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环境规划署

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

开发计划署截至 2018 年 12 月 31 日的讲度报告

本文件介绍开发计划署截至 2018 年 12 月 31 日的进度报告。1 1.

文件范围

2. 本文件包括以下部分:

第一部分:

多边基金经常捐款项下核准的项目。本部分概述了 2018 年和 1991 年以来累计的项目执行进展情况,涉及《蒙特利尔议定书》下所有受 控物质,包括附件 F中的质 (氢氟碳化物),内有对国家一级每个在 建项目执行状况的审查: 2 并且指明了在执行中出现拖延的项目及其 可能对受控物质淘汰工作造成的影响,并指明了仍有未决问题的项目,

以供执行委员会审议。

第二部分: 额外自愿捐款项下核准的支助快速启动逐步淘汰氢氟碳化物的项目。

提供了自愿捐款资助的逐步淘汰氢氟碳化物项目的执行状况。

¹进度报告附于本文件后面。 数据已收入综合进度报告数据库供索取。

²在建项目指所有已获核准、截至2016年12月31日正在执行的项目。关键进度指标包括:已发放资金的百 分比和己开始发放资金的项目的百分比;预计在年底之前发放的资金占已核准供资的百分比;项目执行中 的平均预计拖延时间;以及进度报告数据库中备注一栏提供的信息。

UNEP/OzL.Pro/ExCom/84/18

建议

3. 本文件还包含以下附件:

附件一: 每一个存在未决问题的在建项目的概况和供执行委员会审议的一项建 议。

附件二: 进度报告分析。

进度报告中使用的计量

4. 达成《基加利修正案》协定之前,《蒙特利尔议定书》规定的所有受控物质均为消耗臭氧层物质,按 ODP 吨计量。《基加利修正案》下的受控物质不是消耗臭氧层的物质,其控制目标以二氧化碳当量吨计量(即以公吨为单位的消费量乘以该物质的全球升温潜能值)。尽管在报告受控物质方面有两种不同的衡量标准,向第八十四次会议提交的开发署进度报告中所有受控物质均以 ODP 吨计量。3

氢氟碳化物逐步减少活动概述

5. 截至 2018 年 12 月 31 日,执行委员会核准了 20 国的 26 个项目(包括 5 个投资项目,5 个项目编制和 16 个扶持活动),金额为 902 万美元。核准的投资项目将逐步减少氢氟碳化物 623.4 公吨 (791,633 二氧化碳当量吨)。关于扶持活动,第八十三次会议已核准这些项目中的 10个项目延长完成日期,另五个项目的延期请求已提交第八十四次会议。

秘书处的进度审查程序

6. 考虑到 2018 年报告就计划完成日期发生执行拖延,这些拖延对淘汰受控物质和计划的支付率的潜在影响,秘书处逐国审查了每一在建项目的执行状况。秘书处与开发计划署进行了几次讨论,讨论中提出了一些有关在建项目的问题,而后得到了满意的解决。

第一步分: 多边基金经常性捐款项下核准的项目

2018 年的和累计的项目执行进展概况

- 7. 开发署执行 2018 年和自 1991 年直至 2018 年 12 月 31 日累计的项目和活动的情况总结如下:
 - (a) 淘汰: ⁴ 2018 年,淘汰了 243.6 ODP 吨受控物质消费,并核准了淘汰另外 746.6 ODP 吨受控物质。自 1991 年以来核准的项目(不包括已撤销和移交的项目)预期淘汰的 68,281 ODP 吨受控物质消费中已淘汰了的 67,009 ODP 吨:

³ 受控物质两个不同的衡量问题在综合进度报告(UNEP/OzL.Pro/ExCom/84/16)。

⁴逐步减少了包括核准氢氟碳化物投资项目的 142.8 公吨(204,332 二氧化碳当量吨)。

- (b) **发放/核准:** 2018 年发放了 4,143 万美元,根据 2017 年进度报告计划发放 2,492 万美元,占计划发放的 166%。在核准的发放总额 8.2221 亿美元 (不包括机构支助费用)中,累计发放了 7.4556 亿美元。发放率为 91%。 2018 年,核准的执行费用为 4,027 万美元
- (c) **成本效益(以 ODP 计)**: ⁵ 1991 年以来核准的投资项目平均成本效益导致 永久减少 10.58 美元/千克消费。已完成的投资项目平均成本效益为每 ODP 吨 8.65 美元/千克,在建项目为 78.65 美元/千克: ⁶
- (d) **已完成项目数量:** 2018 年完成了 58 个项目。自 1991 年以来,已核准了的 2 435 个项目中有 2 289 个项目已经完成(不包括结清或移交的项目)。完成率为 94%;
- (e) **交付速度-投资项目:** 2018 年完成的项目平均核准后 40 个内完成。自 1991 年以来,完成投资项目的平均时间为核准项目后 34 个月。这些项目 下的第一笔付款平均在核准后 13 个月发放;
- (f) **交付速度**-非投资项目: 2018 年完成的项目平均在核准后 33 个月完成。自 1991 年以来,非投资项目完成的平均时间为项目核准后 39 个月。这些项目下的第一笔付款平均在核准后的 13 个月发放;
- (g) 项目编制: 截至 2018 年底,已核准 529 个项目编制活动,其中 517 个已 经完成,有 12 个尚在进行中。 2018 年, 12 个项目已完成;
- (h) **执行拖延:** 截至 2018 年底,共有 73 个在建投资项目在执行中。这些项目 平均拖延 13 个月。但是,没有项目归类为"执行拖延项目",需遵循项目 撤销程序(由于项目编制、多年期协定和体制建设不受这些程序的约束);和
- (i) **多年期协定:** 开发署在 2018 年执行 49 项氟氯烃淘汰管理计划多年期协定。自 1991 年以来,核准了 133 项多年期协定,84 项已经完成。

2018 年项目执行进度

8. 经进程审查后,解决了一些问题,但两个项目除外:如本文件附件一所示,一个与淘汰氟氯烃的多年期协定的付款有关,另一个是项目编制。对于每个在建项目简要介绍了执行状况和未决问题,并提出一项建议供执行委员会审议。

⁵包括 142.8 公吨的氢氟碳化物投资项目。

⁶在建项目的成本效益较高,在很大程度上是由于氟氯烃的 ODP 值较低,也是由于各机构分配淘汰量的手段。

- 9. 107 个在建项目中,不包括体制建设和项目编制,自 2017 年进度报告以来,有 36 个项目已修订了计划的完成日期.
- 10. 中国(工商业制冷和空调(ICR)和溶剂行业计划第二阶段),⁷ 哥伦比亚、⁸ 哥斯达黎加、⁹ 埃及、¹⁰ 加纳、¹¹ 伊朗伊斯兰共和国¹² 和马来西亚,¹³ 以及与巴西(氟氯烃淘汰管理计划和 ODS 示范项目)、中国(氟氯化碳溶剂)、古巴(氟氯烃淘汰管理计划)、埃及(低全球升温潜能值替代示范项目)、印度(氟氯烃淘汰管理计划)的详细执行进展情况,以及印度尼西亚(氟氯烃淘汰管理计划)、黎巴嫩(氟氯烃淘汰管理计划)、特立尼达和多巴哥(氟氯烃淘汰管理计划)和乌拉圭(氟氯烃淘汰管理计划)具有特定报告要求¹⁴ 的执行与氟氯烃淘汰管理计划有关的项目的项目报告均已提交第八十四次会议。针对这些项目的未决问题,包括(如有)请求延期的核准建议都在这些文件的有关部分之中。
- 11. 根据第 82/11(c)(ii)号决定,秘书处注意到,过去两年中巴西没有提交延长体制建设项目。开发计划署告知它计划在 2021 年提交延长申请。.

第二部分: 额外自愿捐款项下核准的支助快速启动逐渐减少氢氟碳化物的项目

12. 截止 2018年 12月 31日,执行委员会在额外自愿捐款项下核准了 18个与氢氟碳化 物相关的项目,金额为 6,079,610 美元(不包括机构支助费用)。表 1 汇总了这些项目的现况。

表 1.2018 年核准的与氢氟碳化物有关的项目

类别	项目数量			资金(美元)*			
 	已核准	已完成	完成%	已核准	已发放	余额	已发放%
投资**	2		0	4,406,610	1,208,577	3,198,033	27
项目编制	5	3	60	150,000	47,178	102,822	31
技术援助-扶助活动	11		0	1,523,000	220,635	1,302,365	14
共计	18	3	17	6,079,610	1,476,389	4,603,221	24

^{*}不包括机构支助费用。

13. 截至 2018 年底核准的 18 个项目中,三个项目的编制活动已经完成,尚有 15 项目正在进行中。 第八十次和第八十二次会议核准了两个在建项目的投资,其中一项已发放资金。 扶持活动处于不同的执行阶段。 在核准的支付总额(不包括支助费用)6,079,610 美元中,累计已发放 1,476,389 美元,发放率为 24%。

^{**} 淘汰氢氟碳化物 480.6 公吨(586,551 二氧化碳当量吨)。

⁷ UNEP/OzL.Pro/ExCom/84/42

⁸ UNEP/OzL.Pro/ExCom/84/43

⁹ UNEP/OzL.Pro/ExCom/84/45

¹⁰ UNEP/OzL.Pro/ExCom/84/49

¹¹ UNEP/OzL.Pro/ExCom/84/50

¹² UNEP/OzL.Pro/ExCom/84/51

¹³ UNEP/OzL.Pro/ExCom/84/54

¹⁴ UNEP/OzL.Pro/ExCom/84/22 and Add.1

建议

- 14. 执行委员会不妨:
 - (a) 表示注意到 UNEP/OzL.Pro/ExCom/84/18 号文件所载的开发计划署截至 2018 年 12 月 31 日的进度报告;并
 - (b) 核准本文件附件一表中对有具体问题的在建项目提出的建议。

附件一

开发计划署进度报告中所列存在未决问题的在建项目

国家/项目编号	项目名称	资金发放率 (%)	现况/问题	建议
海地 HAI/PHA/76/INV/22	氟氯烃淘汰管理计划 (第一阶 段,第二次付款)	0	未发放,执行进度缓慢	要求向第八十五次会议提交关于执行进度和资金发放数额的状况报告
刚果民主共和国 DRC/PHA/79/PRP/42	编制氟氯烃淘汰管理计划(第二 阶段)	0	由于执行延误和埃博拉疫情导致实地进行 活动困难而没有发放资金;第二阶段申请 拖延下来	要求向第八十五次会议提交关于资金发放数额状况报告和提交第二阶段申请的状况

1

附件二

对开发计划署截至 2018年 12月 31日的进度报告的分析

1. 本附件包含下列两部分:

第一部分: 多边基金经常捐款项下核准的项目。

第二部分: 额外自愿捐款项下核准的支助快速启动逐渐淘汰氢氟碳化物的项目

第一部分: 多边基金经常捐款项下核准的项目

2. 如表 1 所示,截至 2018 年 12 月 31 日,执行委员会核准了 9.3288 亿美元,其中包括 8.2221 亿美元用于执行投资和非投资项目,1.1066 亿美元用作机构支助费用。2018 年核准了 60 个新项目和活动。预计这一供资额可淘汰 68,281 ODP 吨受控物质的消费。

表 1: 截止 2018年 12月 31日按行业分列为开发计划署核准的供资

行业	供资 (美元)
气雾剂	26,054,838
销毁	3,606,279
消防	50,000
泡沫塑料	173,366,807
哈龙	4,996,975
熏蒸剂	20,081,243
淘汰计划	326,512,742
加工剂	1,286,923
生产	1,056,000
制冷	139,929,636
多个行业	61,151,282
溶剂	63,699,996
消毒剂	417,628
小计	822,210,347
机构支助费用	110,664,988
共计	932,875,335

3. 表 2 概述了按项目类别分列的项目执行状况。

表 2: 按项目类别分列的项目执行状况

类别		项目数量*			供资 (美元)**				
火 冽 	已核准	已完成	已完成%	已核准	已完成	余额	已发放%		
国家方案	22	22	100	1,628,797	1,628,797	0	100		
示范	43	38	88	22,204,392	20,764,309	1,440,084	94		
机构强化	238	211	89	50,971,615	45,142,687	5,828,928	89		
投资	1,265	1,192	94	677,423,733	617,060,549	60,363,183	91		
项目编制	529	517	98	22,207,434	21,547,273	660,162	97		
技术援助	310	281	91	46,183,886	37,823,467	8,360,419	82		

类别	项目数量*			供资 (美元)**				
	已核准	已完成	已完成%	已核准	已完成	余额	已发放%	
培训	28	28	100	1,590,489	1,590,489	0	100	
共计	2,435	2,289	94	822,210,347	745,557,571	76,652,776	91	

^{*}不包括已结算和已移交的项目。

4. 表 3 按年份提供项目执行状况概览 。 15 1991 和 2008 年之间核准的所有项目和活动现在都已完成。

表 3: 按年度分列的项目执行状况

左水		项目数量*			供资 (美	美元)**	
年份	已核准	已完成	已完成%	已核准	已发放	余额	已发放%
1991	15	15	100	1,149,032	1,149,032	0	100
1992	67	67	100	8,619,002	8,619,002	0	100
1993	57	57	100	13,204,712	13,204,712	0	100
1994	148	148	100	49,481,580	49,481,581	-1	100
1995	117	117	100	29,599,445	29,599,446	-1	100
1996	83	83	100	27,838,805	27,838,805	0	100
1997	188	188	100	44,056,257	44,056,257	0	100
1998	172	172	100	31,305,010	31,305,010	0	100
1999	204	204	100	35,896,883	35,896,884	-1	100
2000	149	149	100	31,268,362	31,268,361	1	100
2001	179	179	100	35,292,272	35,292,271	1	100
2002	117	117	100	44,316,424	44,316,422	2	100
2003	64	64	100	36,336,530	36,336,530	0	100
2004	69	69	100	24,802,715	24,802,714	1	100
2005	53	53	100	29,125,258	29,124,834	425	100
2006	62	62	100	15,753,458	15,753,461	-3	100
2007	54	54	100	12,142,488	12,142,486	2	100
2008	84	84	100	22,873,866	22,873,865	0	100
2009	92	91	99	13,226,899	13,188,578	38,321	100
2010	43	42	98	19,567,971	19,545,191	22,779	100
2011	63	60	95	57,453,704	56,972,603	481,101	99
2012	29	26	90	33,889,851	32,376,384	1,513,466	96
2013	43	39	91	34,573,366	33,590,429	982,938	97
2014	67	64	96	22,958,186	21,963,919	994,268	96
2015	75	62	83	33,666,689	27,262,490	6,404,199	81
2016	53	17	32	42,802,250	26,924,872	15,877,378	63
2017	28	6	21	30,734,847	20,418,385	10,316,462	66
2018	60	0	0	40,274,486	253,048	40,021,438	1
共计	2,435	2,289	94	822,210,347	745,557,571	76,652,776	91

^{*}不包括已结算和已移交的项目。

^{**}不包括机构支助费用。

^{**}不包括机构支助费用。

¹⁵这项数据依照执行委员会核准项目的年份列出。所有核准的项目(投资项目和非投资项目)一律照此办理(即将投资项目或多年期协定项目供资付款达 100 万美元的项目视为一个项目,一个 3 万美元的国家项目编制也同样被视作一个项目)。从年度总结得出的关键指标是:完成的项目百分比、淘汰的 ODP 吨和发放的资金百分比。有三种资金发放方式:项目执行中、项目执行后和资金追溯项目。

5. 表 4 列有按国家分列的 2018 年项目执行情况。

表 4. 开发计划署 2018 年项目执行概况

国别	2018 淘 汰*	2018 年按计划 完成了淘汰的 百分比	2018 年发放 资金估计数 (美元)		2018 年已发放资 金超过估计数百 分比	
安哥拉	0.0		151,639	88,817	59	
阿根廷	0.0		91,423	135,453	148	
亚美利亚	0.0		62,309	70,387	113	
孟加拉国	0.0		116,495	77,116	66	67
巴巴多斯	0.0		44,162	55,791	126	
伯利兹	0.0		4,550	0	0	
不丹	0.0		10,754	19,528	182	
1 巴西	45.2		3,068,058	4,422,753	144	
文莱达鲁萨兰国	0.0		7,380	0	0	0
柬埔寨	0.0		15,000	0	0	
智利	6.0	100	395,812	895,921	226	100
中国	88.8		8,384,723	23,003,574	274	50
哥伦比亚	16.0	100	810,427	1,288,525	159	100
哥斯达黎加	0.0		185,918	175,042	94	100
古巴	0.0		205,499	141,381	69	
刚果民主共和国	0.0		24,351	23,536	97	50
多米尼加共和国	0.0		76,662	196,701	257	
埃及	0.6	14	1,023,783	588,656	57	50
萨尔瓦多	2.0		46,000	68,663	149	
斐济	0.2		18,997	12,294	65	
格鲁吉亚	0.0		17,777	17,499	98	
加纳	0.0		56,407	140,053	248	100
圭亚那	0.0		37,671	74,358	197	
海地	0.0		29,136	0	0	
印度	10.0		4,056,125	3,460,223	85	83
印度尼西亚	9.0	100	1,317,271	421,109	32	0
伊朗伊斯兰共和国	0.0		506,468	252,313	50	100
牙买加	0.0		32,787	26,221	80	
科威特	0.0		107,900	0	0	
吉尔吉斯斯坦	1.3	100	21,162	70,400	333	100
黎巴嫩	29.8		258,781	841,562	325	100
马来西亚	14.0	100	1,441,111	2,092,991	145	100
马尔代夫	0.0		88,445	130,151	147	
马里	2.6		32,082	84,296	263	
毛里塔尼亚	0.0		31,500	0	0	
墨西哥	0.0	0	716,710	597,950	83	0
尼泊尔	0.1		17,280	30,916	179	100
尼日利亚	18.0	38	282,423	612,897	217	100
巴基斯坦	0.0		97,766	140,564	144	100

国别	2018 淘 汰*	2018 年按计划 完成了淘汰的 百分比	2018 年发放 资金估计数 (美元)		2018 年已发放资 金超过估计数百 分比	
巴拿马	0.0		199,675	218,217	109	100
巴拉圭	0.0		32,212	38,626	120	
秘鲁	0.0		166,297	75,513	45	
摩尔多瓦共和国	0.0		38,970	1,901	5	
圣基茨和尼维斯	0.0		12,000	0	0	
斯里兰卡	0.0		65,689	199,265	303	100
东帝汶	0.0		35,204	55,600	158	100
特立尼达和多巴哥	0.0		122,408	158,178	129	
乌拉圭	0.0		162,504	289,835	178	
委内瑞拉玻利瓦尔共和国	0.0		192,849	139,748	72	
共计	243.6	44	24,920,548	41,434,526	166	81

^{*2018}年与氢氟碳化物相关的项目未淘汰。

6. 表 5 列有经常捐款项下核准的与氢氟碳化物相关的项目概况。

表 5. 经常捐款项下核准的与氢氟碳化物相关的项目概况

		项目数量			供资 (美元)*			
类别 	已核准	已完成	已完成%	已核准	已发放	余额	已发放 %	
投资**	3	0	0	2,491,791	0	2,491,791	0	
技术援助- 扶助活动	5	0	0	444,000	4,334	439,666	1	
共计	8	0	0	2,935,791	4,334	2,931,457	0.1	

^{*}不包括机构支助费用。

7. 目前在经常捐款项下核准了八个与氢氟碳化物相关的项目(包括三个投资项目和五个扶持性活动),总金额为 2,935,791 美元,其中 4,334 美元已发放。 这些项目都处于不同执行进展阶段,投资项目预计将在 2020 年按时完成。

第二部分: 额外自愿捐款项下核准的支助快速启动逐步淘汰氢氟碳化物的项目

8. 截止 2018年 12月 31日,执行委员会在额外自愿捐款项下核准了 18个与氢氟碳化合物相关的项目,金额为 6,079,610 美元(不包括机构支助费用)。 表 6 列有这些项目的状况概要。

^{**} 已核准 142.8 公吨(204,332 二氧化碳当量吨)的投资项目。

表 6. 2018 年核准的与氢氟碳化物相关的项目

Manage 1 My End 4 Tribulation to the 34 H							
类别	项目数目		供资(美元)*				
尖 別	已核准	已完成	已完成%	已核准	已发放	余额	已发放%
投资**	2		0	4,406,610	1,208,577	3,198,033	27
项目编制	5	3	60	150,000	47,178	102,822	31
技术援助-扶助活动	11		0	1,523,000	220,635	1,302,365	14
共计	18	3	17	6,079,610	1,476,389	4,603,221	24

^{*}不包括机构支助费用。

9. 截至 2018 年底核准的 18 个项目中,三个项目编制工作已经完成,两个投资项目正在执行中。 扶持活动处于不同的执行阶段。 在核准的支付总额 6,079,610 美元中(不包括支助费用),累计发放了 1,476,389 美元,发放率为 24%。

^{**} 将淘汰 480.6 公吨 (587,301 二氧化碳当量吨)氢氟碳化物。



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

UNDP Annual Progress and Financial Report Narrative: 1991-2018

84th Meeting, 16-20 December 2019, Montreal, Canada

I. INTRODUCTION

The following narrative is based on a database of 2,453 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2018. However, some updates of activities which took place during 2019 are also included for information purposes. The database results in 11 summary tables which can be found at the end of this report, and which are referred to throughout this narrative.

As can be seen in the following sections, UNDP has disbursed US\$ 747,033,961 of the US\$ 828,289,957 worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 69,434.8 ODP T/year, of which 67,644.9 (97%) were phased out as of 31 December 2018. This demonstrates UNDP's important role in the success of MLF's assistance towards the elimination of Ozone Depleting Substances.

As of the end of 2018, UNDP was active in 51 countries, of which 24 are low volume consuming (LVCs). The vast majority of ongoing projects are implemented using the National Implementation modality, providing countries with larger country ownership.

A large portion of the current ongoing programmes consist of HCFC phase-out management plans (HPMPs). UNDP is the lead agency in 29 countries, including such key countries for the Montreal Protocol, as Brazil, China, and India. In all three countries, UNDP is providing them with technical support to meet their targets set forth under the Montreal Protocol and they are all progressing towards their targets. UNDP is supporting China with the implementation of its ICR and Solvent Sector Plans. With the experience gained in the implementation of the Stage I sector plans, and the cooperation and coordination mechanisms established during this earlier implementation, both sector plans have progressed well and all ExCom conditions have been met. In addition, UNDP also acts as the cooperating agency in 18 countries. There is a surge of workload for UNDP to meet the needs of so many HPMPs that are currently under implementation. This significant workload comes at a time that preparation of Stage II HPMPs is under way. Most countries, for which UNDP is the lead agency, have submitted their requests for Stage II HPMP full proposals in 2015/2016 and only one country (Democratic Republic of Congo) is yet to submit its request. Despite this challenging situation, UNDP, with its network of country offices, remains fully committed to meet the increased workload and ensure that countries receive the assistance needed to be in compliance with all requirements of the Montreal Protocol.

UNDP has also been at the forefront of technical assessments and demonstration projects for potentially cost-effective alternatives to HCFCs that minimize environmental impacts, particularly for those specific applications where such alternatives are not presently available and applicable. Pursuant to ExCom decision 72/40, UNDP has prepared a number of projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling. UNDP has received approval and implemented eight demonstration projects in seven countries. The factsheets on these projects are available at the MLF website. In addition, UNDP is also exploring demonstration projects for cost-effective alternatives to HFCs that minimize environmental impacts. Pursuant to ExCom decision 78/3(g), UNDP is preparing investment/demonstration projects to phase down HFCs and has received approval for five HFC technology demonstration investment projects in Bangladesh, China, Dominican Republic, Mexico and Zimbabwe. UNDP is also supporting 16 countries to undertake enabling activities for ratification and early implementation of the Kigali Amendment.

Furthermore, UNDP continues to organize several activities to assist countries in meeting their Montreal Protocol obligations. For example, in May 2019, UNDP organized a workshop on HFC alternatives in New York City, which bought together participants from Article 5 countries and experts to discuss challenges, opportunities and solutions, and identify short-term priority activities and long-term strategies to effectively implement the Kigali Amendment and improve energy efficiency. The workshop bought together 60 participants from 20 countries and included experts that discussed key topics relevant to the implementation of the Kigali Amendment: including institutional arrangements, legislative and regulatory framework; baseline data collection and reporting; licensing system, customs rules and enforcement; alternative technologies; key activities in servicing sector; HFC phase down strategies; linkages with other national efforts (e.g. NDC under the Paris Agreement); and complementary actions to improve energy efficiency. The workshop materials are available here.

Finally, UNDP also produced a <u>video</u> which highlights three award-winning projects in Chile, China, and the Kingdom of Eswatini (formerly known as Swaziland). These three countries (out of a total of five award-winning countries) were awarded as "Exemplary Projects" on the 30th Anniversary of the Montreal Protocol in 2017 and their successful stories demonstrated how the different parts of cold chain industries (food storage, super market and domestic refrigerator) could be equipped with highly efficient, economically viable and ozone-climate friendly technologies, and how UNDP, in partnership with private and public sectors, supported innovative and advanced technologies in pursuit of Sustainable Development Goals. UNDP organized a side event on the margins of the 30th Meeting of the Parties to the Montreal Protocol in which the key stakeholders from these three countries shared their experiences on technology transformation, positive social impact, economic growth/investment, and environmental well-being.

II. PROJECT APPROVALS AND DISBURSEMENTS

A. Annual Summary Data (See table 1)

Table 1: "Annual Summary" shows the important summary data on the number of project approvals, corresponding budgets, ODP, and disbursement figures. The table highlights that, cumulatively, as of 31 December 2018, UNDP had a total of 2,550 approved projects under the Multilateral Fund, of which 97 had been canceled or transferred. Of the 2,453 remaining projects, 2,292, or 93% have been completed. They are set to eliminate 68,751 ODP T/year, of which 67,009 ODP T (97%)) have already been eliminated.

As of 31 December 2018, UNDP had received cumulative net project approvals of US\$ 828,289,957 (excluding support costs). Of these, UNDP, as of end-2018, had disbursed US\$ 747,033,961 excluding all obligations. This translates to 90% of approved funding. Furthermore, an additional US\$ 2,365,897 of obligations were outstanding as of end-December 2018, representing orders placed but final payments not yet made.

B. Interest and Adjustments

Interest income earned on MLF resources in 2018 is US\$ 1,327,039. Once the financial statements are submitted to the MLF Treasurer by the agreed deadline of 30 September, the difference between the provisional and final 2018 interest income can be adjusted against UNDP project approvals in 2018.

C. Summary Data By Type and Chemical [CPG, DEM, INS, INV, PRP, TAS, TRA] (See table 2)

Table 2: Summary Data by Project Type presents an overview of the approvals by the type of project. It demonstrates that of the total amounts approved, 82.21% of the budgets were dedicated to investment projects, 5.71% to technical assistance projects, 5.86% to institutional strengthening and 3.09% to project preparation activities. The remaining 3.14% was dedicated to country programmes and demonstration/training activities.

III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

A. Global Projects: There is one on-going global programmes under implementation by UNDP:

<u>GLO/SEV/82/TAS/346</u>, the Core unit support (2019) programme approved at the 82nd meeting of the Executive Committee, that covers the administrative costs of UNDP's Montreal Protocol Unit; and continuation of Core Unit support at a level that allows UNDP to provide the oversight, reporting and assistance needed to sustain the large programmer is critical.

B. **Regional Projects:** There are no ongoing regional projects at this time.

IV. PERFORMANCE INDICATORS

A. Results in 2018

Decision 41/93 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. Annex VIII of the report of the 80th meeting of the Executive Committee contained UNDP's 2018 targets. One can see from the table below that UNDP fully met 4 out of 9 of its targets and that its score amounts to 95%.

Category of performance indicator	Item	Weight	UNDP's target for 2018	Result achieved in 2018	Score
1. Approval	Number of tranches approved vs. those planned*	10	24	$20 \rightarrow 83\%$ (see annex 1, 1)	8.33
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	39	$34 \rightarrow 87\%$ (see annex 1, 2)	8.72
3. Implementation	Funds disbursed	15	\$31,295,677	\$ 40,670,035→ 100% (see annex 1, 3)	15.0
4. Implementation	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	747.2	$716.17 \rightarrow 100\%$ (see annex 1, 4)	24.0
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	41	$46 \rightarrow 100\%$ (see annex 1, 5)	20.0
6. Administrative	The extent to which projects are financially completed 12 months after project completion	10	70% of those due (out of 101, so target is 70)	66 finrevs out of 70 (see annex 1, 7)	9.4
7. Administrative	Timely submission of project completion reports vs. those agreed	5	100% of those due (out of 5)	100% achieved (3 individual PCRs submitted out of 3 planned and 8 MYA PCR submitted out of 2 planned see annex 1, 8)	5.0
8. Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On-time	100% achieved (see annex 1, 9)	5.0

Category of performance indicator	Item	Weight	UNDP's target for 2018	Result achieved in 2018	Score
TOTAL		100			95

^{*}The target of an agency would be reduced if it could not submit a tranche owing to another cooperating or lead agency, if agreed by that agency.

Note on performance indicator on MYA tranches: As per our 2018 Business Plan, UNDP submitted two China HPMP tranches to the 82nd meeting although these tranches weren't approved. As we submitted these tranches in 2018 as we had planned, they should be included in our performance target.

B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,192 investment projects have been completed, with a corresponding elimination of 61,567 ODP T. Of the US\$ 532,733,818 in their approved budgets in the sectors of Foam, Refrigeration, Phase-out Plan, Aerosol, Solvents, Fumigants, Halon, Process Agents, and Sterilants, 100% has already been disbursed. It took an average of 13 months from approval to first disbursement and 34 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was \$8.65 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

C. Cumulative completed non-investment projects (Table 5)

As Table 5 shows, UNDP has completed 580 non-investment projects excluding project preparation assistance. Of the US\$ 102,265,721 in their approved budgets, 99% has been disbursed. It took an average of 13 months from approval to first disbursement and 39 months from approval to completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

D. Cumulative ongoing investment projects (Table 6)

As can be seen in Table 6, UNDP has 75 ongoing investment projects in the sectors of Phase-out Plans, Foam, Aerosol, and Fumigants with corresponding budgets of US\$ 142,144,506. Of this amount, 56% has already been disbursed. It takes an average of 11 months from approval to first disbursement and an average of 46 months from approval to the estimated project completion. The overall cost-effectiveness of the projects to the Fund was \$63.54 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

E. <u>Cumulative ongoing non-investment projects (Table 7)</u>

Table 7 shows that UNDP has 72 ongoing non-investment projects excluding project preparation assistance. Of the US\$ 21,178,765 in approved budgets, 23% has been disbursed. It takes an average of 10 months from approval to first disbursement and 35 months from approval to the estimated project completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

V. STATUS OF AGREEMENTS AND PROJECT PREPARATION BY COUNTRY

A. Agreements To Be Signed/Executed/Finalized

Since UNDP has a standard legal agreement in place in each developing country that covers UNDP activities in that country, no additional legal agreement is required. There were no specific issues related to this in 2018.

^{**} Project preparation should not be assessed if the Executive Committee has not taken a decision on its funding.

B. Project Preparation By Country, Approved Amount And Amount Disbursed (Table 8)

Table 8: Project Preparation by Country, Approved Amount and Amount Disbursed, indicates active project preparation accounts. Of the ongoing 14 PRP projects listed with US\$ 537,143 in associated approvals, 7% has been disbursed.

VI. DESCRIPTION OF KEY ONGOING ACTIVITIES

This section contains a narrative description of the following key ongoing activities:

- A. Technology demonstration projects for HCFCs
- B. Technology demonstration projects for HFCs
- C. ODS destruction demonstration projects
- D. Country Highlights

A. <u>Technology demonstration projects for Stage II HCFCs</u>

UNDP has been at the forefront of developing and implementing demonstration projects in various regions and sectors to assess relatively new technological developments for which little or no experience or data exists on technical performance and costs since 1996. The major objectives of such types of demonstrations were to find alternative solutions and cost-saving methods to the Multilateral Fund for the Implementation of the Montreal Protocol in order to carry out HCFC-investment activities in the future years, bearing in mind the impact on the climate. The results of the demonstrations of emerging technologies in various industrial processes under local conditions in the following countries are described in greater details below.

Pursuant to ExCom decision 72/40, UNDP has prepared and received approval for eight projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling for the following seven countries. Please see brief updates on the status of these projects. Only recent projects have been included but more information on all the Stage II HCFC demonstration projects approved by the ExCom can be found on the MLF website.

• China: demonstrating ammonia semi-hermetic frequency convertible screw refrigeration compression unit in the industrial and commercial refrigeration industry.

In order to produce the small discharge semi-hermetic frequency convertible screw refrigeration compression unit with ammonia as a viable replacement for HCFC-22 technology, the Executive Committee approved a demonstration project at its 76th meeting. Project demonstration activities ongoing in 2017. However, demonstration results will take longer than expected to be completed. As per ExCom Decision 80/26, project completion was extended to June 2018.

The demonstration project was eventually completed and passed national acceptance in May 2018. The small redesigned demonstration system with lower NH3 charging amount and constructed to fit the small discharge semi-hermetic frequency convertible screw refrigeration compression unit has been built in two locations in China. The one at Xiamen Taiqu cold storage began operation in March 2017 and has been running safely for one and half year. The one at Chengdu Taiqu cold storage began operation in June 2017 and has been running safely for one year.

• **Egypt**: demonstrating low-cost options for the conversion to non-ODS technologies in polyurethane foams at very small users.

An international bidding including technical specifications of easy-to-use low-cost foam dispensing units for VSU was completed and issued. All received bids for equipment have been analyzed. The purchase order has been issued and three different dispensers purchased and placed for evaluation at the following Egyptian system houses: Tecmac Dispenser at Baalbaki, Pumer Dispenser at Dow-Middle East, Transtecnica Dispenser at Technocom. There are cost savings observed in the project which are useful in planning work with VSUs globally. Final report will be submitted to the next ExCom meeting as required in early 2019.

 Maldives: testing HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector are being tested.

Demonstration project for HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector was approved at the 76th ExCom. The consulting firm was engaged in 2017. Desk study was completed to find the available alternate refrigerant with low GWP. Due to concerns with flammability, the only refrigerant applicable came in selection in the first round of study was R448A (GWP 1387) and the report was submitted to 80th ExCom. The same was discussed in ExCom and UNDP was asked to continue more research on low GWP alternatives. As per ExCom Decision 80/26, another round of desk study was conducted by the consulting team on the available alternates in the market. In the condition of non-acceptance on A2L refrigerant by the industries, three refrigerants of R450A, R513A and R448A came into the final selection round. The consulting team together with the MIFCO Engineering Team (main fisheries vessels owner) reviewed the options and selected R448A for a demo alternative. By the time an interim report was submitted to the 83rd ExCom only one vessel was retrofitted. Over the summer of 2019 retrofitting of three vessels is completed and result sharing workshops were held in August 2019. The final report is planned to be submitted to 84th ExCom.

B. <u>HFC investment projects</u>

Pursuant to ExCom decision 78/3(g), UNDP has prepared investment/demonstration projects to phase down HFCs and, so far, has received approval for five HFC technology demonstration projects listed below.

• **Bangladesh**: Conversion from HFC-134a to isobutane as refrigerant in manufacturing household refrigerator and of reciprocating compressor of HFC-134a to energy efficient compressor (isobutane) in Walton Hi-Tech Industries Limited

The first conversion project of HFC Phase down was approved in 80th ExCom meeting for Walton Hi-Tech Industries. The agreement was signed between UNDP, Government and Walton to convert three refrigerator lines and one compressor line. From the approval of the project till 31 July 2019 the following tasks have been completed:

O The three refrigerator lines conversion is ongoing, the equipment storage tanks, refrigerant unloading and delivery pump, refrigerant pipeline, gas charging units, ultrasonic welding equipment, alarm board sensor, explosion proof vacuum pumps, gas detection alarm system, explosion proof exhaust blower, helium leak detection system, helium charging and recovery unit, modifications in conveyor line with explosion proof motors, jig fixture modifications equipment have been procured. Commissioning and installation are ongoing. Servicing tools

- have been procured and training will start in the month of September 2019.
- The compressor conversion line: retrofitting of crank case machining unit, crank shaft machining unit, piston machining unit, connecting rod machining unit, motor modification, modification of casting tools, tools and equipment for casting & foundry, lamination press, jigs and fixtures is ongoing and new equipment is procured. The proto type testing of major consumption compressor models have been tested successfully. Remaining models' testing on going.
- First installment has been delivered to Walton. The project technical advisory committee has visited the plant to monitor that milestones have been met for the release of 2nd installment. It will be released by August 2019.
- China: Conversion from C5+HFC-245fa to C5+HFOs in a domestic refrigerator manufacturer (Hisense Kelon)

Project document and contract signed. Hisense started preparation activities on conversion of the manufacturing line, including signing contracts with equipment suppliers.

• **Dominican Republic**: Conversion of a commercial refrigerator manufacturing line at Fábrica de Refrigeradores Comerciales, SRL (FARCO) from HFC-134a and R-404A to propane (R-290) as refrigerant

Memorandum of agreement prepared and signed between the Ministry of Environment and Natural Resources and Farco. An international expert undertook a mission to Farco for establishing work plan for the adoption of R-290 as refrigerant. Production line adaptation and products redesign are underway.

• **Mexico**: Conversion of domestic refrigeration manufacturing facility from HFC-134a to isobutane as a refrigerant and conversion of compressors manufacturing facility from HFC-134a-based to isobutane-based at Mabe Mexico

Contract with MABE has been signed. International expert visited MABE in March 2019. Equipment has been installed and is operational in 4 of 7 production lines. Continued work on remaining lines. Safety related aspects analyzed and validated by international expert. Three compressor manufacturing lines were sought to be converted using R-600a as refrigerant in order to achieve optimum performance of the new Refrigerators. One line of compressors was fully converted and commercial batches of R-600a compressors are already being manufactured. Adaptations and tests are currently being undertaken in the two additional lines.

• **Zimbabwe**: Conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare)

The project document for Capri has been signed and budgets for the funding from the MLF have been put in place to commence activities planned under the project. The full start is possible after bilateral agreement between the Government of France and UNDP is endorsed and the additional funding (US\$ 100,000) has been received. This will allow announcing a tender for equipment for Capri.

C. **ODS** destruction demonstration projects

The UNDP Montreal Protocol & Chemicals Unit has been supporting countries to take steps to manage their stocks of ODS, which cannot be reused in a sound way. The potential for recovery, proper

management and final disposal of such unwanted ODS and ODS containing appliances/equipment banked, have been proven as being possible in developed countries if the proper legislation and price incentives, as well as business opportunities, exist. However, the applicability of banks management schemes in developed countries needs to also be demonstrated in Article 5 countries. The Executive Committee has approved preparation activities for Brazil, Colombia, Cuba, Georgia, Ghana and India, to address ODS waste management leading to ODS destruction. Five such projects (Brazil, Colombia, Cuba, Georgia, and Ghana) have been submitted and approved by the Executive Committee in prior years.

The project in **Brazil** is advancing in both directions: strengthening of the collection center network (reclaim centers) and testing of the destruction facility. Cylinders, equipment and tools were delivered to reclaim centers and the procurement process of lab equipment was prepared and launched. The laboratory equipment was delivered at Reclaim Centers in December 2018, including the Gas Chromatography System (GC). The GC installation and training has already been stared and it is expected to be completed by 2020. The staff from four Reclaim Centers were trained on AHRI 700 tests and lab routines. In 2018, the company for destruction (incineration) has been identified and the contract signed. Essencis' incinerator has already completed the installation of equipment regarding to process. At this moment, it is occurring the pre-test phase that precedes the official Burn Test, expected to take place from 23rd September to 4th October 2019. The results of Burn Test are expected to be completed around late November this year. After the result, if it will be positive, CETESB has a period of 4 months (approximately) for issuing the definitive Operation License and Essencis will be able to start the incineration of ODSs wastes.

The project in **Colombia** was completed in the beginning of 2018. A review of legal framework for the management of ODS waste was conducted and comments to proposed waste management regulations were made. Support was provided for the implementation of "Red Verde" for the collection of old refrigerators. One destruction test was conducted. The final report has been completed and was submitted to ExCom 81. It is important to note that additional tests would be needed for HFCs, as this will be a challenge for the future under the Kigali Amendment. The recollection scheme and dismantling of old refrigerators at a reasonable cost an important factor for the sustainability of the operation. The future of the recollection and disposal scheme is being financed via an Extended Producer Responsibility programme. "Red Verde" continues the collection of ODS-containing refrigerators in 6 cities nation-wide.

D. Country Highlights (January – December 2018)

UNDP has been at the forefront of innovative solutions for countries to address their Montreal Protocol compliance obligations. UNDP's work has resulted in market transformation for the introduction of environment-friendly products and corresponding policy and technological advances and has bought to countries access to emerging technologies, reduced energy bills for consumers, fostered innovation, and created a more equitable market for greener products, allowing indigenous manufacturers to maintain competitiveness.

The next section showcases several prominent examples showing the impact of UNDP's support at the country level.

Bangladesh

ExCom Decision 80/42 (a) approved the first HFC phase-down investment project in support of the Kigali Amendment for phasing out 230.63 metric tonnes of HFC-134a from. This was approved for Walton Hitech Industries Limited, Bangladesh to convert the refrigerant used by this domestic refrigerator manufacturing facility from HFC-134a to isobutane (R-600a), and support conversion of its compressor

manufacturing facility from HFC-134a-based compressors to isobutane-based (R600a) compressors. The conversion to isobutene technology in the refrigerator manufacturing sector will result in 329,801 CO2 equivalent emissions, a phase-out of 197.3 metric tonnes of HFC-134a consumption and 282,139 CO2 equivalent tons (as related to changes in refrigerant charge). Apart from the HFC phase out in manufacturing sector, Walton will phase out 33.33 metric tonnes of HFC-134a currently consumed in the refrigeration and air-conditioning (RAC) servicing sector of Walton-owned service outlets, which will correspond to 47,662 CO2-equivalent tonnes in emission reduction. The conversion of the compressor manufacturing facility from HFC-134a-based compressors to isobutane-based compressors, makes low GWP, in-house manufactured compressors available to the market. The required machinery and equipment have been procured. The installation and commissioning are on-going. The project has shown positive result in reducing direct emission and energy saving by this conversion. Final outcome will be shared in November 2019.

In addition, a complementary K-CEP funded project will be implemented by UNDP in partnership with Walton to increase the energy efficiency performance of domestic refrigerators during the process of conversion of its plant under the MLF funded project. The execution of this KCEP project will include a combination of interventions to facilitate technology transfer, training and capacity building, awareness, monitoring and management. This re-design of refrigerator and matching compressor has resulted in 10-30% energy saving with induction-based compressors. The result sharing workshop was held in July 2019 in cooperation with K-CEP, UNDP, Government and industry.

Dominican Republic

One key component of the implementation of the Montreal Protocol activities in the country is the strengthening of the technical knowledge of refrigeration and air conditioning technicians which allow them to properly manage the ODS and HFC and facilitate the introduction of their alternatives. As part of the HPMP Stage II, the Dominican Republic with support of UNDP has strengthened the refrigeration laboratories of 14 technical institutions where students from low-income areas undertake their initial training in refrigeration and air conditioning. This approach assures that the next generation of RAC technicians are aware of their key role in the protection of the Ozone layer.

Indonesia

The Stage I of the HPMP for Indonesia was approved at the 66th ExCom being a pioneer A-5 country to adopt the HFC-32 as alternative refrigerant for Refrigeration and Air Conditioning applications. However, due to commercial issues, parts and components for wide conversion – with competitive cost – of HFC-32 system could not be put in place, since Indonesia depends on the international market to source compressors and other components. For this reason, the Stage I as extended to December 2019, and in order to facilitate the market uptake, with bilateral support from the Government of New Zealand, the Government of Indonesia and UNDP partnered with global suppliers to promote a "Green Supply Chain Workshop", held in Jakarta, October 2018. The workshop had been attended by many Small Island Developing States (SIDS) from Pacific and Caribbean, which also face difficulties to source equipment, parts and components for low-GWP based alternatives. The two-days' workshop discussed technologies and availability of parts and components for the PU Foam and RAC sectors, and it was an opportunity to facilitate the contacts between suppliers and end-users, trying to close the gap of the supply chain scenario. Following the workshop, a scouting mission to the 2019 China Expo was held in order to access current market scenario for HFC-32 compressors and how to establish a facilitating mechanism so global suppliers could provide efficient and cost-effective compressor to other markets outside China.

Jamaica

The country has witnessed an uptake of HFC containing inverter-based room ACs during the recent years.

Although this equipment is more efficient vis-à-vis standard non-inverter equivalents, this translates into higher presence and consumption of HFCs in the country. In 2018, the Jamaica Customs Agency (JCA) adopted harmonized tariff codes for HFC control. JCA has strict controls not only on HFC gasses but also on HFC-containing equipment to improve the record keeping and to provide valuable information for the design and improvement of the HFC Licensing and Quota Systems for the adoption of the Kigali Amendment. JCA are continuously making improvements to provide a modern regulatory control for ODS and HFCs as well as to track the import of low GWP alternatives.

Kyrgyzstan

The country, due to its association with the Eurasian Economic Cooperation Commission and its Customs Union, had opted several years ago for acceleration of its HCFC phase-out to match that advanced schedule of non-Article 5 group of countries in the Europe/CIS region that receive technical assistance from the GEF. Kyrgyzstan has entered the final year of implementation of its accelerated programme, and has been able to rapidly increase the national capacity to prepare for the full HCFC phase-out in 2020, implement its related National Strategy to be on time with the international obligations, equip the servicing sector with essential tools for the sustainable HCFC re-use, bring in new knowledge on alternative technologies which come to replace HCFCs, including RAC equipment in the commercial sector working on R-290, and control better the use of HCFCs with reduced leakage rates. This is an outstanding performance for the Article 5 country following a non-Article 5 country HCFC phase-out schedule.

Lebanon

The country, as all non-LVCs, had to initially focus its HPMP activities on the phase-out of the most potent HCFC-141b, and thus specifically on the manufacturing sector. This meant that during stage 1, limited support was available for the servicing sector for HCFC-22 phase-out. Fortunately, Stage 2 opened opportunities for massively enhancing the support to training and formalization of the refrigeration servicing technicians' sector. In Lebanon, the servicing is done by technicians (1,000 – 1,250) who are a mix of skilled and unskilled ones and the total number of service workshops specialized in the refrigeration and air-conditioning subsector is around 450. It was essential to equip and strengthen a pivotal refrigeration training center in Beirut, at the Dekwaneh vocational school, which will be complemented by three other training centers in different geographical regions in the country. This was an essential focus of the work of the HPMP in 2018 and aims eventually at achieving a certification system for RAC technicians in the local market – it concluded in the opening of the Centre on International Ozone Day 2019. It must be noted that the country is also combining this effort with targets to increase energy efficiency while refrigerants are being replaced by new options and by improved servicing practices. This is the goal of integrating MLF actions with complementary and synergistic programmes such as KCEP – for example through the efforts at developing a National Cooling Plan and at integrating energy efficiency best practices in the national trainings – which is the case in Lebanon.

Trinidad and Tobago

UNDP supports the implementation of the Montreal Protocol Programme in Trinidad and Tobago (IS and HPMP). Trinidad and Tobago recently achieved the approval of a GEF funded programme to enhance the energy efficiency in the Refrigeration and AC Sector in the country. The efforts in both programmes are highly complementary and will assist the country to achieve additional Climate Benefits in the coming years in the context of the Kigali Amendment and Paris Accord. Trinidad and Tobago will through the combined effort be able to raise the level of ambition of their National Determined Contributions (NDCs) and introduce new climate friendly concepts like District Cooling to the country. This is a clear example of the synergies that exists across different programs and how ambitious governments can raise their commitments to the environment.

Zimbabwe

A new programme on the HFC phase-out in the manufacturing of domestic and light commercial equipment using hydrocarbon series of refrigerants (R600a) was approved for Capri company in Zimbabwe. This is a cooperation of the Government of France and UNDP and should result in the phase-out of 14.5 metric tons of HCFC-134a. The project is unique to the Africa region and may have a sub-regional positive effect on neighboring countries when such new equipment models on R600a are exported from Zimbabwe in the future. It is expected that the implementation of the project will start by the end of 2019 and provide initial results towards the end of 2020.

VII. ADMINISTRATIVE ISSUES (OPERATIONAL, POLICY, FINANCIAL, OTHER)

A. Meetings Attended by UNDP in 2018

From	To	Location	Description
14-Jan-18	21-Jan-18	France	UNEP Inter-Regional Thematic and Network Meetings for National Ozone Officers
3-Feb-18	12-Feb-17	China	Policy Support and Programme Oversight
3-Feb-18	12-Feb-17	Canada	IACM
7-Feb-18	10-Feb-18	Colombia	Policy Support and Programme Oversight
9-Feb-18	12-Feb-18	Bangladesh	Policy Support and Programme Oversight
12-Feb-18	16-Feb-18	Lebanon	Policy Support and Programme Oversight
14-Feb-18	16-Feb-18	Armenia	Policy Support and Programme Oversight
16-Feb-18	24-Feb-18	Iran	Policy Support and Programme Oversight
20-Feb-18	23-Feb-18	Moldova	Policy Support and Programme Oversight
27-Feb-18	2-Mar-18	Bangladesh	Policy Support and Programme Oversight
4-Mar-18	7-Mar-18	Chile	Policy Support and Programme Oversight
5-Mar-18	8-Mar-18	Brunei	Policy Support and Programme Oversight
7-Mar-18	10-Mar-18	Cuba	Policy Support and Programme Oversight
11-Mar-18	15-Mar-18	USA, NY	Coordination Meeting for the 2018 Kigali Amendment related programme
11-Mar-18	16-Mar-18	China	South-South Study Tour
18-Mar-18	20-Mar-18	Egypt	Policy Support and Programme Oversight
18-Mar-18	23-Mar-18	Rwanda	2nd Global Grantee Strategic Meeting of the Kigali Cooling Efficiency Program (K-CEP)
19-Mar-18	21-Mar-18	Dominican Republic	Policy Support and Programme Oversight
21-Mar-18	22-Mar-18	Ecuador	Policy Support and Programme Oversight
9-Apr-18	14-Apr-18	Nigeria	Policy Support and Programme Oversight
16-Apr-18	19-Apr-18	Peru	Policy Support and Programme Oversight
18-Apr-18	19-Apr-18	Kyrgyzstan	Policy Support and Programme Oversight
9-May-18	12-May-17	Panama	Inception workshop on the Enabling Activities (EA) of the Kigali Amendment and K-CEP projects in LAC region
14-May-18	18-May-18	Germany	GIZ Proklima Traininig
20-May-18	24-May-18	Botswana	Regional Africa Network meeting of Ozone Officers
20-May-18	25-May-18	India	Policy Support and Programme Oversight
23-May-18	26-May-18	Malaysia	Policy Support and Programme Oversight
27-May-18	2-Jun-18	Canada	MLF Meeting for HFC Phase-down RAC Servicing Sector

From	To	Location	Description
28-May-18	29-May-18	Peru	Policy Support and Programme Oversight
30-May-18	1-Jun-18	Saint Vincent and the Grenadines	Network Meeting for English speaking LAC countries
11-Jun-18	15-Jun-18	Trinidad and Tobago	Policy Support and Programme Oversight
16-Jun-18	23-Jun-18	Canada	81st meeting of the MLF Executive Committee
25-Jun-18	28-Jun-18	Guatemala	Network Meeting for Spanish speaking LAC countries
7-Jul-18	20-Jul-18	Austria	60 ImpCom, Workshop on Energy Efficiency, 40th OEWG, team coordination meeting
5-Aug-18	9-Aug-18	Nepal	Policy Support and Programme Oversight
26-Aug-18	30-Aug-18	Sri Lanka	Policy Support and Programme Oversight
27-Aug-18	31-Aug-18	Australia	South-South Study Tour
27-Aug-18	31-Aug-18	El Salvador	Policy Support and Programme Oversight
2-Sep-18	6-Sep-18	India	Policy Support and Programme Oversight
3-Sep-18	5-Sep-18	Canada	IACM
11-Sep-18	14-Sep-18	Trinidad and Tobago	Policy Support and Programme Oversight
11-Sep-18	15-Sep-18	Dominican Republic	Policy Support and Programme Oversight
16-Sep-18	19-Sep-18	China	Ozone Day celebration, HPMP stage-II agency coordination meeting, District cooling workshop in Xi'an
24-Sep-18	27-Sep-18	Malaysia	Policy Support and Programme Oversight
6-Oct-18	11-Oct-18	Indonesia	Global Workshop on Green Supply Chain
9-Oct-18	12-Oct-18	Colombia	Kigali Amendment Workshop
10-Oct-18	12-Oct-18	Turkey	Regional ECIS Network meeting of Ozone Officers
13-Oct-18	20-Oct-18	Germany	GIZ Proklima Field Trip
22-Oct-18	24-Oct-18	Bangladesh	Policy Support and Programme Oversight
22-Oct-18	26-Oct-18	USA	K-CEP Meeting
29-Oct-18	31-Oct-18	India	Policy Support and Programme Oversight
1-Nov-18	3-Nov-18	Ecuador	Network Meeting for Spanish speaking LAC countries
3-Nov-18	9-Nov-18	Ecuador	30th Meeting of the Parties to the Montreal Protocol
19-Nov-18	23-Nov-18	Jamaica	Policy Support and Programme Oversight
26-Nov-18	29-Nov-18	Trinidad and Tobago	Policy Support and Programme Oversight
1-Dec-18	9-Dec-18	Canada	82nd meeting of the MLF Executive Committee
16-Dec-18	22-Dec-18	Fiji	Policy Support and Programme Oversight

B. Other Issues.

There were no specific issues in 2018 that need to be addressed.

ANNEX 1: Tables related to the Performance Indicators

1. Performance Indicator 1: MYAs

Multi-year agreements submitted in 2018 are listed in the following table.

Correct Code
BGD/PHA/81/INV/51
BGD/PHA/81/TAS/49
BRA/PHA/82/INV/323
BRA/PHA/82/TAS/322
BRU/PHA/82/INV/23
CHI/PHA/81/INV/197
COL/PHA/81/INV/102
COL/PHA/81/TAS/104
CUB/PHA/82/INV/59
DOM/PHA/82/INV/66
EGY/PHA/82/INV/139
GEO/PHA/81/INV/39
GHA/PHA/81/INV/46
IDS/PHA/81/INV/213
IND/PHA/82/INV/473
IND/PHA/82/INV/475
IND/PHA/82/TAS/477
KYR/PHA/81/INV/40
LEB/PHA/81/INV/91
LEB/PHA/81/INV/93
LEB/PHA/81/TAS/92
NIR/PHA/81/INV/147
NIR/PHA/81/TAS/148
NIR/PHA/81/TAS/150
PAN/PHA/82/INV/48
TRI/PHA/81/INV/35
URU/PHA/82/INV/72
URU/PHA/82/TAS/71
China Stage II HPMP - 3rd tranche (Solvents)
China Stage II HPMP - 3rd tranche (ICR)

2. Performance Indicator 2: Individual Projects

The number of individual projects approved in 2018 are listed in the following table.

MLF Number
ARG/SEV/82/INS/188
BGD/SEV/81/TAS/52
BZE/PHA/82/PRP/34
COS/PHA/81/PRP/58
CPR/FOA/82/INV/06+
CPR/SEV/82/INS/596
CUB/PHA/82/PRP/61
CUB/PHA/82/TAS/60
CUB/SEV/81/TAS/57
DOM/REF/81/INV/63
ELS/PHA/82/PRP/39
ELS/SEV/81/TAS/37
FIJ/PHA/82/PRP/34
FIJ/PHA/82/TAS/35
GEO/SEV/81/INS/40
GHA/PHA/81/PRP/44
GHA/SEV/82/INS/47
GLO/SEV/82/TAS/346
IRA/SEV/82/INS/231
IRA/SEV/82/TAS/232
JAM/PHA/81/PRP/38
LEB/SEV/82/INS/94
MEX/REF/81/INV/187
NIR/SEV/82/INS/152
PAK/SEV/82/INS/98
PAN/SEV/81/TAS/46
PAR/PHA/82/PRP/37
PAR/SEV/81/TAS/01+
SRL/PHA/82/PRP/52
SRL/PHA/82/TAS/51 SRL/SEV/82/INS/53
TRI/PHA/82/PRP/36
VEN/SEV/82/INS/136
ZIM/REF/82/INV/55
ZHVI/INDI / 02/HN V / JJ

3. Performance Indicator 3: Funds disbursed

2018 Disbursements	\$40,670,035
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4. Performance Indicator 4: 2018 ODS phase-out

MLF Number	Consumption ODP to be Phased Out per Proposal
ARG/SEV/82/INS/188	0.0
BGD/PHA/81/INV/51	6.8
BGD/PHA/81/TAS/49	0.0
BGD/SEV/81/TAS/52	0.0
BRA/PHA/82/INV/323	136.3
BRA/PHA/82/TAS/322	0.0
BRU/PHA/82/INV/23	0.2
BZE/PHA/82/PRP/34	0.0
CHI/PHA/81/INV/197	23.2
COL/PHA/81/INV/102	34.6
COL/PHA/81/TAS/104	0.0
COS/PHA/81/PRP/58	0.0
CPR/FOA/82/INV/06+	250.0
CPR/SEV/82/INS/596	0.0
CUB/PHA/82/INV/59	4.2
CUB/PHA/82/PRP/61	0.0
CUB/PHA/82/TAS/60	0.0
CUB/SEV/81/TAS/57	0.0
DOM/PHA/82/INV/66	0.0
DOM/REF/81/INV/63	2.3
EGY/PHA/82/INV/139	0.0
ELS/PHA/82/PRP/39	0.0
ELS/SEV/81/TAS/37	0.0
FIJ/PHA/82/PRP/34	0.0
FIJ/PHA/82/TAS/35	0.0
GEO/PHA/81/INV/39	1.1
GEO/SEV/81/INS/40	0.0
GHA/PHA/81/INV/46	0.0
GHA/PHA/81/PRP/44	0.0
GHA/SEV/82/INS/47	0.0
GLO/SEV/82/TAS/346	0.0
IDS/PHA/81/INV/213	8.6
IND/PHA/82/INV/473	9.8
IND/PHA/82/INV/475	296.6
IND/PHA/82/TAS/477	0.0
IRA/SEV/82/INS/231	0.0
IRA/SEV/82/TAS/232	0.0
JAM/PHA/81/PRP/38	0.0
KYR/PHA/81/INV/40	0.5
LEB/PHA/81/INV/91	9.8
LEB/PHA/81/INV/93	2.5
LEB/PHA/81/TAS/92	1.9
LEB/SEV/82/INS/94	0.0
MEX/REF/81/INV/187	129.4
NIR/PHA/81/INV/147	32.4
NIR/PHA/81/TAS/148	12.8

NIR/PHA/81/TAS/150	0.0
NIR/SEV/82/INS/152	0.0
PAK/SEV/82/INS/98	0.0
PAN/PHA/82/INV/48	6.6
PAN/SEV/81/TAS/46	0.0
PAR/PHA/82/PRP/37	0.0
PAR/SEV/81/TAS/01+	0.0
SRL/PHA/82/PRP/52	0.0
SRL/PHA/82/TAS/51	0.0
SRL/SEV/82/INS/53	0.0
TRI/PHA/81/INV/35	11.2
TRI/PHA/82/PRP/36	0.0
URU/PHA/82/INV/72	4.7
URU/PHA/82/TAS/71	0.0
VEN/SEV/82/INS/136	0.0
ZIM/REF/82/INV/55	11.1

5. Performance Indicator 5: Projects completed in 2018.

The following 66 projects were completed in 2018.

MLF Number	Date Completed (Actual)	
BGD/PHA/75/PRP/44	Jun-2018	
BGD/REF/75/PRP/43	Jun-2018	
BRA/PHA/75/INV/312	Aug-2018	
BRA/PHA/75/TAS/313	Dec-2018	
CHI/PHA/73/INV/184	Jun-2018	
CHI/PHA/76/INV/192	Mar-2018	
COL/FOA/76/DEM/100	Apr-2018	
COL/PHA/75/INV/96	Dec-2018	
COL/PHA/75/TAS/92	Dec-2018	
COL/PHA/75/TAS/94	Dec-2018	
COL/REF/75/DEM/97	Apr-2018	
COL/SEV/74/INS/90	Aug-2018	
COS/SEV/75/INS/53	Jun-2018	
CPR/PRO/80/PRP/03+	Jun-2018	
CPR/REF/76/DEM/573	Mar-2018	
CPR/SEV/77/INS/575	Dec-2018	
CUB/PHA/73/INV/53	Dec-2018	
DOM/PHA/77/INV/60	Dec-2018	
DOM/REF/80/PRP/01+	Dec-2018	
DRC/PHA/80/INV/45	Dec-2018	
EGY/FOA/80/PRP/01+	Dec-2018	
EGY/PHA/74/PRP/126	Dec-2018	
ELS/PHA/77/INV/34	Dec-2018	

GHA/PHA/76/INV/42 Oct-2018 GHA/SEV/76/INS/41 Dec-2018 GLO/SEV/80/TAS/343 Dec-2018 IND/FOA/72/PRP/455 Jun-2018 IND/FOA/74/PRP/460 Jun-2018 IND/PHA/72/PRP/452 Jun-2018 IND/REF/72/PRP/453 Jun-2018 IND/REF/72/PRP/459 Jun-2018 IRA/PHA/72/PRP/216 Jun-2018 IRA/PHA/74/INV/219 Jun-2018 IRA/PHA/74/INV/219 Jun-2018	
GLO/SEV/80/TAS/343 Dec-2018 IND/FOA/72/PRP/455 Jun-2018 IND/FOA/74/PRP/460 Jun-2018 IND/PHA/72/PRP/452 Jun-2018 IND/REF/72/PRP/453 Jun-2018 IND/REF/72/PRP/459 Jun-2018 IRA/PHA/72/PRP/216 Jun-2018 IRA/PHA/74/INV/219 Jun-2018	
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IND/REF/72/PRP/453 Jun-2018 IND/REF/72/PRP/459 Jun-2018 IRA/PHA/72/PRP/216 Jun-2018 IRA/PHA/74/INV/219 Jun-2018	
IND/REF/72/PRP/459 Jun-2018 IRA/PHA/72/PRP/216 Jun-2018 IRA/PHA/74/INV/219 Jun-2018	
IRA/PHA/72/PRP/216 Jun-2018 IRA/PHA/74/INV/219 Jun-2018	
IRA/PHA/74/INV/219 Jun-2018	
IRA/REF/72/PRP/217 Jun-2018	
IRA/SEV/74/TAS/223 Jun-2018	
KYR/PHA/74/INV/34 Dec-2018	
LEB/PHA/75/INV/85 Dec-2018	
LEB/PHA/75/INV/86 Dec-2018	
LEB/PHA/75/INV/87 Dec-2018	
LEB/PHA/75/TAS/88 Dec-2018	
LEB/SEV/74/TAS/35 Dec-2018	
MAL/PHA/71/INV/172 Jun-2018	
MAL/PHA/71/TAS/173 Jun-2018	
MAL/PHA/71/TAS/174 Jun-2018	
MAL/PHA/75/TAS/179 Jun-2018	
MAL/PHA/77/INV/184 Jun-2018	
NEP/PHA/66/INV/30 Jun-2018	
NIR/FOA/72/PRP/139 May-2018	
NIR/PHA/71/INV/135 Feb-2018	
NIR/PHA/72/PRP/138 May-2018	
NIR/PHA/73/INV/140 Jun-2018	
NIR/PHA/75/INV/143 Dec-2018	
NIR/SEV/76/INS/145 Nov-2018	
PAK/SEV/73/INS/91 Mar-2018	
PAN/SEV/75/INS/42 Mar-2018	
SRL/PHA/70/INV/44 Dec-2018	
SRL/SEV/76/INS/48 Dec-2018	
TLS/PHA/63/INV/07 Dec-2018	
TLS/PHA/80/INV/18 Dec-2018	
URU/PHA/77/TAS/68 Dec-2018	
URU/PHA/77/TAS/69 Dec-2018	

7. Performance Indicator 7: Final Revisions

Last year's database counted 101 projects, of which 70 should have been financially completed in 2018. This year's database counts 66 projects for which a final revision was issued in 2018.

8. Performance Indicator 8: PCRs

100% achieved (2 MYA and 3 individual PCRs were due and submitted in 2018).

9. Performance Indicator 9

Progress Report produced on 23 September 2019 as required.