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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-second Meeting
Montreal, 29 November - 3 December 2010

PROJECT PROPOSAL: PAKISTAN

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

Phase-out

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

UNEP/UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Pakistan

(I) PROJECT TITLE	AGENCY
HCFC phase-out management plan (stage I)	UNEP, UNIDO (lead)

(II) LATEST ARTICLE 7 DATA	Year: 2009	239.8 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2009		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Serviceing				
HCFC-123									
HCFC-124									
HCFC-141b		49.5		84.7					134.2
HCFC-142b									
HCFC-22				25.3	80.3				105.6

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline (estimate):	247	Starting point for sustained aggregate reductions:	246.6
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	71.7	Remaining:	167.5

(V) BUSINESS PLAN		2010	2011	2012	2013	2014	Total
UNIDO	ODS phase-out (ODP tonnes)	71.7					71.7
	Funding (US \$)	5,203,913	52,773			52,773	5,309,459
UNEP	Funding (US \$)	197,843		197,842			395,685

(VI) PROJECT DATA			2010	2011	2012	2013	2014	2015	Total
Montreal Protocol consumption limits (estimate)			n/a	n/a	n/a	247	247	222.3	
Maximum allowable consumption (ODP tonnes)			n/a	n/a	n/a	246.6	246.6	221.9	
Project Costs requested in principle(US\$)	UNEP	Project costs	200,000			200,000	40,000		440,000
		Support costs	26,000			26,000	5,200		57,200
	UNIDO	Project costs	4,908,849			80,000	20,000		5,008,849
		Support costs	368,164			6,000	1,500		375,664
Total project costs requested in principle (US \$)			5,108,849	0	0	280,000	60,000	0	5,448,849
Total support costs requested in principle (US \$)			394,164	0	0	32,000	6,700	0	432,864
Total funds requested in principle (US \$)			5,503,013	0	0	312,000	66,700	0	5,881,713

(VII) Request for funding for the first tranche (2010)			
Agency	Funds requested (US \$)	Support costs (US \$)	ODS phase-out (ODP tonnes)
UNEP	200,000	26,000	
UNIDO	4,908,849	368,164	

Funding request :	Approval of funding for the first tranche (2010) as indicated above
Secretariat's recommendation:	Individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of Pakistan, UNIDO, as the lead implementing agency, has submitted to the 62nd Meeting of the Executive Committee an HCFC phase-out management plan (HPMP) at a total cost of US \$6,089,199 plus agency support costs of US \$505,937 (i.e., US \$5,193,799 and agency support costs of US \$389,535 for UNIDO, and US \$895,400 and agency support costs of US \$116,402 for UNEP), as originally submitted. This amount includes US \$4,840,849 and agency support costs of US\$363,064 for UNIDO approved at the 60th Meeting for the phase-out of 71.7 ODP tonnes (651.8 tonnes) of HCFC-141b used in the manufacturing of domestic and commercial refrigerators by five enterprises. The Government of Pakistan is requesting the approval of US \$312,950 and agency support costs of US \$23,471 for UNIDO and US \$448,000 and agency support costs of US \$58,240 for UNEP for the implementation of the first tranche of Stage I of the HPMP.

Background

2. The Ministry of Commerce and the Ministry of Finance and Revenue of Pakistan have issued statutory notifications to control trade in ODS including HCFCs since 2000. An ODS licensing system is already in place to control import and export of HCFCs. However, it is not possible to establish sector-specific and/or importer-specific quotas, as the HCFC consumption baseline will be only established in 2011, during the implementation of Stage I of the HPMP.

3. Currently, all importers of HCFCs must obtain a permit from the Ministry of Commerce every year to become a licensed importer. Licensed importers must submit their import details to the Ozone Office, which records and monitors the import of HCFCs in close coordination with Ministry of Commerce. This data will be used to determine the quotas for individual commercial and industrial importers in 2011.

HCFC consumption and sector distribution

4. Most of the foam-sector and refrigeration-sector enterprises that formerly used CFC-11 as a blowing agent selected HCFC-141b as the replacement technology. Only a few enterprises manufacturing refrigeration equipment selected hydrocarbon-based blowing agents. More than 56 per cent of the total HCFCs consumed in 2009, was HCFC-141b used as a foam blowing agent in the production of rigid foam (including insulation for refrigeration equipment), integral skin and spray foam. HCFC-141b pre-blended polyols for the manufacturing of foam are not imported into the country. A large amount of HCFC-22 is consumed in the manufacturing of about 350,000 split units, package units and chillers annually. The refrigeration servicing sector has grown considerably over the last decade; this trend will continue under a non-restricted consumption scenario. The refrigeration servicing workshops can be categorized as small, medium and large. Workshops which have one to two technicians consume around 20 kg of HCFC-22 per month during the high season and 20 tonnes or less during the off-season. Service workshops with more than two technicians consume around 40 to 50 kg of HCFC-22 during the season. The sector distribution of HCFCs in Pakistan is shown in Table 1 below:

Table 1. Sector distribution of HCFCs in Pakistan in 2009

Sector	HCFC-141b (tonnes)		HCFC-22 (tonnes)		Total (tonnes)	
	Metric	ODP	Metric	ODP	Metric	ODP
Refrigeration sector						
Domestic refrigeration foam	674.5	74.2			674.5	74.2
Commercial refrigeration foam	91.3	10.0			91.3	10.0
Domestic air-conditioning			417.4	23.0	417.4	23.0
Commercial air-conditioning			42.2	2.3	42.2	2.3
Total refrigeration sector	765.8	84.2	459.6	25.3	1225.4	109.5
Foam sector						

Sector	HCFC-141b (tonnes)		HCFC-22 (tonnes)		Total (tonnes)	
	Metric	ODP	Metric	ODP	Metric	ODP
Rigid foam	329.3	36.2			329.3	36.2
Spray foam	91.5	10.1			91.5	10.1
Flexible foam	28.9	3.2			28.9	3.2
Integral skin foam	3.5	0.4			3.5	0.4
Total foam sector	453.2	49.9			453.2	49.9
Refrigeration servicing sector			1,455.5	80.1	1,455.5	80.1
Total consumption	1,219.0	134.1	1,915.1	105.3	3,134.1	239.4

HCFC phase-out strategy and costs

5. The HPMP for Pakistan proposes a systematic HCFC phase-out approach through the conversion of those manufacturing enterprises in the foam and refrigeration sectors with the highest consumption of HCFCs, where alternative technologies are technically proven and cost-effective, taking into account global warming potential (GWP). To ensure the phase-out of HCFCs, the Government will implement the actions listed in Table 2.

Table 2. Action plan for HCFC phase-out in Pakistan

Description	Action	
	2010-2015	2016-2030
Country programme	Update baseline and freeze limit. Complete elaboration and commence implementing projects identified under Stage II.	Reassess new technologies and solutions and adjust programmes. Continue with subsequent stages of the HPMP.
Legal system	Examine present legal system for ODS management and improve where necessary for HCFC Management. Identify additional regulatory measures for HCFC management and implement. Identify, and modify as necessary, legislation/ regulations that may prohibit or restrict specific non-HCFC alternatives.	
HCFC sales and quotas	Investigate thoroughly HCFC consumption status and input channels, monitor and control HCFC sales networks and establish exclusive HCFC sales system. Define consumption quotas to users; control the quotas and supplies according to quotas under a licensing system (from 2011).	
Bans	Ban on new enterprises producing refrigerators, air conditioning equipment and foam material using HCFCs. Ban on import of products and equipment using or containing HCFCs (from 2011).	Ban on import of HCFC and HCFC-based products. Ban on uncontrolled release of HCFCs during servicing.
Financial incentives	Assess the existing import tariffs and continue the reduced import tariffs on equipment and materials required for implementation of HCFC phase-out projects. Assess the existing tax policies on HCFCs and implement policies that will promote the use of non-HCFC-based products through duty relaxation and higher duties on HCFC-based products. Revision of SRO 564 (I)/2008, in which compressors using HCFC gases are exempt of customs duties.	
Investment control	Ban on investment in building new plants using HCFC (from 2010). Strict control of investments in new, enlarged or technically reformed enterprises consuming HCFC.	
Awareness, education and information exchange	Raise awareness about HCFC phase-out among key stakeholders: primary and secondary target audiences. Initiate a study on knowledge, attitude, and practices and behaviour of the key target audiences to customize information materials to suit their needs.	Continue awareness and education activities. Inform consumers about the premature obsolescence of refrigerators, and air-conditioning and refrigerant equipment based on HCFCs.

Description	Action	
	2010-2015	2016-2030
	Carry out awareness and education on ozone layer protection through public media, such as newspapers, broadcasting and TV programmes. Hold awareness workshops. Produce/ translate and disseminate information materials on HCFC phase-out. Participate in trade and industry events to promote the issues among the industry. Engage “multipliers”, including the media, academia, students, NGOs, consumers and general public.	
Enforcement	Strengthen trade registry monitoring of HCFCs, HCFC blends, and HCFC-based products/ equipment using HS 2012 codes within the general customs administration. Undertake capacity-building of customs and other enforcement officials as well as local government officials. Establish a compulsory reporting system for registered industrial and commercial importers of HCFCs. Create an electronically operated system for issuing and control of quotas and permits for trade in HCFCs, HCFC blends and HCFC-based products/ equipment. Set up regional and cross-border networking for improved implementation of national licensing systems.	
Recovery/recycling	Establish networks and sites for HCFC recovery/recycling and operate them.	
Technicians training	Undertake capacity-building of refrigeration technicians in good refrigeration service practices.	
Monitoring	Define and divide responsibilities for supervision and management of technical substitution projects among environmental protection agencies and various sectors and industries, and commence monitoring activities. Determine the phase-out plan, and start a reward and punishment strategy. Report regularly on the progress of HCFC phase-out.	

6. The total cost of complete HCFC phase-out in Pakistan has been estimated at US \$30,333,987. Of this amount, US \$6,552,491 is associated with activities in the refrigeration servicing sector.

7. To meet the 2013 and 2015 phase-out targets, 71.7 ODP tonnes of HCFC-141b used in the foam sector will be phased out and several activities in the refrigeration servicing sector (i.e., training of customs officers and refrigeration service technicians, policy formulation and coordination with the other Government departments and stakeholders) will be implemented during Stage I of the HPMP, as shown in Table 3.

Table 3. Summary of HCFC phase-out activities to be implemented in Pakistan in 2011-2015

Activities	Total cost (US\$)
Manufacturing sector: phase-out of 71.7 ODP tonnes of HCFC-141b used in the manufacturing of domestic and commercial refrigerators by five enterprises (UNIDO)	4,840,849*
Policy and enforcement capacity-building: development of electronically-operated license and quota management system; development of training curriculum for HCFC trade control module at the customs training centers; HCFC identifiers for training centers and key ports; training workshop with local government’s officials; participation in regional/ cross-border enforcement cooperation meetings (UNEP)	220,000
Training programme for service technicians: development of training curriculum with train-the-trainer centres; implementation of train-the-trainer programmes for 60 trainers, and training programmes for 2,100 refrigeration technicians; development of standards/code of good practices and distribution of 4,000 kits; development of a long-term certification programme for 5,000 technicians; implementation of specialized training workshops and strengthening of the refrigeration association (UNEP)	409,200

Awareness activities (UNEP)	266,200
Equipment for training centres: teaching aids; training rigs; recovery machine; recycling machine; service tools (UNIDO)	352,950
Total cost	6,089,199

(*) Funding approved at the 60th Meeting of the Executive Committee.

Implementation modalities

8. UNIDO as the lead implementing agency will be responsible for the implementation of the investment projects, and UNEP as the cooperating agency will implement non-investment activities in the refrigeration servicing sector, including capacity-building, customs (enforcement) training, and assistance in formulating policies that will support the HCFC phase-out activities in Pakistan.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

9. The Secretariat reviewed the HPMP for Pakistan in the context of the guidelines for the preparation of HPMPs (decision 54/39), the two projects for the phase-out of 71.7 ODP tonnes (651.8 metric tonnes) of HCFC-141b used as a foam blowing agent approved by the Executive Committee at its 60th Meeting (decision 60/32) and the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th Meeting (decision 60/44).

10. The HPMP for Pakistan included detailed information on all the HCFC-consuming manufacturing enterprises in the country and the incremental costs for their conversion to non-HCFC technologies.

Starting point for aggregate reduction in HCFC consumption

11. The Government of Pakistan has reported its HCFC consumption under Article 7 of the Montreal Protocol since 1993. The 2000-2009 HCFC consumption data reported by the Government is presented in Table 4 below.

Table 4. HCFC consumption data reported under Article 7 in Pakistan for 2000-2009

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
ODP tonnes	34.5	34.5	46.3	58.2	14.0	5.3	65.5	183.7	189.5	239.8

12. During the preparation of the HPMP, it was noted that the HCFC consumption for 2004 and 2005 had inadvertently been reported as very low compared to previous and subsequent years. Taking this into consideration, several methods were used to determine the HCFC baseline for compliance (i.e., linear least square methods; parabolic least square method; 6 per cent annual increase during 2010-2012; and HCFC-141b and HCFC-22 consumption trends). Based on this analysis, the baseline has been estimated at 246.6 ODP tonnes and the 2012 consumption at 285.1 ODP tonnes (based on a 6 per cent annual growth from the 2009 reported consumption). The Government of Pakistan has selected its HCFC baseline for compliance as the starting point for sustained aggregate reduction in HCFC consumption. After deducting the 71.7 ODP tonnes of HCFC-141b used as a foam blowing agent in five manufacturing plants in Pakistan that were funded at the 60th Meeting, the remaining HCFC consumption eligible for funding is 174.9 ODP tonnes.

Technical and cost issues

13. Issues were raised regarding the funding request for implementation of activities related to policy and enforcement capacity building, training for service technicians, recovery and awareness-raising (US \$895,400 for UNEP), and equipment for training centres (US \$312,950 for UNIDO). It was noted

that no additional phase-out activities were required to meet the 2013 and 2015 control levels, seeing as the 71.7 ODP tonnes of HCFCs associated with the projects approved at the 60th Meeting represented over 29 per cent of the HCFC baseline. The requirement for demonstrating the need for implementing activities in the servicing sector to meet the reduction steps in 2013 and 2015 (as stipulated in decision 60/44(f)(xv)) was also noted.

14. UNIDO explained that the non-investment activities are essential to enhance relevant legislative set-up, modify environmental and energy-saving regulations, and increase awareness to ensure successful implementation of the HPMP. Initiating the activities in the servicing sector will address the increasing demand for HCFCs in the sectors that are not covered by the approved projects, to keep HCFC phase-out in the foam sector from being offset by growth in other sectors. These activities will also create awareness and communication among stakeholders, which is essential in driving HCFC phase-out where no clear HCFC alternatives are available in the market. They will also make it possible to keep using the capacity established during the CFC phase-out stage to ensure that future HCFC phase-out targets could be met.

15. Issues linked to the justification for the non-investment activities (at a total cost of US \$1,248,350) were also considered. UNIDO explained that for the implementation of the projects to phase-out HCFC-141b consumption in the foam sector, it was necessary that HCFC policies and regulations should be enforced from the beginning, supported by awareness-raising activities, and training of customs officers and refrigeration technicians. This will not only create an enabling environment for phase out in the foam sector but would also avoid an increase in consumption in the other manufacturing sectors that would be addressed post 2014. During implementation of stage I of the HPMP, 90 custom officer and 1,000 technicians will be trained and better monitoring and follow up systems of the trained technicians would be implemented. Furthermore, through the training programme the technicians would have a better understanding of the code of good practices for handling HCFCs which will reduce the levels of consumption of virgin HCFCs and as well as uncontrolled emission of HCFCs. Further to a discussion between the Secretariat and UNIDO, the level of funding was adjusted to US \$608,000 for non-investment activities (mainly training of customs officers and technicians, including basic training equipment, and enforcement of HCFC policies) to be implemented over the 2010-2014 period. This funding has an associated phase-out of 7.43 ODP tonnes of HCFCs.

Impact on the climate

16. The Government of Pakistan is well aware of the environmental issues related to climate change. Accordingly, the HCFC phase-out programme proposes to introduce zero-ODP and low-global warming potential (GWP) alternative technologies. Furthermore, the Government has initiated a standards and labelling programme (SLP), with the immediate inclusion of compact fluorescent light bulbs. The Government of Germany has provided additional support to develop baseline energy consumption for four types of domestic appliances, including refrigerators and freezers, ceiling fans, washing machines and gas water geysers. The same programme has already identified the energy saving potential at the country level. The programme needs to be further developed to synergize the twin objectives of ODS reduction and enhanced energy efficiency. With co-financing to be sought from sources yet to be identified, a strengthened project will be implemented to overcome the barriers associated with energy-efficient products. The framework for an efficient and low-HCFC economic development programme, a component of the ozone-climate linkage in the HPMP, will include promotion of market-based accelerated replacement of almost 18 million air-conditioning units with higher energy efficiency units in Pakistan. With an associated outreach and awareness programme, the SLP could also stimulate market transformation in favour of this equipment.

17. Furthermore, implementation of Stage I of the HPMP in Pakistan would avoid the emission into the atmosphere of some 454,956 tonnes of CO₂-equivalent associated with the HCFC-141b foam conversion projects approved at the 60th Meeting. Further reductions in CO₂ emissions could be achieved through the introduction of good refrigeration servicing practices resulting in lower amounts of refrigerants being released into the atmosphere during equipment operation and maintenance (Table 5).

The non-investment activities in this plan are expected to phase out 7.43 ODP tonnes (135.09 metric tonnes).

Table 5. Impact on the climate

Substance	GWP	Tonnes/year	CO2-eq (tonnes/year)
Before conversion			
HCFC-141b	713	651.8	464,733
After conversion			
Cyclopentane	25	391.1	9,777
Net impact			(454,956)

Adjusted 2010-2014 business plans

18. The total level of funding for non-investment activities for Pakistan included in the 2010-2014 consolidated business plan of the Multilateral Fund, as noted by the Executive Committee at its 61st Meeting, is US \$501,230 including agency support costs, as compared to US \$677,800 requested in the HPMP. The difference in funding is related to the basic equipment to be provided to the training centres.

Draft agreement

19. A draft agreement between the Government of Pakistan and the Executive Committee for the phase-out of consumption of HCFCs is contained in Annex I to the present document. The agreement has incorporated the foam projects for the phase-out of HCFC-141b approved by the Executive Committee at its 60th Meeting.

RECOMMENDATION

20. The HPMP for Pakistan is submitted for individual consideration. The Executive Committee may wish to consider:

- (a) Noting that the Government of Pakistan agreed at the 62nd Meeting to establish the consumption based on the average consumption forecast for 2009 and 2010 (246.6 ODP tonnes) as its starting point for sustained aggregate reduction in HCFC consumption;
- (b) Approving in principle Stage I of the HCFC phase-out management plan (HPMP) for Pakistan, at the amount of US \$5,008,849 and agency support costs of US \$375,664 for UNIDO, and US \$440,000 and agency support costs of US \$57,200 for UNEP, noting that US \$4,840,849 and agency support costs of US \$363,064 for UNIDO was approved at the 60th Meeting for the phase-out of 71.7 ODP tonnes of HCFC-141b used in the manufacturing of domestic and commercial refrigerators by five enterprises;
- (c) Approving the Agreement between the Government of Pakistan and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
- (d) Requesting the Secretariat, once the baseline data is known, to update Appendix 2-A to the Agreement to include the figures for maximum allowable consumption, and to notify the Executive Committee of the resulting levels of maximum allowable consumption accordingly;

- (e) Approving the first implementation plan for 2010-2011 for Pakistan at the amount of US \$68,000 and agency support costs of US \$5,100 for UNIDO and US \$200,000 and agency support costs of US \$26,000 for UNEP; and
- (f) Deducting 7.43 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption.

Annex I

DRAFT AGREEMENT BETWEEN PAKISTAN AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUROCARBONS

1. This Agreement represents the understanding of the Government of Pakistan (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”) prior to 1 January 2015 in compliance with Montreal Protocol schedules to a sustained level of 221.9 ODP tonnes representing the maximum consumption allowed for 2015 under the Montreal Protocol reduction schedule.
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 which exceeds the level defined in row 1.2 of Appendix 2-A (maximum allowable total consumption of Annex C, Group I substances) 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 which exceeds the level defined in rows 4.1.3 and 4.2.3 (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 (the “Targets and Funding”) to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (the “Funding Approval Schedule”).
4. The Country will meet the consumption limits for each of the Substances as indicated in Appendix 2-A. It will also accept independent verification, to be commissioned by the relevant bilateral or implementing agency, of achievement of these consumption limits as described in sub-paragraph 5(b) of this Agreement.
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 60 days prior to the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country has met the Targets for all relevant years. Relevant years are all years since the year in which the hydrochlorofluorocarbons phase-out management plan (HPMP) was approved. Exempt are 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;
 - (b) That the meeting of these Targets has been independently verified, except if the Executive Committee decided that such verification would not be required;

- (c) That the Country had submitted tranche implementation reports in the form of Appendix 4-A (the “Format of Tranche Implementation Report and Plan”) 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 and received approval from the Executive Committee for a tranche implementation plan in the form of Appendix 4-A (the “Format of Tranche Implementation Reports and Plans”) 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 (the “Monitoring Institutions and Roles”) will monitor and report on Implementation of the activities in the previous tranche implementation plan 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 sub-paragraph 5(b).

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 phase-down and phase-out of the Substances specified in Appendix 1-A. Reallocations categorized as major changes must be documented in advance in a Tranche Implementation Plan and approved by the Executive Committee as described in sub-paragraph 5(d). Major changes would relate to reallocations affecting in total 30 per cent or more of the funding of the last approved tranche, issues potentially concerning the rules and policies of the Multilateral Fund, or changes which would modify any clause of this Agreement. Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the Tranche Implementation Report. Any remaining funds will be returned to the Multilateral Fund upon closure of the last tranche of the plan.

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. UNIDO has agreed to be the lead implementing agency (the “Lead IA”) and UNEP has agreed to be cooperating implementing agency/agencies (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 IA taking part in this Agreement.

10. The Lead IA will be responsible for carrying out the activities of the plan as detailed in the first submission of the HPMP with the changes approved as part of the subsequent tranche submissions, 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 entered into a formal agreement regarding 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 amounts set out in Appendix 7-A in respect of each ODP tonne 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.

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 information necessary to verify compliance with this Agreement.

14. The completion 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 has been specified in Appendix 2-A. Should at that time activities be still outstanding 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 Appendix 4-A (a), (b), (d) and (e) continue until the time of the completion if not specified by the Executive Committee otherwise.

15. All of the agreements 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	108.45
HCFC-141b	C	I	138.10

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2009	2010	2011	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	239.4	253.7	n/a	n/a	246.6	246.6	221.9	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	239.4	253.7	n/a	n/a	246.6	246.6	221.9	n/a
2.1	Lead IA UNIDO agreed funding(US \$)		4,908,849*			80,000	20,000		5,008,849
2.2	Support costs for Lead IA(US \$; 7.5%)		368,164*			6,000	1,500		375,664
2.3	Cooperating IA [UNEP] agreed funding (US \$)		200,000			200,000	40,000		440,000
2.4	Support costs for Cooperating IA (US \$; 13%)		26,000			26,000	5,200		57,200
3.1	Total agreed funding (US \$)		5,108,849			280,000	60,000		5,448,849
3.2	Total support cost		394,164			32,000	6,700		432,864
3.3	Total agreed costs (US \$)		5,503,013			312,000	66,700		5,881,713
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)								7.4
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)								-
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)								101.1
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)								
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)								71.7
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)								66.4

* US \$4,840,849 and agency support costs of US \$363,064 approved at the 60th Meeting.

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval not earlier than the second meeting of the year specified in Appendix 2-A.

APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Tranche Implementation Report and Plan will consist of five parts:
 - (a) A narrative report regarding the progress in the previous tranche, reflecting on 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 further highlight successes, experiences and challenges related to the different activities included in the Plan, reflecting on changes in the circumstances in the country, and providing other relevant information. The report should also include information about and justification for any changes vis-à-vis the previously submitted tranche plan, 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 about 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 in the next tranche, highlighting their interdependence, and taking into account experiences made and progress achieved in the implementation of earlier tranches. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall plan foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain any revisions to the overall plan which were found to be necessary;
- (d) A set of quantitative information for the report and plan, submitted into a database. As per the relevant decisions of the Executive Committee in respect to the format required, the data should be submitted online. 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), and will cover the same time periods and activities; it will also capture the quantitative information regarding any necessary revisions of the overall plan as per sub-paragraph 1(c) above. While the quantitative information is required only for previous and future years, the format will include the option to submit in addition information regarding the current year if desired by the country and lead implementing agency; and
- (e) An Executive Summary of about five paragraphs, summarizing the information of above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. Ministry of Environment, Government of Pakistan, National Ozone Cell is responsible for the overall project controlling, coordination, and assessment and monitoring.
2. Project Management Unit (PM Officer) – to coordinate daily work of the Project Implementation and also to assist the enterprises as well as government and non government offices and organizations to streamline their activities for smooth implementation of the Project. To help the Government of Pakistan with monitoring the progress on implementation, and reporting to the Executive Committee.
3. Independent and certified auditor – to audit and verify the consumption of ODS reported by the Government through A7 Data and CP Progress Reports.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities. These can be specified in the project document further, but include 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 phase-out plan;
- (b) Assisting the Country in preparation of the Tranche Implementation Plans and subsequent reports as per Appendix 4-A;
- (c) Providing verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Tranche 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 Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
- (e) Fulfilling the reporting requirements for the tranches and the overall Plan as specified in Appendix 4-A as well as project completion reports 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 Tranche 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 co-ordinating implementing agencies, 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 organization 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 COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities can be specified in the respective project document further, but include at least the following:

- (a) Providing policy development assistance 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 \$ 2,500 per metric tonne 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.

APPENDIX 8-A: SECTOR SPECIFIC ARRANGEMENTS