联 合 国



# 联合国 球境规划署

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执行蒙特利尔议定书 多边基金执行委员会 第八十次会议 2017年11月13日至17日,蒙特利尔

# 开发计划署 2018-2020 年业务计划

1. 本文件提出开发计划署 2018-2020 年的业务计划<sup>1</sup>, 其中包括:已经计划的 2018-2020 年淘汰消耗臭氧层物质的活动;业务计划业绩指标;供执行委员会审议的建议。开发计划署 2018-2020 年业务计划的说明载于本文件附件。

# 2018-2020 年计划进行的活动

2. 表 1 按年份开列开发计划署业务计划内各项活动的价值。

 $<sup>^1</sup>$ 2017 年 9 月 5 日至 7 日在蒙特利尔举行的机构间协调会议对开发计划署 2018–2020 年业务计划草案进行了讨论。这份文件所载的业务计划处理了该次会议提出的问题。

表 1: 开发计划署 2018-2020 年业务计划提交的资源分配数额(以千美元计)\*

	2018年	2019年	2020年	共计	2020年
				(2018-2020年)	后
					共计
履约所需资源					
已核准的氟氯烃淘汰管理计划	50,264	26,339	38,426	115,028	53,355
氟氯烃生产量 - 第一阶段	0	2,000	2,000	4,000	10,000
氟氯烃淘汰管理计划第一阶段	0	0	107	107	107
氟氯烃淘汰管理计划第一阶段 – 追加	96	328	0	424	0
经费					
氟氯烃淘汰管理计划项目编制 - 第二	411	10	0	421	0
阶段					
氟氯烃淘汰管理计划第二阶段	3,352	7,839	4,385	15,577	8,987
氟氯烃淘汰管理计划项目编制 - 第三	420	80	0	500	0
阶段					
氟氯烃淘汰管理计划第三阶段	0	0	10,621	10,621	175,221
履约所需资源 - 小计	54,542	36,596	55,539	146,678	247,670
氢氟碳化物活动					
氢氟碳化物 - 示范项目	2,800	0	0	2,800	0
氢氟碳化物 – 扶持活动	3,079	0	0	3,079	0
氢氟碳化物 – 投资项目	600	5,885	2,140	8,625	0
氢氟碳化物活动 - 小计	6,479	5,885	2,140	14,504	0
标准活动					
体制强化	4,305	2,082	4,304	10,691	0
核心单位	2,084	2,098	2,113	6,295	0
标准活动 - 小计	6,388	4,181	6,418	16,987	0
总计	67,410	46,662	64,097	178,169	247,670

<sup>\*</sup>包括相关机构支助费用。

3. 下文提供一些拟议活动的进一步信息。

# 氟氯烃生产量-第一阶段

4. 总额 1400 万美元(包括用于 2018 年至 2020 年的 400 万美元)列入目前不符合供资资格的印度的氟氯烃生产淘汰管理计划第一阶段。

# 氟氯烃淘汰管理计划第一阶段

- 5. 开发计划署列入为毛里塔尼亚进行的活动,其氟氯烃淘汰管理计划第一阶段未获批准,开列费用 214,000 美元,包括 2018 年至 2020 年期间的 107,000 美元。毛里塔尼亚的氟氯烃淘汰管理计划已提交第八十次会议<sup>2</sup>。
- 6. 开发计划署还将在 2018 年至 2020 年为哥斯达黎加、古巴和巴拉圭进行氟氯烃淘汰管理计划第一阶段的其他项目,价值 424,297 美元。这些申请都是根据执行委员会不同决定作出的,允许这些国家在落实第一阶段期间提出其他项目。

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<sup>&</sup>lt;sup>2</sup> UNEP/OzL.Pro/ExCom/80/44。

# 氟氯烃淘汰管理计划第二阶段

- 7. 2020 年后,低消费量国家氟氯烃淘汰管理计划第二阶段达到削减氟氯烃基准消费量的 35%的供资总额为 67,000 美元,达到削减 67.5%的供资总额为 320 万美元(包括 2018 年至 2020 年的 150 万美元)。
- 8. 表 2 按行业开列非低消费量国家氟氯烃淘汰管理计划第二阶段的资金分配情况。

表 2: 按行业开列的非低消费量国家氟氯烃淘汰管理计划第二阶段资金分配情况(以千美元计)

行业	2018-2020 年	2020年后	共计	占总额的 百分比 (%)
泡沫塑料	2,000	0	2,000	9.4
制冷、空调和维修	5,805	645	6,450	30.3
制冷制造和维修	5,106	4,412	9,518	44.8
制冷维修	1,159	2,127	3,287	15.5
共计	14,071	7,185	21,255	100.0

# 氢氟碳化物 – 相关活动

- 9. 氢氟碳化物活动包括扶持活动(2018年,为 16个国家供资 308万美元);转换副产品 HFC-23 的技术示范项目(2018年,为中国供资 280万美元);投资活动(2018年,为中国、多米尼亚共和国、埃及和津巴布韦供资 860万美元)。
- 10. 列入业务计划的氢氟碳化物活动的先决条件之一是相关政府发送一份意向书/同意函。开发计划署已经发送了进行这些活动的所有相关信函。

# 核心单位费用

11. 预期核心单位费用3每年增加目前已商定的 0.7%。

### 秘书处拟议作出的调整

12. 在机构间协调会议期间,根据执行委员会的相关决定,对调整双边机构和执行机构的业务计划达成了协议。秘书处在审查开发计划署订正的 2018-2020 年业务计划时,注意到以下各项调整没有包括在内:

<sup>&</sup>lt;sup>3</sup> 开发计划署的 2018 年核心单位费用已提交第八十次会议(UNEP/OzL.Pro/ExCom/80/29)。

表 3: 对开发计划署 2018-2020 年业务计划作出的调整(以千美元计)

调整	2018-2020	2020 年后
氟氯烃淘汰管理计划的价值反映根据协定核准的实际数额	-642	856
提交第八十次会议的新氟氯烃淘汰管理计划活动(第一阶段和第二阶	-1,456	-279
段),以便符合原先提出的拟议供资数额		
依照第71/42号决定编制氟氯烃淘汰管理计划第二阶段和第三阶段的项目	-290	290
低消费量国家氟氯烃淘汰管理计划第二阶段达到最大允许值以便根据第	-46	0
74/50(c)(七)号决定实现削减氟氯烃基准消费量 67.5%		
依照第 74/51(c)号决定进行体制强化项目	-14	0
依照第 79/46(c)号决定进行的或提交第八十次会议的氢氟碳化物扶持活动	-1,581	0
氟氯烃生产淘汰管理计划第一阶段	-4,000	-10,000
非低消费量国家的氟氯烃淘汰管理计划第二阶段,其制冷空调行业的最大	-3,810	-416
成本效益为 8.40 美元/公斤4		
非低消费量国家的氟氯烃淘汰管理计划第三阶段,根据第 74/50(c)(十	-0.236	-0.031
三)号决定其制冷维修行业的最大成本效益为 4.80 美元/公斤		
非低消费量国家的氟氯烃淘汰管理计划第三阶段,其工业和商业制冷和空	0	-59,700
调行业的最大成本效益为 8.40 美元/公斤5		
非低消费量国家的氟氯烃淘汰管理计划第三阶段,以完成第二阶段的年份	-10,000	10,000
为依据		

13. 表 4 开列秘书处建议的对开发计划署 2018-2020 年业务计划作出的调整,这也在 2018-2020 年多边基金综合业务计划中作出改动6。

表 4: 开发计划署调整后的 2018-2020 年业务计划的资源分配情况(以千美元计)\*

	2018年	2019年	2020年	共计	2020年
				(2018-2020年)	后共计
履约所需资源					
核准的氟氯烃淘汰管理计划	50,264	26,339	37,784	114,386	54,211
氟氯烃生产量 - 第一阶段	0	0	0	0	0
氟氯烃淘汰管理计划第一阶段	0	0	173	173	299
氟氯烃淘汰管理计划第一阶段 – 追加	96	328	0	424	0
经费					
氟氯烃淘汰管理计划项目编制 - 第二	410	10	0	420	0
阶段					
氟氯烃淘汰管理计划第二阶段	1,238	5,839	3,120	10,197	8,100
氟氯烃淘汰管理计划项目编制 - 第三	130	80	0	210	290
阶段					
氟氯烃淘汰管理计划第三阶段	0	0	621	621	125,520
履约所需资源 - 小计	52,138	32,596	41,698	126,433	188,421
氢氟碳化物活动					
氢氟碳化物 - 示范项目	2,800	0	0	2,800	0
氢氟碳化物 – 扶持活动	1,499	0	0	1,499	0
氢氟碳化物 - 投资项目	600	5,885	2,140	8,625	0
氢氟碳化物活动 - 小计	4,899	5,885	2,140	12,924	0

<sup>4</sup>机构间协调会议商定的结果。

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<sup>5</sup> 机构间协调会议商定的结果。

 $<sup>^6</sup>$  UNEP/OzL.Pro/ExCom/80/16  $_{\circ}$ 

	2018年	2019年	2020年	共计	2020年
				(2018-2020年)	后共计
标准活动					
体制强化	4,305	2,069	4,304	10,678	0
核心单位	2,084	2,098	2,113	6,295	0
标准活动 - 小计	6,388	4,167	6,418	16,973	0
总计	63,426	42,648	50,256	156,330	188,421

<sup>\*</sup>包括相关机构支助费用。

# 绩效指标

14. 开发计划署依照第 71/28 号决定在其业务计划说明提交了绩效指标。在若干次讨论后,开发计划署和秘书处同意表 5 所列的各项指标。

表 5: 开发计划署的绩效指标

指标类别	简称	计算	2018 年指标
规划 - 核准	批准付款	与计划的付款次数相比,核准的付款数目*	23
规划 - 核准	核准的项目/活动	与计划的项目/活动次数相比(包括编制项目活	43
		动),核准的项目/活动数目**	
执行	发放的资金	根据进度报告中的估计付款数额	31,295,677 美元
执行	淘汰消耗臭氧层物	按业务计划进行的淘汰相比,在下一次付款核	756.2 ODP 吨
	质	准时,本次付款淘汰的消耗臭氧层物质	
执行	完成项目的活动	与所有活动的进度报告内计划的项目相比,项	4
		目完成的数目(不包括项目编制)	
行政	财务工作完成速度	在项目完成后 12 个月项目的财务部分完成的程	到期付款的 70%
		度	
行政	项目完成报告的准	与商定的数目相比,及时提交项目完成报告的	准时
	时提交	情况	
行政	进度报告的准时提	除非另行商定,准时提交进度报告和业务计划	准时
	交		

<sup>\*</sup>如果一个机构由于另一个合作或牵头机构而无法提出付款申请,在该机构同意下,可降低该机构的目标。

# 建议

- 15. 谨请执行委员会:
  - (a) 注意到 UNEP/OzL.Pro/ExCom/80/18 号文件所载开发计划署 2018-2020 年业 务计划;以及
  - (b) 批准 UNEP/OzL.Pro/ExCom/80/18 号文件表 5 所载开发计划署的绩效指标。

<sup>\*\*</sup>如果执行委员会尚未就编制项目的资金作出决定,就不应对项目编制作出评估。



# **Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol**

# UNDP 2018 Business Plan Narrative

80th Meeting, 13-17 November 2017, Montreal

#### I. Introduction

The 2018-2020 UNDP Business Plan for the Multilateral Fund for the Montreal Protocol provides the Executive Committee with estimates of the funding levels needed to achieve the 2020 and 2025 control measures for HCFCs, the enabling activities required by Parties for the early ratification of the Kigali Amendment, and the stand-alone investment projects that will support the early phase-down of HFCs. This narrative is based on an excel table that is included as **Annex 1** to this report. The excel table lists all the ongoing and planned UNDP activities for which funding is expected during the period 2018 through 2020. Figures are also provided for the years 2020-2030, which are mainly related to Stage I HPMP approvals, preparation funds for Stage II, and Stage II HPMP proposals. In addition, tentative estimates were included for Stage III HPMPs in China and India in 2020 and beyond as well.

It should also be noted that planned activities included in the 2018 column are relatively firm, while future years are indicative and are provided for planning purposes only.

In preparing this business plan, the relevant Executive Committee decisions on Business Planning, Stage I and Stage II HPMPs, HCFC investment and demonstration projects, and HFC enabling activities and stand-alone investment projects (60/44, 71/18, 71/42, 72/20, 72/40, 73/27, 74/18, 74/50, 74/51, 79/45, 79/46, and 79/47) as well as country requests have been taken into consideration. As agreed with the Secretariat, activities which were included in UNDP's 2017 Business Plan, but were not submitted in 2017 were reflected in the 2018 Business Plan as well.

The activities included for 2018 can be summarized as follows:

- 22 ongoing institutional strengthening activities, of which 14 will request an extension in 2018 for a combined amount of US\$ 4.3 million;
- Several HCFC-related activities, some of which have resulted directly from the approval of Stage I in the previous six years.
- Two new countries (Bangladesh and Democratic Republic of the Congo) have included HCFC activities for Stage II HPMPs in 2018.
- Sixteen countries will be submitting requests for HFC enabling activities in 2018 for a total of US\$ 3.1 million:
- Two countries (China and Dominican Republic) have included requests for funding for HFC stand-alone investment projects for a total of US\$ 3.4 million; and
- One global request for the Core Unit support cost.

Thus the expected business planning value is **US\$ 67.4 million for 2018** and **US\$ 46.7 million for 2019** (including support costs). This funding translates to the phase out of 768.5 ODP tonnes in 2018 and 605.6 ODP tonnes in 2019.

Figures for the Stage I HPMP-related activities in 2018 and beyond were obtained by taking the approved figures and ODP values from the agreements between the Executive Committee and the countries concerned.

Figures for the new Stage II HPMP-related activities in 2018 and beyond were based on the Stage II guidelines that were approved at the 74<sup>th</sup> meeting and were obtained using the following methodology:

1. We took the sector/chemical distribution as per starting point, based on the HPMP Stage I document.

- 2. We took the ODPs by sectors that have already been approved during Stage I and calculated the remaining eligible sector consumption by deducting the approved ODP from the original sector distribution.
- 3. For non-LVCs, in most cases, we estimated the value of Stage II based on a calculation of up to 35% of the value of phase-out. HCFC-141b entries were prioritized in the majority of cases.
- 4. For LVCs that phased out 10% in Stage I, we assumed they would phase-out 35% in Stage II.
- 5. For those LVCs that phased out 35% in Stage I, we assumed they would phase out 67.5% in Stage II.
- 6. US dollar estimates were derived based on the cost-effectiveness figures agreed with the MLF Secretariat during the Inter-agency coordination meeting in August 2015.
- 7. The year of the first tranche of Stage II and the duration of Stage II were determined on a country basis depending on the local context of the country.

Stage II PRP was entered one to two years before the last tranche of Stage I of the HPMP is due in most cases with the exception of a few countries.

### II. Resource allocation

The projects are grouped into various categories, which are described in the following summary table.

Table 1: UNDP 2018-2020 Business Plan Resource Allocations<sup>1</sup>

Category	2018 Value (000's)	2019 Value (000's)	2020 Value (000's)
1a. Approved Stage I HPMP	1,332	352	370
1b. Approved Stage II HPMP	48,877	25,987	37,993
2a. Planned Stage I HPMP	151	328	151
2b. Planned Stage II PRP	398	10	-
2c. Planned Stage II HPMP	3,364	7,839	4,404
2d. Planned Stage III PRP	420	80	-
3. Planned Inst. Str.	4,305	2,082	4,304
4. Core	2,084	2,098	2,113
5a. Planned Enabling Activity	3,079	-	-
5c. Planned investment project	3,400	5,885	2,140
6. Production Sector	-	2,000	2,000
Grand Total	67,410	46,662	64,097

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<sup>&</sup>lt;sup>1</sup> All values include agency support costs.

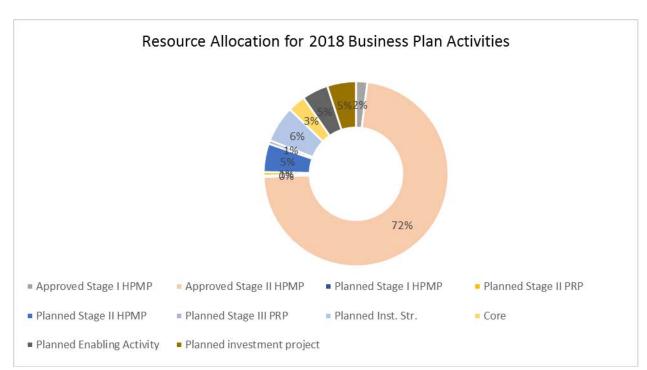


Chart 1: UNDP Resource Allocation for 2018 Business Plan Activities

# III. Geographical distribution

The UNDP Business Plan will once again cover all the regions, with approved and new activities in 48 countries, 38 of which have funding requests in 2018. The number of activities and budgets per region for 2018 is listed in Chart 1.

It should be noted that the budget amounts are in direct correlation with the amount of ODS that a country/region consumes.

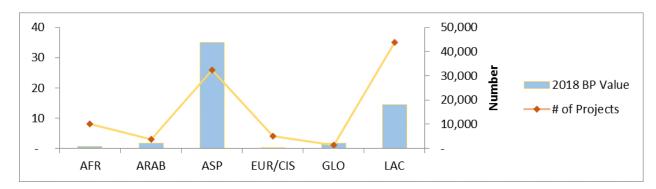


Chart 2: UNDP 2018 MYA Tranches<sup>2</sup> and New Activities per Region<sup>3</sup>

This graph doesn't include the Ozone programmes in the CIS that are funded by the GEF.

## IV. Programme Expansion in 2018

# 4.1. Background

UNDP's 2018-2020 Business Plan has mostly been developed by taking previous years' business plans into consideration, applying the relevant Executive Committee decisions on Business Planning, Stage I and Stage II HPMPs, investment and demonstration projects, and through communication with Article 5 countries that have expressed an interest in working with UNDP to address their compliance and other needs.

Clarifications were sought and overlaps were resolved during discussions with the MLF Secretariat and other Implementing and bilateral Agencies during and post the Inter-Agency Coordination meeting held on 5 - 7 September 2017 in Montreal.

<u>Countries Contacted.</u> All activities listed are either deferred from the prior year's business plan, or have active project preparation accounts ongoing, or were included based on requests from the countries concerned. UNDP will continue to provide technical and advisory support to all the countries assisted during Stage I, in addition to Venezuela, which UNDP wasn't involved in Stage I for.

Coordination with other bilateral and implementing agencies. As in the past, during 2018 UNDP will continue to collaborate with both bilateral and other implementing agencies, as lead agency or cooperating agency. Collaborative arrangements in programming will continue with bilateral agencies, the Government of Italy and the Government of Japan.

<sup>&</sup>lt;sup>2</sup>All values include agency support costs.

<sup>&</sup>lt;sup>3</sup> EUR contains CIS-countries that receive MLF funding.

# 4.2. ODP Impact on the 2-year Phase-out Plan

In the next table, which is also based on **Annex 1**, the ODP amount listed in a given year corresponds to the US\$ amount that is approved in that same year whereby the overall cost-effectiveness was applied to each individual funding tranche.

Table 2: Impact upon Project Approval (in ODP T)<sup>4</sup>

Category	<b>ODP in 2018</b>	ODP in 2019
HCFC-141b	172.26	60.19
HCFC-22	238.95	291.40
HCFC-22/HCFC-141b	357.30	125.30
HCFC-22/HFC-23	-	128.66
Total	768.51	605.55

<sup>\*</sup>The split between the various HCFCs is often difficult to determine, especially where various agencies are active in one HPMP. It is for those cases that the category "HCFC-22/HCFC-141b" was used.

### 4.4. Non-investment projects

Also included in **Annex 1** are UNDP's planned non-investment projects in 2018, with a total value of more than US\$ 5.9 million, including support costs. This list excludes institutional strengthening and includes one global request under the core unit, preparation funding and HFC enabling activities.

Details on all these requests will also be included in the respective Work Programmes to be submitted throughout 2018.

Table 3: Individual Non-Investment projects (DEM/TAS) in 2018

Agency Category	Country	Sector and Subsector	Value (\$000) in 2018
2c. Planned Stage II PRP	Brunei Darussalam	Stage II HPMP Preparation	10
2c. Planned Stage II PRP	Costa Rica	Stage II HPMP Preparation	43
2c. Planned Stage II PRP	Cuba	Stage II HPMP Preparation	60
2c. Planned Stage II PRP	El Salvador	Stage II HPMP Preparation	30
2c. Planned Stage II PRP	Fiji	Stage II HPMP Preparation	12
2c. Planned Stage II PRP	Georgia	Stage II HPMP Preparation	32
2c. Planned Stage II PRP	Ghana	Stage II HPMP Preparation	36
2c. Planned Stage II PRP	Jamaica	Stage II HPMP Preparation	30
2c. Planned Stage II PRP	Mali	Stage II HPMP Preparation	12
2c. Planned Stage II PRP	Nepal	Stage II HPMP Preparation	10
2c. Planned Stage II PRP	Paraguay	Stage II HPMP Preparation (refr servicing)	32
2c. Planned Stage II PRP	Sri Lanka	Stage II HPMP Preparation	30
2c. Planned Stage II PRP	Swaziland	Stage II HPMP Preparation	11
2c. Planned Stage II PRP	Trinidad and Tobago	Stage II HPMP Preparation	64
2e. Planned Stage III PRP	Dominican Republic	Stage III HPMP Preparation	50
2e. Planned Stage III PRP	India	Stage III HPMP Preparation (air-conditioning)	120

<sup>&</sup>lt;sup>4</sup> Tonnage in ODP and based on date of project approvals. The figures for ODP related to ODS-waste management and destruction projects are very raw estimates. In addition it has to be clear that those figures are not phase-out as they represent ODS "use" and not "consumption"

2e. Planned Stage III PRP	India	Stage III HPMP Preparation (refrigeration)	120
2e. Planned Stage III PRP	India	Stage III HPMP Preparation (overarching)	50
2e. Planned Stage III PRP	Panama	Stage III HPMP Preparation	40
2e. Planned Stage III PRP	Uruguay	Stage III HPMP Preparation	40
4. Core	Global	Core Unit Support	2,084
5a. Planned Enabling Activity	Bangladesh	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Chile	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Colombia	Enabling activities for Kigali Amendment	273
5a. Planned enabling activity	Costa Rica	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Cuba	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	El Salvador	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	India	Enabling activities for Kigali Amendment	273
5a. Planned enabling activity	Indonesia	Enabling activities for Kigali Amendment	273
5a. Planned enabling activity	Iran	Enabling activities for Kigali Amendment	273
5a. Planned enabling activity	Jamaica	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Malaysia	Enabling activities for Kigali Amendment	273
5a. Planned enabling activity	Panama	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Paraguay	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Peru	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Trinidad and Tobago	Enabling activities for Kigali Amendment	164
5a. Planned enabling activity	Uruguay	Enabling activities for Kigali Amendment	82
		Total	5,982

In addition, UNDP will prepare 14 non-investment Institutional Strengthening project extensions in 2018, as indicated in the table below. The total value of IS renewal programming in 2018 is US\$ 4.3 million. An additional 8 IS renewals (Chile, Colombia, Costa Rica, Indonesia, Malaysia, Panama, Trinidad and Tobago, Uruguay) will be submitted in 2019 and are thus not shown in the table below.

**Table 4: Non-Investment Institutional Strengthening requests** 

<b>Agency Category</b>	Country	Sector and Subsector	Value (\$000) in 2018
Planned Inst. Str.	Argentina	Institutional Strengthening	427
Planned Inst. Str.	Bangladesh	Institutional Strengthening	178
Planned Inst. Str.	Brazil	Institutional Strengthening	481
Planned Inst. Str.	China	Institutional Strengthening	534

Planned Inst. Str.	Cuba	Institutional Strengthening		204	
Planned Inst. Str.	Georgia	Institutional Strengthening		91	
Planned Inst. Str.	Ghana	Institutional Strengthening		191	
Planned Inst. Str.	India	Institutional Strengthening		511	
Planned Inst. Str.	Iran	Institutional Strengthening		238	
Planned Inst. Str.	Lebanon	Institutional Strengthening		212	
Planned Inst. Str.	Nigeria	Institutional Strengthening		356	
Planned Inst. Str.	Pakistan	Institutional Strengthening		307	
Planned Inst. Str.	Sri Lanka	Institutional Strengthening		184	
Planned Inst. Str.	Venezuela	Institutional Strengthening		391	
			Total	4,305	

# 4.5. Formulation of HPMP related activities in 2018

UNDP is now focused on preparing and submitting HCFC Stage II Phase-out Management Plans and has submitted such plans for 49 countries out of 50 countries. UNDP's focus is:

- 1. Preparing and submitting final tranches of Stage I HPMPs.
- 2. Preparing and submitting subsequent tranches for already approved Stage II HPMPs (including China ICR and Solvents). 14 tranches valued at \$48.9 million is expected to be submitted in 2018
- 3. Developing and submitting first tranches for Stage II HPMPs. It is expected that two countries will be submitting their Stage II HPMPs to the ExCom for its consideration in 2018.

# V. Activities included in the Business plan that needs special consideration

#### **HCFC** Demonstration Projects

While the preceding Section 4 of this report dealt specifically with 2017 activities only, section 5 is related to all years.

Implementation of HCFC Phase-out Management Plans (HPMPs) in developing countries involves technology and policy interventions for phasing out HCFCs, to comply with the control targets of the accelerated HCFC phase-out schedule. During Stage I of the HPMP covering the 2013 and 2015 control targets, higher ODP HCFCs and sectors (HCFC-141b and the Foams Sector) were prioritized to maximize environmental impact. It followed that larger enterprises, where cost-effective conversions could be carried out using existing and mature technologies (eg. hydrocarbons), were also prioritized.

While some companies addressed in Stage I were able to identify solutions, we are now facing the work to be done to phase out consumption in SMEs. It has been noted during Stage I that even in the prioritized sectors/substances (HCFC-141b, Foams Sector), for enterprises with lower levels of HCFC consumption, established alternatives to HCFCs (e.g. hydrocarbons) did not always provide a sustainable solution in terms of availability, costs, performance and safety issues. Similarly, in other sectors and substances, alternatives to HCFCs are in various stages of development and market introduction and reliable data in terms of costs, availability and performance is not readily available, particularly at the country/ground level.

UNDP has significant experience in facilitating technology assessments of emerging alternatives (Methyl formate, Methyl Al, CO<sub>2</sub>, R-32, Ammonia, hydrocarbons, etc.) in various sectors and will be submitting new proposals in 2016 that are in line with the intent of ExCom Decision 72/40 and which demonstrate viable and low GWP alternatives to HCFCs using various technologies in a number of priority sectors. Pursuant to ExCom decision 72/40, UNDP is preparing additional projects to demonstrate climate-

friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling. UNDP has prepared such demonstration projects for China, Colombia, Costa Rica, Dominican Republic, Egypt, Kuwait, and Maldives. Please see below the table for a detailed list of the countries, project titles, and budget amounts.

Country	Project Title	MLF Grant
China	Demonstrating ammonia semi-hermetic frequency convertible screw refrigeration compression unit in the industrial and commercial refrigeration industry	1,026,815
Colombia	HC-290 (propane) is being tested as an alternative refrigerant in commercial air-conditioning manufacturing; and validation of the use of hydrofluoro-olefins for discontinuous panels in Article 5 parties through the development of cost-effective formulations;	500,000
Costa Rica	Testing the application of an ammonia/carbon dioxide refrigeration system in replacement of HCFC-22 for the medium-sized producer and retail store of Premezclas Industriales S.A.	524,000
Dominican Republic	Feasibility study for district cooling in Punta Cana	91,743
Egypt	Demonstrating low-cost options for the conversion to non-ODS technologies in polyurethane foams at very small users;	295,000
Kuwait	Demonstrating HCFC-free low-global warming potential technology performance in air-conditioning applications; and	293,000
Maldives	Testing HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector are being tested.	141,000
	Grand Total	2,871,558

Most of these projects are still in the early stages of building the project teams and initiating the procurement processes. The most advanced project is the Feasibility study for district cooling in Punta Cana, where the study was conducted and a final report was prepared. The study showed that district cooling is a viable approach for Punta Cana, avoiding emission of ODS (future need of approximately 1000 kg can be avoided) and GHGs (8.500 ton CO2/year reduction). A seminar to present the findings and results was organized and attracted the interest of many stakeholders.

#### ODS Alternative Surveys

As per the decision of XXVI/9 of the Twenty-Sixth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNDP also conducted surveys of ODS alternatives, prioritizing the Foams, Refrigeration and Air Conditioning sectors in selected developing countries representing a balance of size and regional spread in order to: establish the market penetration of current commercially available alternatives, in terms of supply chain and costs, performance and environmental impact; and identify emerging alternatives, in terms of their expected market introduction and availability, performance and projected costs. ODS alternative surveys were approved with MLF funding for Bangladesh, Costa Rica, Cuba, Dominican Republic, El Salvador, India, Iran, Lebanon, Moldova, Panama, Paraguay and Peru. UNDP has completed all the surveys for the countries that we are responsible for.

The surveys show that an increase in the consumption of alternatives to HCFCs (R-404A, R-407C, R-410A, HFC-32 and R-290) is expected in the next several years, partially due to the phase-out of HCFC-22 as a result of the conversion of lines manufacturing HCFC-based equipment, as well as policies banning the manufacturing (where applicable) and/or the importation of HCFC-based equipment. As technologies in the refrigeration/air-conditioning and/or foam sectors based on HFC-32, R-290 and HFO further penetrate local markets and become more cost-effective, the consumption trend of HFCs and hydrocarbons may change.

### HFC Enabling Activities and Stand-alone Investment Projects

As per ExCom decision 79/46, the Executive Committee has allowed for the submission of HFC enabling activities, which will support the early ratification of the Kigali Amendment. The activities to be implemented will support Parties in the ratification process. Countries can undertake a range of enabling activities to help their national ozone units to fulfill their initial obligations with regards to HFC phasedown, in line with the Kigali Amendment, including country-specific activities aimed at initiating support on institutional arrangements, the review of licensing systems, data reporting on HFC consumption and production and the national strategies. UNDP is assisting 19 countries (Bangladesh, Chile, China, Colombia, Costa Rica, Cuba, El Salvador, Fiji, India, Indonesia, Iran Jamaica, Malaysia, Nepal, Panama, Paraguay, Peru, Trinidad and Tobago, and Uruguay) with developing HFC enabling activities and these requests will be submitted in 2018.

The Executive Committee (ExCom decision 79/45) has also allowed for the preparation of stand-alone investment projects, which will support the phase-down of HFCs. Investment projects that will help to reduce the HFCs consumption at the enterprise level will be considered by the ExCom on a case-by-case basis. UNDP is assisting six countries (Bangladesh, China, Colombia, Dominican Republic, Egypt, Mexico, and Zimbabwe) with preparing such projects. Of these countries, Bangladesh and Colombia were submitted in 2017 and one project for China (Technology demonstration for HFC-23 by-product conversion), Dominican Republic and Mexico will be submitted in 2018. The remaining projects will be submitted in 2019 and 2020.

# VI. Policy Issues

There are no policy issues to be highlighted.

#### VII. 2017 PERFORMANCE INDICATORS

Decision 71/28 of the Executive Committee approved the following indicators to allow for the evaluation of performance of implementing agencies, with the weightings indicated in the table below. UNDP has added a column containing the "2018 targets" for those indicators. Some of these targets can be extracted from UNDP's 2018 business plan to be approved at the 80th ExCom meeting in November 2017. It should however be noted that this table is usually revised at that meeting, depending on the decisions that are taken. Other targets will be known once the prior year's progress report is submitted.

Category of performance indicator	Item	Weight	UNDP's target for 2018	Remarks
Planning/Approval	Number of tranches approved vs. those planned*	10	23	
Planning/Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**		52	14 IS, 16 TAS, 20 PRP, 1 DEM, 1 INV
Implementation	Funds disbursed (based on estimated disbursement in progress report)	15	31,295,677	As determined by the 2016 Progress Report.
Implementation	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans		766.9	ODS Phaseout associated with 23 tranches
*	Project completion vs. planned in progress reports for all activities (excluding project preparation)		4	As determined by the 2016 Progress Report.

Category of	Item	Weight		Remarks
performance indicator			target for 2018	
Administrative	The extent to which projects are financially	10	70% of	As determined by the 2016 Progress
	completed 12 months after project completion		those due	Report.
				_
Administrative	Timely submission of project completion reports	5	On time	TBD
	vs. those agreed			
Administrative	Timely submission of progress reports and	5	On time	TBD
	business plans and responses unless otherwise			
	agreed			

<sup>\*</sup> The target of an agency will be reduced if we could not submit a tranche owe to another cooperating/lead agency, if agreed by that agency.

<u>Note:</u> As per usual practice, all the above indicators will be revised during the 80<sup>th</sup> ExCom, depending on which programmes are allowed to stay in the business plan at that meeting.

<sup>\*\*</sup> Project preparation should not be assessed if the Executive Committee has not taken a decision on its funding.

# ANNEX 1 – TABLES RELATED TO PERFORMANCE INDICATORS

Table 1: Performance Indicator on planned/approved tranches

Country	Sector and Subsector
Bangladesh	Stage II HPMP (air conditioning and servicing)
Brazil	Stage II HPMP
Brunei Darussalam	Stage I Investment proj./Sector Plans (Servicing Sector)
Chile	Stage II HPMP
China	Stage II Investment proj./Sector Plans (ICR Sector Plan)
China	Stage II Investment proj./Sector Plans (Solvents Sector Plan)
Colombia	Stage II HPMP
Cuba	Stage I HPMP
Democratic Republic of the Congo	Stage II HPMP (servicing)
Dominican Republic	Stage II HPMP (servicing)
Egypt	Stage I HPMP
Fiji	Stage II HPMP Preparation
Georgia	Stage I HPMP
Ghana	Stage I HPMP
Guyana	Stage II HPMP (servicing)
India	Stage II HPMP (air conditioning, foam and refrigeration)
Indonesia	Stage II HPMP
Iran (Islamic Republic of)	Stage II HPMP (refrigeration)
Kyrgyzstan	Stage II HPMP (servicing)
Lebanon	Stage II HPMP
Panama	Stage II HPMP
Trinidad and Tobago	Stage I HPMP
Uruguay	Stage II HPMP (rigid foam & servicing)

Table 2: Performance Indicator on planned/approved activities

Country	Sector and Subsector		
Brunei Darussalam	Stage II HPMP Preparation		
Costa Rica	Stage II HPMP Preparation		
Cuba	Stage II HPMP Preparation		
El Salvador	Stage II HPMP Preparation		
Georgia	Stage II HPMP Preparation		
Mali	Stage II HPMP Preparation		
Nepal	Stage II HPMP Preparation		
Paraguay	Stage II HPMP Preparation (refr servicing)		
Sri Lanka	Stage II HPMP Preparation		
Swaziland	Stage II HPMP Preparation		
Trinidad and Tobago	Stage II HPMP Preparation		
Dominican Republic	Stage III HPMP Preparation		
Panama	Stage III HPMP Preparation		

Uruguay	Stage III HPMP Preparation
Argentina	Several Ozone unit support
Bangladesh	Several Ozone unit support
Brazil	Several Ozone unit support
China	Several Ozone unit support
Cuba	Several Ozone unit support
Georgia	Several Ozone unit support
Nigeria	Several Ozone unit support
Pakistan	Several Ozone unit support
Sri Lanka	Several Ozone unit support
Venezuela	Several Ozone unit support
Bangladesh	Enabling activities for Kigali Amendment
Chile	Enabling activities for Kigali Amendment
Colombia	Enabling activities for Kigali Amendment
Costa Rica	Enabling activities for Kigali Amendment
Cuba	Enabling activities for Kigali Amendment
El Salvador	Enabling activities for Kigali Amendment
Malaysia	Enabling activities for Kigali Amendment
Panama	Enabling activities for Kigali Amendment
Paraguay	Enabling activities for Kigali Amendment
Peru	Enabling activities for Kigali Amendment
Trinidad and Tobago	Enabling activities for Kigali Amendment
Uruguay	Enabling activities for Kigali Amendment
China	Technology demonstration for HFC-23 by-product conversion
Dominican Republic	Phase out of HFC-134a in commercial refrigeration

# **Table 3: ODS phase-out for tranches**

Country	Sector and Subsector	ODP in 2018
Bangladesh	Stage II HPMP (air conditioning and servicing)	6.80
Brazil	Stage II HPMP	105.40
Brunei Darussalam	Stage I Investment proj./Sector Plans (Servicing Sector)	0.22
Chile	Stage II HPMP	20.45
China	Stage II Investment proj./Sector Plans (ICR Sector Plan)	209.14
China	Stage II Investment proj./Sector Plans (Solvents Sector Plan)	51.59
Colombia	Stage II HPMP	29.70
Cuba	Stage I HPMP	1.10
Democratic Republic of the Congo	Stage II HPMP (servicing)	3.92
Dominican Republic	Stage II HPMP (servicing)	5.94
Egypt	Stage I HPMP	13.86
Fiji	Stage II HPMP Preparation	0.00
Georgia	Stage I HPMP	0.56
Ghana	Stage I HPMP	2.42
Guyana	Stage II HPMP (servicing)	0.16

India	Stage II HPMP (air conditioning, foam and refrigeration)	250.29
Indonesia	Stage II HPMP	7.65
Iran (Islamic Republic of)	Stage II HPMP (refrigeration)	33.77
Kyrgyzstan	Stage II HPMP (servicing)	0.76
Lebanon	Stage II HPMP	9.73
Panama	Stage II HPMP	4.86
Trinidad and Tobago	Stage I HPMP	1.77
Uruguay	Stage II HPMP (rigid foam & servicing)	6.85