



联合国



环境规划署

Distr.  
GENERAL

UNEP/OzL.Pro/ExCom/84/36  
25 November 2019

CHINESE  
ORIGINAL: ENGLISH

执行蒙特利尔议定书  
多边基金执行委员会  
第八十四次会议  
2019年12月16日至20日，蒙特利尔

## 工发组织 2019 年工作方案修正案

## 基金秘书处的评论和建议

1. 工发组织请执行委员会核准表 1 所列 2019 年工作方案修正案的 1,542,396 美元外加机构支助费用 109,717 美元。来文附于本文件之后。

**表 1：2019 年工发组织工作方案修正案**

国家	活动/项目	申请数额 (美元)	建议数额 (美元)
<b>A 节：建议一揽子核准的活动</b>			
<b>A1: 体制强化项目延长</b>			
波斯尼亚和黑塞哥维那	体制强化项目延长（第七阶段）	122,026	122,026
塞尔维亚	体制强化项目延长（第七阶段）	168,064	168,064
突尼斯	体制强化项目延长（第九阶段）	316,506	316,506
土耳其	体制强化项目延长（第九阶段）	332,800	332,800
A1 小计		939,396	939,396
A1 机构支助费用（体制强化的 7%）		65,757	65,757
A1 共计		1,005,153	1,005,153
<b>A2: 编制关于氟氯烃消费情况核查报告的技术援助</b>			
危地马拉	氟氯烃淘汰管理计划第一阶段核查报告	30,000	30,000
洪都拉斯	氟氯烃淘汰管理计划第一阶段核查报告	30,000	30,000
黑山	氟氯烃淘汰管理计划第一阶段核查报告	30,000	30,000
A2 小计		90,000	90,000
机构支助费用		8,100	8,100
A2 共计		98,100	98,100
<b>A3: 氟氯烃淘汰管理计划的项目编制</b>			
亚美尼亚*	编制氟氯烃淘汰管理计划（第二阶段）	20,000	20,000
巴哈马**	编制氟氯烃淘汰管理计划（第二阶段）	10,000	10,000
贝宁**	编制氟氯烃淘汰管理计划（第二阶段）	20,000	20,000
布基纳法索**	编制氟氯烃淘汰管理计划（第二阶段）	20,000	20,000
科特迪瓦**	编制氟氯烃淘汰管理计划（第二阶段）	20,000	20,000
赤道几内亚**	编制氟氯烃淘汰管理计划（第二阶段）	10,000	10,000
厄立特里亚**	编制氟氯烃淘汰管理计划（第二阶段）	10,000	10,000
加蓬**	编制氟氯烃淘汰管理计划（第二阶段）	20,000	20,000
科威特**	编制氟氯烃淘汰管理计划（第二阶段）	15,000	15,000
	编制氟氯烃淘汰投资活动（制冷空调）	80,000	80,000
利比里亚**	编制氟氯烃淘汰管理计划（第二阶段）	10,000	10,000
马达加斯加**	编制氟氯烃淘汰管理计划（第二阶段）	20,000	20,000
塞拉利昂**	编制氟氯烃淘汰管理计划（第二阶段）	10,000	10,000
A3 小计		265,000	265,000
机构支助费用（项目编制的 7%）		18,500	18,500
A3 共计		283,500	283,500

国家	活动/项目	申请数额 (美元)	建议数额 (美元)
<b>A4: 扶持活动技术援助 (第 79/46 号决定)</b>			
阿尔及利亚	逐步减少氢氟碳化物扶持活动	150,000	150,000
A4 小计		150,000	150,000
机构支助费用 (技术援助的 7%)		10,500	10,500
A4 共计		160,500	160,500
<b>B 节: 建议单独审议的活动</b>			
<b>B1: 项目编制</b>			
巴林**	编制氟氯烃淘汰管理计划 (第二阶段)	18,000	***
	编制氟氯烃淘汰投资活动 (第二阶段) (泡沫塑料行业)	80,000	***
B1 小计		98,000	***
机构支助费用 (项目编制的 7%)		6,860	***
B1 共计		104,860	***
总计 (A1、A2、A3、A4、B1)		1,652,113	1,547,253

\* 环境规划署为合作执行机构

\*\* 环境规划署为牵头执行机构

\*\*\* 供个别审议

## A 节: 建议一揽子核准的项目

### A1: 体制强化项目的延长

#### 项目说明

2. 工发组织提交了表 1 的 A1 节中所列各国体制强化项目延长的申请。这些项目的说明载于本文件的附件一。

#### 秘书处的评论

3. 秘书处参照关于资助资格和供资金额的准则和相关决定, 审查了工发组织代表各国政府提交的 4 项体制强化项目延长的申请。参照上一阶段的体制强化工作计划、国家方案和第 7 条数据、氟氯烃淘汰管理计划执行情况最新报告、机构的进度报告以及缔约方会议的有关决定, 对申请进行了仔细的核对。秘书处注意到, 这些国家提交了本国 2018 年国家方案数据, 且遵守了《蒙特利尔议定书》规定的控制目标, 其年度氟氯烃消费量未超过其分别与执行委员会达成的氟氯烃淘汰管理计划协定规定的年度最高允许消费总量。此外, 所提申请均根据第 74/51 号决定(e)段包括了下一阶段体制强化项目所规划活动的业绩指标。

## 秘书处的建议

4. 秘书处建议按本文件表 1 的 A1 节所示供资金额一揽子核准波斯尼亚和黑塞哥维那、塞尔维亚、突尼斯和土耳其的体制强化延长申请。执行委员会不妨向上述国家政府表达本文件附件二中中所述评论。

## A2：编制氟氯烃消费情况核查报告的技术援助

### 项目说明

5. 执行委员会请各相关的双边和执行机构在其提交第八十四次会议的各自工作方案的修正案中，纳入编制工发组织作为其牵头执行机构的危地马拉、洪都拉斯和黑山的氟氯烃淘汰管理计划第一阶段核查报告（第 81/33 号决定）的资金。

### 秘书处的评论

6. 秘书处注意到，所申请资金符合以往会议上核准的类似核查的资金。秘书处还注意到，核查报告必须在其提出氟氯烃淘汰管理计划下一次付款申请时的适当执行委员会会议之前 60 天提交。

### 秘书处的建议

7. 秘书处建议按表 1 的 A2 节所列供资金数额一揽子核准危地马拉、洪都拉斯和黑山氟氯烃淘汰管理计划第一阶段核查报告的编制，但有一项谅解，即核查报告应在提出这些国家的氟氯烃淘汰管理计划下一次付款申请时的适当执行委员会会议之前 60 天提交。

## A3：氟氯烃淘汰管理计划的项目编制

### 项目说明

8. 工发组织作为牵头执行机构提交了一个国家的氟氯烃淘汰管理计划第三阶段的编制申请，并作为牵头执行机构的环境规划署的合作执行机构提交了 11 个国家的氟氯烃淘汰管理计划第二阶段的编制申请。此外，工发组织还申请了作为科威特氟氯烃淘汰管理计划第二阶段一部分的制冷和空调行业投资活动项目编制的资金。这些申请载于表 1 的 A3 节。

9. 工发组织说明了支持亚美尼亚项目编制申请的各项活动，环境规划署对其他 11 个国家<sup>1</sup> 给出了说明。各国的来文包括：申请项目编制资金的理由；关于其各自氟氯烃淘汰管理计划第一和第二阶段执行情况进度报告；以及潜在活动和相应预算的清单。科威特投资项目的申请还提供了企业的数量和基本消费情况的数据。

---

<sup>1</sup> UNEP/OzL.Pro/ExCom/84/35。

10. 作为 11 个国家的牵头执行机构和一个国家的合作执行机构，环境规划署在其 2019 年的工作方案修正案中分别申请了 435,000 美元外加机构支助费用，以及 10,000 美元外加机构支助费用。<sup>2</sup>

### 秘书处的评论

11. 在审查 12 项申请时，秘书处注意到第 71/42 号决定中所载第 5 条国家氟氯烃淘汰管理计划第二和第三阶段编制工作供资准则；已核准的氟氯烃淘汰管理计划第一和第二阶段，编制本文件时各次付款申请的实施情况，以及第 82/45 号决定(cc)(一)段。<sup>3</sup> 秘书处注意到，为各国所申请资金符合第 71/42 号决定，工发组织确认，这些国家的剩余的付款申请将依照其与执行委员会《协定》的安排予以提交。

12. 工发组织确认，巴哈马、贝宁、布基纳法索、科特迪瓦、赤道几内亚、厄立特里亚、加蓬、利比里亚、马达加斯加和塞拉利昂氟氯烃淘汰管理计划第二阶段到 2030 年将实现氟氯烃消费 100%的削减，科威特将于 2025 年实现 67.5%的削减。亚美尼亚氟氯烃淘汰管理计划第三阶段将于 2030 年实现 97.5%的削减。

### 秘书处的建议

13. 秘书处建议按表 1 的 A3 节所示金额一揽子核准巴哈马、贝宁、布基纳法索、科特迪瓦、赤道几内亚、厄立特里亚、加蓬、科威特、利比里亚、马达加斯加和塞拉利昂氟氯烃淘汰管理计划第二阶段的项目编制以及亚美尼亚的第三阶段。

## A4：扶持活动的技术援助

### 背景

14. 根据第 79/46 号决定，<sup>4</sup> 工发组织提交了表 1 的 A4 节中所列为实施阿尔及利亚扶持活动供资的申请。

15. 这些扶持活动包括：

- (a) 审查批准和履行《基加利修正案》的法律框架，包括评估已制定的现行立法和政策，确定建立管理逐步减少氢氟碳化物的立法和政策框架的要求；

<sup>2</sup> 同上。

<sup>3</sup> 2019–2021 年综合业务计划中列入氟氯烃淘汰管理计划第三阶段仅适用于其已核准氟氯烃淘汰管理计划第二阶段实现了 2020 年减少目标的国家。

<sup>4</sup> 除其他外，执行委员会决定，在以下基础上批准第 5 条缔约方的扶持活动：允许各国灵活开展一系列扶持活动，根据《基加利修正案》履行其初步义务；扶持活动可包括但不限于：协助和支持早日批准《基加利修正案》；启动支持体制安排；审查许可证制度；氢氟碳化物的数据报告；以及非投资活动的示范。

- (b) 政府机构和利益攸关方之间就批准和实施《基加利修正案》所要求的政策和行动计划进行协调；
- (c) 制定监管框架以确定氢氟碳化物和氢氟碳化物的替代品的进出口许可证制度；根据数据报告承诺编制氢氟碳化物的统一关税编码，并特别注意氢氟碳化物的混合物；审查用于消耗臭氧层物质报告的国家机制以纳入氢氟碳化物的消费量，特别是维修行业；以及
- (d) 提高认识活动。

## 秘书处的评论

16. 秘书处审查了各项扶持活动申请，认为申请符合第 79/46 号决定的所有要求，详情如下：

- (a) 工发组织提交了阿尔及利亚政府的核准信函，表明其打算做出最好努力尽早批准《基加利修正案》；
- (b) 项目提案包括对各项扶持活动、体制安排、费用细目以及实施时间表的详细说明；以及
- (c) 所有提案都将在 18 个月内付诸实施。

17. 阿尔及利亚的供资申请符合第 79/46 号决定(c)段，而且是根据该国的氟氯烃基准进行计算的。

## 秘书处的建议

18. 秘书处建议按上文表 1 的 A4 节所列数额一揽子核准关于阿尔及利亚逐步减少氢氟碳化物扶持活动的申请。

## B 节：供单独审议的活动

### B1：氟氯烃淘汰管理计划的项目编制

## 项目说明

19. 工发组织作为合作执行机构（环境规划署为牵头执行机构）提交了表 1 的 B1 节所列巴林氟氯烃淘汰管理计划第二阶段编制工作的申请和泡沫塑料行业投资项目的项目编制申请。环境规划署作为牵头执行机构在其 2019 年工作方案修正案中申请 42,000 美元外加机构支助费用。<sup>5</sup>

<sup>5</sup> UNEP/OzL.Pro/ExCom/84/35。

20. 工发组织说明了支持泡沫塑料行业投资项目的项目编制申请的各项活动，包括企业的数量和基本消费数据，而环境规划署提供了关于总体战略的详细资料，并在其 2019 年工作方案修正案中申请 US \$42,000 美元外加机构支助费用。<sup>6</sup>

### 秘书处的评论

21. 秘书处根据第 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工作的供资准则，以及编制本文件时第一阶段的执行情况，审查了巴林氟氯烃淘汰管理计划第二阶段项目编制申请和泡沫塑料行业投资项目的项目编制申请。预期巴林氟氯烃淘汰管理计划第二阶段将于 2025 年实现 67.5% 的削减。秘书处注意到，巴林提交了一项付款申请，供执行委员会第八十四次会议审议。<sup>7</sup>

22. 秘书处注意到，巴林政府与执行委员会签订的巴林氟氯烃淘汰管理计划第一阶段的《协定》于 2023 年终止。因此，根据第 71/42 号决定，第二阶段的项目编制申请只能在第一阶段《协定》终止之前两年提交（即 2021 年）<sup>8</sup>。巴林政府向第八十四次会议提交了与氟氯烃淘汰管理计划第一阶段相关的付款申请，同时还提交将完成日期由 2023 年 12 月 31 日改为 2020 年 12 月 31 日的申请。如果执行委员会核准巴林政府所要求的氟氯烃淘汰管理计划第一阶段的完成日期，向第八十四次会议提交的第二阶段的项目编制工作资金申请便符合资格。

### 秘书处的建议

23. 执行委员会不妨考虑为巴林氟氯烃淘汰管理计划第二阶段的项目编制核准 18,000 美元外加机构支助费用 1,260 美元，以及为泡沫塑料行业投资项目的项目编制核准 80,000 美元外加机构支助费用 5,600 美元，但项目 9(f) “投资项目” 下将要讨论的巴林政府与执行委员会《协定》中的 2020 年 12 月 31 日之前完成氟氯烃淘汰管理计划第一阶段的修订须获得核准。

---

<sup>6</sup> UNEP/OzL.Pro/ExCom/84/35。

<sup>7</sup> UNEP/OzL.Pro/ExCom/84/40。

<sup>8</sup> 第 82/45 号决定(c)(一)段。

**Annex I**

**INSTITUTIONAL STRENGTHENING PROJECT PROPOSAL<sup>1</sup>**

**Bosnia and Herzegovina: Renewal of institutional strengthening**

<b>Summary of the project and country profile</b>		
Implementing agency:		UNIDO
Amounts previously approved for institutional strengthening (US \$):		
Phase I:	Mar-99	110,000
Phase II:	Jul-04	95,333
Phase III:	Nov-11	95,333
Phase IV:	Dec-13	95,333
Phase V:	May-15	95,333
Phase VI:	Nov-17	122,026
	Total:	613,358
Amount requested for renewal (phase VII) (US \$):		122,026
Amount recommended for approval for phase VII (US \$):		122,026
Agency support costs (US \$):		8,542
Total cost of institutional strengthening phase VII to the Multilateral Fund (US \$):		130,568
Date of approval of country programme:		1997
Date of approval of HCFC phase-out management plan:		2012
Baseline consumption of controlled substances (ODP tonnes):		
Annex B, Group III (methyl chloroform) (average 1998-2000)		1.6
Annex C, Group I (HCFCs) (average 2009-2010)		4.7
Annex E (methyl bromide) (average 1995-1998)		3.5
Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7:		
Annex B, Group III (methyl chloroform)		0.00
Annex C, Group I (HCFCs)		2.00
Annex E (methyl bromide)		0.00
	Total:	2.00
Year of reported country programme implementation data:		2018
Amount approved for projects (as at May 2019) (US \$):		4,658,617
Amount disbursed (as at December 2018) (US \$):		4,212,462
ODS to be phased out (as at May 2019) (ODP tonnes):		257.6
ODS phased out (as at December 2018) (ODP tonnes):		315.4

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

<b>Summary of activities</b>	<b>Funds approved (US \$)</b>
(a) Investment projects:	3,340,659
(b) Institutional strengthening:	613,358
(c) Project preparation, technical assistance, training and other non-investment projects:	704,600
	Total:
	4,658,617
(d) HFC activities funded from additional voluntary contributions	95,000

Progress report

2. In phase VI of the institutional strengthening (IS) project, Bosnia and Herzegovina has continued the implementation of the HCFC phase-out management plan (HPMP) activities along with increased capacity building of the national ozone unit (NOU). The HCFC quota system, HFC licenses, and the ban

<sup>1</sup> Data as at December 2018 are based on document UNEP/OzL.Pro/ExCom/84/20.



on equipment based on HCFCs and its blends, have been approved by the Council of Ministers and implemented by the NOU in cooperation with the Indirect Taxation Authority. Bosnia and Herzegovina's representative was a Vice-President of the Bureau of the Twenty-eighth Meeting of the Parties to the Montreal Protocol. All the 24 performance indicators of this phase have been fully achieved.

### Plan of action

3. In phase VII, the NOU will continue building up capacity to achieve and maintain compliance with the HCFC consumption phase-out targets and supporting ongoing legislative and regulatory efforts, with a special focus on additional HCFC restrictions. Cooperation with the customs authorities to prevent illegal trade in ODS, and with the refrigeration and air-conditioning (RAC) association to train technicians, will be continued. Bosnia and Herzegovina is committed to ratifying the Kigali Amendment and has made the necessary initial steps by including the ratification into the bi-annual work plan of the Council of Ministers and collecting opinions from relevant administrative institutions. The date of ratification will depend on the establishment of the new Parliament.

### **Serbia: Renewal of institutional strengthening**

<b>Summary of the project and country profile</b>		
Implementing agency:		UNIDO
Amounts previously approved for institutional strengthening (US \$):		
Phase I:	Jul-98	151,500
Phase II:	Dec-04	131,300
Phase III:	Nov-09	119,938
Phase IV:	Nov-11	131,300
Phase V:	Dec-13	131,300
Phase VI:	Nov-17	168,064
	Total:	833,402
Amount requested for renewal (phase VII) (US \$):		168,064
Amount recommended for approval for phase VII (US \$):		168,064
Agency support costs (US \$):		11,764
Total cost of institutional strengthening phase VII to the Multilateral Fund (US \$):		179,828
Date of approval of country programme:		1997
Date of approval of HCFC phase-out management plan:		2010
Baseline consumption of controlled substances (ODP tonnes):		
Annex B, Group III (methyl chloroform) (average 1998-2000)		0.0
Annex C, Group I (HCFCs) (average 2009-2010)		8.4
Annex E (methyl bromide) (average 1995-1998)		8.3
Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7:		
Annex B, Group III (methyl chloroform)		0.00
Annex C, Group I (HCFCs)		6.61
Annex E (methyl bromide)		0.00
	Total:	6.61
Year of reported country programme implementation data:		2018
Amount approved for projects (as at May 2019) (US \$):		9,970,907
Amount disbursed (as at December 2018) (US \$):		8,077,009
ODS to be phased out (as at May 2019) (ODP tonnes):		1,121.2
ODS phased out (as at December 2018) (ODP tonnes):		1,121.2

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

Summary of activities	Funds approved (US \$)
(a) Investment projects:	7,125,743
(b) Institutional strengthening:	833,402
(c) Project preparation, technical assistance, training and other non-investment projects:	2,011,762
Total:	9,970,907
(d) HFC activities funded from additional voluntary contributions	150,000

Progress report

5. In phase VI of the IS project, amendments to the Regulation on ODS Management, and revised conditions for issuing licenses for import and export of ODS, were adopted (March 2018), which restricted the import of HCFCs to servicing sector maintenance activities and introduced a ban on equipment containing HCFCs. The NOU has initiated, and is following up on, the procedure for the ratification of the Kigali Amendment, under the enabling activities for HFC phase-down. Public awareness activities have been organized on the occasion of the International Ozone Day. The NOU has strengthened the cooperation with the refrigeration association in the process of certification of technicians and provision of technical support on alternatives to HCFC use to other countries in the region, through organization of exhibitions, conferences and other initiatives. All the 16 performance indicators of this phase have been fully achieved.

Plan of action

6. In phase VII, the NOU will continue to coordinate activities to finalize the implementation of stage I of the HPMP in 2020 and submit stage II to the 85<sup>th</sup> meeting. The NOU will prepare early implementation of the Kigali Amendment through enabling activities for HFC phase-down. Priority will be given to liaising with stakeholders, in particular from the RAC sector, on promoting low-global-warming-potential (GWP) alternatives on the local market. Awareness-raising activities will also be implemented.

**Tunisia: Renewal of institutional strengthening**

Summary of the project and country profile	
Implementing agency:	UNIDO
Amounts previously approved for institutional strengthening (US \$):	
Phase I:	Oct-92 285,312
Phase II:	June-98 186,700
Phase III:	Apr-03 242,667
Phase IV:	Apr-06 247,270
Phase V:	Jul-08 247,270
Phase VI:	Jul-10 247,270
Phase VII:	Apr 12 247,270
Phase VIII:	May-15 247,270
Total:	1,951,029
Amount requested for renewal (phase IX) (US \$):	316,506
Amount recommended for approval for phase IX (US \$):	316,506
Agency support costs (US \$):	22,155
Total cost of institutional strengthening phase IX to the Multilateral Fund (US \$):	338,661
Date of approval of country programme:	1991
Date of approval of HCFC phase-out management plan:	2014
Baseline consumption of controlled substances (ODP tonnes):	
Annex B, Group III (methyl chloroform) (average 1998-2000)	0.1
Annex C, Group I (HCFCs) (average 2009-2010)	40.7
Annex E (methyl bromide) (average 1995-1998)	8.3
Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7:	

<b>Summary of the project and country profile</b>	
Annex B, Group III (methyl chloroform)	0.00
Annex C, Group I (HCFCs)	25.91
Annex E (methyl bromide)	0.00
Total:	25.91
Year of reported country programme implementation data:	2018
Amount approved for projects (as at May 2019) (US \$):	13,389,657
Amount disbursed (as at December 2018) (US \$):	10,185,179
ODS to be phased out (as at May 2019) (ODP tonnes):	1,397.3
ODS phased out (as at December 2018) (ODP tonnes):	1,566.5

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

<b>Summary of activities</b>	<b>Funds approved (US \$)</b>
(a) Investment projects:	8,408,446
(b) Institutional strengthening:	1,951,029
(c) Project preparation, technical assistance, training and other non-investment projects:	3,030,182
Total:	13,389,657
(d) HFC activities funded from additional voluntary contributions	150,000

Progress report

8. In phase VIII, the NOU has advanced with the implementation of the HPMP activities through strict monitoring of HCFC trade through the ODS regulatory framework and allocation of quotas; further strengthening of the cooperation with the customs authorities ensuring sustained ODS phase-out; sharing of information with industry associations; updating the membership of the National Ozone Steering Committee on Montreal Protocol matters; coordination and preparation of stage II of the HPMP; implementation of enabling activities for HFC phase-down to prepare for the ratification of the Kigali Amendment; public awareness activities, including the celebration of the International Ozone Day; country programme and Article 7 data reporting; and participation in regional network and Montreal Protocol-related meetings.

Plan of action

9. Planned activities in phase IX include: country programme and Article 7 data reporting; continued cross-checking of the licensing system and quota allocation against the customs records to control HCFC imports; implementation of stage II of the HPMP following its approval; updating the legislation to include HFCs; establishing a certification system for RAC technicians; banning the import or manufacturing of HCFC-based equipment, including HCFC-22; continued cooperation with custom authorities and industry associations; and facilitating the ratification of the Kigali Amendment through the implementation of enabling activities for HFC phase-down. The celebration of the International Ozone Day and the participation in regional network and Montreal Protocol-related meetings are also envisaged.

**Turkey: Renewal of institutional strengthening**

<b>Summary of the project and country profile</b>	
Implementing agency:	UNIDO
Amounts previously approved for institutional strengthening (US \$):	
Phase I:	Oct-92 300,000
Phase II:	Dec-00 200,000
Phase III:	Dec-04 260,000

<b>Summary of the project and country profile</b>			
	Phase IV:	Jul-09	195,000
	Phase V:	Jul-11	260,000
	Phase VI:	Jul-13	260,000
	Phase VII:	May-15	260,000
	Phase VIII:	Nov-17	332,800
		Total:	2,067,800
Amount requested for renewal phase IX (US \$):			332,800
Amount recommended for approval for phase IX (US \$):			332,800
Agency support costs (US \$):			23,296
Total cost of institutional strengthening phase IX to the Multilateral Fund (US \$):			356,096
Date of approval of country programme:			1992
Date of approval of HCFC phase-out management plan:			2012
Baseline consumption of controlled substances (ODP tonnes):			
Annex B, Group III (methyl chloroform) (average 1998-2000)			37.4
Annex C, Group I (HCFCs) (average 2009-2010)			551.5
Annex E (methyl bromide) (average 1995-1998)			479.7
Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7:			
Annex B, Group III (methyl chloroform)			0.00
Annex C, Group I (HCFCs)			10.57
Annex E (methyl bromide)			0.00
			Total:
			10.57
Year of reported country programme implementation data:			2018
Amount approved for projects (as at May 2019) (US \$):			55,116,145
Amount disbursed (as at December 2018) (US \$):			48,245,319
ODS to be phased out (as at May 2019) (ODP tonnes):			4,937.0
ODS phased out (as at December 2018) (ODP tonnes):			5,002.1

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

<b>Summary of activities</b>	<b>Funds approved (US \$)</b>
(a) Investment projects:	47,172,947
(b) Institutional strengthening:	2,067,800
(c) Project preparation, technical assistance, training and other non-investment projects:	5,875,398
	Total:
	55,116,145
(d) HFC activities funded from additional voluntary contributions	250,000

Progress report

11. The capacity of the NOU has been increased by allocating additional staff from the Ministry of Environment and Urbanization, and by enhancing the functionality of the Steering Committee. Progress has been achieved in reviewing the national ODS legislation and on enabling activities for HFC phase-down. The Kigali Amendment is already in the parliamentary procedure with a view of its adoption. Cooperation with the refrigeration association has been enhanced through awareness-raising and pilot demonstration activities undertaken in the context of the HPMP implementation, and the HFC consumption trend analysis carried out annually. Prevention of illegal trade has been enhanced through improvement of a centralized electronic system. Turkey has fully achieved 11 indicators and two were partially achieved.

Plan of action

12. In phase IX, new ODS alternative technologies will be supported through training and awareness-raising activities. Monitoring of ODS trade will be strengthened, especially through the use of

information-technology-based and context-dependent approaches. Data collection and reporting, communication and networking, as well as the awareness of the protection of ozone layer among stakeholders, will be strengthened.



## 附件二

### 执行委员会就提交第八十四次会议的体制强化项目延长所表示的意见草案

#### 波斯尼亚和黑塞哥维那

1. 执行委员会审查了提交的报告，其中载有波斯尼亚和黑塞哥维那体制强化项目（第七阶段）的申请，并赞赏地注意到，波斯尼亚和黑塞哥维那向臭氧秘书处报告了《蒙特利尔议定书》第 7 条规定的 2017 年和 2018 年消耗臭氧层物质消费数据，并向基金秘书处报告了国家方案数据，指出该国遵守了该国的《蒙特利尔议定书》义务。执行委员会还注意到，波斯尼亚和黑塞哥维那为实现氟氯烃消费淘汰目标以协调的方式采取了措施，并开始实施逐步减少氢氟碳化物的措施。执行委员会注意到波斯尼亚和黑塞哥维那的努力，并因此希望该国继续及时和圆满地实施《蒙特利尔议定书》活动，包括实施氟氯烃淘汰管理计划和体制强化项目活动。

#### 塞尔维亚

2. 执行委员会审查了提交的报告，其中载有塞尔维亚体制强化项目（第七阶段）的延长申请，并赞赏地注意到，塞尔维亚向臭氧秘书处报告了《蒙特利尔议定书》第 7 条规定的 2017 年和 2018 年消耗臭氧层物质消费数据，并向基金秘书处报告了国家方案数据，指出该国遵守了该国的《蒙特利尔议定书》义务。执行委员会还注意到，塞尔维亚根据其和执行委员会的《协定》为实现氟氯烃消费淘汰目标作出了协调一致的努力，包括执行于 2018 年 3 月开始禁止使用含有氟氯烃的设备的进口，以及在本区域实施技术信息交流活动。执行委员会注意到塞尔维亚的努力，并因此希望该国继续及时和圆满地实施《蒙特利尔议定书》活动，包括实施氟氯烃淘汰管理计划和体制强化项目活动。

#### 突尼斯

3. 执行委员会审查了提交的报告，其中载有突尼斯体制强化项目（第九阶段）的延长申请，同时注意到，突尼斯向臭氧秘书处报告了《蒙特利尔议定书》第 7 条规定数据，并向基金秘书处报告了国家方案数据，指出该国遵守了该国的《蒙特利尔议定书》义务。执行委员会注意到，突尼斯采取了淘汰氟氯烃消费的行动，包括通过国家监管框架实施严格的消耗臭氧层物质贸易监测系统，并对海关当局进行了培训。执行委员会注意到突尼斯为执行氟氯烃淘汰管理计划第一阶段所作的努力，注意到突尼斯提交了供执行委员会审议的氟氯烃淘汰管理计划第二阶段，并因此希望该国继续及时和圆满地实施体制强化项目活动。

#### 土耳其

4. 执行委员会审查了提交的报告，其中载有土耳其体制强化项目（第九阶段）的延长申请，并赞赏地注意到，土耳其正在遵守《蒙特利尔议定书》规定的报告义务和国家方案的实施，加快了其与执行委员会的《协定》中规定的氟氯烃淘汰目标。执行委员会还注意到土耳其在欧洲和中亚区域的制冷和空调行业采用氟氯烃替代品方面的重要作用。执行委

员会注意到土耳其的努力，并因此希望该国继续及时和圆满地实施《蒙特利尔议定书》活动，包括实施氟氯烃淘汰管理计划和体制强化项目活动。





UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

# UNIDO WORK PROGRAMME

Presented to the 84<sup>th</sup> Meeting of the Executive Committee of the Multilateral Fund

## Introduction

The UNIDO Work Programme Amendment (WPA) for the consideration of the 84<sup>th</sup> Meeting of the Executive Committee (ExCom) of the Multilateral Fund (MLF) has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme Amendment will support the implementation of UNIDO's three year Rolling Business Plan 2019-2021.

The 84<sup>th</sup> UNIDO WPA is addressing preparatory assistance, institutional strengthening, verification report and enabling activities requests.

Preparatory assistance is submitted for the 84<sup>th</sup> Executive Committee Meeting consideration for the Bahamas, Bahrain, Benin, Burkina Faso, Cote d'Ivoire, Equatorial Guinea, Eritrea, Gabon, Kuwait, Liberia, Madagascar and Sierra Leone to enable the countries to overview and update data necessary for the launch and implementation of HPMP Stage II. Also, preparatory assistance is submitted for the 84<sup>th</sup> Executive Committee Meeting consideration for Armenia to enable the country to overview and update data necessary for the launch and implementation of HPMP Stage III. For the first time, UNIDO is submitting preparatory assistance for HFC phase-down plans for Cameroon, Gabon, the Gambia, Jordan and Mexico to assist the countries with the implementation of the next phases of the Kigali Amendment to the Montreal Protocol.

Institutional strengthening extension requests are submitted based on the country requests for Bosnia and Herzegovina, Serbia, Tunisia and Turkey.

Verification Report related funding is required in line with the Decisions 61/46(c) and 83/48 for Guatemala, Honduras and Montenegro.

Request for funding of enabling activities is submitted in line with Decision 79/46 in Algeria. UNIDO is the only implementing agency in Algeria and the proposal is submitted as part of UNIDO's WPA. Detailed description of tasks and budget is included in the project concept.

As per decision 81/31(a), Enabling activities for HFC phase-down were approved with a duration of 18 months, however if needed, that period can be extended for additional 12 months, when an official request is submitted. UNIDO has received official letters from Argentina, Egypt, Libya, Morocco, the Niger, Nicaragua and the Bolivarian Republic of Venezuela, requesting the duration of the implementation period to be extended for additional 12 months. The reasons for the extensions are provided in Section 3.

The UNIDO Work Programme Amendment for the consideration of the 84<sup>th</sup> ExCom Meeting comprises the following sections:

- **Section 1:** Consolidated list of activities foreseen for the above requests by project types and country;
- **Section 2:** Project concepts indicating details and funding requirements; and
- **Section 3:** Requests for extension of the duration of the Enabling activities for HFC phase down.

Funding is requested as follows:

- Preparatory assistance funding for HPMP Stage II in the Bahamas, Bahrain, Benin, Burkina Faso, Cote d'Ivoire, Equatorial Guinea, Eritrea, Gabon, Kuwait, Liberia, Madagascar and Sierra Leone<sup>1</sup> and for HPMP Stage III for Armenia amounting to US\$ 388,410 (including US\$ 25,410 representing 7.0 % A.S.C.);
- Preparatory assistance funding for HFC phase-down plans in Cameroon, Gabon, Gambia, Jordan and Mexico<sup>2</sup> amounting to US\$ 1,182,350 (including US\$ 77,350 representing 7.0% A.S.C.)
- Institutional strengthening projects amounting to US\$ 1,005,153 (including US\$ 65,757 representing 7.0 % A.S.C.);
- Verification Report funding amounting to US\$ 98,100 (including US\$ 8,100 representing 9.0 % A.S.C.); and
- Enabling activities funding amounting to US\$ 160,500 (including US\$ 10,500 representing 7.0 % A.S.C.).

**Total: US\$ 2,834,513 (including US\$ 187,117 agency support cost).**

---

<sup>1</sup> The Project Concepts for the Bahamas, Bahrain, Benin, Burkina Faso, Cote d'Ivoire, Equatorial Guinea, Eritrea, Gabon, Kuwait, Liberia, Madagascar and Sierra Leone are included in the Lead Agency (UN Environment) Work Programme.

<sup>2</sup> The project proposal for Mexico includes four sub-projects, all related to HFC phase-down.

## SECTION 1

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
<b>Preparatory Assistance for HPMP</b>											
Armenia	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage III HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment.
Bahamas (the)	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Bahrain	Non-LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	18,000	1,260	19,260	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Bahrain	Non-LVC	PRP	HCFC-141b	Foam	Preparation of Stage II HPMP	80,000	5,600	85,600	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Benin	Non-LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Burkina Faso	Non-LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Cote d'Ivoire	Non-LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Equatorial Guinea	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Eritrea	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Gabon	Non-LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Kuwait	Non-LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	15,000	1,050	16,050	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Kuwait	Non-LVC	PRP	HCFC-141b	REF-Air Conditioning	Preparation of Stage II HPMP	80,000	5,600	85,600	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Liberia	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Madagascar	Non-LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Sierra Leone	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
<b>SUBTOTAL</b>						<b>363,000</b>	<b>25,410</b>	<b>388,410</b>			
<b>Institutional Strengthening</b>											
Cameroon	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	150,000	10,500	160,500	7%	24	
Gabon	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	150,000	10,500	160,500	7%	24	
Gambia (the)	LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	95,000	6,650	101,650	7%	24	
Jordan	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	150,000	10,500	160,500	7%	24	
Mexico	Non-LVC	PRP	HFC	Overarching	Preparation of HFC phase-down plan	250,000	17,500	267,500	7%	24	
Mexico	Non-LVC	PRP	HFC	MAC sector	Preparation of HFC phase-down plan	150,000	10,500	160,500	7%	24	
Mexico	Non-LVC	PRP	HFC	Demonstration refrigeration	Demonstration pilot project	80,000	5,600	85,600	7%	24	
Mexico	Non-LVC	PRP	HFC	Investment refrigeration	Preparation of umbrella project in manufacturing sector	80,000	5,600	85,600	7%	24	
<b>SUBTOTAL</b>						<b>1,105,000</b>	<b>77,350</b>	<b>1,182,350</b>			
<b>Institutional Strengthening</b>											
Bosnia and Herzegovina	LVC	INS	All	SEV	Institutional strengthening	122,026	8,542	130,568	7%	24	
Serbia	LVC	INS	All	SEV	Institutional strengthening	168,064	11,764	179,828	7%	24	

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Tunisia	Non-LVC	INS	All	SEV	Institutional strengthening	316,506	22,155	338,661	7%	24	
Turkey	Non-LVC	INS	All	SEV	Institutional strengthening	332,800	23,296	356,096			
<b>SUBTOTAL</b>						<b>939,396</b>	<b>65,757</b>	<b>1,005,153</b>			
<b>Verification Reports</b>											
Guatemala	LVC	TAS	HCFC-22	SEV	Verification report	30,000	2,700	32,700	9%	24	
Honduras	LVC	TAS	HCFC-22	SEV	Verification report	30,000	2,700	32,700	9%	24	
Montenegro	LVC	TAS	HCFC-22	SEV	Verification report	30,000	2,700	32,700	9%	24	
<b>SUBTOTAL</b>						<b>90,000</b>	<b>8,100</b>	<b>98,100</b>			
<b>Enabling activities for HFC phase-down</b>											
Algeria	Non-LVC	TAS	SEV	SEV	Enabling activities	150,000	10,500	160,500	7%	18	
<b>SUBTOTAL</b>						<b>150,000</b>	<b>10,500</b>	<b>160,500</b>			
<b>GRAND TOTAL</b>						<b>2,647,396</b>	<b>187,117</b>	<b>2,834,513</b>			

## SECTION 2

### PROJECT CONCEPT - Armenia

#### MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HCFC phase-out management plan (Overarching strategy)

#### Part I: Project Information

<b>Project title:</b>	Preparation of a HCFC phase-out management plan (stage III)	
<b>Country:</b>	Armenia	
<b>Lead implementing agency:</b>	UNIDO	
<b>Cooperating agency (1):</b>	UNEP	Click or tap here to enter text.
<b>Implementation period:</b>	January 2020 – December 2021	
<b>Funding requested:</b>		
<b>Agency</b>	<b>Sector</b>	<b>Funding requested (US \$)*</b>
UNIDO	Overarching	20,000
UNEP	Overarching	10,000

\*Details should be consistent with information provided in the relevant sections below.

#### Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Written confirmation – balances from previous PRP funding approved for stage I HPMP had been returned / will be returned ( <b>Decision 71/42(i)</b> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Specify meeting at which PRP funding balance had been returned/will be returned</li> </ul>	UNDP will return the balance to ExCom 84; UN Environment disbursed 100% of preparatory funding; UNIDO was not involved in HPMP stage II.	

#### A. Information required to support PRP funding (Overarching strategy)

<b>1. Montreal Protocol compliance target to be met in <input type="checkbox"/> stage II / <input checked="" type="checkbox"/> stage III of the HPMP</b>		
<b>Phase-out commitment (%)</b>	97.5%	<b>Year of commitment</b> 2030
<input checked="" type="checkbox"/> <b>Servicing only</b>	<input type="checkbox"/> <b>Manufacturing only</b>	<input type="checkbox"/> <b>Servicing and manufacturing</b>
<b>2. Brief background on previous stage of the HPMP</b>		
<ul style="list-style-type: none"> <li>Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made.</li> </ul>		
<p>Armenia's HPMP stage II was approved by ExCom 77 in November 2016 to reduce the HCFC consumption to a sustained level of 2.34 ODP tonnes by 1 January 2020, with UNDP as lead and UN Environment as cooperating agency. Tranche 1 was approved for both agencies in November 2016. Tranche 2 was approved by ExCom 83 in May 2019 for UN Environment only. Tranche 3 is scheduled for 2020 and contains only UNDP components. Armenia is in compliance with the Montreal Protocol provisions and the Agreement with the Executive Committee. Armenia has an enforceable import/export licensing and quota system for HCFCs in place, which is operational, effective and capable of ensuring compliance with the Montreal Protocol phase-out provisions for HCFCs. UN Environment's preparatory funds for HPMP stage II have fully been disbursed. UNIDO has not been involved in HPMP stage II. UNDP will return the balance of their preparatory funding for HPMP stage II. The endorsement</p>		



from the Government requesting UNIDO as lead agency and UN Environment as cooperating agency to prepare HPMP stage III has been received.

**3. Current progress in implementation of previous stage of the HPMP**

Activity	Description	Implementing agency
Refrigeration servicing sector	Purchase of advanced multi-gas identifiers	UNDP
Refrigeration servicing sector	Purchase of training / servicing equipment / tools	UNDP
Legal/regulatory framework	Regulatory updates in HCFC control frameworks	UNEP
Legal/regulatory framework	Electronic licensing system	UNEP
Refrigeration servicing sector	Strengthening capacity in the refrigeration sector	UNEP
Refrigeration servicing sector	Strengthening capacity in prevention of illegal trade	UNEP
(select)	Monitoring HPMP implementation	UNEP

**4. Overview of current HCFC consumption in metric tonnes by substance (last three years)**

Substance	Sector	2016	2017	2018
HCFC-22	RAC servicing	11,458	17,000	42,664

**5. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)**

HCFC consumption is below the reduction targets of the Montreal Protocol and the agreement between Armenia and the Executive Committee. However, it is fluctuating depending on the economic development and due to imports in one year, which might be used in subsequent years (stock-piling).

**6. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.**

Information needed	Description	Agency
Updated sectoral consumption information	Review available data and collect additional sector-specific data through questionnaires and interviews.	UNIDO
Analysis of the types of equipment using HCFCs	Review available data and collect additional equipment data through questionnaires and interviews.	UNIDO
New information on ODS regulations	Review existing legislation and identify gaps and need for new legislation, amendments and policy development.	UNEP
Others, specify.	Review available Article 7 and CP data, data from ODS alternatives surveys, enabling activities and progress reports and collect additional data as needed to determine needs for training and awareness raising	UNEP

**7. Activities to be undertaken for project preparation and funding**

Activity	Indicative funding (US \$)	Agency
Consultant to conduct surveys, interviews and consultations with key stakeholders to draft the investment components of the HPMP stage III overarching strategy / tranche 1 request in consultation with the Montreal Protocol focal point and implementing agencies.	20,000	UNIDO
Consultant to conduct surveys, interviews and consultations with key stakeholders including importers, wholesalers, service workshops, end-users, technology providers, training institutes, academia, RAC and consumer associations, NGOs, relevant Government bodies and to draft the non-investment components of the	10,000	UNEP

HPMP stage III overarching strategy / tranche 1 request in consultation with the Montreal.		
<b>TOTAL</b>	<b>30,000</b>	
<b>8. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation for stage II of the HPMP?</b>		
The overarching strategy will focus on the HCFC phase-out while promoting ozone-friendly, climate-friendly and energy-efficient technologies to the extent that this is possible without significant additional costs. The strategy will also raise awareness of stakeholders on the Kigali Amendment and its future obligations.		

## PROJECT CONCEPT – Cameroon

### MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

#### Part I: Project Information

<b>Project title:</b>	HFC Phase-Down Management Plan Preparation	
<b>Country:</b>	Cameroon	
<b>Implementing agency:</b>	UNIDO	
<b>Implementation period:</b>	January 2020 – December 2021	
<b>Funding requested:</b>		
<b>Agency</b>	<b>Sector</b>	<b>Funding requested (US \$)*</b>
UNIDO	Overarching	150,000

\*Details should be consistent with information provided in the relevant sections below.

#### Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government for choice of agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Letter of intent to ratify the KA	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### A. Information required to support PRP funding (Overarching strategy)

<p><b>3. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</b></p> <ul style="list-style-type: none"> <li>Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date.</li> </ul>		
<p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/50(e), funding was approved for Cameroon for <i>Enabling Activities for HFC phase-down</i> towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Cameroon for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. Cameroon had requested an extension for the implementation of the project that was granted for additional 12 months implementation as per decision 83/40(b). Since the project approval, workshops and consultations have been organized, national consultant has been hired, awareness raising meetings have been organized with customs and the reporting mechanisms were updated to include HFCs. Both the National Assembly and the Senate have adopted the Kigali Amendment, and the Law was signed by the President of the Republic. Currently, the instrument of ratification is at the Presidency awaiting final signature and onward transmission to the UN Secretariat in New York. All project activities are advancing well and the project will end as planned in June 2020. The Government of Cameroon has reinstated its intent to ratify the KA and requested UNIDO to proceed with the next steps and requesting funding for preparing HFC phase-down plan.</p> <p>Taking into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, and Cameroon has updated its reporting mechanism to include HFC, the country will be able to follow up on the reporting obligation, once the amendment is officially ratified. Cameroon has already created an enabling environment for the phasedown of HFCs.</p>		
<p><b>4. Current progress in implementation of Enabling Activities for HFC phase-down</b> <b>Budget: 150,000 USD</b></p>		
<b>Activity</b>	<b>Description</b>	<b>Implementing agency</b>
Activities to support the early ratification of the KA	Coordination with Government representatives; Supporting national ratification instruments	UNIDO

Institutional arrangements	Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain; Training of technicians on reducing refrigerant emissions as well as on the use of flammable and toxic low-GWP alternatives	UNIDO
Licensing systems	Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends	UNIDO
Data reporting on HFC consumption	Review of the national mechanisms used for ODS reporting to include HFCs consumption	UNIDO
Preparation for national strategies	Assessment of the refrigeration and air-conditioning servicing sector; Survey to cover the sectors that have not been analyzed in the ODS alternatives survey; Identification of policies and regulations to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies	UNIDO

#### 5. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt

Substance	2012	2013	2014	2015
HFC				
HFC 134a	1,700	1,768	1,904	1,999
HFC blends				
R 404A	141.7	152.6	163.5	174.4
R 407C	7.9	10.2	11.3	11.3
R 410A	282.5	293.8	316.4	327.7
Others				
Methyl formate	1.2	2.4	1.2	3.6
HC 600a	0.007	0.13	0.13	0.65
R-717	1.5	0	0	1.5
Ethanol	1.5	3	4.5	4.5
Pentane (C,N,I)	30.0	30.0	30.0	30.0

#### 6. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

The HCFC baseline of Cameroon amounts to 88.8 ODP tonnes.

The ODS alternative survey estimated a steady growth of 4% per annum over the next four years for the consumption of HFCs and blends, as result of the expected GDP growth and population push (increase of total population and population living in urban areas) for more air-conditioning, refrigeration units and their service. The survey found that as the country is phasing out ODS substance, the import of readily available alternatives on the market (i.e. high-GWP HFCs and their blends) increases. The high values for the consumption of HFC-134a are due to earlier conversion of the domestic refrigeration sub-sector to HFC-134. Furthermore, chillers and air-conditioning equipment are also using HFC-134a. HFC-blends used in the refrigeration sub-sector (R-404A) and in chillers (R-407C) are used in Cameroon for more than ten years. The use of R-410A is second to R-134a in metric tonnes since this alternative is increasingly being used in the commercial and central air conditioning applications like rooftop packaged units and large splits.

Cameroon, uses HFCs and their blends mainly in three sectors:

- Manufacturing of refrigerant equipment;
- Servicing sector for air-conditioning and refrigeration;
- Mobile air-conditioning sector for small cars and vans and large vehicles.

As Europe phases out the use of HFCs and their blends, they are imported by Cameroon in pre-owned machines. The lack of awareness, control and training were identified as a reason for refrigerant emissions in the informal sector.

The *Enabling activities for HFC phase-down* are preparing the ground works on which should be built up a detailed strategy and action plans for HFC phase-down in line with the reduction targets.

Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.

**7. Activities to be undertaken for project preparation and funding**

<b>Activity</b>	<b>Indicative funding (US \$)</b>	<b>Agency</b>
Conducting interviews, organizing workshops and stakeholders' consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control	50,000	UNIDO
Assessment of country level needs for trainings and certification in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; including assessments of the needs for enhancing training programs on recovery, recycling and destruction	30,000	UNIDO
Communication and outreach plan preparation and development of awareness raising activities	25,000	UNIDO
Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency	35,000	UNIDO
Validation: Consultations, review and validation of the consolidated overarching strategy	10,000	UNIDO
<b>TOTAL</b>	<b>150,000</b>	

**8. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?**

Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs.

## PROJECT CONCEPT – Gabon

### MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

#### Part I: Project Information

<b>Project title:</b>	HFC Phase-Down Management Plan Preparation	
<b>Country:</b>	Gabon	
<b>Implementing agency:</b>	UNIDO	
<b>Implementation period:</b>	January 2020 – December 2021	
<b>Funding requested:</b>		
<b>Agency</b>	<b>Sector</b>	<b>Funding requested (US \$)*</b>
UNIDO	Overarching	150,000

\*Details should be consistent with information provided in the relevant sections below.

#### Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government for choice of agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Kigali Amendment ratified by the country	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### A. Information required to support PRP funding (Overarching strategy)

<p><b>1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</b></p> <ul style="list-style-type: none"> <li>Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date.</li> </ul>		
<p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/49(h), funding was approved for Gabon for <i>Enabling Activities for HFC phase-down</i> towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Gabon for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. Gabon had requested an extension for the implementation of the project that was granted for additional 12 months as per decision 83/40(b). In the meantime, Gabon successfully completed the ratification process of the Kigali Amendment to the Montreal Protocol. The Government of Gabon has requested UNIDO to proceed with the next steps and request funding for preparing HFC phase-down plan.</p>		
<p><b>2. Current progress in implementation of Enabling Activities for HFC phase-down</b> <b>Budget: 150,000 USD</b></p>		
Activity	Description	Implementing agency
Facilitation of Ratification of the Kigali Amendment	Analysis of existing Ozone and Climate Policy and Legislation and drafting the amendments in the existing legislation to allow for ratification of the Kigali amendment; Stakeholder consultations; Translation of the Kigali amendment into national language; Drafting the Law on ratification of the Kigali amendment; Production of information sheets on the Kigali amendment to facilitate consultations and speed up the ratification; Finalizing the package on the ratification of Kigali amendment and advancing the ratification process.	UNEP
Capacity-Building &	Undertaking the training needs assessment for the	UNEP

Training on Alternatives	servicing sector and preparing an assessment report that will be used for further planning of the activities related to use of HFCs and low-GWP alternatives; Conduct sensitization meetings for technicians on safe handling of HFCs and its alternatives.			
Article 4B Licensing and Reporting	Revision of existing legislation and drafting the ODS alternative regulation to allow early ratification of the Kigali Amendment; Assisting Customs Office in developing national custom codes for different HFCs and include them into the Customs Tariff.			UNEP
<b>3. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt</b>				
<b>Substance</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
HFC				
HFC 134a	12,988	20,948	14,814	7,906
HFC blends				
R 404A	3,992	35,406	11,605	11,997
R 407C	4,678	3,868	79,077	24,795
R 410A	3,327	4,545	5,889	4,963
<b>4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)</b>				
<p>The HCFC baseline of Gabon amounts to 29.74 ODP tonnes.</p> <p>HFC-134a and R-410A, R-407C and R-404A mixtures are the main HFC refrigerants used in the country, mostly in refrigeration and air-conditioning servicing sector. Annual demand for HFCs has been fluctuating in the period of 2012-2015 but with a generally increasing trend, which is also a result of the HCFCs phase out and use of ODS alternative readily available at the market.</p> <p>The ODS survey results have demonstrated that HFCs-134a is used in the mobile air-conditioning sector for cars, small vans and large vehicles. HFCs and their blends are also imported in the country as part of equipment that contains HFCs (furniture chest-type freezers conservatives; household refrigerators; furniture cabinet-type freezers; refrigerator freezer with separate doors; monobloc air conditioners wall-type split system or window, machines and air conditioners with cooling devices). The country, following the ratification of the Kigali Amendment, needs to develop a detailed plan for the phase-down of HFCs and blends in the sectors identified as part of the ODS survey.</p>				
<b>5. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.</b>				
<b>Information needed</b>	<b>Description</b>			<b>Agency</b>
Updated ODS alternatives data	Review available data and collect additional sector-specific data, especially for the years for 2016-2018 through questionnaires and interviews (this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2015).			UNIDO
<b>6. Activities to be undertaken for project preparation and funding</b>				
<b>Activity</b>	<b>Indicative funding (US \$)</b>			<b>Agency</b>
Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives; consultant to conduct surveys and consultations with key stakeholders for the	50,000			UNIDO

integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control		
HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including assessment of needs to develop/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions	35,000	UNIDO
Communication and outreach plan preparation and development of awareness raising activities	20,000	UNIDO
Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency	35,000	UNIDO
Validation: Consultations, review and validation of the consolidated overarching strategy	10,000	UNIDO
<b>TOTAL</b>	<b>150,000</b>	
<b>7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?</b>		
Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs.		



**PROJECT CONCEPT – Jordan**  
**MULTILATERAL FUND FOR THE**  
**IMPLEMENTATION OF THE MONTREAL PROTOCOL**  
**PROJECT PREPARATION REQUEST FORM**  
**HFC Phase-down Management plan (OVERARCHING)**

**Part I: Project Information**

<b>Project title:</b>	HFC Phase-Down Management Plan Preparation	
<b>Country:</b>	Jordan	
<b>Implementing agency:</b>	UNIDO	
<b>Implementation period:</b>	January 2020 – December 2021	
<b>Funding requested:</b>		
<b>Agency</b>	<b>Sector</b>	<b>Funding requested (US \$)*</b>
UNIDO	Overarching	150,000

\*Details should be consistent with information provided in the relevant sections below.

**Part II: Prerequisites for submission**

<b>Item</b>	<b>Yes</b>	<b>No</b>
1. Official endorsement letter from Government for choice of agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Letter of intent to ratify the KA (by end of 2019)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**A. Information required to support PRP funding (Overarching strategy)**

<b>1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</b>		
<ul style="list-style-type: none"> <li>Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date.</li> </ul>		
<p>Following the outcomes of the 82th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, funding was approved for Jordan for Enabling Activities towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Jordan for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. All project activities are advancing well and the project will end as planned in June 2020. Jordan is yet to ratify but significant progress has been made. All necessary procedures of ratification process have been initiated, including the final step, the signature by the ministry of foreign affairs which will now forward the ratification document to the United Nations Head office in Washington for Jordan's inclusion in the list of parties that already ratified the KA to the Montreal Protocol. The Government of Jordan confirms its intention to ratify the KA before the end of 2019 in an attached letter.</p> <p>Jordan has conducted a national inventory of HFCs and a survey on alternatives to ODS financed by CCAC and the MLF. This survey indicates the current supply and consumption of HFC and ODS alternatives and provides future projections of growth patterns by substances and sector in line with the multilateral fund secretariat decision 75/77.</p> <p>Jordan has started to create an enabling environment for the phasedown of HFCs through the Enabling Activities project as well as the ODS alternative survey and inventory. Taking also into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, Jordan is ready to take further early action on HFCs and submit preparatory funding request to prepare its HFC phase-down plans. The Enabling activities for HFC phase-down are preparing the ground works on which will be built up a detailed strategy and action plan for HFC phase-down in line with the reduction targets. Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.</p>		
<b>2. Current progress in implementation of Enabling Activities for HFC phase-down</b>		
<b>Budget: 150,000 USD</b>		
<b>Activity</b>	<b>Description</b>	<b>Implementing agency</b>

Activities to support the early ratification of the KA	Coordination with Government representatives Supporting national ratification instruments	UNIDO
Institutional arrangements	Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain	UNIDO
Review of licensing systems and data reporting	Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends and review of the national mechanisms used for ODS reporting to include HFCs	UNIDO
Assessment of national barriers and opportunities for the use and further uptake of low- and zero-GWP ODS alternative	Assessment of national barriers and opportunities for the use and further uptake of low- and zero-GWP ODS alternative, with a special focus on the availability and accessibility and their related equipment.	UNIDO
Awareness, communication and dissemination	Awareness raising of stakeholders (public and private sectors) on HFC phase-down and energy efficiency improvement options	UNIDO

### 3. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt

#### Total consumption of HFC and HFC blends in all sectors during the period 2012-2015.

ODS Alternative in (Mt/Year)	Year				Growth Rate 2012-2015 (%)
	2012	2013	2014	2015	
R-134a	693	723.5	714	773	11.5
FM200 (HFC-227ea)	30	30	30	35	16.7
R-404A	232	218	210	235	1.3
R-407C	113	110	105	150	33.6
R-410A	73	94	100	117	60

The table shows a consistent increase in consumption of HFC, HFC blends and other alternatives. Consumption of HFC is primarily dominated by consumption of R-134a, which is used in the refrigeration and air conditioning sector. This increase in HFCs use can be attributed to the growth in population in the wake of Syrian crisis, local market growth and the magnitude of Jordanian exports of RAC appliances to the neighbouring countries.

#### Total consumption of other ODS alternatives in all sectors during the period 2012-2015

ODS Alternative in (Mt/Year)	Year				Growth Rate 2012-2015 (%)
	2012	2013	2014	2015	
R-600a	-	-	3	5	66.7
R-717	0.55	0.55	3.2	5.2	945
C-Pentane	355	382	405	405	14.1
Methylene Chloride	238	261	283	270	13.2
HC: LPG	500	500	500	500	0
Butane	145	145	150	150	3.5
CO <sub>2</sub>	12	12	13	13	8.3
NOVEC 1230	10	10	10	10	0
NAF S III	20	20	20	0	-

<p>The increase in consumption of HFC blends is almost equally dominated by consumption of R-404A, R-407C and R-410A in RAC sector. R-600a and R-717 are recently introduced into the market with small amount. Tables 3-22 until 3-29 show the total consumption of HFC, HFC blends and other ODS alternatives by sectors for the period 2012-2015.</p>		
<p><b>4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)</b></p>		
<p>The consumption of ODS alternatives in Jordan has been observed in the refrigeration and air-conditioning (RAC) sector including their servicing, MAC, firefighting, aerosol and foam application. Under the RAC sector, it is used in unitary air-conditioning, water chillers, domestic refrigeration (refrigerators and plug-in-freezers), commercial refrigeration (stand-alone system, centralized system), industrial refrigeration (small, medium and large sized cold rooms), mobile air-conditioning, and transport refrigeration (road vehicles such as vans, trucks and trailers).</p> <p>Jordan neither produces nor export ODS or ODS alternatives and entirely relies on imports for its own consumption. Growing population, increase in income levels, increase in number of construction activities in the residential sector, expansion in the commercial and institutional (education institute, office space) sector and expansion in transportation, hospitality and tourism industry are the prime factors that drive the growth in consumption of ODS and ODS alternatives in Jordan.</p> <p>The survey reveals that R-134a, R-404A, R-407C, R-410A, R-600a and R-717 are the main refrigerants used in the RAC sector. The R-134a is the main ODS alternatives employed and count for 70% of the total alternatives been used during the period 2012-2015 with annual growth rate of up to 10%, followed by R-404A (18%) and R-407C (10%) with annual growth rate of 5% for each. The rest of the alternatives (R-410A, R-600a and R-717) are introduced recently and count for only 2% of the total alternatives. For insulation, the C-Pentane found to be the main alternative for the HFC-141b used in this sector as blowing agent.</p> <p>The consumption of HFCs and other alternatives of the main refrigerants (R-134a, R-404A, R-407C, R-410A, R-600a and R-717) in Jordan has increased from about 1307 MT in 2012 to 1532 MT in 2015, representing a compound annual growth of about 17% over the said period. Based on projected annual growth rates in demand forecasted for ODS alternatives until 2030, it is estimated that the consumption of these substances is likely to reach about 7638 MT in 2030. This demand of ODS alternatives will be dominated by the RAC and MAC sector.</p> <p>While the survey indicated a wide range of HFCs uses in the RAC and MAC, there were limited applications of HFCs in firefighting system, aerosol and foam application. Moreover, the survey didn't result in any HFCs applications in the solvent.</p> <p>Among various alternatives used in the country, consumption of HFC and its blends are likely to increase tremendously by 2030, potentially leading to notable environmental impacts on global warming. The total potential direct emission of HFC in all sector applications is estimated to reach 2650.171 Thousand tCO<sub>2</sub>eq. in the year 2015 and this is expected to increase to 15753.28 Thousand tCO<sub>2</sub>eq. in the year 2030.</p> <p>However this can be avoided through introduction of low-GWP based alternatives to replace HCFCs and HFCs.</p>		
<p><b>5. Description of information that needs to be gathered and updated. Explain why this has not been undertaken in previous projects.</b></p>		
<b>Information needed</b>	<b>Description</b>	<b>Agency</b>
Updated ODS alternatives data	Review available data and collect additional sector-specific data for the years 2016-2018 through questionnaires and interviews as this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2015.	UNIDO
<p><b>6. Activities to be undertaken for project preparation and funding</b></p>		
<b>Activity</b>	<b>Indicative funding (US \$)</b>	<b>Agency</b>

<p>Ground work: Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives; consultant to contact surveys and consultations with key stakeholders for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control</p>	<p>15,000</p>	<p>UNIDO</p>
<p>HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including: - assessment and development/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; - Communication and outreach plan preparation and development of awareness raising activities; - Enhance the training program on recovery and recycling of refrigerants and improve the monitoring and evaluation system of R&amp;R practices</p>	<p>65,000</p>	<p>UNIDO</p>
<p>Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency in all sectors, by: - Promoting upgrades for mandatory and voluntary standards;- Promoting the replacement of RAC equipment in homes, businesses and industry; - Promoting efficient practices of operation, maintenance and installation in RAC</p>	<p>50,000</p>	<p>UNIDO</p>

systems; - Developing detail studies for RAC equipment characterization and project portfolio evaluation for energy efficiency upgrades.		
Validation: Consultations, review and validation of the prepared strategy	20,000	UNIDO
<b>TOTAL</b>	<b>150,000</b>	
<b>7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?</b>		
Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs.		

## PROJECT CONCEPT – Mexico

### MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL PROJECT PREPARATION REQUEST FORM

Click or tap here to enter text.

#### Part I: General Information

<b>Country:</b>	Mexico	
<b>Implementing agency:</b>	UNIDO	
<b>Implementation period:</b>	2020-2021	
<b>Funding requested:</b>		
<b>Project titles</b>	<b>Type of project and sector</b>	<b>Funding requested (US \$)</b>
A. Development of country strategy on HFC phase-down	Overarching	250,000
B. Preparation of sub-sector plan	Sub-sector plan MAC	150,000
C. Demonstration Pilot project	Demonstration Refrigeration	80,000
D. Preparation of Umbrella project in manufacturing sector	Investment Refrigeration	80,000

#### Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government for choice of agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Kigali Amendment ratified by the country	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### **BACKGROUND**

On October 15 of 2016, 197 countries adopted the Kigali Amendment (KA) to phase down HFCs under the Montreal Protocol. Under the amendment, countries committed to cut the production and consumption of HFCs by more than 80% over the next 30 years. The ambitious phase down schedule will avoid more than 80 billion metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) emissions by 2050—avoiding up to 0.5° Celsius warming by the end of the century—while continuing to protect the ozone layer.

The Kigali Amendment came into force globally on January 1, 2019, after the ratification of at least twenty countries. The ratification of Mexico occurred on September 25, 2018 and its promulgation decree was published in the Official Gazette of the Federation (OGF), on November 30, 2018.

The Kigali amendment to phase down HFCs was the result of years of negotiation by parties to the Montreal Protocol (MP), with numerous HFC amendment proposals, with Mexico, actively participating as a key player in the proposal submitted by North America together with the United States and Canada in order to control the production and consumption of HFCs.

Following the pronouncement of the Kigali Amendment, at its 79th Meeting, the Executive Committee approved decision 79/46, which allowed A5 countries to undertake a range of enabling activities. As a result of this decision, the Government of Mexico identified the main actions to initiate the institutional provisions to facilitate the introduction of HFC phase-down obligations in future and enforce the role of the National Ozone Unit in terms of HFC and energy efficiency.

The Roadmap to implement the Kigali Amendment in Mexico was the main result of these enabling activities, it presents the general “way forward” for Mexico to implement the KA and is based on the national diagnosis on use, consumption and sectoral distribution of HFCs and the analysis of the national legal framework for the control of the consumption of substances regulated by the MP and its amendments.

The Roadmap has made an initial general identification of the short, medium and long-term actions of four pillars of public policy on which the HFC phase-down will be supported: 1) regulation, 2) strategic planning, 3) implementation, 4) reporting and verification.

Furthermore, Mexico is one of the first countries that has 2 approved projects to eliminate HFCs, including: 1) Conversion of commercial refrigeration manufacturing in two facilities from the use of HFC-134a and R-404A as the refrigerants to isobutane (R-600a) and propane (R-290) at Imbera, and 2) Conversion of a domestic refrigeration manufacturing facility from HFC-134a as the refrigerant to isobutane (R-600a) and conversion of a compressor manufacturing facility from HFC-134a-based compressors to isobutane-based compressors at Mabe Mexico SA de CV.

A project was submitted to the 84<sup>th</sup> ExCom Meeting addressing HFC-23 by-product emissions in the HCFC-22 production plant of the company Quimobasicos.

Like the companies described above, there are many others in the different national HFC user sectors that are ready and mature to move to new alternatives with low Global Warming Potential (GWP). For these reasons and those listed above, and continuing with the leadership and commitment shown by the country with the Montreal Protocol, Mexico is prepared to elaborate its **National HFC Phase-Down Strategy**.

## **A. Information required to support PRP funding for Overarching strategy**

### **Project Title: DEVELOPMENT OF COUNTRY STRATEGY ON HFC PHASE-DOWN**

#### **Description:**

Primary activities were identified by the Government of Mexico and targeted actions were undertaken in the enabling activities to initiate institutional provisions which can facilitate the introduction of HFC phase-down obligations in future and can enforce the role of the National Ozone Unit in terms of HFC and energy efficiency.

As a second step in the roadmap established in Mexico, the strategy preparation is crucial at this stage to ensure a consolidated regulatory framework and integrate the existing procedures on the operative and administrative mechanism in the institutions involved in the HFC control.

As part of the development of the strategy, the country has already identified a set of initial strategic lines that will be decisive for the implementation of the KA in Mexico. Additional lines of actions will be identified during or after the preparatory funding will be approved. Main actions under an Overarching strategy are described below:

#### ***1. Integrate national regulations and procedures for KA implementation and consolidate technical capacities in the institutions involved in HFC control***

National Ozone Unit (NOU) of Mexico is the government unit responsible for managing national programmes to comply with the Montreal Protocol on Substances that Deplete the Ozone Layer and now they are in charge to support the government in the implementation of the Kigali Amendment as well. Due to the new approach, the NOU would need to fulfil their obligations with regard to HFC phase-down under the Kigali Amendment.

The integration of updated or new regulations with the existing procedures in the NOU and institutions involved in the HFC control is a long process that need to consolidate the technical capacities and consists in the next components:

- HFC phase-down coordination and monitoring
- Procedures and control mechanism integrated
- Improvement of the Quota and license system
- Support Custom Activities to control HFC imports
- Standards ban and policy controls

#### ***2. Training and certification in the use of flammable refrigerants***

With the evident growth of hydrocarbon consumption for the manufacture of commercial stand-alone and domestic refrigeration equipment, it is necessary to update the technicians dedicated to the service and maintenance of these sectors. In addition, other sectors are expected to move towards these types of refrigerants in the coming years, such as the case of mini-split air conditioning equipment or larger commercial refrigeration systems and the country has to ensure they have access to consistent information on how to manage risks associated with these substances.

Refrigeration technicians must be competent to manage any foreseeable hazard (including a flammability hazard) during installation or maintenance work. They should have the required experience and training, and where flammable refrigerants are or may be used.

The national strategy, will include a specific component to improve the national training and certification schemes taking into consideration: the study of flammable refrigerants; inclusion of new content and covering specialized procedures for servicing and repair air conditioning and refrigeration equipment using hydrocarbon refrigerant; reinforce safe working practices and cover specialized



knowledge of refrigeration principles applicable for hydrocarbons; manuals; testing, locating and rectifying faults and defective components and completing the necessary service documentation.

It is expected that a new certification scheme must enable existing qualified refrigeration and air conditioning technicians to gain additional knowledge and skills to safely and effectively handle these low Global Warming Potential (GWP) refrigerants.

Also, in the case of hydrocarbons as well as for HFCs, training and certification processes must emphasize in the knowledge and skills to safely and effectively recover non-flammable and flammable refrigerants from end of life refrigeration and air conditioning appliances using appropriate tools and equipment.

### **3. Strategic Communication and Outreach Plan**

With the fulfillment of activities proposed in Mexico for the phase-down of HFCs, it is necessary to contemplate a communication and outreach plan that accompanies the reduction strategy aimed at the sectors involved as well as, a broader public.

The first objective of the communication and outreach plan will be to make visible the efforts that Mexico is making to reduce the consumption of HFCs.

Therefore, a series of communication activities are proposed to be carried out in conjunction with the implementation of the HFC phase-out plan, which will be targeted at specific audiences and will be implemented by the Montreal Protocol Unit in Mexico, with support of the institutions that are counterpart (mainly SEMARNAT), and the participating international agencies.

#### *Target publics*

- Private sector of air conditioning and automotive air conditioning, aerosols, foams, fire extinguishers, commercial, domestic, industrial and transport refrigeration, including managers, workers and technicians.
- Public of the government sector involved on HFCs phase-down is contemplated (SEMARNAT, INECC, SENER, CONUEE, SAT, and COFEPRIS).
- International organizations and donors.
- Universities, specialized centers and NGOs.
- The media and general public.

According to the projected phases of HFC reduction in Mexico (*Roadmap to implement the Kigali Amendment in Mexico, SEMARNAT, 2019*), various communication activities will be carried out, such as stakeholder meetings, design and creation of campaigns and multimedia content, and the design and dissemination of technical documents and training manuals, for instance.

### **4. Recovery, recycling and destruction**

A relevant issue for the strategy is the control of HFCs, they must be recovered from home appliances, cars, and commercial equipment when the equipment containing these gases is discarded. Recovered gas must be recycled or destroyed, instead of being released into the air as it happens mostly to date in Mexico.

In addition to increase the recovery and destruction rates during the time of implementation of the HFC phase-down, it will be necessary to recover the amount of HCFC-22 refrigerant that are still contained in a large stock of commercial refrigeration equipment and in mini-splits and window air conditioning equipment. So, it will be necessary to ensure the supply chain to transfer the un-wanted refrigerant to the facilities present in Mexico that have the destruction technologies approved by the MP.

The project will evaluate the new recovery and recycling equipment per sector/sub-sector(if necessary) and strengthen the national recycling network to be run by SEMARNAT. Additionally, it will be necessary to improve the monitoring and evaluation system of these practices.

In line with the above, the strategy will consider actions to continue and to enhance the Training Program on Recovery and Recycling of refrigerants and to increase the destruction rates that are a

fundamental part of a comprehensive approach to reduce the national HFC consumption in the refrigeration and air conditioning servicing sector.

### ***5. Promoting Energy efficiency in the RAC sector***

As well known, energy efficiency is one of the most important issues to get global goals in climate change challenge in present century. In this way, energy efficiency (EE) in the RAC sector is a real need to accompany Kigali Amendment actions and accomplish the commitments established about HFC reduction.

The enabling activities supported the initial studies and assessment of opportunities on EE in the RAC sector. However, specific measures and program need to be promoted into the main sectors and with effective engagement of main actors and stakeholders.

Energy efficiency in RAC sector will allow implementing alternative refrigerants to reduce HFC with economic benefits to end users due to energy savings. Therefore, actions in energy efficiency must be included in the Strategy to HFC Phase-Down. Proposed actions are:

- Promote upgrades for mandatory and voluntary standards.
- Promote the replacement of RAC equipment in homes, businesses and industry
- Promote efficient practices of operation, maintenance and installation in RAC systems.
- Develop detail studies for RAC equipment characterization and project portfolio evaluation for energy efficiency upgrades.

#### **Activities and Funding:**

Activities to be undertaken for project preparation and funding are presented in the table below.

**Table 1.** Activities and indicative funding for PRP of country strategy

Line of Actions and Activities	Estimated Resources	Indicative funding (US \$)	Total Funds (US \$)
<p><b>1. Integrate national regulations and procedures for KA implementation and consolidate technical capacities in the institutions involved in HFC control</b></p> <ul style="list-style-type: none"> <li>• HFC phase-down coordination and monitoring</li> <li>• Procedures and control mechanism prepared/integrated between institutions</li> <li>• Improvement of the Quota and license system</li> <li>• Support Custom Activities to control HFC imports</li> <li>• Standards ban and policy controls</li> </ul>	<ul style="list-style-type: none"> <li>- National Consultants to prepare and conduct interviews and procedures with relevant stakeholders;</li> <li>- Trips for the consultants</li> <li>- Workshops with key stakeholders for institutional coordination and, private sector engagement and capacity building</li> <li>- National or International consultant to conduct special trainings or assessments</li> </ul>	<p style="text-align: center;">45,000.00</p> <p style="text-align: center;">20,000.00</p> <p style="text-align: center;">25,000.00</p> <p style="text-align: center;">12,000.00</p>	102,000
<p><b>2. Training and certification in use of flammable refrigerants</b></p> <ul style="list-style-type: none"> <li>• Update certification schemes to include the study of flammable refrigerants</li> <li>• Improve National training with a new program covering specialized procedures for HC</li> <li>• Set up training and certification processes for HFCs</li> </ul>	<ul style="list-style-type: none"> <li>- National and international technical experts to prepare all documents, consult all key stakeholders and develop detailed programs and certification schemes.</li> <li>- Workshops for main stakeholders and training advocated institutions</li> </ul>	<p style="text-align: center;">12,000.00</p> <p style="text-align: center;">15,000.00</p>	27,000
<p><b>3. Strategic Communication and Outreach Plan</b></p> <ul style="list-style-type: none"> <li>• Communication and outreach plan preparation</li> <li>• Awareness activities and development of initial communicational material/instruments</li> </ul>	<ul style="list-style-type: none"> <li>- Communicational experts /service to prepare the plan</li> <li>- Meetings/workshops with relevant stakeholders</li> <li>Development of reference communicational material</li> </ul>	<p style="text-align: center;">28,000.00</p> <p style="text-align: center;">15,000.00</p> <p style="text-align: center;">10,000.00</p>	53,000
<p><b>4. Recovery, recycling and destruction</b></p> <ul style="list-style-type: none"> <li>• Enhance the training program on recovery and recycling of refrigerants</li> <li>• Improve the monitoring and evaluation system of R&amp;R practices</li> </ul>	<ul style="list-style-type: none"> <li>- National Consultants</li> <li>- Meetings and workshops with relevant stakeholders</li> </ul>	<p style="text-align: center;">16,000.00</p> <p style="text-align: center;">7,000.00</p>	23,000
<p><b>5. Promote Energy Efficiency in RAC</b></p> <ul style="list-style-type: none"> <li>• Promote upgrades for mandatory and voluntary standards.</li> <li>• Promote the replacement of RAC equipment in homes, businesses and industry.</li> <li>• Promote efficient practices of operation, maintenance and installation in RAC systems.</li> <li>• Develop detail studies for RAC equipment characterization and project portfolio evaluation for energy efficiency upgrades.</li> </ul>	<ul style="list-style-type: none"> <li>- National Consultants to prepare and conduct studies;</li> <li>- Workshops with key stakeholders (private sector engagement and capacity building)</li> <li>- National or International consultant to conduct special trainings and assessments</li> </ul>	<p style="text-align: center;">15,000.00</p> <p style="text-align: center;">18,000.00</p> <p style="text-align: center;">12,000.00</p>	45,000
<b>TOTAL</b>			<b>250,000</b>

## **B. Information required to support PRP funding for preparation of sub-sector plan**

### **Project Title: Servicing PLAN for the Mobile Air Conditioning (MAC)**

#### **Description:**

The MAC sector is the third major HFC user nationwide, mainly consuming HFC-134a. It is estimated that 46% of this consumption corresponds to the manufacture of new vehicles, while the other 54% is for service and maintenance.

During the last 4 years, this sector has been rapidly moving from the use of HFC-134a replacing it with HFO-1234yf, particularly in new vehicles for export. The previous trend can be confirmed by observing that HFO-1234yf consumption has increased from 200 metric tons in 2015 to just over 1200 in 2018.

Derived from this rapid replacement, it will be necessary to execute a plan aimed at recovering the HFC-134a refrigerant that is still in the vehicle fleets, for which technical assistance for the MAC servicing will be required. For the sub-sectorial plan a project might include providing equipment for servicing refrigeration systems, establish a recovery/recycling scheme, a program for the retrofit of HFC-134a-based MACs to HFO-1234yf refrigerant, and conduct training workshops for service technicians in retrofitting and the use of recovery and recycling machines; as well as the implementation of monitoring and reporting activities.

The implementation of this project may represent the phase-out of approximately 2600 metric tons of HFC-134a, which represent an estimated reduction of 3.7 million tCO<sub>2</sub>e.

#### **Activities and Funding:**

Activities to be undertaken and funding for project preparation of the Plan in servicing sub-sector of MAC are presented in the table below.

**Table 2.** Activities and indicative funding for preparation of sub-sector plan in MAC

Activities	Estimated Resources	Indicative funding (US \$)	Total Funds (US \$)
<p><b>1. Evaluation of relevant information and scenarios on new alternatives in the MAC sector and existing recovery/recycling scheme (proposed plan for servicing sector)</b></p> <ul style="list-style-type: none"> <li>Data collection on monitoring and evaluation system of R&amp;R practices. Preparation of proposals</li> </ul>	<p>National Consultants to collect data and prepare relevant documents;</p> <p>Trips for the Consultants</p> <p>Workshops with key stakeholders(institutional, private sector engagement)</p> <p>International consultant to conduct specific assessments</p>	<p>20,000.00</p> <p>10,000.00</p> <p>15,000.00</p> <p>10,000.00</p>	<p>55,000</p>
<p><b>2. Establishing recovery/recycling scheme, a program for the retrofit of HFC-134a-based MACs to HFO-1234yf refrigerant</b></p> <ul style="list-style-type: none"> <li>Update certification schemes to include new alternatives</li> <li>Improve National training with a new program covering specialized procedures for new alternatives</li> <li>Set up training and certification processes if applicable</li> </ul>	<p>National and international technical experts to prepare all documents; consult all key stakeholders and develop detailed programs and certification schemes.</p> <p>Meeting for main stakeholders and training advocated institutions</p>	<p>20,000.00</p> <p>6,000.00</p>	<p>26,000</p>
<p><b>3. Technical evaluation and cost estimation on equipment for servicing</b></p> <ul style="list-style-type: none"> <li>Technical and cost evaluation</li> </ul>	<p>National and international consultants on technical evaluation of equipment including cost estimation</p> <p>Meetings and Workshops with relevant stakeholders</p>	<p>21,000.00</p> <p>15,000.00</p>	<p>36,000</p>
<p><b>4. Plan for MAC sector prepared and Workshop for technicians conducted</b></p> <ul style="list-style-type: none"> <li>Presentation of MAC plan to stakeholders</li> <li>Conduct training workshops for service technicians in retrofitting and the use of recovery and recycling machines</li> </ul>	<p>National Consultants to prepare the documents and estimated activities</p>	<p>8,000.00</p>	<p>33,000</p>
	<p>Training Workshop and logistic services for meetings</p>	<p>15,000.00</p>	
	<p>International consultant</p>	<p>10,000.00</p>	
<b>TOTAL</b>			<b>150,000</b>

## C. Information required to support PRP funding for Demonstration pilot project

### **Project Title: PILOT PROJECTS FOR THE SUBSTITUTION OF LARGE COMMERCIAL REFRIGERATION SYSTEMS**

#### **Description:**

Due to their large charge sizes, the multiplex rack systems and condensing units typically used in supermarkets and convenience stores account for the greatest percentage of HFC refrigerants installed in the commercial refrigeration sector. According to 2017 data, R-404A is the most consumed substance in commercial refrigeration (with 80%), followed by the R-507A (13%) and HFC-134a (4%). In addition to that, Mexico has a large stock of equipment that still operates with HCFC-22.

Since this kind of equipment typically lasts approximately 15–20 years, this offers an interesting panorama for replacing obsolete equipment and testing new technologies operating with low global warming potential alternatives.

Many design strategies exist today to reduce the amount of refrigerant needed while at the same time reducing the likelihood of leaks and mitigating risks if using a flammable or toxic refrigerant.

Although most of these advanced refrigeration systems still rely on HFC refrigerants, they have great potential for drastically reducing HFC charges.

Additionally, a number of climate-friendly alternatives to HFC refrigerants are, rapidly becoming available for use in commercial refrigeration applications. Alternatives available today include hydrocarbons isobutane (R-600a) and propane (R-290), ammonia (R-717), and carbon dioxide (R-744). Other alternatives, such as new HFCs/HFOs blends, are also likely to enter the Mexican market in the coming years.

As part of the relevant sector considered in the strategy of HFC phase-down, a pilot project will be proposed to test the adoption of higher energy efficiency technologies to reduce the HFCs use. Among which can be found, the conversion or retrofit of R-404A/R-507A in the commercial refrigeration units for supermarkets, and pilot project could consider testing as well the adoption of transcritical CO<sub>2</sub> refrigeration systems or CO<sub>2</sub>/NH<sub>3</sub> or Hydrocarbons/CO<sub>2</sub> cascade systems. The results obtained in pilot project will show the advantage/disadvantages between options.

#### **Activities and Funding:**

**Table 3.** Activities and indicative funding for preparation of sub-sector plan in MAC

<b>Activities</b>	<b>Estimated Resources</b>	<b>Indicative funding (US \$)</b>	<b>Total Funds (US \$)</b>
<b>1. Data collection and evaluation of current situation</b> • Data collection and evaluation of scenarios for new alternatives in commercial refrigeration units for supermarkets.	-National Consultants to collect data and prepare relevant documents;	14,000.00	26,000
	-Trips for the Consultants	8,000.00	
	-Meetings with stakeholders (institutional, private sector engagement)	4,000.00	
<b>2. Technical evaluation and cost estimation of options identified</b> • Evaluation on conversion or retrofit of R-404A/R-507A in the commercial refrigeration units for supermarkets, test the adoption of transcritical CO <sub>2</sub> refrigeration systems or CO <sub>2</sub> /NH <sub>3</sub> or Hydrocarbons/CO <sub>2</sub> cascade systems.	-National consultants on technical evaluation	6,000.00	30,000
	-International expert/consultancy	15,000.00	
	-Trips for the Consultants and logistic for meetings	9,000.00	

<b>3. Present and validate the proposal with the stakeholders on the Pilot project</b> on testing the adoption of higher energy efficiency technologies (transcritical CO2 refrigeration systems or CO2/NH3 or Hydrocarbons/CO2 cascade systems) and reduction of HFCs in supermarkets.	-National Consultants to prepare the document	8,000.00	24,000
	-International expert/consultancy	10,000.00	
	- Workshop with stakeholders to validate the proposal	6,000.00	
<b>TOTAL</b>			<b>80,000</b>

## **D. Information required to support PRP funding for preparation of Umbrella project in Manufacturing sector**

### **Project Title: UMBRELLA PROJECT FOR COMMERCIAL STAND-ALONE EQUIPMENT**

In Mexico there are different national companies like Criotec, Metaplus, Refrigeración Ojeda and Fersa, which are dedicated to the manufacture of stand-alone commercial refrigeration equipment.

All of them have been converting their HFC-134a production lines to hydrocarbon refrigerants, mainly R-290 (propane) during the last 5 years.

Due to the disaggregation of consumption in these various companies, it is proposed to carry out an umbrella project that groups them together and allows the phase-out of approximately 168 metric tons of HFC-134a used for original equipment manufacturing and another 70 metric tons for servicing, which represent a potential emission reduction of about (340 thousand tCO<sub>2</sub>e).

The project preparation will provide the necessary relevant information on current situation and options to consider in 4 manufacturing companies to estimate the most cost-effective conversion process in this sector. Additionally, the meetings and technical discussion will support the agreement with the beneficiaries and stakeholders involved in the Kigali implementation in Mexico

#### **Activities and Funding:**

The following table summarize the activities and funds requested for a project preparation in refrigeration manufacturing sector to phase-down HFC.

**Table 4.** Activities and indicative funding for project preparation in Refrigeration sector (Umbrella project)

Activities	Estimated Resources	Indicative funding (US \$)	Total Funds (US \$)
<b>1. Data collection and evaluation of 5 companies' situation/consumption of HFC and conversion process applicable.</b>	National Consultants to collect data and prepare relevant documents;	15,000.00	27,000
	Trips for the Consultants	8,000.00	
	Meetings with key stakeholders (institutional, private sector engagement)	4,000.00	
<b>2. Technical evaluation and cost estimation of the Umbrella conversion project</b> in the specific scope of manufacturing of stand-alone commercial refrigeration equipment.	International expert/consultancy	20,000.00	29,000
	Trips for the Consultants and logistic for meetings	9,000.00	
<b>3. Present and validate the proposal with the companies and stakeholders</b> on the project conversion on manufacturing sector of commercial stand-alone equipment	National Consultants to prepare the document	8,000.00	24,000
	International expert/consultancy	10,000.00	
	Workshop/Meeting with stakeholders to validate the proposal	6,000.00	
<b>TOTAL</b>			<b>80,000</b>



## PROJECT CONCEPT – The Gambia

### MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

#### Part I: Project Information

<b>Project title:</b>	<b>HFC Phase-Down Management Plan Preparation</b>	
<b>Country:</b>	<b>The Gambia</b>	
<b>Implementing agency:</b>	<b>UNIDO</b>	
<b>Implementation period:</b>	<b>January 2020 – December 2021</b>	
<b>Funding requested:</b>		
<b>Agency</b>	<b>Sector</b>	<b>Funding requested (US \$)*</b>
<b>UNIDO</b>	<b>Overarching</b>	<b>95,000</b>

\*Details should be consistent with information provided in the relevant sections below.

#### Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government for choice of agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Letter of intent to ratify the KA	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### A. Information required to support PRP funding (Overarching strategy)

<p><b>1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</b></p> <ul style="list-style-type: none"> <li>Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date.</li> </ul>		
<p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/50(d), funding was approved for the Gambia for Enabling Activities towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare the Gambia for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. The Gambia had requested an extension for the implementation of the project. All project activities are advancing well and the project will end as planned in June 2020. The Gambia is yet to ratify but significant progress has been made. All necessary preliminary procedures of ratification process have been initiated, this included information and awareness raising meetings with Environment minister, Perm Secretary and technical staff as well as targeted meetings with ministry of energy and finance. A cabinet paper has been developed, reviewed and sent to the secretary to cabinet by the permanent secretary Ministry of Environment Climate Change and Natural Resources. The cabinet paper is discussed and waiting for approval by Government Ministers as the last step before it goes to the ministry of foreign affairs for the development of a ratification instrument which will be forwarded to the United Nations Head office in Washington for Gambia's inclusion in the list of parties that already ratified the KA to the Montreal Protocol. The Government of the Gambia confirms its intention to ratify the KA by the end of 2019.</p> <p>The Gambia has started to create an enabling environment for the phasedown of HFCs. Taking also into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, the Gambia is ready to take further early action on HFCs and submit preparatory funding request to prepare its HFC phase-down plans. The Enabling activities for HFC phase-down are preparing the ground works on which will be built up a detailed strategy and action plan for HFC phase-down in line with the reduction targets. Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.</p>		
<p><b>2. Current progress in implementation of Enabling Activities for HFC phase-down</b> <b>Budget: 95,000USD</b></p>		
<b>Activity</b>	<b>Description</b>	<b>Implementing agency</b>
Activities to support the early ratification of the KA	Coordination with Government representatives Supporting national ratification instruments	UNIDO
Institutional arrangements	Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain	UNIDO

Licensing systems	Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends			UNIDO
Data reporting on HFC consumption	Review of the national mechanisms used for ODS reporting to include HFCs consumption			UNIDO
Preparation for national strategies	Identification of policies and regulations to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies			UNIDO
<b>3. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt</b>				
<b>Substance</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
HFC				
HFC 134a	9	11	13	15
HFC blends				
R 404A	6	7	8	10
R 407C	5	6	10	12
R 410A	4	6	8	9
Others				
Methyl formate	12	13	15	16
HC 600a	4	5	7	8
<b>4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)</b>				
<p>The HCFC baseline of Gambia amounts to 1.5 ODP tonnes.</p> <p>The major ODS alternatives in use in the country are R-134a, R-404A, R-407C, R-410A, R-600a, R-290. These are used in sectors and subsectors mainly in the Refrigeration and Air conditioning servicing and installation.</p> <p>Consumption of ODS alternatives are generally on the increase from 2012 to 2015 while consumption of HCFC-22 is on the decline in compliance with the accelerated HCFC phase out provisions. Although the use of ODS alternatives are increasing in most sectors, HCFC-22 is still the predominant refrigerant in the refrigeration and air conditioning sector.</p> <p>Through a pilot project, 100 units of R290 AC split-units have been installed in the country along with extensive training and capacity building. This lead also to local supply of (imported) R290 refrigerant since 2019.</p>				
<b>5. Description of information that needs to be gathered and updated. Explain why this has not been undertaken in previous projects.</b>				
<b>Information needed</b>	<b>Description</b>			<b>Agency</b>
Updated ODS alternatives data	Review available data and collect additional sector-specific data, especially for the years for 2016-2018 through questionnaires and interviews (this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2015).			UNIDO
<b>6. Activities to be undertaken for project preparation and funding</b>				
<b>Activity</b>	<b>Indicative funding (US \$)</b>			<b>Agency</b>
Ground work: Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives; consultant to contact surveys and consultations with key stakeholders for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions	15,000			UNIDO

involved in HFC control		
HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including: - assessment of needs to develop/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions, - Communication and outreach plan preparation and development of awareness raising activities	40,000	UNIDO
Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency	30,000	UNIDO
Validation: Consultations, review and validation of the prepared strategy	10,000	UNIDO
<b>TOTAL</b>	<b>95,000</b>	
<b>7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?</b>		
Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs.		



## Project Concept

<b>Country:</b>	Bosnia and Herzegovina
<b>Title:</b>	Extension of Institutional Strengthening for the implementation of Montreal Protocol in Bosnia and Herzegovina – Phase VII
<b>Project Duration:</b>	24 months (March 2020 – February 2022)
<b>Project Budget:</b>	122,026 (excl. 7% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	Ministry of Foreign Trade and Economic Relations/ National Ozone Unit

---

## Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Foreign Trade and Economic Relations/ National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

In this context, the role and functions of the National Ozone Unit (NOU) established within the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina in the past two years remained unchanged. The NOU is further committed to build up capacity at country level in view of compliance with the HCFCs consumption phase-out targets and it is expected that the ongoing regulatory efforts will be further enhanced by the implementation of new phase of the institutional strengthening project. The NOU is coordinating the promulgation and enforcement of policy and legislation with a specific focus on HCFCs phase-out management plan and the additional HCFCs restrictions, cooperation with customs authorities on prevention of illegal trade and cooperation with the RAC Association. Under the new institutional strengthening phase the NOU will continue the communication with environmental inspectorates and will train them in order to improve enforcement of ozone legislation.

The country has introduced permits for F-gases and HCFC quota in accordance with the approved HPMP and MYA, and ban on import of HCFCs and HCFC mixtures based equipment and products. Furthermore, tariff codes have been fully harmonized with the EU tariff codes, permits for HFCs have been introduced, as well as criteria for allocating import quotas for HCFCs, procedures for obtaining import licenses for ODSs used for special purposes and for substitute substances and reporting system on import of substitute substances has been defined.

Under the current phase, the Government of Bosnia and Herzegovina was supported through increased capacity building of the NOU, by achieving a smooth implementation of the HPMP activities, ODS alternatives survey prepared for period 2013 to 2015. Also, lessons have been learned by finalizing the NoPP. New legal procedures for controlling the HCFCs introducing quota

system for HCFCs, permits for HFCs and ban on HCFC and its mixtures based equipment are approved by Council of Ministers of Bosnia and Herzegovina and is operated smoothly by the NOU in cooperation with BiH ITA. For three cases of successful seizure of ACs containing R-22 BiH ITA Customs was awardee with UNEP and WCO global award. The NOU in 2015 established the RAC Association within Foreign Trade Chamber and since then is cooperating successfully. Seminars on F-gas regulation, alternative low-GWP commercially available technologies using CO<sub>2</sub>, ammonia, R290 were organized, as well as seminar on energy efficiency and safety standards in cooling sector. Also, the NOU participated in Verification report preparation for years 2016 and 2017 based on which fourth HPMP tranche was approved by the ExCom in 2018.

The Government of Bosnia and Herzegovina is committed to ratify the Kigali amendment and is committed to finalize the enabling activities for early actions in this context. Procedure for the ratification of Kigali amendment is commenced and it is in the procedure of collection of opinions from numerous institutions in Bosnia and Herzegovina. Ratification is pending on new parliament establishment. HFC outlook model is under preparation and NOU will continue work on it in order to define proper starting point and strategy for HFC phase-down. The NOU will continue cooperation with climate authorities on inclusion of F-gases in NDC and will continue cooperation with safety standards authorities.

The IS Phase VII extension request aims to address sustainability of the NOU by ensuring continuity of the staff. The IS Phase VII will assist the Government meet its obligations on the HCFCs phase out process and will prepare the country for HFCs restrictions, in an integrated manner.

The National Ozone Unit within the Ministry of Foreign Trade and Economic Relations will be responsible for and oversee the implementation of the project in accordance with the objectives and activities. The NOU will continue to actively cooperate with ministries and inter-ministerial bodies as well as with advisory groups such as NGOs, RAC and others.

## Project Concept

<b>Country:</b>	Serbia
<b>Title:</b>	Extension of Institutional Strengthening for the implementation of Montreal Protocol in Serbia – Phase VII
<b>Project Duration:</b>	24 months (December 2019 – November 2021)
<b>Project Budget:</b>	168,064 (excl. 7% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	Ministry of Environmental Protection/National Ozone Unit

---

## Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Environmental Protection/National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

Following the administrative restructuring of Government (central administration) in Serbia, NOU is established currently in the Ministry of Environmental Protection. Substantive progress was achieved during IS Phase V. The NOU has ensured compliance with quota and bans and the import control measures are in place and enforced. In line with the annual inspection's work plan, the Customs Officers are checking shipments containing ODS and f-gases regularly. Furthermore, training was organized on the control of cooling installations (commercial/industrial) for the environmental inspectors. Illegal export to Serbia has been prevented in several cases due to the application of the informal Prior Informed Consent (iPIC) mechanism of communication and consultations between importing and exporting countries. The NOU is exchanging information with the Customs Authorities on an ongoing basis. Annual data reports were submitted on time and data discrepancies have been addressed accordingly. Serbia is preparing for ratification of the Kigali Amendment with the assistance provided as part of the project *Enabling activities for HFC phase-down*.

The NOU is providing ongoing support to the implementation of the HPMP and ensures that all Montreal Protocol related activities are integrated into national environmental plans and policies. In addition, awareness raising activities have been organized on an ongoing basis, including celebration of the Ozone Day, distribution of promotional material at the International Fair of Protection of Environment and Natural Resources in Belgrade, publishing of press articles, posting information on the website, printing posters and other promotional material.

The IS Phase VII extension request aims to address sustainability of the NOU, to remain active, to liaise with consumer sectors, and will assist the Government meet its obligations on the HCFCs phase out process and will prepare the country for HFCs restrictions, in an integrated manner and having regarded the enabling activities separately approved funding.

## Project Concept

<b>Country:</b>	Tunisia
<b>Title:</b>	Extension of Institutional Strengthening for the implementation of Montreal Protocol in Tunisia – Phase IX
<b>Project Duration:</b>	24 months (January 2020 – December 2022)
<b>Project Budget:</b>	316,506 (excl. 7% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	National Agency for Environmental Protection (ANPE)/ National Ozone Unit (NOU)

---

## Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Local Affairs and Environment - National Agency for Environmental Protection (ANPE) / National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

The National Ozone Unit is an autonomous entity operating directly under the General Director of the ANPE. It operates under the auspices of the Ministry of Local Affairs and Environment. It is the Focal Point of the Montreal Protocol and Vienna Convention; and is responsible for the implementation of the Montreal Protocol. In this context, the roles and responsibilities of the NOU are related to ensuring overall coordination and monitoring of all Montreal Protocol activities in the country, ensuring compliance with the decisions of the Parties to the Montreal Protocol, collecting data on ODS use, identification and execution of ODS elimination projects, presiding over the National Ozone Committee responsible for allocation HCFC quotas, preparing legislation with regards to implementation of the Montreal Protocol and preparing amendments where needed for Government adoption.

The focus in the current phase was on: strict monitoring of HCFC trade through the national ODS regulatory framework and allocation of quotas, further strengthening the cooperation with the customs authorities ensuring sustained ODS phase-out, organization of training activities with customs officers, collaboration and sharing information with the industry associations, updating the National Ozone Steering Committee on Montreal Protocol matters, coordination of the HPMP Stage I activities and preparation of HPMP Stage II; implementation of the enabling activities project to prepare the country for ratification of the Kigali Amendment; public awareness activities including celebration of International Ozone Day; Country Programme and Article 7 data reporting; and, active participation in regional network and Montreal Protocol meetings.

The IS Phase IX extension request aims to address sustainability of the NOU by ensuring continuity of the staff and resources. The IS Phase IX will assist the Government meet the 35 per



cent HCFC reduction target in 2020. Activities planned include: CP and Article 7 data reporting; continued monitoring the licensing system and allocate quotas against the records of customs to achieve full control over the imports of all HCFCs; start with implementation of activities under the HPMP Stage II, following its approval; update the legislation to include HFCs, establish national certification system for RAC technicians, ban importing or manufacturing HCFC equipment, including HCFC-22; continue cooperation with custom authorities and industry associations; facilitate the ratification process of the Kigali Amendment through implementation of the enabling activities project. Public awareness activities will include celebration of international ozone day and the country plans to participate in regional network and Montreal Protocol meetings.

The National Ozone Unit within the National Agency for Environmental Protection will be responsible for and oversees the implementation of the project in accordance with the objectives and activities. The NOU will continue to actively cooperate with ministries, customs authorities, inter-ministerial bodies, training centers, RAC association other parties involved in the Montreal Protocol activities.

## Project Concept

<b>Country:</b>	Turkey
<b>Title:</b>	Extension of Institutional Strengthening for the implementation of Montreal Protocol in Armenia – Phase IX
<b>Project Duration:</b>	24 months (December 2019 – November 2021)
<b>Project Budget:</b>	332,800 (excl. 7% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	Ministry of Environment and Urbanization/ General Directorate of Environmental Management

---

## Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Environment and Urbanization / National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer. The National Ozone Unit (Division for the Protection of the Ozone Layer) is located under Climate Change and Adaptation Department / Directorate General of Environment Management of the Ministry of Environment and Urbanization of Turkey (herein after referred as the Ministry). The Unit is in charge of the national coordination of all policies, regulations, projects and activities with the objective of implementation of the Vienna Convention and Montreal Protocol. The NOU is also responsible for ensuring the cooperation and coordination at country level and contributes to the work of the implementing agencies of the Montreal Protocol and other relevant governmental institutions, NGOs as well as other specific stakeholders. Beside the role and its responsibilities in regard of MP implementation, NOU has been given also the mandate to follow up the implementation of the policies and regulations related to HFCs controls.

Under the current IS Phase the country has ensured the online ODS tracking programme is fully operating, implemented strict licencing and quota system and coordinated with stakeholders to identify required legislative/regulatory measures related to ODS alternatives. The national structure for collection, verification and disposal of unwanted/waste ODS has been improved, series of meetings have been conducted with relevant stakeholders and authorities in charge of ODS waste management. Activities under the HPMP Stage I have been coordinated and the preparation of HPMP Stage II has been rescheduled to 2020 due to the extension of the HPMP Stage I. Significant progress has been made with the Kigali Amendment ratification. The document was translated into Turkish language, was sent to the Ministry of Foreign Affairs for ratification process that pursued with parliamentary ballot. Upon completion of the administrative procedure, ratification instruments will be submitted to the UN Secretariat and is expected the procedure to be finalized by end of 2019. Training for customs officers are organized and the training module is integrated into the standard training delivery for the newly appointed customs officials. Ozone Panel meetings are taking place each year when HCFC quotas are set. The two technical

committees on Identification of Equipment containing ODSs and F-gases and committee on Training of Technicians and Certification Schemes have been merged for easier coordination and continue to be active and serve as communication channels among various stakeholders. The Article 7 and Country Programme data has been submitted every year by the provided deadlines.

The IS Phase IX extension request aims to address sustainability of the NOU by ensuring continuity of the staff and resources. The IS Phase IX will assist the Government meet its obligations on the HCFCs phase out process and will prepare the country for HFCs restrictions. Furthermore, the plan of activities for the next phase includes organization of trainings and meetings on new generations of ODS alternatives, strengthening the monitoring of ODS trade through the use of innovative and IT based approaches, strengthen the ODS data collection and reporting and continue with the communication and networking activities, raising awareness on the protection of the ozone layer and ongoing activities for ratification of the Kigali Amendment.

The National Ozone Unit within the Ministry of Environment and Urbanization will be responsible for and oversees the implementation of the project in accordance with the objectives and activities. The NOU will continue to actively cooperate with ministries, customs authorities, technical committee, ozone panel, inter-ministerial bodies, media as well as with other advisory groups.

## Project Concept

<b>Country:</b>	Guatemala
<b>Title:</b>	Verification report on the implementation of the HCFC phase-out management plan
<b>Project Duration:</b>	24 months
<b>Project Budget:</b>	US\$ 30,000 (excl. 9% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	Ministerio de Ambiente y Recursos Naturales - MARN - NOU

---

## Project Summary

### 1. Background

Funding requirement for the preparation of verification report of compliance with HPMP agreement is being requested in accordance with decision made at the 83<sup>rd</sup> meeting of the Executive Committee for Implementation of the Montreal Protocol, held in May 2019 in Montreal, as stated in document UNEP/OzL.Pro/ExCom/83/48.

The HCFC Phase-out Management Plan for Guatemala was approved in July 2011 at the 64<sup>th</sup> Meeting of the Executive Committee held in Montreal, Canada and updated in December 2012 at the 68<sup>th</sup> meeting held in Montreal, Canada. The project was approved in accordance with the agreement between the Government and the Executive Committee for the period 2011 to 2020 to meet the 35 per cent reduction in HCFC consumption, and on the understanding that the total funding of US\$ 345,637 (US\$ 33,000 is still to be requested in the remaining years of Stage I) has been provided to address HCFC consumption in the refrigeration servicing sector to reach up to and include the 35 per cent reduction in 2020 in line with decision 60/44.

### 2. Decision 83/48: Verification reports of low-volume consuming countries' compliance with their HPMP agreements

The Executive Committee decided to request relevant bilateral and implementing agencies to include in their amendments to their respective work programmes, due for submission to the 84<sup>th</sup> meeting, funding, in the amount of US \$30,000, plus agency support costs, for verification reports for stage I of the HCFC phase-out management plans (HPMPs) for Burkina Faso, Cambodia, Cook Islands, Guatemala, Honduras, Kiribati, Lesotho, Marshall Islands, Micronesia (Federated States of), Montenegro, Nauru, Niue, South Sudan, Tuvalu and Vanuatu and for verification reports for stage II of the HPMPs for Angola and Armenia.

## Project Concept

<b>Country:</b>	Honduras
<b>Title:</b>	Verification report on the implementation of the HCFC phase-out management plan
<b>Project Duration:</b>	24 months
<b>Project Budget:</b>	US\$ 30,000 (excl. 9% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	Unidad Tecnica de Ozono de Honduras - UTOH - NOU

---

## Project Summary

### 1. Background

Funding requirement for the preparation of verification report of compliance with HPMP agreement is being requested in accordance with decisions made at the 83<sup>rd</sup> meeting of the Executive Committee for Implementation of the Montreal Protocol, held in May 2019 in Montreal, as stated in document UNEP/OzL.Pro/ExCom/83/48.

The HCFC Phase-out Management Plan for Honduras was approved in April 2011 at the 63<sup>rd</sup> Meeting of the Executive Committee held in Montreal, Canada. The project was approved in accordance with the agreement between the Government and the Executive Committee for the period 2011 to 2020 to meet the 35 per cent reduction in HCFC consumption, and on the understanding that the total funding of US\$ 630,000 (both for UNIDO and UNEP and still to request the last 2020 tranche in the total amount of US\$ 65,000) has been provided to address HCFC consumption in the refrigeration servicing sector to reach up to and include the 35 per cent reduction in 2020 in line with decision 60/44.

### 2. Decision 83/48: Verification reports of low-volume consuming countries' compliance with their HPMP agreements

The Executive Committee decided to request relevant bilateral and implementing agencies to include in their amendments to their respective work programmes, due for submission to the 84<sup>th</sup> meeting, funding, in the amount of US \$30,000, plus agency support costs, for verification reports for stage I of the HCFC phase-out management plans (HPMPs) for Burkina Faso, Cambodia, Cook Islands, Guatemala, Honduras, Kiribati, Lesotho, Marshall Islands, Micronesia (Federated States of), Montenegro, Nauru, Niue, South Sudan, Tuvalu and Vanuatu and for verification reports for stage II of the HPMPs for Angola and Armenia.

## Project Concept

<b>Country:</b>	Montenegro
<b>Title:</b>	Verification report on the implementation of the HCFC phase-out management plan
<b>Project Duration:</b>	24 months
<b>Project Budget:</b>	US\$ 30,000 (excl. 9% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	Agency for Nature and Environmental Protection

---

## Project Summary

### 1. Background

Funding requirement for the preparation of verification report of compliance with HPMP agreement is being requested in accordance with decisions made at the 83<sup>rd</sup> meeting of the Executive Committee for Implementation of the Montreal Protocol, held in May 2019 in Montreal.

The HCFC Phase-out Management Plan for Montenegro was approved in April 2011 at the 63<sup>rd</sup> Meeting of the Executive Committee held in Montreal, Canada and updated in December 2013 at the 71<sup>st</sup> meeting held in Montreal, Canada. The project was approved in accordance with the agreement between the Government and the Executive Committee for the period 2011 to 2020 to meet the 35 per cent reduction in HCFC consumption, and on the understanding that the total funding of US\$ 404,500, as per the updated Agreement, (fifth tranche is still to be requested) has been provided to address HCFC consumption in the refrigeration servicing sector.

### 2. Decision 83/48: Verification reports of low-volume consuming countries' compliance with their HPMP agreements

The Executive Committee decided to request relevant bilateral and implementing agencies to include in their amendments to their respective work programmes, due for submission to the 84<sup>th</sup> meeting, funding, in the amount of US \$30,000, plus agency support costs, for verification reports for stage I of the HCFC phase-out management plans (HPMPs) for Burkina Faso, Cambodia, Cook Islands, Guatemala, Honduras, Kiribati, Lesotho, Marshall Islands, Micronesia (Federated States of), Montenegro, Nauru, Niue, South Sudan, Tuvalu and Vanuatu and for verification reports for stage II of the HPMPs for Angola and Armenia.

## Project Concept

<b>Country:</b>	Algeria
<b>Title:</b>	Enabling activities for HFC phase-down
<b>Project Duration:</b>	18 months
<b>Project Budget:</b>	US\$ 150,000 (excl. 7% Agency Support Costs)
<b>Implementing Agency:</b>	UNIDO
<b>Coordinating Agency:</b>	National Ozone Unit

---

## Project Summary

### General Statements

*The Government of Algeria as well as UNIDO, as the implementing agency, confirm that implementation of the enabling activities would not delay implementation of HCFC phase-out projects.*

*The Government of Algeria confirms that the budget for activities under Enabling Activities will follow the UNIDO rules and regulations. Execution modalities will follow the principle of best value for money.*

### 1. Background

#### *HPMP and HCFC baseline*

Algeria's starting point for aggregate reductions in its HCFC consumption is the same as its HCFC baseline consumption of 62.1 ODP tonnes (ODPt). The analysis of the data by substance and by sector showed that HCFC-22 is used almost entirely in the RAC sector and is the most predominant ODS in metric terms. HCFC-141b was used in the servicing sector for flushing, and was banned in 2015.

The Twenty Fourth Meeting of the Parties adopted Decision XXIV/16 with regard to the request of Algeria to change its consumption in 2009 to 60.35 ODPt and for 2010 to 63.88 with a resulting baseline of 62.1 ODPt. The phase-out schedule of Algeria is shown in table 1 below:

**Table 1: Algeria HCFC phase-out schedule**

Phase-out step	Date	Maximum HCFC consumption (ODPt)
Freeze at the baseline level	1 <sup>st</sup> January 2013	62.1
Reduction step of 10%	1 <sup>st</sup> January 2015	55.9
Reduction step of 20%	1 <sup>st</sup> January 2017	49.7
Reduction step of 35%	1 <sup>st</sup> January 2020	40.4
Reduction step of 67.5%	1 <sup>st</sup> January 2025	20.2
Reduction step of 97.5%	1 <sup>st</sup> January 2030	1.6

Algeria has implemented strict controls on ODS through its national legislative structure. In accordance with Decision IX/8 of the Parties, Algeria introduced an ODS control system for ODS users, and established ODS import and monitoring procedures as well as policies for discouraging the use of ODS through its awareness activities. A quota system has been established in order to meet the ODS phase-out schedules set by the Montreal Protocol.

#### *Algeria and Montreal Protocol ratifications*

Algeria has ratified the Montreal Protocol and its various amendments to control/phase out the ozone depleting substances. Over the past two decades, all necessary legal instruments/directives have been issued by the Algerian government to effect requirements of Montreal Protocol. The status of ratification is summarized in Table 2.

**Table 2: Status of Ratification of Montreal Protocol and its amendments**

Protocol/Amendment	Date	Type
Vienna Convention	Sept 23, 1992	Ratification
Montreal Protocol	Sept 23, 1992	Ratification
London Amendment	Sept 23, 1992	Ratification
Copenhagen Amendment	June 14, 1999	Ratification
Montreal Amendment	March 19, 2007	Ratification
Beijing Amendment	March 19, 2007	Ratification

As Party to the Montreal Protocol, Algeria adopted the agreement on HFCs (Kigali Amendment) at the close of the 28th Meeting of the Parties in Kigali, Rwanda. Governments, including Algeria, agreed that it would enter into force on 1 January 2019, provided that at least 20 Parties to the Montreal Protocol had ratified it, which has been fulfilled. Algeria has not yet ratified the Kigali Amendment.

#### *HFC data*

Algeria has not conducted a national inventory of HFCs and/or a survey on alternatives to ODS. Therefore, there is no reliable data on the current supply and consumption of HFC and ODS



alternatives nor future projections of growth patterns by substances and/or sector.

Known used alternatives can be obtained from the HPMP, stage I conversions of one foam manufacturing enterprise (Cristor – from HCFC-141b to cyclopentane technology/hydrocarbons) and one assembler of air-conditioning equipment (Condor – from HCFC-22 to HFC-32). Both conversions have been completed.

Overall, first indications show: Algeria neither produces nor export ODS or ODS alternatives and entirely relies on imports for its own consumption. Although Algeria's economic growth is currently subdued, the population is growing, the number of construction activities in several sectors is increasing, expansion in the commercial and industrial sector is expanding. These are indicators for a growth in consumption of ODS and ODS alternatives in Algeria.

It is expected that R-134a, R-404A, R-407C, R-410A, as well as a low rate of R-600a and R-717 are the main refrigerants used or used first in the RAC sector. It is likely that R-134a is the main ODS alternative employed in the country.

Consumption of HFC and its blends are likely to increase tremendously by 2030, potentially leading to notable environmental impacts on global warming. However this can be avoided through introduction of low-GWP based alternatives to replace HCFCs and HFCs.

#### *High Ambient Temperature (HAT) exemption*

There is an exemption for Parties with high ambient temperature conditions where suitable alternatives do not exist for the specific subsector of use. This exemption allows for a delay in the HFC freeze date and initial control obligations by an initial duration of four years. Algeria is included in the list of Parties this exemption applies.

## **2. Objectives**

The main objective of these enabling activities is to prepare Algeria for the ratification and early implementation of the Kigali Amendment to the Montreal Protocol, considering the situation above through the following lines of action:

- Support for the early ratification of the Kigali Amendment,
- Support to the institutional arrangements,
- Review of the licensing systems,
- Review of the data reporting systems and
- Demonstration of non-investment activities.

### 3. Proposed approach and activities

#### a. Activities to facilitate and support the early ratification of the Kigali Amendment

National Ozone Officers should facilitate the ratification process by providing the required data, information and background documents to the ratification institutions.

These activities are aiming to inform and prepare all involved stakeholders specifically for the ratification of the Kigali amendment.

Activities	Responsible entity	Target group	Start date	Completion date	Budget (US \$)	Milestones	Expected outputs
<p>Coordination with Government representatives and other national stakeholders</p> <p>---</p> <p>Raising awareness amongst the public and other stakeholders.</p>	National Consultant with support of UNIDO and NOU	<p>Related ministries, legislators, the refrigeration association, and other stakeholders.</p> <p>---</p> <p>The public and relevant stakeholders, including but not limited to the economic sector, the civil society and NGOs.</p>	Jan 2020	April 2020	10,000	<p>One or two national workshop(s) delivered.</p> <p>---</p> <p>Workshop report(s) published.</p>	<p>Steering committee, task forces and/or working groups set up as appropriate.</p> <p>---</p> <p>Roles and tasks for the ratification of the amendment distributed among relevant bodies.</p> <p>---</p> <p>Awareness on the ratification raised among relevant stakeholders including the public.</p>
Supporting national ratification instruments		Legislators				5,000	Supporting documents distributed among ministries and legislators

b. Initial activities identified in paragraph 20 of decision XXVIII/2, excluding institutional strengthening, as addressed in decision 78/4(b)

*b.1 Country-specific activities aimed at initiating supporting institutional arrangements*

Institutional arrangement is what integrates analysis and decision-making tools, and it is the precondition of a successful ratification.

<b>Activities</b>	<b>Responsible entity</b>	<b>Target group</b>	<b>Start date</b>	<b>Completion date</b>	<b>Budget (US \$)</b>	<b>Milestones</b>	<b>Expected outputs</b>
Review of codes and standards, permits, inspections, operating standards for HFC and flammable/toxic medium and low (or lower) -GWP alternatives (use, maintenance, end-user), prohibitions, testing, labelling (customs, wholesalers or distributors), taking into account regional and international practices.	National Consultant with support of UNIDO and NOU	Related ministries, departments, legislators, servicing sector, suppliers, standards bodies.	April 2020	Sept 2020	20,000	Meetings conducted if needed. --- A desktop study delivered. --- A report published.	A proposal for updating codes and standards prepared and presented.

*b.2 Review of licensing systems*

Properly established and functioning licensing systems play a key role in sustaining the impressive results achieved so far under the Montreal Protocol and also in facilitating the realization of new, ambitious strategies.

<b>Activities</b>	<b>Responsible entity</b>	<b>Target group</b>	<b>Start date</b>	<b>Completion date</b>	<b>Budget (US \$)</b>	<b>Milestones</b>	<b>Expected outputs</b>
Enhancement of the import and export license system to include HFCs and other alternatives.	UNIDO with support from National Consultant and NOU	Customs division, Trade Department, relevant ministries.	Jun 2020	Feb 2021	35,000	A workshop with relevant stakeholders delivered --- A report published on this topic	Identification of necessary regulatory and administrative measures for the control of HFCs' imports and exports.
Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends.						A workshop with relevant stakeholders delivered --- A report published on this topic	Proposal on local harmonized tariff codes for HFCs.

*b.3 Data reporting on HFC consumption*

National data reporting is the backbone of the strategic planning, monitoring and evaluation of the institutions of the Montreal Protocol.

These activities are investigating the need for updates in Jordan's in the existing reporting system to prepare and improve for future reporting needs under the Kigali Amendment.

<b>Activities</b>	<b>Responsible entity</b>	<b>Target group</b>	<b>Start date</b>	<b>Completion date</b>	<b>Budget (US \$)</b>	<b>Milestones</b>	<b>Expected outputs</b>
Review of the national mechanisms used for ODS reporting to include HFCs consumption, especially considering the servicing sector (the informal sector in particular)	UNIDO with support from National Consultant and NOU	Relevant ministries and Customs	Jun 2020	Mar 2021	16,000	A workshop with relevant stakeholders delivered --- A report published on this topic	National mechanism updated

c. Demonstration of non-investment activities

Demonstration projects assist the country to gain a more precise and targeted overview on ODS alternatives and have a better understanding on their characteristics and potential applications.

These activities are particularly addressing Jordan’s concern about its technology choices and technology future in the context of MP and Kigali implementation. This will help to better understand the current and future role of HFCs as well as other HCFC alternatives in its economy.

Activities	Responsible entity	Target group	Start date	Completion date	Budget (US \$)	Milestones	Expected outputs
Assessment of national barriers and opportunities for the use and further uptake of medium and low or (lower) GWP ODS alternative, with a special focus on the availability and accessibility and their related equipment.	UNIDO with support from National Consultant and NOU	Importers, technicians, technology suppliers, end users and other relevant stakeholders	Jul 2020	Jan 2021	30,000	Working group meetings conducted.  Technical feasibility study on alternatives prepared.  A report published.	An assessment of national barriers and opportunities prepared.  ---  First proposals on possible financial instruments, policies and technical assistance to address national barriers to the introduction of alternatives prepared.

d. Awareness, Communication and Dissemination

d.1 Awareness activities on key information and results from the activities A to C

These activities are planned to ensure that all involved stakeholders are informed about the activities conducted relevant to their areas.

Activities	Responsible entity	Target group	Start date	Completion date	Budget (US \$)	Milestones	Expected outputs
<p>Awareness raising of stakeholders (public and private sectors) on HFC phase-down and energy efficiency improvement options</p> <p>Dissemination of documents and materials obtained during the enabling activities project implementation and preparation of additional information material</p>	UNIDO with support from National Consultant and NOU	Sectors involved in HFC phase-down (manufacturing and servicing sector); Public	Jun 2020	Jun 2021	34,000	<p>National Workshop with main stakeholders developed.</p> <p>Leaflets, informative material elaborated and disseminated.</p> <p>Documents or materials are edited, printed and distributed.</p>	<p>Public and private stakeholders are informed and aware of KA commitments, current situation on HFC and actions as well as national challenges and technical alternatives</p> <p>---</p> <p>Communication and dissemination of national key information on HFC phase-down (e.g. roadmap, studies)</p>

#### 4. Implementation budget and plan

Enabling Activity		Budget per cost item (USD)	Budget Requested (USD)
a. Activities to support the early ratification of the Kigali Amendment	<ul style="list-style-type: none"> <li>- Workshops</li> <li>- National consultants</li> <li>- Travel</li> </ul>	6,000 7,000 2,000	15,000
b.1. Institutional arrangements	<ul style="list-style-type: none"> <li>- Coordination meetings</li> <li>- National consultants</li> <li>- International consultant</li> <li>- Travel</li> <li>- Misc. (printing, document preparation, communication etc.)</li> </ul>	2,000 4,000 7,000 5,000 2,000	20,000
b.2. Licensing systems	<ul style="list-style-type: none"> <li>- Workshop and coordination meetings</li> <li>- National consultants</li> <li>- Travel</li> <li>- Other contractual services (internet, consulting company)</li> </ul>	5,000 4,000 6,000 20,000	35,000
b.3. Data reporting on HFC consumption	<ul style="list-style-type: none"> <li>- Meeting</li> <li>- National consultants</li> <li>- Travel</li> <li>- Misc. (printing, document preparation, communication etc.)</li> </ul>	3,000 10,000 2,000 1,000	16,000
c. Demonstration of non-investment activities	<ul style="list-style-type: none"> <li>- Meetings</li> <li>- National consultant</li> <li>- Travel</li> <li>- Other contractual service (internet, consulting company)</li> </ul>	3,000 6,000 5,000 16,000	30,000





## **5. Institutional arrangements**

The National Ozone Unit (NOU) and the United Nations Industrial Development Organization (UNIDO) will be jointly responsible for the correct implementation of the above mentioned activities.

The role of UNIDO will be focused on the general implementation and execution of the enabling activities and the appropriate expenditure of the funds allocated for each of them. Besides, UNIDO will provide technical assistance based on the support of international experts on the different areas of work.

On its turn, the NOU will collaborate in the implementation of the different activities, including the identification of local experts on the different areas of work, when necessary. Besides, the NOU will provide general guidance on the implementation of the enabling activities based on the national priorities.

### SECTION 3

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
Argentina	Enabling activities for HFC phase-down (ARG/SEV/81/TAS/02+)	12	Longer period was required to coordinate the inception phase of the project and to proceed with the legislative proposal and licensing system changes in the country that are still in progress. In order to ensure the proper identification and contract of the expert and pertinent actions, the country needs additional time to advance with the planned enabling activities.	Yes
Egypt	Enabling activities for HFC phase-down (EGY/SEV/81/TAS/02+ and EGY/SEV/81/TAS/03+ implemented by UNEP)	11 <sup>3</sup>	UN Environment is taking the lead on the Enabling activities for phase-down in Egypt. The justification is provided in UN Environment's WPA.	Yes
Libya	Enabling activities for HFC phase-down (LIB/SEV/81/TAS/01+)	12	The implementation of the project is delayed due to the unstable situation in the country. The selection of consultants has been delayed. Preparatory activities for the ratification progress are ongoing. Extension is needed to complete all planned activities.	Yes
Morocco	Enabling activities for HFC phase-down (MOR/SEV/81/TAS/01+)	12	The ratification process is underway, however is not yet completed. The extension of the enabling activities is required to support the completion of ratification, ensure adequate execution of all activities and compensate for the late start due to delay in consultant identification and recruitment.	Yes
Niger (the)	Enabling activities for HFC phase-down (NER/SEV/81/TAS/01+)	12	Niger has already ratified the Kigali Amendment. The extension of the Enabling activities is needed for finalization of the national legislation, support for relevant legislative activities and respective workshops, as well as for completion of the information dissemination and awareness campaign.	Yes
Nicaragua	Enabling activities for HFC phase-down (NIC/SEV/81/TAS/01+)	12	Together with MARENA, UNIDO and the international experts have prepared a good working plan. Furthermore, UNIDO has provided coordination and other support, however the Enabling Activities have not been completed. It was agreed with the NOU to request extension for the project implementation and to ensure that all the stakeholders are well prepared for the next steps. The ratification is underway and it is expected to be submitted soon.	Yes
Venezuela (Bolivarian Republic of)	Enabling activities for HFC phase-down (VEN/SEV/81/TAS/01+)	12	Due to the political situation some of the projects have faced certain delays, however UNIDO keeps the implementation modality and has found ways to ensure the project can achieve the goals. UNIDO with cooperation of international experts, local experts and FONDOIN – NOU has advanced and progresses with the project, but still more time for smooth implementation will be required.	Yes

<sup>3</sup> In the request from Egypt is included that the requested endorsement is by the end of 2020, which translates into 11 months.