UNITED NATIONS EP



United Nations Environment Programme Distr. GENERAL



UNEP/OzL.Pro/ExCom/75/32 16 October 2015

**ORIGINAL: ENGLISH** 

EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Seventy-fifth Meeting Montreal, 16-20 November 2015

**WORLD BANK'S WORK PROGRAMME AMENDMENTS FOR 2015** 

#### COMMENTS AND RECOMMENDATION OF THE FUND SECRETARIAT

1. The World Bank is requesting approval from the Executive Committee of US \$544,650, plus agency support costs of US \$41,625 for its 2015 work programme amendments listed in Table 1. The submission is attached to the present document.

Table 1: The World Bank's work programme for 2015

Country	Activity/Project	Amount Requested	Amount Recommended
		(US \$)	(US \$)
SECTION A: ACTIVITIE	S FOR BLANKET APPROVAL		
A1: Project preparation			
T 1	Preparation of HCFC phase-out management plan (stage II) (overarching strategy)	70,000	70,000
Jordan	Preparation for HCFC phase-out investment activities (stage II) (foam sector)	45,000	45,000
	Subtotal for A1	115,000	115,000
Agency support costs (7 per	cent for project preparation):	8,050	8,050
	Total for A1	123,050	123,050
A2: Technical assistance f	or preparation for ODS surveys		
Philippines	Survey of ODS alternatives at the national level	130,000	130,000
Viet Nam	Survey of ODS alternatives at the national level	45,000	45,000
	175,000	175,000	
Agency support costs (9 per	cent for technical assistance):	15,750	15,750
	Total for A2	190,750	190,750
<b>SECTION B: ACTIVITIE</b>	S FOR INDIVIDUAL CONSIDERATION		
B1: Project preparation			
China	Preparation of a HCFC production phase-out management plan (stage II)	254,650	*
	Subtotal for B1	254,650	
Agency support costs (7 per	cent for project preparation):	17,825	*
	Total for B1		
	Grand total (A1, A2 and B1)	586,275	313,800

<sup>\*</sup>For individual consideration

#### SECTION A: ACTIVITIES FOR BLANKET APPROVAL

#### A1: Project preparation

<u>Jordan: Preparation of a HCFC phase-out management plan (HPMP) (stage II) (overarching strategy)</u> (US \$70,000)

Jordan: Preparation for HCFC phase-out investment activities (stage II) (foam sector) (US \$45,000)

#### **Project description**

2. The World Bank, on behalf of the Government of Jordan, has submitted a request for the preparation of stage II of the HPMP for Jordan at the levels of funding indicated in Table 1. This request is in addition to the funding requested in UNIDO's work programme amendments<sup>1</sup> for part of the activities in the foam sector. The submission included a progress report on the implementation of stage I of the HPMP, justification for the requested funding, the activities to be implemented and the corresponding budgets.

#### **Secretariat's comments**

- 3. The Secretariat noted that the request is within the limits set by decision 71/42(d), (f) and (g) based on the remaining eligible HCFC consumption of 68.8 ODP tonnes<sup>2</sup>. In addition to the overall strategy for stage II, the World Bank will be responsible for the overall foam sector plan (including UNIDO's component) and preparing projects for small foam enterprises.
- 4. The Secretariat further noted that a tranche request for stage I of the HPMP<sup>3</sup> for Jordan has been submitted to the 75<sup>th</sup> meeting. The tranche request included a proposal for a revised work plan and an updated Agreement that would enable Jordan to complete stage I of the HPMP at an earlier date.

#### **Secretariat's recommendation**

5. The Secretariat recommends blanket approval of the requests for project preparation for stage II of the HCFC phase-out management plan (overarching strategy), and part of the HCFC phase-out investment activities in the foam sector for Jordan at the level of funding indicated in Table 1.

#### A2: Technical assistance for preparation for national surveys on ODS alternatives

The Philippines: Survey of ODS alternatives at the national level (US \$130,000) Viet Nam: Survey of ODS alternatives at the national level (US \$45,000)

#### **Project description**

6. The World Bank has submitted funding requests to conduct national surveys on alternatives to ODS for the Philippines and Viet Nam in response to paragraph 4 of decision XXVI/9<sup>4</sup>. The objective of the surveys would be to assist these Article 5 countries to better understand their consumption trends for non-ODS alternatives, and their distribution by sector and subsector.

<sup>&</sup>lt;sup>1</sup> UNEP/OzL.Pro/ExCom/75/31.

<sup>&</sup>lt;sup>2</sup> Jordan may receive up to a maximum of US \$70,000 for the overarching strategy and US \$100,000 for the investment component of the HPMP.

<sup>&</sup>lt;sup>3</sup> UNEP/OzL.Pro/ExCom/75/50.

<sup>&</sup>lt;sup>4</sup> The Parties to the Montreal Protocol decided inter alia "to request the Executive Committee of the Multilateral Fund to consider providing additional funding to conduct inventories or surveys on alternatives to ozone-depleting substances in interested parties operating under paragraph 1 of Article 5 upon their request".

#### **Secretariat's comments**

7. The Secretariat noted that the funding requests are in line with decision 74/53(d). In the case of Viet Nam, the World Bank is requesting less than half of the funding it is eligible for, to account for an inventory of the HFC consumption under current implementation, with funding from the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC).

#### **Secretariat's recommendation**

8. The Secretariat recommends blanket approval of the requests for national surveys of ODS alternatives in the Philippines and Viet Nam, at the level of funding indicated in Table 1, noting that in the case of Viet Nam, the funding requested had taken into account an on-going survey funded outside the Multilateral Fund.

#### SECTION B: ACTIVITIES FOR INDIVIDUAL CONSIDERATION

#### **B1: Project preparation**

China: Project preparation for stage II of the HCFC production phase-out management plan (HPPMP) (US \$254,650)

#### **Project description**

9. The World Bank, on behalf of the Government of China, has submitted a request for the preparation of stage II of the HPPMP for China at the level of funding of US \$304,260, as originally submitted. The request was supported by a brief progress report on the implementation of stage I of the HPPMP, the objectives, scope, activities to be undertaken, timeline for preparation, and budget for the funding requested.

#### **Secretariat's comments**

- 10. Upon a request for clarification, the World Bank indicated that during the preparation of the project, it would take into consideration the Secretariat's analysis on the remaining eligible consumption (submitted to the 74<sup>th</sup> meeting) and the UNEP Technical and Economic Assessment Panel (TEAP) 2014 assessment report on the forecast of HCFC demand. The World Bank also revised the costs for the consultant to prepare the demand analysis resulting in a reduction of US \$49,610 of the level of funding originally requested.
- 11. The Secretariat also reviewed the request for the preparation of stage II of the HPPMP for China in light of decisions 71/23(b) and (c)<sup>5</sup> and decision 73/27(c)(ii)a<sup>6</sup>. In responding to a query from the Secretariat, the World Bank confirmed that stage II of the HPPMP for China would be submitted to the 77<sup>th</sup> meeting in 2016.

#### **Secretariat's recommendation**

12. In light of decisions 71/23(b) and (c) and 73/27(c)(ii)a, the Executive Committee might wish to approve the request for project preparation for stage II of the HCFC production phase-out management

<sup>&</sup>lt;sup>5</sup> The Executive Committee removed the allocation related to the preparation of stage II of the HPPMP for China from the World Bank's business plan for 2014-2016 on the understanding that it could be reinstated at a later date for consideration by the Executive Committee; and removed the allocation for stage II of HPPMP implementation for the year 2016 in the World Bank's 2014-2016 business plan, noting that China might decide to submit a proposal in 2016 for stage II of the HPPMP to commence in 2017.

<sup>&</sup>lt;sup>6</sup> The Executive Committee removed from the consolidated 2015-2017 business plan of the Multilateral Fund project preparation activities for stages I and II of HPPMPs.

plan (HPPMP) for China at the level of funding of US \$254,650 plus support costs of US \$17,825 for the World Bank, noting that the Government of China would be allowed to submit stage II of the HPPMP in 2016 together with a funding request for the approval of first tranche of stage II also in 2016.

## 2015 BUSINESS PLAN WORK PROGRAM AMENDMENT



# WORLD BANK IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

Presented to the 75<sup>th</sup> Meeting of the Executive Committee of the Multilateral Fund

21 September 2015

#### WORK PROGRAM FOR

#### WORLD-BANK IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

- 1. This proposed work program amendment for Bank-Implemented Montreal Protocol Operations is prepared on the basis of the 2015-2017 World Bank Business Plan which was approved by the Executive Committee at its 73<sup>rd</sup> meeting.
- 2. The 2015-2017 World Bank Business Plan consists of investment and non-investment activities to assist Article 5 partner countries to meet their two HCFC reduction targets, the 2015 10% reduction and the 2020 35% reduction. The Business Plan includes, in addition to deliverables associated with previously approved and new investment activities, requests to extend support for implementation of existing institutional strengthening projects in two countries.
- 3. As part of the 2015-2017 Business Plan, the World Bank plans to submit new preparation fund requests for HCFC sector plans Stage II for Argentina, Jordan, and Thailand, including foam demonstration project for Thailand, and project proposals for Argentina, China, Indonesia, Jordan, the Philippines, Thailand and Vietnam.

#### 2015 Work Program – ExCom 75 Amendment

- 4. The proposed 2015 Work Program Amendment being submitted for consideration at the 75<sup>th</sup> Meeting of the Executive Committee, includes funding requests for three preparation activities. In addition, two countries are seeking funding for surveys of ozone depleting substances (ODS) alternatives. Full funding is requested for a survey in the Philippines, whereas less than half of the maximum funding permitted for Vietnam is requested in accordance with Executive Committee Decision 74/53(d). Vietnam is in the process of conducting an HFC inventory under the Climate and Clean Air Coalition. However, the funding is insufficient to cover the scope of work to be covered by the Multilateral Fund surveys, namely all ODS alternatives rather than solely HFCs.
- 5. The funding requested per activity is outlined in Table 1 below. Please refer to **Error! Reference source not found.** for the Stage II HCFC Phaseout Management Plan (HPMP) preparation request for Jordan and Annex II for the Stage II HCFC Production Phaseout Management Plan (HPPMP) preparation request for China.

Table 1: Funding Requests Submitted for Consideration by the 75<sup>th</sup> Meeting of the Executive Committee

Country	Request (US\$)	Support Costs (US\$)	Duration	Description
China	254,650	17,826	1 year	Project preparation for Stage II HPPMP
Jordan	70,000	4,900	1-2 years	Project preparation for Stage II HPMP, further to Decision 68/36, and in accordance with Decision 71/42
Jordan	45,000	3,150	1-2 years	Project preparation for Stage II HPMP, foam sector (partial), further to Decision 68/36, and in accordance with Decision 71/42
Philippines	130,000	9,100	1 year	Preparation of ODS Alternatives Survey in accordance with MOP Decision XXVI/9 and ExCom Decision 74/53
Vietnam	45,000	3,150	1 year	Preparation of ODS Alternatives Survey in accordance with MOP Decision XXVI/9 and ExCom Decision 74/53
Global	0	1,725,000	1 year	Agency Core Unit Costs
Total	549,160	1,763,126		

# **Annex I Project Preparation Request: Jordan Stage II, HPMP**

#### **Progress under Stage I HPMP**

The agreement between the Government of Jordan and the Executive Committee of the Multilateral Fund (MLF) for the reduction of HCFCs through the Stage I HCFC Phaseout Management Plan (HPMP) encompasses the period 2012-2017 and allocates resources for HCFC reductions through 2016 in the air-conditioning (AC) manufacturing sector primarily. The assistance provided aimed to enable Jordan's compliance with maximum allowable consumption targets established in the agreement, culminating with 66.4 ODP tonnes in 2017. Reductions expected under Stage I amount to 25.51 ODP tonnes of HCFC consumption: 22.32 ODP tonnes of HCFC-22 and 1.19 ODP tonnes of HCFC-141b in in AC manufacturing, and, 2 ODP tonnes of HCFC-22 in the servicing sector.

Implementation of the Stage I HPMP is underway and on target for physical completion by 2017. However, one of the three beneficiaries under the AC Sector Plan (68% of the grant for the enterprises at US\$1.3 million) has undergone financial difficulties and is under a lengthy restructuring that has not yet completed. It has not manufactured AC units since 2013 and hence has ceased the use of HCFC-22. The Government of Jordan will seek cancellation of this subproject at the 75<sup>th</sup> Meeting of the Executive Committee.

Absent of this enterprise which has greatly impacted the rate of disbursement, the project is steadily advancing with both remaining enterprises expected to complete their conversions by the end of this year. One enterprise has received all equipment and has begun installation as well started prototype development. The second enterprise is expecting its new equipment in October and will completed installation by November. It too has begun developing prototypes with support of the Royal Scientific Society of Jordan. The Petra component, implemented by UNIDO (the Lead Implementing Agency for Stage I) has already completed.

Under the technical assistance component of the HPMP, activities have consisted of workshops for Customs officers and for the Standards and Metrology Organization. Workshops also have included the launch of Jordan's national AC sector plan and a workshop for regulators on the future ban of HCFC-22 in AC manufacturing. Staff have provided support through the project management unit in AC sector plan implementation through site visits and consultations. The servicing sector demonstration activity has been initiated with the development of a work plan, terms of references and identification of institutions that will partner in the work.

In terms of policy measures, the Government of Jordan has introduced a quota system for controlling HCFCs, in force now since 1 January 2013.

#### Preparation Activities for Stage II of Jordan's HPMP

The subsequent compliance period requiring support, starting in 2018, will involve new sectors. Taking into account ExCom Decision 65/40(d), the foam manufacturing sector will be

prioritized. However, given that HCFC-22 consumption has only experienced a slow decline as opposed to that in HCFC-141b, it is clear that the remaining refrigeration sectors (commercial refrigeration manufacturing and servicing) need to be assessed in preparation to determine whether and to what degree they should be addressed in Stage II. Experience under the Stage I HPMP indicates that approximately two years are required for the preparation and approval of an HCFC phaseout strategy and the sector plan. In addition, as a major component of the AC sector plan will be cancelled and remaining investment activities having a direct bearing on curbing demand will be completed, Jordan is eager to begin developing future investment activities to support it in reductions starting in 2018. The WBG is therefore seeking project preparation funding on behalf of the Government of Jordan to initiate project preparation as outlined in the tables below.

#### **Overall Stage II HPMP Preparation**

Activities to be Undertaken and Information to be Collected and Updated

Activity		Information to be Collected/Updated	Cost
Survey work	•	Review and assessment of the degree of validity of Stage I HPMP data as well as gaps that need to be filled since 2009 data collection.  Data collection including, overall consumption patterns by HCFC substance and sector with emphasis on HCFC-141b as well as HCFC-22 consumption data that was not funded under Stage I.  Corroboration of survey data through site visits (agreed percentage of users).  Inclusion of servicing sector in survey work to better assess the type/size of typical providers, nature of work and options/readiness for introduction of climate-friendly, potentially flammable replacements.	45,000
Technology assessment	•	Consideration of the range of non-ODS, technically proven, and commercially available alternatives, including climate-friendly alternatives to HCFCs; will supplement the requisite assessments at the sector, subsector level.	7,000
Stakeholder workshops (2) and consultations	•	Kick-off workshop to discuss plans for Stage II preparation, replacement technologies and existing and planned regulation.  A second workshop to present the final Stage II strategy and associated data,	15,000

	validate data, and secure stakeholder commitment.	
Policy development	Initiation of additional policy measures for new HPMP sectors through inter- ministerial and sector-wide consultations.	3,000
	Total	70,000

## **Sector Plan Preparation Requests**

Stage II Sector to be Prepared	Amount of Preparation Funding Requested (US\$)	Number of Enterprises	Explanations
Foam Sector	45,000	20+	The funding is being sought for part of the foam sector – industrial SMEs (UNIDO will target the large enterprises) Most of these smaller manufacturers of foam products (in rigid PU foam), consuming about 60% of HCFC-141b in 2014 are known but because the HPMP Stage I had not intended that they be addressed until a 2 <sup>nd</sup> or 3 <sup>rd</sup> phase, more details are required. It is also assumed that since five years of the initial survey some have exited the market and new ones have entered. Funding will in part go to international expertise (for low-GWP technologies, project design).

#### Annex II

# Request for Project Preparation (PRP) for Stage II of HCFC Production Phase-out Management Plan (HPPMP) in China

#### 1. Background

At the 19th Meetings of the Parties held in September 2007, the Parties agreed to accelerate the HCFC phase-out schedule. As an Article 5 country, China was required to freeze the production and consumption of HCFCs at the average level of 2009 - 2010 (baseline) by 2013, to realize 10%, 35%, 67.5% reductions in 2015, 2020 and 2025, respectively, and achieve complete phase-out of HCFCs by 2030 with a 2.5% remaining allowed production and consumption of HCFCs to meet the residual demand in the servicing sector during the period of 2030 – 2040.

In cooperation with the World Bank, one of the implementing agencies to the Multilateral Fund for the implementation of the Montreal Protocol, the Sector Plan for Phase out of HCFCs in the Production in China (phase I) was submitted to the 66th ExCom meeting for approval in July 2012, and was approved at 69th ExCom meeting with a funding of US\$95,000,000 grant. The objective of the HPMP in production sector in the first stage (2011-2015) is to ensure the HCFC production in China is frozen on an average level of 2009-2010 by 2013 and realizes 10% reduction from the freeze level by 2015. To realize these targets, the sector plan covers enterprise level phase-out, policy-making and technical assistance activities. According to the sector plan, around 47,256 MT of HCFCs, equivalent to 3,970 ODP tonnes, will be phased out by the year 2015.

In the second stage (2015-2020), to continue the phase-out of HCFCs and achieve the 2020 target of phasing out 35% of HCFC production from the baseline level, the HPMP (stage II) of production sector is to be prepared, and will continue to organize the investment activities, policy development, and technical assistance (TA) activities. This document presents the intended coverage, time-lines and costs for the preparation for Stage II.

#### 2. Sector background and coverage

#### 2.1. Sector Background

China produces a variety of HCFC including HCFC-22, HCFC-141b, HCFC-142b, HCFC-123 and HCFC-124. The first three accounts for 99% of total production and are used primarily as refrigerants, foam blowing agents and feedstock. For HCFC-22, HCFC-141b and HCFC-142b, there are 16, 8 and 12 manufacturers, respectively. Total production capacity in 2010 was around one million tons. China HCFC production, excluding feedstock, was 445,887 tons in 2010. In terms of metric tons, HCFC-22 production is about 71% of the total production, follow by HCFC-141b (22%) and HCFC-142b (6%). Phasing out HCFC will pose a very significant challenge to China as HCFC production and consumption plays a critical role in China's economy in terms of raw materials consumed, sectors covered, volume produced and economic value.

#### 2.2. Implementation Progress of HPMP (stage I) and lessons learnt

Since approval of the Sector Plan, China has initiated various activities to ensure the smooth implementation of the sector plan. With regard to policy actions, in order to duly achieve the freeze target in 2013 and 10% reduction in 2015, China has already issued the ODS regulations, strict control of HCFC Production facilities and establishment of facilities, and introduced the quota management in the

production sector. As a result of conversion activities carried out under the sector plan, collaborating with policy measures as well as series of TA activities, China has realized the freeze target for 2013, and implementation of the production sector is also on track as per the commitments set out in the sector plan.

In terms of policy actions, the HCFC export/import license system was implemented and HCFC production and consumption quota system has been implemented since 7 August 2013. A national HCFC production quota of 426,540 MT (28,633 ODP) which includes 281,037 (18,560 ODP) for domestic use was issued for 2013 and 2014. According to the verification report on 2013 and 2014 production conducted by the World Bank's independent verification team, it shows that the overall production for controlled use and production for domestic sales are within the quotas issued for both 2013 and 2014.

HCFC production in 2009-2014 (ODP tonnes)

	2009	2010	2011	2012	2013	2014	Baseline
Production	28,200.60	30,043.30	32,106.07	34,413.51	26,599.33	27,180.28	29,122.00

For meeting the freeze target in 2013, mandatory production reduction was employed. By end of December 2013, 6 HCFC-141b enterprises and 6 HCFC-142b enterprises signed the phase-out contracts with FECO for their reduction from the 2010 level to baseline for a total amount of 10,427 MT of production reduction. Meanwhile, several TA activities were carried out to lay down a solid foundation for smooth implementation of phase-out activities in future. The actual phase-out amount in 2013 compared to 2010 was 51,028.71 MT with an estimate of climate benefit of about 96.33 Million tons of CO2eq emission reduction.

In order to address the 10% reduction in 2015, the bidding for HCFC production line closure projects has been initialed at earlier of August 2014, and the contracts with bid winners are expected to be signed by end of October 2014. Through bidding five production line closure contracts were signed by end of 2014 with the total amount of US\$ 75,072,965. In accordance with the 2015 production line closure contracts with 5 HCFC producers, the five producers have, in effect, surrendered their production quotas of 58,864 MT to MEP on 2013 freeze level and agree to close down and dismantle their production facilities, which have a combined capacity of 88,000 MT. Idle capacity of these five lines in 2010 was 17,908MT and the additional capacity phase-out funded by MLF in 2015 will be 27,116MT. At end of Stage I HPPMP, China will not only meet their 10 per cent production reduction but also to achieve at least 25 per cent of its overall target (107,013 MT) for additional production capacity to be retired as per para.6 (a) of the Agreement. For 2015, it is estimated that at least 86.43 million tons of CO2 equivalent for climate cobenefit will be achieved through HCFC production reduction.

During the implementation of stage I so far, except the funding incentive to encourage the phase-out activities at the enterprise level, quota system is the most effective manner to ensure the China's compliance with the Montreal Protocol. Combination of financial incentives and "tradable" production quota system has shown to be effective tools in enabling China to meet its production control targets. Coordination among management of HCFC production, consumption and import & export is also the key element for China's compliance with the Montreal Protocol.

#### 3. Preparation of HPMP (stage II)

#### 3.1. Objective

The objective of this assignment is to develop a HCFCs Production Phase-out Management Plan for stage II with funding request for China to ensure its production for controlled use will not exceed 18,929 ODP tons by 2020. The plan will include a production phase-out strategy for each HCFCs taking into account current and future demand of HCFCs and expected HCFCs consumption reduction from MLF funded

activities in China and other A5 countries, in order to maintain a balance between global demand and supply of HCFCs.

#### 3.2. Scope of works

In order to properly develop the HPMP (stage II) for the production sector, the preparation work will mainly include:

- Review experience and lessons learned from implementation of Stage I HPPMP;
- Determine the demand of each HCFCs in China and other Article 5 countries during the past three years and in the future by reviewing all the HPMP agreements between the ExCom and other A5 countries;
- Conduct consultation with relevant industrial sectors in China and with key non-LVC countries regarding their phase-out policies and future demand of HCFCs;
- Review any potential industrial rationalization including closure in the HCFC production industry in China:
- Develop a comprehensive HCFC production phase-out strategy, reduction schedule, implementation modality, policies framework, technical activities for each HCFC taking into account the need to maintain a balance between the global supply and demand of HCFCs.
- Determine the funding needed for stage II, taking into account different kinds of influencing factor and key sensitivity parameters;

#### 4. Timelines for preparation

Overall time plan for implementation of the preparation project during the 12 months is given in the table below:

	Q1	Q2	Q3	Q4
Inception meeting	X			
Review current domestic	X	X		
demand and HPMP of other				
A5 countries				
Analysis on future demand	X	X		
for HCFCs in China and other				
A5 countries for stage II				
Funding needed for stage II		X	X	
Stage II HPPMP formulation		X	X	
Stakeholder consultations			X	X
Finalization of stage II				X
HPPMP				

#### 5. Project costs

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

Particulars	Units	Nos.	Value in USD
Workshops	8,000	4	32,000
National consultant service (analysis on future demand,	200	150	30,000
industry rationalization, global demand and supply,			
reduction schedule, cost calculation and project			

formulation)			
Domestic travel for stakeholder consultation and enterprise	800	30	24,000
visits			
International travels and accommodation for Chinese	6,000	2	12,000
experts			
Consultation workshops with non-LVC in China	6,000	8	48,000
Communication, translation, printing, etc.			5,000
Development of Project Implementation Modality taking			62,800
into account industrial rationalization and the global			
demand and supply			
Review the consultant's report and finalize the HPPMP			17,700
document			
Sub-total			231,500
Contingency (10%)			23,150
Total			254,650