeration and water heaters, commercial refrigeration, discontinuous panels for cold rooms and construction, vehicle frame manufacturing for public transportation, refrigerated trucks, fishing boat insulation, reefers and pipe and tank insulation. Less than one per cent of the total volume is used in the production of integral skin foams.

11. Around half of the HCFC-141b in Peru is consumed by three enterprises: Fera and Precor, which manufacture discontinuous panels, and BSH Electrodomésticos, a 100 per cent German-owned appliance manufacturer. The remaining HCFC-141b is consumed by 88 enterprises (Table 2).

Table 2: HCFC-141b contained in imported pre-blended polyols used by the foam sector in Peru (2007-2009)

Application	Number of enterprises	HCFC 141b (mt)			Average 2007-2009	
		2007 (**)	2008	2009	(mt)	(ODP tonnes)
Domestic refrigeration	1(*)	68.40	82.80	63.00	71.40	7.85
Discontinuous panels	10	45.16	59.84	67.20	57.40	6.31
Water heaters & small appliances	5	5.44	6.86	6.15	6.15	0.68
Commercial refrigeration	8	6.40	8.08	7.24	7.24	0.80
Public transportation (body manufacture)	4	4.12	5.20	4.66	4.66	0.51
Refrigerated trucks (pour in place, manual)	4	1.67	2.10	1.88	1.88	0.21
Piping, tanks, fishing boats, construction spray, industrial insulation	54	238.29	40.09	33.63	104.00	11.44
Integral skin	5	0.85	1.07	0.96	0.96	0.11
Total	91	370.33	206.04	184.73	253.70	27.91

(*) One enterprise not eligible for funding (BSH)

(**) Including 207 mt (22.77 ODP tonnes) reported under Article 7

HCFC consumption in the refrigeration and air-conditioning sector

12. The entire consumption of pure HCFCs is in the refrigeration and air-conditioning servicing sector. Most of the HCFC-22 consumption is concentrated in the commercial sector (63 per cent), followed by the industrial sector (33 per cent). The air-conditioning equipment is composed mostly of window and split units with low leakage rates and maintenance requirements. Pure HCFC-141b is used exclusively as a cleaning agent in both the industrial and commercial subsectors. HCFC-124 and HCFC-142b are used as components of commercial blends such as R-409, which are being used as a replacement for CFC-12 mostly in retrofit practices in the domestic and commercial refrigeration subsectors.

13. Table 3 shows the distribution of HCFC use in the refrigeration and air-conditioning servicing sector in Peru.

Table 3: HCFC-22 consumption in the refrigeration and air-conditioning sector (2011)

Sector	Installed equipment (units)	Average equipment capacity (kg)	Leakage rate %	HCFC-22 annual need	
				(mt)	(ODP tonnes)
Industrial sector: refrigeration	90,145	13	10	117.2	6.4
Industrial sector: air conditioning	380,720	3	5	57.1	3.1
Commercial sector: refrigeration	12,413	30	12	44.7	2.5
Commercial sector: air conditioning	633,265	9	5	295.9	16.3
Residential air conditioning	121,602	1	5	6.0	0.3
Services industry refrigeration and air conditioning	35,568			14.2	0.8
Government and refrigeration and air conditioning	7,583			3.0	0.2
Armed forces refrigeration and air conditioning	1,168			0.5	0.0
Total				538.7	29.6

14. The current prices of HCFCs and alternative refrigerants per kilogramme in the country are: US \$4.95 for HCFC-22, US \$4.05 for HCFC-141b, US \$3.16 for R-406A, US \$6.64 for R-409A, US \$7.49 for R-404A, US \$14.87 for R-407C, US \$9.58 for HFC-134a, US \$8.09 for R-507C, US \$5.73 for R-407A, and US \$11.45 for R-410A.

15. On the basis of consumption trends for past years, HCFC consumption in Peru is expected to grow on a yearly basis by approximately 6 per cent using an unconstrained growth scenario from 2012 to 2020. Table 4 presents the forecast of HCFC consumption up to 2020.

Table 4: 2012-2020 forecast of HCFC consumption

YEAR		2011*	2012	2013	2014	2015	2016	2017	2018	2019	2020
Without constraint	MT	574.2	571.0	605.7	643.1	683.3	726.6	773.2	823.3	877.4	935.6
	ODP	32.5	31.4	33.3	35.4	37.6	40.0	42.5	45.3	48.3	51.5
With constraint	MT	574.2	571.0	470.4	470.4	423.4	423.4	423.4	423.4	423.4	305.8
	ODP	32.5	31.4	26.9	26.9	24.2	24.2	24.2	24.2	24.2	17.5

(*) Reported under Article 7 of the Montreal Protocol.

HCFC phase-out strategy

16. The Government of Peru plans to phase-out HCFCs consumption in accordance with the Montreal Protocol schedule. The Government proposes to implement the following activities during stage I:

- (a) Further development of the legal framework for HCFC reduction by including the quotas for HCFCs in the import/export licensing system, extending the import licensing and quota system to HCFC-based equipment by 2014 and 2017 respectively; banning the imports of pure HCFC-141b by 1 January 2015; establishing a certification requirement for technicians and workshops providing servicing; and adopting a code of good practices;
- (b) Training and technical assistance programme for 300 customs officers to strengthen monitoring and enforcement of import controls; strengthening of the customs function through distribution of refrigerant identifiers; and field campaigns for inspection of HCFC imports at main ports of entry as well as warehouses of importers and distributors;
- (c) Technical assistance and training for the refrigeration and air-conditioning servicing sector. It will cover 1,440 technicians, representing 29 per cent of the estimated number of technicians in the country, and will focus on:
 - (i) Introduction of alternative technologies and technical assistance to introduce new types of refrigeration systems based on low global warming potential (GWP) and zero ODP refrigerants for large end-users;
 - (ii) Issues related to the introduction of natural refrigerants such as flammability or toxicity, and required modifications on the related normative framework;
 - (iii) Conservation and conversion plans for large HCFC consumers. It includes training of engineers on reducing HCFC-22 use by improving systems design; training of technicians on equipment conversions; and raising awareness on potential energy and refrigerant savings that can be achieved by better servicing practices; and
 - (iv) Sustainable use of cleaning agents. It includes distribution to technical schools of equipment to recycle cleaning agents used for flushing during servicing. The

technical schools will initiate a pilot project for the national manufacturing of such equipment; and

- (d) The project monitoring and implementation unit will be located within OTO, and its responsibilities will include: implementation and monitoring of project activities, progress in HCFC replacement technologies and trends in the local ODS market; and preparation of annual and other progress reports. The administrative monitoring will be performed by the auditing unit of the Vice Ministry of Industry under the rules and procedures of the Government of Peru.

PU foam investment projects

17. Stage I of the HPMP includes investment projects to phase out the use of HCFC-141b contained in imported pre-blended polyols in the two largest foam manufacturing enterprises, namely Fera and Precor. Projects for the remaining eligible enterprises will be submitted at a future stage when proven cost-effective and low-GWP technologies are commercially available.

18. Fera Peru S.A.C. is proposing to eliminate the use of 32.3 mt (3.55 ODP tonnes) of HCFC-141b in the production of discontinuous panels and introduce pentane technology. The total cost of the project is US \$549,623 with a cost effectiveness of US \$16.99/kg. Applying the cost-effectiveness threshold of US \$9.79/kg, the level of funds requested is US \$316,653 and the enterprise contribution is US \$232,970.

19. Precor is proposing to eliminate the use of 29.7 mt (3.28 ODP tonnes) of HCFC-141b in the production of insulating sandwich panels and introduce pentane technology. The total cost of the project is US \$536,983 with a cost-effectiveness of US \$18.04/kg. Applying the cost-effectiveness threshold of US \$9.79/kg, the funds requested are US \$291,349 and the enterprise contribution is US \$245,634.

Cost of the HPMP

20. The total cost of implementing stage I of the HPMP has been estimated at US \$1,036,035 as shown in Table 5. As submitted, the activities proposed will reduce HCFC consumption by 5.15 ODP tonnes equivalent to 19.2 per cent of the baseline, and 7.0 ODP tonnes of HCFC-141b in imported pre-blended polyols.

Table 5: Total cost of stage I of the HPMP for Peru

Proposed activities	Agency	Substance	Impact		Cost (US \$)	CE (US \$/kg)
			mt	ODP tonnes		
Refrigeration and air-conditioning servicing						
Technical assistance for revision of legal framework	UNEP	HCFC-22	11.1	0.6	50,000	4.50
Technical assistance for control of imports of HCFC-based refrigerants and equipment			50.0	2.8	225,000	
Technical assistance and training on new replacement technologies, natural refrigerants and conservation and conversion plans	UNDP	HCFC-141b	16.0	1.8	73,035	
Technical assistance and training on sustainable use of cleaning agents in refrigeration servicing		All			80,000	
HCFC implementation, monitoring and control programme						
HPMP servicing total			77.1	5.15	428,035	
PU foam manufacturing						
Conversion of Fera and Precor (pre-blended polyols)	UNDP	HCFC-141b	63.7	7.0	608,000	9.79
HPMP Total					1,036,035	

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

21. The Secretariat reviewed the HPMP for Peru in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th meeting (decision 60/44), subsequent decisions on HPMPs and the 2012-2014 business plan of the Multilateral Fund. The Secretariat discussed technical and cost-related issues with UNDP, which were addressed as summarized below.

Operational licensing system

22. In line with decision 63/17, UNDP was advised to request an official letter from the Government indicating 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 HCFC phase-out schedule for the duration of this Agreement. UNDP advised that such a letter is being prepared by the Government of Peru for submission to UNDP before the 68th meeting.

Institutional arrangements

23. In discussing with UNDP, the Secretariat expressed concern over major delays incurred in the implementation of ongoing Multilateral Fund activities and requested additional information on the measures that have been established to avoid similar delays during the implementation of the HPMP. For example, phase III of the institutional strengthening project approved in 2002 is still ongoing; completion of the activities under the RMP (approved in 2004) took 2.5 years longer than planned; and the TPMP approved in July 2008 only started actual implementation in December 2010. UNDP indicated that the Government of Peru has taken several steps to ensure excellent working relations with the private sector and other stakeholders, and that the new structure of the Ministry of Production will expedite the decision-making process.

Status of implementation of the RMP and the TPMP

24. The Secretariat reviewed the activities proposed for the refrigeration and air-conditioning servicing sector in light of the status of implementation of the RMP and the TPMP. UNDP as lead implementing agency in the preparation of the HPMP, after discussing with UNIDO and UNEP explained that the activities planned for stage I of the HPMP were an expansion of the work being done under the TPMP, which, as of September 2012, had been 90 per cent implemented. Additional information from UNIDO and UNEP on the status of the TPMP indicated that with funding from this plan the HCFC licensing and quota systems was developed to start operations in 2013; equipment was provided to the customs department; regulations for refrigeration servicing technicians were drafted; 39 training centres were upgraded with the latest tools for training on good refrigeration practices; 60 trainers and 450 technicians were trained in good refrigeration practices and the use of hydrocarbon as alternative refrigerant. The remaining balance (US \$14,784) will be used on a last training session by the end of 2012.

HCFC reductions beyond 10 per cent of the baseline

25. The Secretariat noted that the HPMP as submitted was requesting funding to reduce 5.15 ODP tonnes of HCFCs, which corresponds to 19.2 per cent of the HCFC compliance baseline. However, the Government of Peru was committing to reduce its consumption only by 10 per cent under the baseline level. The Secretariat considered that there was no justification to request funding for HCFC reductions

beyond 10 per cent considering that, as indicated by UNDP, the unusually high consumption in 2011 and 2012 was due to user sectors' reaction to future supply needs as the quotas enter into force. Furthermore, during 2012 a number of activities to phase out HCFCs were implemented with funding from the TPMP. After further consultations between UNDP and the Government of Peru, the funding request was revised to US \$282,671 with an associated phase-out of 3.74 ODP tonnes, representing 13.9 per cent of the HCFC baseline.

Technical issues associated with the assistance on legislation and the refrigeration servicing sector

26. In providing further explanations on how the HPMP will build on TPMP activities, UNDP indicated that commitment to accelerate the phase-out of HCFCs brought new challenges such as the need to adopt low-GWP alternatives to minimize climate impact and the need for appropriate handling of flammable refrigerants, which should be complemented by the development of rules and standards for their use. Accordingly, during implementation of the HPMP, these factors will be put together in a holistic approach to improve technicians' skills, since many of them are in the informal sector, and the mandatory certification of technicians will be formalized. On the request for assistance on legislation, it was agreed to remove the establishment of HCFC quotas as it is one of the activities reported as achieved within the TPMP.

27. With regard to the viability of introducing new refrigeration systems with lower GWP and zero ODP for large end-users, UNDP explained that the technologies will be introduced gradually following an assessment of technical aspects, availability and barriers for adoption. Priority will be given to natural non-halogenated refrigerants with zero or very low GWP, but new emerging technologies based on HFOs will also be analysed. Furthermore, the training and technical assistance activities proposed in stage I of the HPMP are directed to the introduction and use of flammable refrigerants while investments in conversions will be included in stage II.

Technical and cost issues associated with PU foam investment projects

28. UNDP submitted two investment projects to phase out the use of HCFC-141b contained in imported pre-blended polyols at Fera and Precor. Funding for the conversion of the enterprises was based on the amount of HCFC-141b that was imported in pre-blended polyols in 2011. It is the Secretariat's view, however that the funding level should be based on their 2007-2009 average consumption, in line with decisions 61/47 and 63/15. Upon further discussion and in view of the lack of agreement on the cost level, UNDP decided to withdraw the proposals, and defer them to stage II of the HPMP within the context of a foam sector plan which will include all the eligible enterprises. The Secretariat noted that UNDP had provided the information required by decision 61/47 including an indicative plan to phase out the use of HCFC-141b contained in pre blended polyols with cost and funding schedule, and an indicative list of all foam enterprises.

29. In discussing the amount of HCFC-141b in pre-blended polyols that would need to be added to the baseline for the calculation of the starting point in accordance with decision 61/47, UNDP noted some errors in the figure for 2007 owing to the fact that part of the HCFC-141b pre-blended polyol consumption during this year was reported as official consumption under Article 7. In recognising that the 2007 data would need to be corrected before a calculation of the amount of HCFC-141b in imported pre-blended polyols (average 2007-2009) that would be added to the starting point, the Secretariat suggested that the Government of Peru officially request this data change with the Ozone Secretariat as soon as possible. Considering that the foams sector will only be addressed in stage II and that the conversion of enterprises using fully formulated polyols containing HCFC-141b would not contribute to meeting the compliance, the Secretariat recommends that the Executive Committee considers allowing Peru to add this amount to the starting point once the Article 7 data is revised and the foam sector project is submitted under stage II of the HPMP, in line with decision 61/47.

Starting point for aggregate reduction in HCFC consumption

30. The Government of Peru has agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 26.88 ODP tonnes, calculated using actual consumption of 27.3 ODP tonnes and 26.45 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol. The 2007-2009 average consumption of HCFC-141b contained in imported pre-blended polyols will be added to the starting point once Article 7 data for 2007 is revised.

Total cost

31. The total agreed cost of implementing stage I of the HPMP for Peru is US \$282,671, excluding support costs, as shown in Table 6. The HCFC reductions associated to this funding represent 13.9 per cent of the HCFC baseline. The Government of Peru commits to meeting the Montreal Protocol's HCFC compliance targets up to and including the 10 per cent reduction by 2015.

Table 6: Revised cost of stage I of the HPMP

Proposed activities	Agency	Substance	Impact		Cost (US \$)	CE (US \$/kg)
			mt	ODP tonnes		
Refrigeration and air-conditioning servicing						
Technical Assistance for Revision of legal framework	UNEP	HCFC-22	35.47	1.95	50,000	4.50
Technical Assistance for Control of Imports of HCFC-based Refrigerants and Equipment					109,636	
Technical assistance for RAC: New replacement technologies, natural refrigerants, conservation and conversion plans	UNDP				HCFC-141b	
Technical assistance for RAC: Sustainable use of cleaning agents		All			50,000	
HCFC implementation, monitoring and control programme						
HPMP Total			51.72	3.74	282,671	

Impact on the climate

32. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogramme (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-equivalent tonnes saved. Although a calculation of the impact on the climate was included in the HPMP, UNDP indicated that it would be difficult to provide reliable data on climate impact since HCFC alternatives that will be used are not clearly identified at this stage. At this time, the Secretariat is not in a position to quantitatively estimate the impact on the climate. The impact might be established through an assessment of implementation reports by, inter alia, comparing the levels of refrigerants used annually from the beginning of implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22-based equipment being retrofitted.

Co-financing

33. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth meeting of the Parties, the Government of Peru indicated that it will

initiate efforts towards finding alternative sources for co-financing the HCFC phase-out strategy, concentrating those efforts on the Global Environment Facility (GEF) funding sources as well as bilateral assistance programmes at the international level. At the national level possible joint undertakings under the National Environmental Fund will be explored.

2012-2014 business plan of the Multilateral Fund

34. UNDP and UNEP are requesting US \$310,111 including agency support costs for implementation of stage I of the HPMP. The total value requested for the period 2012-2014 of US \$277,570 including support cost is below that in the business plan.

Draft Agreement

35. A draft Agreement between the Government of Peru and the Executive Committee for HCFC phase-out is contained in Annex I of the present document.

RECOMMENDATION

36. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Peru for the period 2012 to 2015 to reduce HCFC consumption by 10 per cent of the baseline, at the amount of US \$310,111, consisting of US \$232,671, plus agency support costs of US \$20,940 for UNDP, and US \$50,000, plus agency support costs of US \$6,500 for UNEP;
- (b) Noting:
 - (i) That the Government of Peru had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 26.88 ODP tonnes, calculated using actual consumption of 27.3 ODP tonnes and 26.45 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol; and
 - (ii) That the amount of 2007-2009 average consumption of HCFC-141b contained in imported pre-blended polyols will be added to the starting point upon submission of stage II of the HPMP, within the context of a foam sector plan;
- (c) Noting the commitment of the Government of Peru to ban imports of pure HCFC-141b no later than 1 January 2015;
- (d) Deducting 3.74 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption;
- (e) Approving the draft Agreement between the Government of Peru and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document; and
- (f) Whether to approve the first tranche of stage I of the HPMP, and the corresponding implementation plan, at the amount of US \$145,970, consisting of US \$108,000, plus agency support costs of US \$9,720 for UNDP, and US \$25,000, plus agency support costs of US \$3,250 for UNEP, given that the Secretariat did not receive a confirmation from the Government of Peru 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 the country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this Agreement.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF PERU AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

1. This Agreement represents the understanding of the Government of Peru (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of 24.19 ODP tonnes by 1 January 2015 in compliance with Montreal Protocol schedules.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in rows 4.1.3, 4.2.3, 4.3.3, 4.4.3 and 4.5.3 (remaining eligible consumption).
3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (“Funding Approval Schedule”).
4. The Country agrees to implement this Agreement in accordance with the HCFC phase-out sector plans submitted. In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.
5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country had met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which no obligation for reporting of country programme data exists at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
 - (b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted annual implementation reports in the form of Appendix 4-A (“Format of Implementation Reports and Plans”) covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

- (d) That the Country has submitted an annual implementation plan in the form of Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A (“Monitoring Institutions and Roles”) will monitor and report on implementation of the activities in the previous annual implementation plans in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in paragraph 4 above.

7. The Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

- (a) Reallocations categorized as major changes must be documented in advance either in an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual implementation plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
 - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
 - (ii) Changes which would modify any clause of this Agreement;
 - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and
 - (iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
- (b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and
- (c) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sub-sector, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the plan.

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNDP has agreed to be the lead implementing agency (the “Lead IA”) and UNEP has agreed to be the cooperating implementing agency (the “Cooperating IA”) under the lead of the Lead IA in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might

be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of any of the agencies taking part in this Agreement.

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have reached consensus on the arrangements regarding inter-agency planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A (“Reductions in Funding for Failure to Comply”) in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once these decisions are taken, this specific case will not be an impediment for future tranches as per paragraph 5 above.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee, the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to the information necessary to verify compliance with this Agreement.

14. The completion of stage I of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee.

15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	23.85
HCFC-124	C	I	0.06
HCFC-141b	C	I	1.79
HCFC-142b	C	I	1.18
Sub-total			26.88
HCFC-141b contained in imported pre-blended polyols*	C	I	TBD
Total			26.88

* To be phased-out during stage II

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	26.88	26.88	24.19	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	26.88	26.88	24.19	n/a
2.1	Lead IA (UNDP) agreed funding (US \$)	108,000	100,000	0	24,671	232,671
2.2	Support costs for Lead IA (US \$)	9,720	9,000	0	2,220	20,940
2.3	Cooperating IA (UNEP) agreed funding (US \$)	25,000	20,000	0	5,000	50,000
2.4	Support costs for Cooperating IA (US \$)	3,250	2,600	0	650	6,500
3.1	Total agreed funding (US \$)	133,000	120,000	0	29,671	282,671
3.2	Total support costs (US \$)	12,970	11,600	0	2,870	27,440
3.3	Total agreed costs (US \$)	145,970	131,600	0	32,541	310,111
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)					1.95
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)					0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)					21.90
4.2.1	Total phase-out of HCFC-124 agreed to be achieved under this Agreement (ODP tonnes)					0
4.2.2	Phase-out of HCFC-124 to be achieved in previously approved projects (ODP tonnes)					0
4.2.3	Remaining eligible consumption for HCFC-124 (ODP tonnes)					0.06
4.3.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)					1.79
4.3.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)					0
4.3.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)					0
4.4.1	Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)					0
4.4.2	Phase-out of HCFC-142b to be achieved in previously approved projects (ODP tonnes)					0
4.4.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)					1.18
4.5.1	Total phase-out of HCFC-141b contained in imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes)					0
4.5.2	Phase-out of HCFC-141b contained in imported pre-blended polyols to be achieved in previously approved projects (ODP tonnes)					0
4.5.3	Remaining eligible consumption for HCFC-141b contained in imported pre-blended polyols (ODP tonnes)					TBD

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the last meeting of the year specified in Appendix 2-A.

APPENDIX 4-A: FORMAT OF IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Implementation Report and Plan for each tranche request will consist of five parts:

- (a) A narrative report, with data provided by calendar year, regarding the progress since the year prior to the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include ODS phase-out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Annual Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information on activities in the current year;
- (b) A verification report of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
- (c) A written description of the activities to be undertaken until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
- (d) A set of quantitative information for all annual implementation reports and annual implementation plans, submitted through an online database. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and

- (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The monitoring unit will be located within the Ozone Technical Office (OTO), and its responsibilities will include: day-to-day implementation of project activities; regular monitoring of project activities, results, progress in HCFC replacement technologies and trends in the local ODS market; technical guidance to the project beneficiaries; and preparation of annual and other progress reports to the Executive Committee. The administrative monitoring will be performed by the auditing unit of the Vice Ministry of Industry under the rules and procedures of the Government of Peru.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities, including at least the following:
 - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
 - (b) Assisting the Country in preparation of the Implementation Plans and subsequent reports as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Implementation Plan consistent with Appendix 4-A;
 - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;
 - (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
 - (g) Carrying out required supervision missions;
 - (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Implementation Plan and accurate data reporting;
 - (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
 - (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;
 - (k) Ensuring that disbursements made to the Country are based on the use of the indicators; and

- (l) Providing assistance with policy, management and technical support when required.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the overall plan, including at least the following:

- (a) Providing assistance for policy development when required;
- (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
- (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$151 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met.
