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执行蒙特利尔议定书
多边基金执行委员会
第七十二次会议
2014年5月12日至16日，蒙特利尔

2014年工发组织工作方案

基金秘书处的评论和建议

1. 工发组织请执行委员会为表 1 所列其 2014 年工作方案核准 965,323 美元，外加 67,573 美元的机构支助费用。来文载于本文件后。

表 1：2014 年工发组织工作方案

国家	活动/项目	所需数额 (美	建议数额 (美元)
A节：建议一揽子核准的活动			
A1：体制建设项目延长			
埃及	体制建设延长（第十阶段）	228,323	228,323
	机构支助费用（体制建设项目的 7%）	15,983	15,983
	A1 共计	244,306	244,306
A2：项目编制			
阿尔及利亚	甲基溴项目编制	35,000	35,000
	机构支助费用（项目编制的 7%）	2,450	2,450
	A2 共计	37,450	37,450
A3：氟氯烃淘汰管理计划（第二阶段）项目编制			
巴西	编制氟氯烃淘汰投资活动（第二阶段）（制冷和空调制造业）	150,000	150,000
	编制氟氯烃淘汰管理计划（第二阶段）	10,000	10,000
尼日利亚	编制氟氯烃淘汰投资活动（第二阶段）（制冷和空调制造业）	150,000	150,000
巴基斯坦	编制氟氯烃淘汰管理计划（第二阶段）	42,000	42,000
	编制氟氯烃淘汰投资活动（第二阶段）（泡沫塑料行业）	50,000	50,000
	编制氟氯烃淘汰投资活动（第二阶段）（制冷和空调制造业）	60,000	60,000
苏丹	编制氟氯烃淘汰管理计划（第二阶段）	25,000	25,000
	编制氟氯烃淘汰投资活动（第二阶段）（泡沫塑料）	40,000	40,000
	编制氟氯烃淘汰投资活动（第二阶段）（制冷和空调制造业）	35,000	35,000
多民族玻利维亚国	编制氟氯烃淘汰管理计划（第二阶段）	90,000	90,000
	更新氟氯烃淘汰投资活动（第二阶段）（制冷制造业）的编制	50,000	50,000
	A3 小计	702,000	702,000
	机构支助费用（项目编制的 7%）	49,140	49,140
	A3 共计	751,140	751,140
	总计（A1、A2 和 A3）：	1,032,896	1,032,896

A 节：建议一揽子核准的活动

A1：体制建设

项目说明

3. 工发组织提交了表 1 所列体制建设项目延长申请。项目说明载于本文件附件一。

秘书处的评论

4. 秘书处审查了工发组织代表埃及政府提交的体制建设最终报告和行动计划，并注意到，该国遵守了《蒙特利尔议定书》消耗臭氧层物质淘汰目标。秘书处表示在审议这一申请时考虑了第 61/43 号决定。¹

秘书处的建议

5. 秘书处建议依照本文件表 1 所示供资金额一揽子核准埃及的体制建设延长申请。谨建议执行委员会向上述国家政府转达本文件附件二中的评论意见。

A2：甲基溴项目编制

项目说明

6. 工发组织请求为根据第 69/4 号决定(b)(四)段² 淘汰阿尔及利亚高水份枣熏蒸甲基溴用途的项目编制提供资金。工发组织指出，所申请资金是为了确定为建立技术支助以便让阿尔及利亚能够在 2015 年实现淘汰而需要开展的活动。阿尔及利亚所报告的该国 2012 年甲基溴消费量为 1.8 ODP 吨，而该国的基准是 4.7 ODP 吨。

秘书处的评论

7. 所提交来文符合第 69/4 号决定(b)(四)段。阿尔及利亚还批准了《哥本哈根修正》，这是核准项目以实现甲基溴淘汰的一个前提条件。

8. 秘书处注意到，阿尔及利亚以往收到了给甲基溴活动的资金，总额为 84,000 美元，大多用于项目编制。工发组织在解释需要补充项目编制资金时指出，由于先前的资金是几

¹ 除其他外，执行委员会决定，将体制建设的供资维持在目前的水平，将体制建设项目延长自第六十一次会议起的两整年，同时亦顾及第 59/17 号决定和第 59/47 号决定(b)段，这些决定允许第 5 条国家缔约方的体制建设项目作为单独的项目或在氟氯烃淘汰管理计划内提出申请，并核准了用于提交第六十二次会议及其后会议的体制建设项目延长申请的经修订体制建设延长表格，其中增加了确定目标和指标（第 61/43 号决定）。

² 该决定请各执行机构考虑在拥有部分甲基溴淘汰项目或根据缔约方第十五次会议的第 XV/12 号决定免于遵守甲基溴管制措施的一些国家的补充甲基溴项目的必要性。

年前核准，有必要更新阿尔及利亚当前的实地情况。鉴于高水份枣的甲基溴用途的豁免，这一用途中的消费量由于没有替代品而不受管制。环境规划署甲基溴技术选择办法委员会（MBTOC）的最近报告指出，现在这一用途有了替代品；因此，该豁免有可能不再适用。因此，替代用于枣的甲基溴的项目编制已经迫在眉睫，以便让阿尔及利亚到 2015 年能够遵守甲基溴淘汰。

秘书处的建议

9. 秘书处建议按照本文件表 1 所示供资数额一揽子核准阿尔及利亚甲基溴项目编制的申请。

A3：氟氯烃淘汰管理计划/氟氯烃淘汰投资活动（第二阶段）的项目编制

项目说明

10. 工发组织提交了以下氟氯烃淘汰管理计划第二阶段和氟氯烃淘汰投资活动编制的申请：巴基斯坦、苏丹和多民族玻利维亚国（工发组织为牵头执行机构）；巴西和尼日利亚（开发计划署³为牵头执行机构）。项目编制过程中要开展活动的细节已在牵头执行机构的各自工作方案中作了说明。

11. 除工发组织作为其唯一执行机构的苏丹以外，所有申请均为德国政府、⁴ 开发计划署和环境规划署⁵ 为其他氟氯烃制造业/总体战略编制申请之外的申请。

12. 工发组织说明了支持其有关编制巴基斯坦、苏丹和多民族玻利维亚国的氟氯烃淘汰管理计划第二阶段/氟氯烃淘汰投资活动的申请的活动。这些申请涉及以下编制工作的资金：

- (a) 巴基斯坦，工发组织负责的整体战略的 90,000 美元（工发组织 42,000 美元以及环境规划署 48,000 美元）、泡沫塑料行业的 50,000 美元以及制冷业的 60,000 美元；
- (b) 苏丹，整体战略 25,000 美元、泡沫塑料行业的 40,000 美元以及制冷业的 35,000 美元，均由工发组织负责；以及
- (c) 多民族玻利维亚国，工发组织负责的整体战略的 90,000 美元和制冷和空调行业的 50,000 美元，外加开发计划署负责的泡沫塑料行业的 150,000 美元。

13. 为这些国家所申请资金总额，根据其剩余符合资格氟氯烃消费量，均未超过第 71/42 号决定(d)、(f)和(g)段规定的限制。

³ UNEP/OzL.Pro/ExCom/72/14。

⁴ UNEP/OzL.Pro/ExCom/72/13。

⁵ UNEP/OzL.Pro/ExCom/72/15。

秘书处的评论

14. 在审查这些申请时，秘书处考虑到第 71/42 号决定所载第 5 条国家氟氯烃淘汰管理计划第二阶段编制的供资准则，并对已核准氟氯烃淘汰管理计划第一阶段和编制文件时第一次付款的执行情况作了全面审查。秘书处对各份来文的审查，载于这些国家各自牵头执行机构的工作方案中。成员国提出了详细的评论，要求就支持项目编制申请所提信息作出澄清，并进行了实质性讨论，以便了解要求开展第二阶段的活动和所申请的资金。

15. 关于巴基斯坦，秘书处注意到：

- (a) 巴基斯坦 2012 年氟氯烃的消费量显示比基准超过 30%，并要求就这一增加作出解释；以及
- (b) 氟氯烃淘汰管理计划第一阶段确定了所有制造业企业，并要求就泡沫塑料和制冷行业编制工作的资金申请作出解释。

16. 工发组织在回应时解释说，2012 年消费量在增长仅表现在 HCFC-22 上，其他物质的进口保持在相同的水平。看来，HCFC-22 数量增加是由于为准备冻结而进行储存造成的。工发组织指出，这并未改变该国对实现 2013 年氟氯烃消费量冻结的承诺。

17. 关于泡沫塑料和制冷业的项目编制资金，工发组织解释说，这两个行业的数量需要更新，因为数据都 2009 年收集，项目提案是当时编制。所申请项目编制资金少于为第一阶段核准的资金，并考虑了已提供的信息。

18. 关于苏丹，成员们要求提供信息说明第 71/42 号决定所要求的在执行氟氯烃淘汰管理计划第一阶段方面所取得的实质性进展，同时亦顾及苏丹氟氯烃淘汰管理计划第一阶段第二次付款只是到第七十三次会议时才需提交。工发组织提供的信息显示，维修行业的很多活动已经完成，包括培训和交付工具和设备。工发组织还提供了财务报告，其中显示，第一次付款的资金发放达到了核准资金的 80% 以上。

19. 秘书处还要求澄清关于多民族玻利维亚国投资部分的项目编制申请，同时亦顾及第一阶段开展的工作。工发组织解释说，所申请资金将用于进行一次调查，以更新制造业的氟氯烃消费量。此外，2009 年以来，新的环境友好型替代品已经上市，多民族玻利维亚国政府希望看到第二阶段如何在这方面进行落实。

20. 秘书处指出，工发组织作为负责制冷业的巴西氟氯烃淘汰管理计划第二阶段编制的合作机构，并没有参与氟氯烃淘汰管理计划第一阶段的编制和执行。工发组织提供了该行业将要开展的活动的详尽清单，并指出，工发组织将确保过去在第一阶段收集的信息将用于当前的进程。

21. 就尼日利亚而言，作为负责制冷和空调制造业合作机构的工发组织澄清说，由于该行业氟氯烃消费量增加，有必要对消费量作全面的重新评估，并分析是否能够获得适当技术以执行第二阶段。

22. 经上述讨论后，秘书处认为，这些申请符合第 71/42 号决定的要求。表 1 所示国家

的数量只是工发组织负责的数量。其他资金反映在其他执行机构的工作方案中。

秘书处的建议

23. 秘书处建议按照本文件表 1 所示供资数额一揽子核准巴西、尼日利亚、巴基斯坦、苏丹和多民族玻利维亚国氟氯烃淘汰管理计划/氟氯烃淘汰投资活动项目（第二阶段）编制的工发组织的组成部分的申请。

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSAL

Egypt: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNIDO
Amounts previously approved for institutional strengthening (US \$):		
	Phase I: Jun-93	263,450
	Phase II: Nov-95	175,909
	Phase III: Mar-99	175,000
	Phase IV: Jul-01	175,000
	Phase V: Jul-03	228,323
	Phase VI: Mar-07	228,323
	Phase VII: Nov-08	228,323
	Phase VIII: Jul-10	228,323
	Phase IX: Jul-12	228,323
	Total:	1,930,974
Amount requested for renewal (phase X) (US \$):		228,323
Amount recommended for approval for phase X (US \$):		228,323
Agency support costs (US \$):		15,983
Total cost of institutional strengthening phase X to the Multilateral Fund (US \$):		244,306
Date of approval of country programme:		1992
Date of approval of HCFC phase-out management plan:		2011
Baseline consumption of controlled substances (ODP tonnes):		
(a) Annex A, Group I (CFCs) (average 1995-1997)		1,668.0
(b) Annex A, Group II (halons) (average 1995-1997)		705.0
(c) Annex B, Group II (carbon tetrachloride) (average 1998-2000)		38.5
(d) Annex B, Group III (methyl chloroform) (average 1998-2000)		26.0
(e) Annex C, Group I (HCFCs) (average 2009-2010)		386.3
(f) Annex E (methyl bromide) (average 1995-1998)		238.1
Latest reported ODS consumption (2012) (ODP tonnes) as per Article 7:		
(a) Annex A, Group I (CFCs)		0.0
(b) Annex A, Group II (halons)		0.0
(c) Annex B, Group II (carbon tetrachloride)		0.0
(d) Annex B, Group III (methyl chloroform)		0.0
(e) Annex C, Group I (HCFCs)		513.8
(f) Annex E (methyl bromide)		116.4
	Total:	630.2
Year of reported country programme implementation data:		2012
Amount approved for projects (as at December 2013) (US \$):		58,109,624
Amount disbursed (as at December 2013) (US \$):		46,464,590
ODS to be phased out (as at December 2013) (ODP tonnes):		4,493.4
ODS phased out (as at December 2013) (ODP tonnes):		4226.4

1. Summary of activities and funds approved by the Executive Committee:

Summary of activities	Funds approved (US \$)
(a) Investment projects:	51,673,954
(b) Institutional strengthening:	1,930,974
(c) Project preparation, technical assistance, training and other non-investment projects:	4,504,696
Total:	58,109,624

Progress report

2. The National Ozone Unit (NOU), in cooperation with all stakeholders in Egypt, was successful in continuing its activities for a sustainable phase-out of CFCs in the country. The Memorandum of Understanding signed between the Egyptian Environmental Affairs Agency and the customs and the monitoring authorities of imports and exports ensured the continuation of banning the imports of CFCs and illegal trade. Several awareness events were also targeting the HCFCs phase-out objectives. Also, the NOU participated actively in the implementation of stage I of the HCFC phase-out management plan. The NOU was successful in meeting all its commitments to the Montreal Protocol.

Plan of action

3. In addition to the follow up on the ongoing projects and on the sustainability of the completed projects, the NOU will continue to focus on the phase out of HCFCs in Egypt. Activities already started during the implementation of stage I of the HCFC phase-out management plan (HPMP). Several foam sector projects are currently under implementation, and other activities in the refrigeration and air-conditioning sector have started. The NOU will take part in following up and coordinating with the beneficiaries and the implementing agencies to ensure the success of these projects and a smooth phase-out according to the HCFCs phase-out schedule. The NOU will continue reviewing and suggesting any necessary legislative amendments needed to mainstream the HPMP into the national policies and sustainable development programmes. The sustainable cooperation with all stakeholders in Egypt will facilitate a successful implementation of the HPMP. The NOU will continue to cooperate with the enforcement authorities to prevent illegal trade of ODSs and public awareness and training programmes will be conducted among stakeholders.

附件二

执行委员会成员就提交第七十二次会议的体制建设项目延长表示的意见

埃及

1. 执行委员会审查了连同埃及体制建设项目延长申请提交的报告，并赞赏地注意到，在本报告所述期间，该国履行了《蒙特利尔议定书》的数据报告义务。执行委员会还注意到，在体制建设项目框架内，埃及采取了重大步骤解决氟氯烃淘汰消费量以遵守 2013 年冻结目标。因此，执行委员会相信，在今后两年内，埃及政府将继续在项目和政策层面上开展活动，确保该国在 2015 年实现氟氯烃 10% 的削减。



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

72nd Executive Committee of the
Multilateral Fund for the Implementation of the Montreal Protocol

UNIDO Work Programme

72nd Executive Committee

Introduction

The UNIDO Work Programme for the consideration of the 72nd ExCom of the Multilateral Fund has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2014-2016.

As a follow up of the Decision 71/42 that approved Guidelines for the preparation of Stage II HPMPs and based on country requests, the UNIDO 72 WPA included preparatory funding HPMP stage II for Brazil, Pakistan, Sudan and Venezuela. In addition, 72 UNIDO WPA is including one MeBr preparatory assistance request addressing fumigants sector, respectively the phase-out of MeBr from the high-moisture dates applications.

Institutional strengthening extension request is submitted based on the country request for Egypt.

The UNIDO Work Programme Amendment for the consideration of the 72nd Ex.Com. Meeting comprises the following sections:

Section 1

Gives in a tabulated form by project types and country the consolidated list of activities foreseen for the above requests

Funding is requested as follows:

- preparatory assistance proposals addressing HPMP stage II in Brazil, Nigeria, Pakistan, Sudan and Venezuela and Methyl Bromide phase-out from high-moisture applications in Algeria amounting \$US 788,590 (including \$US 51,590 representing 7.0 % A.S.C.)
- IS extension Project in Egypt 244,306 US\$ (including \$US 15,983 representing 7.0 % A.S.C.)
- **Total: 1,032,896 \$US including A.S.C.**

Project concepts indicating details and funding requirements are provided in Section 2.

Consolidated table giving project preparation and non-investment projects in all countries and sectors

Country	Type	Subs-tance	Title of Project	Requested amount USD	A.S.C. USD	Total (incl ASC) USD	A.S. C. %	P.D.	Remarks
Preparatory assistance									
Algeria	PRP	MeBr	MeBr project preparation in fumigants sector (high-moisture dates sector)	35,000	2,450	37,450	7	12	
Brazil	PRP	HCFC	Preparation of investment activities for the phase-out of HCFCs in RAC manufacturing sector	150,000	10,500	160,500	7	12	
Brazil	PRP	HCFC	HPMP 2nd Stage Overarching Strategy	10,000	700	10,700	7	12	UNDP lead agency (concept included with the UNDP 72WPA)
Nigeria	PRP	HCFC	Preparation of investment activities for the phase-out of HCFCs in refrigeration manufacturing sector	150,000	10,500	160,500	7	12	UNDP lead agency (concept included with the UNDP 72WPA)
Pakistan	PRP	HCFC	Project preparation for Stage II of HPMP	152,000	10,640	162,640	7	12	
Sudan	PRP	HCFC	Project preparation for Stage II of HPMP	100,000	7,000	107,000	7	12	
Venezuela	PRP	HCFC	Project preparation for Stage II of HPMP	90,000	6,300	96,300	7	12	
Venezuela	PRP	HCFC	Update the preparation of investment activities for the phase-out of HCFCs in the refrigeration manufacturing sector.	50,000	3,500	53,500	7	12	
Subtotal				737,000	51,590	788,590			
Institutional strengthening									
Egypt	INS	All	Institutional Strengthening - Phase X	228,323	15,983	244,306	7	24	
Subtotal				228,323	15,983	244,306			
Grand TOTAL				965,323	67,573	1,032,896			

Section 2

PROJECT CONCEPT

Country:	Algeria
Sector Covered:	Project preparation in the fumigants sector (high-moisture dates)
Duration:	12 months
Project Budget:	US\$ 37,450 (including 7% Agency Support Costs)
Implementing Agency:	UNIDO
Coordinating Agency:	Ministry of Environment

Project Summary

The Executive Committee at its 69th Meeting has recommended Implementing Agencies to consider the need for additional methyl bromide (MB) projects in Algeria, exempted from complying with the MB controls pursuant to Decision XV/12 of the Fifteenth Meeting of the Parties (Decision 69/4).

Par 1 of Decision XV/12 states that:

[Quote] the Implementation Committee and Meeting of the Parties should defer the consideration of the compliance status of countries that use over 80 per cent of their consumption of methyl bromide on high-moisture dates until two years after the Technology and Economic Assessment Panel formally finds that there are alternatives to methyl bromide that are available for high-moisture dates [un-quote].

In its 2013 Progress Report, the Technology and Economic Assessment Panel reported that treatments have been designed and are being used for dates in most date-producing countries.

Project Concept

Country: The Federative Republic of Brazil

Title: Preparation of investment activities for the phase-out of HCFCs in the refrigeration and air-conditioning manufacturing sector

Project Duration: 12 months

Project Budget: 160,500 (including 7% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: PROZON and IBAMA (MMA)

Project Summary

Brazil has the fifth highest HCFC-Baseline consumption among all Article 5 countries, amounting to 1,327.3 ODP tonnes.

Stage I HPMP of Brazil is focusing mainly on activities related to the phase-out of HCFC-141b in the foam manufacturing sector. In addition, activities have also been initiated in the refrigeration service sector for the phase-out of HCFC-22.

Brazil has made commitments with the Executive Committee to comply with the Freeze and the 10% reduction targets in 2013 and in 2015 respectively. The last funding tranche of Stage I HPMP is in 2015.

On 19 May 2013, UNIDO received a government request from Brazil to be responsible for the Refrigeration and Air-Conditioning (RAC) sector in Stage II HPMP. In the same letter, UNIDO was requested to include in its 2014 Business Plan, project preparation for Stage II in the RAC sector. UNIDO's 2014 Business Plan has been prepared accordingly.

Although funds were approved for UNDP for the preparation of activities in the RAC sector before Stage I HPMP was approved (Ref: BRA/REF/57/PRP/289), no funds were utilized and all preparatory funds were returned to the 69th Meeting of Executive Committee, since the Government of Brazil decided that this sector would not be a priority for Stage I.

An inter-agency coordination meeting was held on 18-19 February 2014 in Brasilia to agree on the responsibilities and timing for Stage II HPMP. Implementing agencies were requested to ask for project preparation funding at the 72nd Executive Committee for the preparation of Stage II HPMP, for additional phase-out activities in the foam sector and for phase-out activities in the RAC sector to ensure that Stage II HPMP can be submitted in 2015.

The Executive Committee in its Decision 71/42 approved guidelines for the preparation of Stage II HPMPs, according to which, Brazil is fully eligible to request project preparation fund at the 72nd Meeting of the Executive Committee.

Based on preliminary information, there are over 45 manufacturers in the refrigeration and air

conditioning manufacturing sector in Brazil. Around 15 large and medium size companies are in the air-conditioning sector and over 30 large and mediums size enterprises in the commercial refrigeration sub-sector. Although there are few Article 2 owned enterprises, the majority of the above mentioned 45 companies is either Brazilian or owned by other A5 countries. It is expected that HCFC consumption in the RAC sector might be higher than estimated in Stage I HPMP.

UNIDO will have to undertake a comprehensive survey in the RAC sector to collect HCFC consumption data, ownership information, details on the produced products as well as baseline equipment. There is a need to hold several stakeholder consultation meetings with the industry and the involvement of the Government to design a proper strategy for this very complex sector.

In cooperation with the Government of Brazil, industry and relevant bilateral and implementing agencies, a RAC sector strategy and investment projects will be prepared to help the Government of Brazil to achieve at least the 2020 reduction target in line with the priorities established in the HPMP.

The requested funding level of USD 150,000 is fully in compliance with ExCom Decision 71/42.

Project Concept

Country:	Pakistan
Title:	Project preparation for stage II of HPMP
Project Duration:	12 months
Project Budget:	US\$ 162,640 (including 10,640 USD, representing 7% Agency Support Costs)
Implementing Agency:	UNIDO
Coordinating Agency:	UNEP
Cooperating Agency:	Ministry of Climate Change / National Ozone Unit

1. Background

Funding requirement for the preparation of Stage-II HCFC Phase out Management Plan (HPMP) is being prepared in accordance with UNEP/OzL.Pro/ExCom/71/55 November 01, 2013. The number of enterprises where the request for funding in manufacturing sector is being sought is in line with decision 56/16. This request of funding is being submitted to ensure continuity of implementation of HPMP in Pakistan until the last target as set under accelerated HCFC Phase-out plan is achieved. It is ensured that the document is being submitted in accordance with minimum requirement of 2 years since approval of Stage-1 as set under item 3.b of the guideline.

The HPMP for Pakistan was approved in 62nd meeting of ExCom., to ensure compliance of the Country with 2013 Freeze and 2015 10% HCFC phase out reduction targets; for principal amount of US\$ 5,448,849 to be implemented through different tranches as following:

	2010	2011	2012	2013	2014	2015	Total
Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	253.7	n/a	n/a	246.6	246.6	221.9	n/a
Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	253.7	n/a	n/a	246.6	246.6	221.9	n/a
Lead IA UNIDO agreed funding(US \$)	4,908,849			80,000	20,000		5,008,849
Cooperating IA UNEP agreed funding (US \$)	200,000			200,000	40,000		440,000
Total agreed funding (US \$)	5,108,849			280,000	60,000		5,448,849

The investment component of HPMP under stage-I for Pakistan was submitted to the 60th ExCom in April 2010, to phase out HCFC 141b from the 5 manufacturing companies in domestic and commercial refrigeration. The project was approved for total cost of US\$ 4,840,849 to phase out 71.7 ODP (651.8 Metric ton) of 141b from the foaming operations.

2. Achievement/ Progress of Stage-I

2.1 Overview of HCFC Consumption

Based on actual 2010 consumption, the baseline set for Pakistan was 247.4 ODP ton whereas the first 10% reduction target was 222.6 ODP ton for 2015. The projects approved under stage-I shall phase out 71.7 ODP ton in manufacturing and 7.4 ODP ton in servicing sector. The remaining eligible consumption is as under:

Substance	ODPT
HCFC 141b	66.8
HCFC-22	101.5
Total	168.3

2.2 Phase out activities in Manufacturing Sector

Five projects in manufacturing sectors were selected to phase out HCFC-141b from the manufacturing of insulating PU rigid foam. The alternate technology selected was based on Cyclopentane as blowing agent. The conversion technology included supply of equipment, installation, technical assistance/technology transfer, testing; production run and on work as well as safety training. Project completion including safety certification is scheduled for April 2014.

2.3 Phase out activities in the servicing sector

The following non-investment components were implemented.

- Policy & enforcement capacity building. Enforced HCFC import licensing system effective January 01, 2013.
- National project for training service technician. UNIDO procured six sets of tools & equipment and six refrigerant identifiers to facilitate training of technicians and custom officers. UNEP provided training to 31 master trainers, 35 custom officers and 175 technicians.
- National recovery and recycling project
- Awareness. UNEP organized an event with electronic media people to prepare video clips for general public awareness through different TV channels in Pakistan

2.4 Impacts on the environment

- ODP reduction; 79.1 ODP tonnes
- Net annual reduction of CO₂ equivalent; 532,497 metric ton in manufacturing sector and 244,350 metric ton in servicing sector.

2.5 Co-financing

- The Standard and Labeling Program (SLP) was initiated through the funding of GIZ
- The program “Barrier Removal to the Cost Effective Development & Implementation of Energy Efficiency Standards and Labeling” was sponsored by UNDP & GEF.

2.6 Financial Disbursement/ Obligation

The disbursement, un-liquidated obligation and future commitment are provided in the table below:

Description	UNIDO (US\$)			UNEP Servicing	G. total
	Manufacturing	Servicing	Total		
Funds under all three tranches	4,840,849	168,000	5,008,849	440,000	5,448,849
Disbursements					
- Actual disbursed	4,257,584	13,381	4,270,965	171,870	4,442,835
-Un-liquidated obligation	479,762	2,993	482,755	-	482,755
Total disbursed & obligated	4,737,346	16,374	4,753,720	171,870	4,925,590
%age disbursement and obligated	97.9%	9.7%	94.9%	39.1%	90.4%

3. Amount of HCFC to be phased out in Stage-II

The remaining eligible consumption of HCFCs in manufacturing and servicing sector is 168.3 ODP Tons. It is projected that this amount will be phased out through investment and non-investment activities and also by other interventions as stipulated in overarching HPMP strategy document approved by 62nd ExCom, in the sectors as following:

A) HCFC 141b phase-out in the manufacturing sector:

- Rigid foam manufacturing sector (panels, cabinets and spray subsectors); 20 identified companies
- Domestic refrigeration sector (foam component); 1 identified company
- Commercial refrigeration sector (foam component); 1 identified company
- Extruded polystyrene; 1 identified company
- Flexible molded polyurethane foam; 3 identified company
- Integral skin (polyurethane); 1 identified company

B) HCFC 22 phase-out in the manufacturing sector:

- Domestic air-conditioning; 10 identified company
- Commercial air-conditioning; 9 identified company

C) HCFC 22 phase-out in the servicing sector.

4. Funding Requirement

In accordance with the guideline 71/55 the preparatory funds are requested for two collaborating agencies as following:

Activities	Funding		Total
	UNIDO	UNEP	
Survey in the foam sector	32,000.0		32,000.0
Survey in the refrigeration sector	28,000.0		28,000.0
Consultancy (international consultant)	12,000.0		12,000.0
Consultancy (team of national consultants; and/or consulting company)	16,000.0	5,000.0	21,000.0
Travel of international and national consultants	15,000.0		15,000.0
Industrial stake holders meetings	10,000.0		10,000.0
Technology option benchmarking, including south-south cooperation	15,000.0	8,000.0	23,000.0
Consultation meetings	6,000.0	15,000.0	21,000.0
Technical and legislative assistance	18,000.0	20,000.0	38,000.0
	152,000.0	48,000.0	200,000.0

5. Activities to be undertaken to develop Stage-II document

The following activities shall be undertaken for the preparation of stage-II HPMP to be prepared from the proposed funding:

- Data Collection and Surveys
 - Collection, verification and validation of HCFC consumption in various sectors/ sub-sectors through survey of Government departments, traders, distributors, importers and manufacturers to access the sectoral distribution of HCFC consumption
 - Collection and verification of baseline equipment data in the manufacturing sector through survey. Also collect information to determine proportion of foreign ownership and exports to non-article 5 countries in the manufacturing sector for each identified industries. This shall also include the establishment date of each identified industries
 - Study of baseline equipment data to ascertain requirement as set in the applicable HPMP guidelines and amendments issued from time to time
- Chemical wise projections and consumption trends
- Overview and suitability review of alternate technologies. Re-assess new technologies & solutions for possible adjustment of the program based on the availability of technically proven, commercially available, climate friendly alternatives.
- Develop strategy and plan for implementation for investment projects as well as servicing sector related activities
- Evaluate climate co-benefits

Project Concept

Country: Sudan

Title: Project preparation for stage II of HPMP

Project Duration: 12 months

Project Budget: US\$ 107,000 (incl. 7% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: National Ozone Unit, Ministry of Industry

1. Background

Funding requirement for the preparation of Stage-II HCFC Phase out Management Plan (HPMP) is being prepared in accordance with UNEP/OzL.Pro/ExCom/71/55 .

The HPMP for Sudan was approved in 66nd meeting of ExCom., to ensure compliance of the Country with 2013 Freeze and 2015 10% HCFC phase out reduction targets; for principal amount of US\$ 1,456,072 to be implemented through different tranches as following:

	2010	2011	2012	2013	2014	2015	2016	2017	Total
Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	n/a	n/a	52.67	52.67	47.40	47.40	47.40	n/a
Maximum allowable total consumption of Annex C Group I substances (ODP tonnes)	n/a	n/a	n/a	52.67	52.67	47.40	42.13	36.87	n/a
Lead IA UNIDO agreed funding (US \$)	1,056,072		250,000	-	110,000	-	-	40,000	1,456,072
Total agreed funding (US \$)	1,056,072		250,000	-	110,000	-	-	40,000	1,456,072

The investment component of HPMP under stage-I for Sudan was submitted to the 62nd ExCom in November 2010, to phase out HCFC 141b from the 4 manufacturing companies in domestic and commercial refrigeration. The project was approved for total cost of US\$ 1,056,072 to phase out 11.87 ODP tonnes of HCFC-141b from the foaming operations.

2. Achievement/ Progress of Stage-I

2.1 Overview of HCFC Consumption

Based on average of 2009 and 2010 consumption, the baseline set for Sudan was 52.67 ODP ton. The projects approved under stage-I shall phase out 11.87 ODP ton in manufacturing and 7.74 ODP ton in servicing sector. The remaining eligible consumption is as under:

Substance	ODPT
HCFC 141b	28.78
HCFC-22	8.1
Total	36.88

2.2 Phase out activities in Manufacturing Sector

Four projects in manufacturing sectors were selected to phase out HCFC-141b from the manufacturing of insulating PU rigid foam. The alternate technology selected was based on Cyclopentane as blowing agent. The conversion technology included supply of equipment, installation, technical assistance/technology transfer, testing; production run and on work as well as safety training. Project completion including safety certification is scheduled for December 2014.

2.3 Phase out activities in the servicing sector

The following non-investment components were implemented.

- Policy & enforcement capacity building. Enforced HCFC import licensing system effective January 01, 2013.
- Upgrading the Teaching/Instruction Capacity of the Sudan University of Science and Technology
- Training of Technicians at the Vocational Training Centers & Recovery and Recycling Equipment and Tools
- Policy and enforcement capacity building

2.4 Impacts on the environment

- ODP reduction; 11.87 ODP tonnes of HCFC-141b
- Net annual reduction of CO₂ equivalent; 74,775 metric ton in manufacturing sector and 244,350 metric ton in servicing sector.

2.5 Financial Disbursement/ Obligation

The disbursement, un-liquidated obligation and future commitment are provided in the table below:

Description	HPMP Stage I
Funds under all three tranches	1,456,072
Disbursements	
- Actual disbursed	1,214,552.0
- Un-liquidated obligation	1,286
Total disbursed & obligated	1,215,838.0
%age disbursement and obligated	83.5%

3. Amount of HCFC to be phased out in Stage-II

The remaining eligible consumption of HCFCs in manufacturing and servicing sector is 36.9 ODP Tons. It is projected that this amount will be phased out through investment and non-investment activities and also by other interventions as stipulated in overarching HPMP strategy document approved by 66th ExCom, in the sectors as following:

A) HCFC 141b phase-out in the manufacturing sector:

- Rigid foam manufacturing sector (panels), Flexible moulded polyurethane foam (car, truck and tractor seats) and Integral skin (steering wheels, dash boards, armchairs, car parts), ; 1 identified company
- Rigid polyurethane foam sector (spray and pipe in pipe insulation services); 10 companies to be documented.

B) HCFC 22 phase-out in the servicing sector training and technical assistance in the development and improving of “desert coolers”.

- Update of legislation and regulatory measures.

4. Funding Requirement

In accordance with the guideline 71/55 the preparatory funds are requested as following:

Activity	Total USD
Survey in the foam and refrigeration sector sectors	32,000.0
Consultancy (international consultant)	15,000.0
Consultancy (team of national consultants)	18,000.0
Travel of international and national consultants	15,000.0
Technology option benchmarking, including south-south cooperation	10,000.0
Consultation meetings	5,000.0
Technical and legislative assistance	5,000.0
Total	100,000.0

5. Activities to be undertaken to develop Stage-II document

The following activities shall be undertaken for the preparation of stage-II HPMP to be prepared from the proposed funding:

- Data Collection and Surveys
 - Collection, verification and validation of HCFC consumption in various sectors/ sub-sectors through survey of Government departments, traders, distributors, importers and manufacturers to access the sectoral distribution of HCFC consumption
 - Collection and verification of baseline equipment data in the manufacturing sector through survey. Also collect information to determine proportion of foreign ownership

and exports to non-article 5 countries in the manufacturing sector for each identified industries. This shall also include the establishment date of each identified industries

- Study of baseline equipment data to ascertain requirement as set in the applicable HPMP guidelines and amendments issued from time to time
- Chemical wise projections and consumption trends
- Overview and suitability review of alternate technologies. Re-assess new technologies & solutions for possible adjustment of the program based on the availability of technically proven, commercially available, climate friendly alternatives.
- Develop strategy and plan for implementation for investment projects as well as servicing sector related activities
- Evaluate climate co-benefits

Project Concept

Country: Venezuela

Title: Project preparation for stage II of HPMP

Project Duration: 12 months

Project Budget: US\$ 90,000 (excl. 7% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: FONDOIN - National Ozone Unit

Project Summary

The Implementing Agency has received an official request from the Government of Venezuela for project preparation in the stage II of HPMP. In response to the decision 71/42(b) UNIDO is submitting a request for funds for the preparation of stage II of HPMP.

Venezuela's base line consumption of HCFCs amounted to 207 ODP tonnes. This was verified through an audit on 2009 – 2010 consumption data for substances included in Annex C, group I. Copy of the report is attached.

Remain consumption in the HPMP will be 186.3 ODP after the first phase is completed. Three projects compose the action plan for the HCFC compliance strategy, namely: "Technical Assistance for Reduction of HCFC Use", "Technical Assistance for Enhanced Control of Trade of HCFC-based Substances and Equipment", and "HPMP implementation, monitoring and control".

Financial progress

From the HPMP financial aspect the implementation progress can be summarized as follows. At present three of the four tranches have been approved. The first tranche is almost complete, more than 90% has been spent and 88% disbursed. From the second tranche 93% has been obligated and 51% disbursed. In the third tranche just 2% of the funds have been obligated. Last tranche will be requested in 2015.

Implementation progress

Regarding the HPMP implementation the general strategy has been executed successfully. The following activities summarize the progress in the project:

- Improve the module for training and certification of the existing "Refrigeration Training and Certification Programme"
- Update the Good Refrigeration Practices Manual including the new HCFC phase out schedule, the use of natural refrigerants, the new Decree and latest technologies. New manual for the use of hydrocarbon as alternative.
- Purchase of tools to upgrade of 36 INCES, including HC for demonstration activities and in addition 13 refrigeration demonstration boards for the use of HC 290.
- Training of trainers from INCES (National Vocational Institutions) in charge of the technician training project.

- Implementation of pilot projects for air conditioning (on going).
- Finalization of “Code of Good Practices in Refrigeration”.
- Audit report on the baseline consumption.

HCFC consumption trend

The HCFC consumption during 2011, including production is summarized in the following table:

Substance	Consumption	Import	Export	Production	ODP
HCFC-22	2,643.31	200.76	0	2,442.55	145.38
HCFC-141b	176.8	176.8	0	0	19.45
HCFC-142b	0	0	0	0	0
HCFC-123	12.03	12.03	0	0	0.72
HCFC-141b included in premixed polyol	4.50	4.50	0	0	0.50
Total	2,836.64	394.09	0	2,442.55	166.05

The HCFC consumption during 2012, including production is summarized in the following table:

Substance	Consumption	Import	Export	Production	ODP
HCFC-22	3,518.96	604.87	0	2,914.09	193.54
HCFC-141b	469.12	469.12	0	0	51.60
HCFC-142b	10.00	10.00	0	0	0.65
HCFC-123	10.49	10.49	0	0	0.63
HCFC-141b included in premixed polyol	17.47	17.47	0	0	1.92
Total	4,032.05	1117.96		2,914.09	248.35

Consumption trend

Substance	2009	2010	Average	2011	2012
HCFC-22	43.25	33.15	38.20	145.38	193.54
HCFC-22 prod	126.88	119.19	123.04		
HCFC-141b	37.61	41.42	39.52	19.45	51.60
HCFC-142b	7.49	3.88	5.69	0.00	0.65
HCFC-123	0.30	0.10	0.20	0.72	0.63
Total	215.53	197.74	206.64	165.55	246.43

As expected the production and consumption in the years 2011 and 2012 shows an increase tendency. The data from 2013 is not yet available but it is expected a reduction beyond the baseline. The demand of HCFC-22 during 2012 was lower than the consumption and in 2011 the consumption was lower than the demand.

Remaining consumption eligible for funding

		2011	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	n/a	207	207	186.3	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	207	207	186.3	n/a
2.1	Lead IA UNIDO agreed funding(US \$)	654,854	603,339	324,875		175,432	1,758,500
2.2	Support costs for Lead IA (US \$)	49,114	45,250	24,366	0	13,157	131,888

2.3	Cooperating IA UNEP agreed funding (US \$)	50,646	46,661	25,125	0	13,568	136,000
2.4	Support costs for Cooperating IA (US \$)	6,584	6,066	3,266	0	1,764	17,680
3.1	Total agreed funding (US \$)	705,500	650,000	350,000	0	189,000	1,894,500
3.2	Total support cost (US \$)	55,698	51,316	27,632	0	14,921	149,568
3.3	Total agreed costs (US \$)	761,198	701,316	377,632	0	203,921	2,044,068

4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)	23.16
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)	n/a
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)	138.47
4.2.1	Total phase-out of HCFC-124 agreed to be achieved under this agreement (ODP tonnes)	n/a
4.2.2	Phase-out of HCFC-124 to be achieved in previously approved projects (ODP tonnes)	n/a
4.2.3	Remaining eligible consumption for HCFC-124 (ODP tonnes)	0
4.3.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)	n/a
4.3.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)	n/a
4.3.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)	39.56
4.4.1	Total phase-out of HCFC-142b agreed to be achieved under this agreement (ODP tonnes)	n/a
4.4.2	Phase-out of HCFC-142b to be achieved in previously approved projects (ODP tonnes)	n/a
4.4.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)	5.68
4.5.1	Total phase-out of HCFC-123 agreed to be achieved under this agreement (ODP tonnes)	n/a
4.5.2	Phase-out of HCFC-123 to be achieved in previously approved projects (ODP tonnes)	n/a
4.5.3	Remaining eligible consumption for HCFC-123 (ODP tonnes)	0.07
4.6.1	Total phase-out of HCFC-141b contained in imported pre-blended polyol agreed to be achieved under this agreement (ODP tonnes)	n/a
4.6.2	Phase-out of HCFC-141b contained in imported pre-blended polyol to be achieved in previously approved projects (ODP tonnes)	n/a
4.6.3	Remaining eligible consumption for HCFC-141b contained in imported pre-blended polyol (ODP tonnes)	1.91

The information used for the HPMP preparation was obtained during surveys carried out in 2008 and 2009 and this has to be updated. After three years of implementation of the project the situation has changed, there are new alternatives and this is the information to be obtained with the funds requested for the HPMP Stage II.

The funds requested will be used for the required surveys, updated HCFC consumption information, review new potential alternatives and project preparation for the HPMP Stage II for the Bolivarian Republic of Venezuela.

Project Concept

Country: Venezuela

Title: Update the preparation of investment activities for the phase-out of HCFCs in the refrigeration manufacturing sector.

Project Duration: 12 months

Project Budget 1: US\$ 53,500 (incl. 7% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: FONDOIN - National Ozone Unit

Project Summary

The HPMP for Venezuela was approved during the 63th ExCom in April 2011. At the time of approval the Venezuela 2008 Article 7 consumption of HCFCs amounted to 1.45 ODP tonnes in the refrigeration manufacturing sector.

In order to ensure that Venezuela meets the 2013 and 2015 HCFC reduction targets the HPMP implementing activities were focused in the refrigeration service sector. The actions for the refrigeration manufacturing sector were prepared and included in the HPMP though the implementation was postponed for the second phase.

The 2012 reported Article 7 consumption of HCFCs amounted to 1.28 ODP tonnes in the refrigeration manufacturing sector. A total of 10 refrigeration and air-conditioning equipment manufacturing enterprises which account in 2009 for the consumption of 26.40 metric tonnes of HCFC22 were found in the HPMP preparation survey. (The list of enterprises can be found below for reference)

For the HPMP stage II is required to update the data for the preparation of sector plan for the refrigeration manufacturing sector. Based on that, the Government of Venezuela requested UNIDO to submit funding requests of US\$ 50,000 for upgrade the data and develop of investment activities for the HCFC-consuming manufacturing sector to achieve the 2020 control measures.

The priority needed for the above mentioned sub-sector is supported by the Country Programme Progress implementation Reports for the years 2011 and 2012 that shows the following sectoral consumption (in metric Tonnes) for the HCFCs manufacturing activities in the refrigeration sector:

	Refrigeration Manufacturing	
Annex C Group I	2011	2012
HCFC-22	20.80	23.29
HCFCs Total Consumption	20.80	23.26

Sector strategies and investment projects will be prepared by UNIDO in cooperation with the Governmental institutions support, to enable Venezuela to achieve the 2020 reduction target, in line with the priorities of the HPMP.

Table V.3.: Enterprises identified in the refrigeration sector

	<i>Name of Industry</i>	<i>HCFC Phase Out (Ton)</i>	<i>Products Manufactured</i>	<i>Previous Conversion</i>	<i>Starting date</i>	<i>Location/City</i>
1	INPERCA	7.5	Commercial Air Conditioning	NO	1982	Maracaibo
2	CLIMAR	5	Commercial Air Conditioning	NO	1969	Guarenas
3	DICAL	5	Industrial chiller systems	NO	1997	Villa de Cura
4	FRICOR	4.2	Industrial chiller systems	NO	2002	Barquisimeto
5	DIFUSORES FRIODAN	1	Commercial Air Conditioning	NO	1977	Paracotos
6	MACA (Termax)	1	Commercial Air Conditioning	NO	2003	Guatire
7	TRANSCA	1	Commercial Air Conditioning	NO	1950	Miranda
8	FRIOVEN	0.8	Commercial Air Conditioning	NO	1979	Caracas
9	IDRACA	0.5	Commercial Air Conditioning	NO	1985	Pto. Fijo
10	TERMODINAMIC A MARACAY	0.4	Industrial chiller systems	NO	1991	Maracay
<i>Total Consumption</i>		26.4				

The information used for the refrigeration manufacturing sector preparation was obtained during surveys carried out in 2008 and 2009 and this has to be updated. The HPMP was approved more than three years ago and has been implemented successfully which may have changed the situation of the surveyed enterprises. Based on that, the survey has to be updated to be obtained for the implementation of the project in the sector.

The funds requested will be used for the required survey, updated HCFC consumption information of the enterprises and project preparation for the refrigeration manufacturing sector as part of the HPMP Stage II for Venezuela.

Project Concept

Country:	The Arab Republic of Egypt
Title:	Extension of Institutional Strengthening for the implementation of Montreal Protocol in Egypt – Phase X
Project Duration:	12 months (January 2014 – December 2015)
Project Budget:	244,306 (including US\$ 15,983 representing 7.0% Agency Support Costs)
Implementing Agency:	UNIDO
Coordinating Agency:	Egyptian Environmental Affairs Agency / National Ozone Unit

Project Summary

The project aims at **institutional strengthening and capacity building of the** Egyptian Environmental Affairs Agency / National Ozone Unit and will ensure helping the Government meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer, with a specific view to the HCFCs phase-out commitments.

IS Phase X phase will continue to assist the Government to maintain the continuity of the NOU staff and the on-going activities. The new IS extension phase X is focused on supporting the HPMP implementation monitoring, coordination and proper awareness among stakeholders, as well as consumption monitoring by sub-sectors, to ensure country compliance with the reporting obligations.

The NOU will coordinate all the on-going project activities, including the collection of consumption data and reporting as required, with a specific view to HCFCs phase-out schedule for the Article 5 countries.