

### Country: People's Republic of China Project Document

Project Title	Preparation of a HCFC Phase-out Management Plan (Stage II) - Overarching Strategy
UNDAF Outcome(s):	Outcome: Government and other stakeholders ensure environmental suitability, address climate change, and promote a green, low carbon economy
Expected CP Outcome(s):  (Those linked to the project and extracted from the CPAP/UNDAF Action Plan)	Low carbon and other environment sustainable strategies and technologies are adapted widely to meet China's commitments and compliance with Multilateral Environment Agreements
Expected Output(s): (Those that will result from the project and extracted from the CPAP)	National Coordination and formulation of an Overarching Strategy of HCFC Phase-out Management Plan (Stage-II) in China
Executing Entity:	Foreign Economic Cooperation Office, China Ministry of Environmental Protection (FECO/MEP)
Implementing Agency:	United Nations Development Programme (UNDP)

### **Project Summary**

The XIXth Meeting of the Parties to the Montreal Protocol in September 2007, through its Decision XIX/6, adopted an accelerated phase-out schedule for HCFCs. The first control is the freeze on production and consumption of HCFCs from 01 January 2013, at the Baseline Level (average of 2009 and 2010 levels). The other control steps are reduction of 10% by 2015, reduction of 35% by 2020, reduction of 67.5% by 2025, reduction of 97.5% by 2030, allowance of 2.5% of baseline (annual equivalent) for period 2030-2040 and complete phase out by 2040. China is a party to the Montreal Protocol and must comply with the above targets.

At the 73<sup>rd</sup> Meeting of the Executive Committee, Preparation of a HCFC Phase-out Management Plan (Stage II) Overarching Strategy was approved by the Executive Committee with UNDP as the implementing agency. Total approved funding was US \$200,000. The preparation project comprises of national stakeholder coordination, review, coordination, monitoring and formulating of HCFC Phase-out Management Plan (Stage II) which will consist of phase-out activities and targets to be implemented over five years from 2016 to 2020. Upon successful completion and approval of the HCFC Phase-out Management Plan (Stage II) – Overarching Strategy, implementation of the project will follow the rules and procedures of National Execution (NEX). The Performance Based Payment (PBP) mechanism will be applied for the implementation of this preparation project.

Programme Period: Key Result Area (Strategi Atlas Award ID: Start date: End Date	March 2015 – August 2016 c Plan):  1 March 2015 31 August 2016	Total resources required Total allocated resources: Regular Other: MLF	200,000US\$ 200,000US\$	
Management Arrangemen	its: National Execution (NEX)	In-kind Contributions	<u>-</u>	

Agreed by FECO/MEP:

Date: 2015.02.06

Agreed by UNDP:

Date: 2015.02.13

### LIST OF ABBREVIATIONS

**CFC** Chloro Fluoro Carbons HCFC Hydro Chloro Fluoro Carbon

CP Country Programme
CTC Carbon Tetra Chloride

**ExCom** Executive Committee of the Multilateral Fund

FECO Foreign Economic Cooperation Office

GWP Global Warming Potential
HCFCs Hydrochlorofluorocarbons
IA Implementing Agency

MEP Ministry of Environmental Protection

MLF Multilateral Fund for the Implementation of the Montreal Protocol

MOP Meeting of Parties to the Montreal Protocol

MP Montreal Protocol MT Metric Tonnes

ODP Ozone Depleting Potential
ODS Ozone Depleting Substances
PBP Performance Based Payment

SBAA Standard Basic Assistance Agreement
UNDP United Nations Development Programme

### I. SITUATION ANALYSIS

### 1. **OBJECTIVE**

The objective of this project is for the Government of China to formulate a comprehensive overarching Hydrochlorofluorocarbons Phase-out Management Plan (HPMP Stage II) which will incorporate the strategy and action plan for the People's Republic of China to accomplish compliance with the target of 35% reduction in Hydrochlorofluorocarbons (HCFC) reduction by 2020. The HPMP Stage II is targeted for submission to the Executive Committee of the Multilateral Fund (MLF) for review and approval at its 76<sup>th</sup> Meeting in 2016.

### 2. BACKGROUND

### 2.1 ODS Phase Out in China

China signed Vienna Convention for the Protection of the Ozone Layer in June 1989, Montreal Protocol on Substances that Deplete the Ozone Layer (hereinafter Montreal Protocol) in June 1991. As of May 2010, China has ratified all amendments to the Montreal Protocol. Chinese government compiled and approved "Country Program for Phase-out of Ozone Depleting Substances" (hereafter Country Program) in January 1993 and established phase-out strategies for major sectors of ODS production and consumption in 1995. In November 1999, Chinese Government updated the Country Program. According to Country Program, with the support of Multilateral Fund and international institutions, China has conducted more than 400 projects and 18 sector plans including chemical production sector, Automobile Air-conditioner Sector, Tobacco Sector, Industrial and Commercial Refrigeration and Air Conditioning, Extinguishing Sector, Solvent Sector, Household Appliance, Foam Sector etc. to phase out production and consumption of CFCs, Halons, CTC, TCA and Methyl Bromide subsequently. With more than two decades of hard work, China has completed the phase-out of the production and consumption of CFCs and Halons on July 1st 2007, two and a half years earlier than the phase-out schedule under Montreal Protocol. Until January 1st 2010, except for essential use, Chinese Government had completely eliminated the production and consumption of CFC, Halons, CTC and TCA (5 years ahead the schedule) to meet the requirement of Montreal Protocol, which is an outstanding contribution to Ozone Layer protection.

### 2.2 Evolution of HCFC Phase-out Management Plans

HCFCs, which have Ozone Depleting Potential (ODP) up to 15% of that of CFCs, are also classified as controlled substances under Annex-C, Group-I of the Montreal Protocol. HCFCs, therefore, have use restrictions and would eventually have to be phased-out. Initially, for developing countries, the scheduled phase-out date for HCFCs was 1 January 2040 with an interim control measure of freezing HCFC production and consumption at 2015 levels from 1 January 2016.

The XIX Meeting of the Parties to the Montreal Protocol in September 2007, through its Decision XIX/6, adopted an accelerated phase-out schedule for HCFCs. The first control is the freeze on production and consumption of HCFCs from 01 January 2013, at the Baseline Level (average of 2009 and 2010 levels). The second control step is the reduction of 10% from the Baseline Levels on January 1, 2015. Subsequent control steps are 35% reduction by 2020, 67.5% by 2025, 97.5% by 2030 with allowance of 2.5% of baseline for period 2030-2040 and complete phase out from January 1 2040. The decision also directed the Executive Committee of the Multilateral Fund to assist Article-5 Parties in preparation of HCFC Phase-out Management Plans (HPMP).

### 2.3 HCFC Phase-out Management Plan of China

There are more than 30 categories of HCFCs controlled in Montreal Protocol. Currently, only six of them are produced in China: HCFC-22, HCFC-123, HCFC-124, HCFC-133a (mainly used as feedstock), HCFC-141b and HCFC-142b. Six kinds of HCFCs are consumed in China including HCFC-22, HCFC-141b, HCFC-142b, HCFC-124, HCFC-123 and HCFC-225ca/cb and HCFC-225 are imported from foreign market. The production and consumption of HCFCs in China involves 7 sectors: HCFC Production Sector, Polyurethane Foam Sector, Extruded Polystyrene Foam Sector, Room Air Conditioning Sector, Industrial and Commercial Refrigeration and Air Conditioning Sector, Solvents Sector and Servicing Sector.

In order to meet the targets in Stage I from 2011 - 2015 in consumption sector, China reached an agreement with the Executive Committee for HCFC Phase-out Management Plan (Stage-I), which was approved at the 64<sup>th</sup> ExCom Meeting and updated at the 67<sup>th</sup> ExCom Meeting. In April 2013, the 69<sup>th</sup> ExCom Meeting approved the HCFC Phase-out Production Sector Management Plan (HPPMP) with a total of US\$95 million for the HPPMP in China (Stage-I) to meet the freeze and 10 percent reduction of baseline. The HPPMP agreement was approved at the 71<sup>st</sup> ExCom Meeting.

Through the implementation of the HCFC Phase-out Management Plan (Stage-I) that includes 7 sector plans, China has successfully achieved the 2013 freeze target and is progressing towards 10% reduction in 2015. By the end of 2014, the first four funding tranches of the consumption sectors and the first two tranches of HPPMP had been approved and released by the Executive Committee.

### Formulation of China HCFC Phase-out Management Plan Stage-II

For the consumption sector, request for the last tranche of HPMP Stage-I of China is expected to be submitted in 2015. For the production sector, 2016 will be the last tranche based on the agreement of HPPMP Stage-I. As mentioned earlier, with a combination of phase-out projects, policies and regulations, awareness and capacity building and monitoring mechanisms that were established for HPMP Stage-I, China is expected to successfully achieve their 2015 targets. From here, China needs to proceed seamlessly and in a systematic manner, implementing activities to achieve HCFC phase-out projects to achieve 2020 targets in HCFC production and consumption. Based on detailed consultations with different stakeholders and implementing agencies, it was noted that 2020 HPMP targets can be achieved through phase-out sector plans for all the seven sectors, as identified during Stage-I. China needs to develop 7 sector-level HPMPs for Stage II covering production, PU foam, XPS foam, RAC, ICR, solvent and refrigeration servicing sectors. Development of these sector plans will require effective and efficient coordination at the national level to ensure that the phaseout targets are achieved in a timely and smooth manner.

To achieve the 35% reduction by 2020, China needs to respectively phase out 7,280 ODP tons and 4,716 ODP tons of HCFCs in the production and the consumption sectors at Stage II, which is much higher than the amount of phase out in Stage I. The unprecedented challenge faced by China in phasing out large quantities of HCFCs in a relatively very short period of time will require effective and efficient alignment of different sector plans to achieve 2020 targets in a smooth manner. Furthermore, there is a need to have an overarching project for China to integrate and coordinate preparation of all the sector plans under one umbrella at the national level. This will also ensure that the mechanisms for monitoring and reporting can be carried out in an efficient manner and reporting obligations to the Executive Committee are well fulfilled., Keeping in mind the above, overarching strategy for HPMP for achieving 2020 targets i.e., Stage-II targets, would be prepared for China.

### II. STRATEGY FOR FORMULATION OF THE OVERARCHING STRATEGY FOR HPMP STAGE II

The national coordination components of the project: preparation of China's HPMP Stage-II comprises the following interventions:

- National Stakeholder Coordination: This sub-component will be carried out through two
  national coordination meetings of stakeholders during the year 2015-2016. These coordination
  meetings will enable regular monitoring and review of progress of preparation of the seven
  sector plans and also facilitate consensual adaptive and corrective actions as may be required, to
  ensure smooth preparation of the sector plans.
- Formulation of the Overarching Strategy of HCFC Phase-out Management Plan (Stage II): The work will involve coordination between the project management teams of the seven sector plans. Every sub-sector will develop the HCFC Phase-out Management Sector Plan (Stage II), the overarching HPMP will include the key results of every sector plan, such as methodologies, work schedule, overall work plans, and the policy review and amendment suggestions to achieve the phase-out targets essential for compliance with the 2020 targets. It must be noted that while preparing the Overarching Strategy, UNDP and Government of China will discuss and coordinate with all the agencies preparing the different sector plans and would draw inputs from them while preparing the overarching strategy. Detailed preparation activities are outlined in Annex II.

## United Nations Development Programme



# III. TIME FRAME/MONITORING MILESTONES

Overall time plan for implementation of the programs is given in Table 1 below:

Table 1

				(ර)	J)		
MILESTONE/TIME FRAME		20	2015			2016	
	Q1	Q2	εÒ	Q4	Q1	02	63
National Stakeholder Coordination							
Organize two stakeholder coordination meetings.							
Coordination with local and international stakeholders/partners							
Review, coordination, monitoring and reporting, preparation of the overall Plan for Stage II						:	
Coordination between the project management teams of the seven sector plans							
Policy reviewing, consultation.							
Preparation of the HCFC Phase-out Management Plan for Stage-II, including the Overarching Strategy						:	



### RESULTS AND RESOURCES FRAMEWORK

### Table 2

	1	1 autc 2		
Applicable Goal (UNDAF):	Outcome: Low carbon and other en widely to meet China's commitments and Indicator: Relevant nationals laws and	and compliance with Multilateral En	vironment Agree	ments
ATLAS Award ID:				
ATLAS Project ID:				-
Intended Outputs	Output Targets (2015)	Indicative activities	Responsible Parties	Inputs (US \$ )
Output: HCFC Phase-out	Targets: March 2015 Finalization and signing of Project	National Stakeholder Coordination	FECO/MEP	40,000
Management Plan (Stage II) – Overarching Strategy	Document.  Targets: December 2015  The draft of HCFC Phase-out Management Plan (Stage II) — Overarching Strategy	<ul> <li>Coordination with local and international stakeholders / partners</li> <li>Organization of two National Stakeholder Coordination Meetings</li> </ul>		
Indicator: 35% reduction of HCFCs consumption in China by 2020	Target: December 2015/January 2016 - submission of the project proposal to the 76 <sup>th</sup> ExCom Meeting	Management, Review, coordination, monitoring and reporting  - Coordination between the project management teams of the seven sector plans  - Review, compilation and submission of implementation plans andreports to MLF  - Monitoring the preparation of Stage II sector plans at national level  - Development of the Overarching Strategy document for China for Stage-II HPMP	FECO/MEP	160,000
		Grand total		200,000

### IV. ANNUAL WORK PLAN

The table below presents the annual budget allocation during the project life cycle.

Table 3

AWARD ID						•	
PROJECT ID							
Project Title	National Coor Strategy	dination for	China HCF	C Phase-out Management	Plan (Stage-I	I) – Overarc	hing
Executing Agency	Foreign Econo	omic Cooper	ation Office	, China Ministry of Envir	onmental Prot	ection (FEC	O/MEP)
ATLAS Activity	Responsible Party	Source of funds	ATLAS Code	ATLAS Budget Description	2015	2016	Total
Activity 1 : National Stakeholder Coordination	FECO/MEP	63080	75700	Training, workshop and conference	20,000	20,000-	40,000
	Sub-Total				20,000	20,000	40,000
Activity 2 : Review, coordination,	FECO/MEP	63080	71600	Travel		2,000	2,000
monitoring and reporting, for	FECO/MEP	63080	72100	Contractual Services - companies	78,000	19,000	97,000
formulating the HCFC Phase-out Management Plan	FECO/MEP	63080	72600	Contractual Services (Project Management for FECO/MEP)	12,000	4,000	16,000
(Stage II) – Overarching Strategy	FECO/MEP	63080	75700	Training, workshop and conference	5,000		5,000
Strategy	UNDP	63080	71200	International experts	20,000	8,000	28,000
	UNDP	63080	71600	Travel	12,000		12,000
	Sub-Total				127,000	33,000	160,000
	Total				147,000	- 53,000	200,000

### v. MANAGEMENT ARRANGEMENT

### 6.1 Implementation Modality

The relevant agreements between the Chinese Government and the ExCom will serve as the framework within which the National Coordination will be implemented. The project will be managed in accordance with National Execution (NEX) modality. The Government of China through its Foreign Economic Cooperation Office, Ministry of Environmental Protection (FECO/MEP) will be implementing the project with support from UNDP. Under the support of UNDP and FECO, Peking University will act as the responsible party for the project. The Performance Based Payment (PBP) mechanism will be applied to disbursements to FECO/MEP in this project in accordance to the MoU between UNDP and FECO/MEP which was signed on 8 January 2011.

### 6.2 Roles and responsibilities

UNDP is serving as the implementing agency to supervise the implementation of the National Coordination, specifically including the following:

- Providing assistance for coordination with local and international stakeholders / partners, when required;
- Providing assistance for coordination with other implementing agencies and the project management teams of the seven sector plans to monitor the progress of sector plans at national level;
- Providing assistance for reviewing and compilation of implementation plans prepared by the project management teams of the seven sector plans;
- Providing assistance to ensure the submission of implementation plans and reports to MLF accurately and on time;
- Providing assistance on monitoring and coordination at the national-level, when required;
- Monitoring the progress and carrying out supervision missions;
- Working in close coordinate with FECO/MEP and the Peking University on the development of the HPMP Stage II Overarching Strategy;
- In consultation with the other Implementing Agencies, obtaining endorsement by FECO/MEP on the Overarching Strategy and the seven sector plans, for submission of the plans to the Executive Committee;
- Responding to MLF Secretariat's comments on the Overarching Strategy;
- Ensuring the Fund disbursed in accordance with the guidelines of the ExCom;
- Reporting the progress of National Coordination project to the ExCom.

FECO/MEP will be responsible for the overall implementation, coordination and management of the National Coordination project, specifically including the following:

• Coordinating with stakeholders, preparing and organizing the National Stakeholder Coordination Meetings;

- Preparing the implementation plan and progress reports as required by MLF and UNDP;
- Coordinating between the project management teams of the seven sector plans, review, compilation and submission of the sector plans so that these inputs can be utilised effectively;

- Coordinating between various HCFCs consumption and production sectors at national level and providing inputs from sector plans developed by different agencies for overarching strategy;
- Providing inputs to implementing agencies in the response to the MLF Secretariat's comments on the sector plan proposals.

PEKING UNIVERSITY will be engaged by FECO/MEP to act as the responsible party of the project, the responsibilities are as following:

- Collecting and analysing information on HCFC production, consumption, import and export for preparation of the overarching strategy;
- Consulting widely with national and international experts, industrial associations, enterprises and other stakeholders on issues such as policy framework, alternative technology selection, conversion cost etc.;
- Developing HCFC phase-out strategy of Stage II for the national and sector level based on different scenario analysis;
- Preparing the overarching strategy of HPMP for Stage II of China including HCFC phaseout strategy of Stage II, policy and regulation framework, alternative technology selection, environmental effects, cost calculation and action plans etc.;
- Participation of stakeholder meetings and providing technical consultation.

### 6.3 Payment Schedule and Indicators

Fund Allocation for National Coordination (Stage II)

Table 4

Cost Component	Funding Request (US\$)
Two coordination meetings	40.000
Management, Review, coordination, monitoring and reporting, formulation of the plan	160,000
Total	200,000

Performance-Based Payment (PBP) Schedule to FECO/MEP for the Preparation of HCFC Phaseout Management Plan (Stage II) – Overarching Strategy

Table 5

Payment (Indicative)	Disbursement (US\$160,000)	Indicators/Milestones
First disbursement on Signature of the Project document	30% of fund (US \$48,000)	- Project Document is finalized and signed between FECO/MEP and UNDP.
Second disbursement	50% of fund (US \$80,000)	<ul> <li>Submission of report of the first workshop.</li> <li>Signature of agreement between FECO and Peking University</li> </ul>

Third disbursement	20% of fund (US \$32,000)	<ul> <li>The final version of the HPMP Stage II         Overarching Strategy</li> <li>Confirmation letter of FECO for submission         of project proposal to ExCom</li> </ul>
Total	US \$160,000	

### VI. MONITORING FRAMEWORK AND EVALUATION

### 7.1 Monitoring & Verification

The activities of Monitoring & Verification include the following:

### a) Financial Audit:

In accordance with the agreement between UNDP and the Chinese Government, an annual financial audit on UNDP National Execution (NEX) projects in China will be conducted by an independent contractor. According to the agreement, if the project achieved the annual expenditure exceeded the UNDP defined minimum the project will participate in the financial audit. The project will be audited at least one time during its project life cycle. The financial audit aims to verify:

- If the project fund has been appropriately applied which are in line with the Project Document between UNDP and FECO.
- If the project fund has been appropriately disbursed. If the project has achieved certain progress which are defined in the project document and the annual work plan.

The invited auditing agency will formulate an auditing report to UNDP China Country Office and share with FECO/MEP. If there are any qualified issues which are verified in the financial audit, the related payment will be suspended until the issues to be worked out by the responsible parties and accepted by UNDP.

### b) Review Meetings

Two official review meetings between UNDP and FECO/MEP will be conducted in the year, one of them to be arranged prior to the submission date of HCFC Phase-out Management Plan (Stage II). The objective of the meetings will be to review progress of implementation of preparation projects of each sector. The review meeting will also review the progress of the seven sector plans and the Overarching Strategy prior to the submission.

### c) Monitoring & Evaluation

Monitoring will include a continuous review of the various project components and will be intended to (i) measure the progress towards meeting the overall project objectives and (ii) alert implementing partners to potential problems in implementation and propose corrective measures. Monitoring visits can be undertaken by UNDP on annual basis. Such visits could be done in connection with the official meetings to be held between partners. An independent expert, if necessary, could be invited to join the visit.

### 7.2 Quality Management for Project Activity Results

OUTCOME: Stage II HCFC Phase-out Management Plan Overarching Strategy in China

**Output:** The following activities contribute to achieving the above outcome.

• Organization of National Stakeholder Coordination meetings.

- Development and implementation of monitoring and coordination.
- Planning, review & reporting on project implementation.
- Coordination between project management teams of seven sector plans to formulate **Stage II** HCFC Phase-out Management Plan Overarching Strategy in China

Quality Criteria	Quality Method	Date of Assessment
Description	<ul> <li>Coordination with stakeholders and partners on a</li> <li>Organization of national coordination meetings a</li> <li>Finalization of meeting minutes.</li> </ul>	•
Purpose	Coordinate with local and international stakeholders formulation of 7 sector plans for phase out HCFCs in	1
Result 1	The National Stakeholders are well Coordinated through the national coordination meetings.	Start Date: March, 2015 End Date: August, 2016

Quality Criteria		Quality Method	Date of Assessment
National stakehold meeting organized		Meeting minutes	No later than November each year
Result 2		g strategy HPMP for Stage II are coordinated, monitored and onal level.	Start Date: March. 2015 End Date: August. 2016
Purpose	Management Pla	curate and timely submission of Stan Overarching Strategy of China by espective implementing agencies.	_
Description	review the pr • Compilation	etween project management teams o ogress on regular basis; of sector plans from seven sectors; on project implementation and the s	
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Quality Criteria	Quality Method	Date of Assessment
The activities are conducted on time and the documents are timely submitted.	Sector plans and overall management plan.	Submission to the 76 <sup>th</sup> Executive Committee Meeting in 2016.  No later than June 2016.
National coordination provided	Local experts involvement	Implementing agencies are involved

### VII. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement (SBAA) between the Government of the People's Republic of China and the United Nations Development Programme, signed by the parties on 29 June 1979.

Consistent with the Article III of the SBAA, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the executing agency.

The executing agency shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) Assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999).The list can be accessed http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm, This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

In addition, the following types of revisions may be made to this Project Document with the signature of the UNDP resident representative only, provided he or she is assured that the other signatories of the Project Document have no objections to the proposed changes:

- 1. Revision in, or addition of, any of the annexes of the Project Document;
- 2. Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation; and
- 3. Mandatory annual revisions that rephrase the delivery of agreed project inputs, or reflect increased expert or other costs due to inflation, or take into account agency expenditure flexibility.

### VIII. ANNEX

### **ANNEX-I: RISK ANALYSIS**

**ANNEX-II**: Final version of the project proposal for Preparation of Overarching HCFC Phase-out Management Plan (Stage II) submitted and approved at the 73<sup>rd</sup> Executive Committee Meeting, with funding approval at US \$200,000

### ANNEX-I

## RISK ANALYSIS

Description	Date identified	Type	Impact and Probability (Low 1 to High 5)	Counter Measures	Owner
Delay in completion of project deliverables such as national stakeholder coordination meetings, implementation plan and progress reports to MLF etc.	Project initiation date	Operational	Operational Probability – 3 Impact - 4	Close coordination with FECO/MEP and periodic monitoring of project tasks. Facilitating timely completion of tasks.	FECO/MEP, UNDP
Delay in monitoring and coordination in seven sector plans	Project initiation date	Operational	Operational Probability – 3 Impact - 4	Consultation with experts and closely monitoring the progress of the implementation of sector plans at the national level	FECO/MEP, UNDP

### **ANNEX-II**

### PEOPLE'S REPUBLIC OF CHINA PREPARATION OF OVERARCHING HCFC PHASE-OUT MANAGEMENT PLAN

(STAGE II – For compliance with 2020 target)

### 1. Background

In July 2008, the 55<sup>th</sup> meeting of the Executive Committee (ExCom) approved 9 HPMP preparation projects of China including 6 consumption sector preparation projects, a production sector preparation projects, an overarching HPMP strategy and an enabling program. In 2011, the Executive Committee approved, in principle, Stage I of the HCFC phase-out management plan of 6 consumption sectors for China including a national coordination project and an enabling program for the period 2011 to 2015 in the amount of US \$270 million. In April 2013, the 69<sup>th</sup> ExCom meeting approved the HCFC Phase-out Production Sector Management Plan (HPPMP) with a total of US \$95 million for the HPPMP in China (Stage I) to meet the freeze and 10 per cent reduction of China's Montreal Protocol HCFC baseline.

The 64<sup>th</sup> ExCom meeting approved the national coordination project of USD 360,000 with UNDP as the leading implementing agency. The activities of the national coordination project mainly include national stakeholder coordination as well as review, coordination, monitoring and reporting. Through these activities, the national coordination project aims to assist the Government of China to meet the 2013 and 2015 control measures of the Montreal Protocol for HCFCs for both the production and consumption sector.

Based on the experience accumulated during implementation of Stage I HPMP, it is very important to continue to develop an overarching strategy of HPMP for Stage II (2015-2020) to enable China to meet the 2020 control measures of the Montreal Protocol for HCFCs for both the production and consumption sector. Preparation of the overarching strategy for HPMP Stage II will involve data analysis, alternative technology evaluation, policy and regulation framework review, stakeholder consultation, preparation of proposal etc., which is expected to take a period of 12 month. The proposed budget for the preparation project is USD 289,750.

### 2. Background and coverage

### 2.1 HCFC production and consumption profile

The production and consumption of HCFCs in China involves 7 sectors: HCFC production sector, Polyurethane Foam sector, Extruded Polystyrene Foam sector, Room Air Conditioning sector, Industrial and Commercial Refrigeration and Air Conditioning sector, Solvent sector and Servicing sector. With the development of national economy, the HCFCs production and consumption of China keep growing. According to the Agreement between China and the ExCom for the production and consumption sector, the baseline of the production and consumption sectors is respectively 29,122 ODP tons and 18,865.44 ODP tons.

The overall production and consumption of HCFCs has grown in China during the period 2009-2012, with an annual average growth rate of about 7% and 4% respectively. Particularly, the production and consumption of HCFC-22 has increased about 22% and 13% during the period 2009-2012, and those of HCFC-141b has increased about 27% and 24%, during the same period.

### 2.2 Policies and regulations

A number of national regulations have been enacted in the past years. So far more than 100 policies and regulations on ozone layer protection and ODS phase-out have been formulated and issued in almost every relevant areas to regulate ODS activities. As soon as the accelerated HCFC phase-out schedule was agreed, China upgraded related policies to control production and consumption of HCFCs. In 2008 and 2009, two important Circulars were issued by the Ministry of Environmental Protection to curb the increase of production and consumption of HCFCs. Later on, the Regulation on Management of Ozone Depleting Substances was approved by the State Council in 2010 which marks a milestone of ODS legislative efforts in China.

In August 2013, MEP issued a "Circular on the Management of HCFC Production, Sales and Consumption", which establishes a quota management system for production and consumption of HCFCs in China. All the production enterprises should apply for a quota for HCFC production and production enterprises should not produce beyond the amount specified in its quota. Enterprises whose annual consumption of HCFC is more than 100MT should also apply for a quota. Additionally, the revised version of the "Circular on the Management of the Import and Export of ODS" came into force on 1st March 2014.

### 2.3 Implementation of HPMP Stage I and lessons learned

According to the Agreement between the ExCom and China for the production and consumption sectors, the national level of HCFCs consumption shall be limited to 18,865 ODP tons in 2013 and 16,979 ODP tons in 2015 and the national level of HCFC production shall be limited to 29,122 ODP tons in 2013 and 26,210 ODP tons in 2015.

The Government of China has worked closely with Industrial Associations to encourage enterprises to participate in the conversion. The PMO reviewed the eligibilities of the enterprises and carried out site visit and verification of HCFCs consumption. By August 2014, PMO has signed contracts with 101 enterprises for conversion projects. A preliminary data suggested that about 34,648 metric tons of HCFCs will be phased out through implementation of these conversion projects and many enterprises selected zero ODP and low GWP alternatives to replace HCFCs which will be in line with the overall strategy of China HPMP and will result in the maximum environmental benefits. MEP issued quotas to all the production enterprises and a number of large consumption enterprises to control the overall production and consumption in 2013 and 2014. Since 2011, MEP/FECO held coordination meetings annually to review the progress in implementation of sector plans and strengthen coordination and management at the national level. So far, the first three tranches of the consumption sector and the first two tranches of the production sector have been approved and released by the ExCom.

China is faced with unprecedented challenges on phasing out large quantities of HCFCs in a relatively very short period of time. The overarching HPMP and the national coordination project played a very important role in the implementation of HPMPs Stage I. Effective and efficient coordination and management at the national level ensures smooth implementation of sector plans, which should continue to be carried out in subsequent stages.

### 2.4 Proposed activities of HPMP Stage II preparation

As per the HCFCs accelerated phase-out schedule, HPMP Stage II shall phase out at least 25% of the baseline for HCFC production and consumption in addition to what is achieved in Stage I. The HCFC production and consumption of China shall not exceed 18,929 ODP tons and 12,262 ODP tons in 2020.

### 2.4.1 Data update and analysis

It is necessary to analyze historical data on HCFC production, consumption, import and export at the national level, as well as consumption data at the sector level, in particular the data from 2011 to 2013. Based on the implementation of the HPMP Stage I, information on different sectors such as industry profiles,

HCFC production and consumption trend, distribution by sector/subsector etc. shall be updated. With the above information and data collected, obstacles or challenges faced by China at Stage II shall be further analyzed.

### 2.4.2 Policy and regulation framework review

Based on implementation of Stage I HPMP, ODS national management mechanism as well as existing policies and regulations shall be reviewed, and detailed rules on the Regulation on ODS Management shall be developed. New policies and regulation should be proposed based on the requirement for achievement of compliance targets at Stage II. For example, coordinating with relevant domestic authorities to make research on policy measures including industry policy adjustment, government procurement, and green product certification to encourage application and dissemination of low-GWP alternatives.

### 2.4.3 Alternative technology evaluation

Application of the alternative technologies of Stage I shall be reviewed. Development of alternative technologies of home and abroad shall be updated and analyzed, and establish alternative technology roadmap for HPMP Stage II.

### 2.4.4 Stakeholder coordination

As an integral part of China's overarching HPMP for compliance with 2020 target, China will need to develop 7 sector level HPMPs Stage II covering PU foam, XPS foam, RAC, ICR, solvent, refrigeration servicing and production sectors. Development of these sector plans will require effective and efficient coordination at the national level to enable China to meet the 2020 target. To formulate HCFC phase-out strategy for Stage II, stakeholder workshops will be held with participants from international implementing agencies, bilateral countries, industrial associations, research institutes and universities, and experts etc. Coordination mechanism of Stage I shall be analyzed and reviewed. Relationship among sectors shall be further discussed and strategy for Stage II HPMP should be formulated.

### 2.4.5 Preparation of HPMP Stage II

Based on data collected and analyzed, as well as consultation with stakeholders, the overarching HPMP Stage II will be prepared. The sector level HPMPs will be incorporated into the overarching HPMP to ensure compliance at the national level. Based on an analysis on status quo of HCFC production and consumption, the overarching HPMP Stage II will include policy measures, phase-out strategy, alternative selection and funding requirement etc. The draft overarching HPMP Stage II will be circulated by MEP/FECO among international agencies and national stakeholders for comments. The overarching HPMP Stage II will be revised based on the comments collected and the final version will be submitted to the ExCom meeting.

### 3. Timelines for preparation

The timeline for preparation of the overarching HPMP Stage II is as following:

	Q1	Q2	Q3	Q4
Inception meeting	X			
Field survey planning			_	
Data collection	-	X	X	
Data analysis		X	X	
Project preparation			X	
Stakeholder consultations			X	
Project document finalization				X

The HPMP Stage-II overarching strategy document is expected to be finalized by end of 2015 and will be submitted to the  $76^{th}$  Meeting of the Executive Committee.

### 4. Project costs and break-down

The project preparation costs for sector projects can be given in the table below.

Component	Particulars	Cost in USD
Workshops/meetings	Inception/ stakeholder consultations on technology issues/finalisation	40,000
Project development including data collection and analysis	options assessment including technical support, project development and implementation plan development	
Management, communications and	including support during stakeholder consultations  Travel for FECO staff for preparation, communication, printing including outreach and other miscellaneous costs	234,750
miscellaneous		15,000
	Grand total	289,750