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执行蒙特利尔议定书
多边基金执行委员会
第九十三次会议
2023 年 12 月 15 至 19 日，蒙特利尔
临时议程[1] 项目 7(a)(iii)

开发计划署截至 2022 年 12 月 31 日的进度报告

导言

1. 本文件介绍开发计划署截至 2022 年 12 月 31 日的进度报告。[2]

2. 开发计划署的进度报告中纳入了项目执行情况，包括 18 个氢氟碳化物相关项目，这些项目由 17 个非第 5 条缔约方的额外自愿捐款供资，为执行《基加利修正案》提供快速启动支助。

3. 秘书处逐国审查了每个进行中项目的执行情况，同时考虑到针对 2022 年报告的计划完成日期在执行中出现的延误、这些延误对淘汰受控物质以及计划的资金发放率可能产生的影响。本文件所载分析以所有受控物质的 ODP 吨数为依据，但以二氧化碳当量吨计算的氢氟碳化物除外。[3]

4. 本文件由以下部分组成:

一、 在多边基金经常捐款项下核准的所有受控物质项目。该部分概述了 2022 年项目执行进展，以及 1991 年以来涉及《蒙特利尔议定书》下所有受控物质，包括附件 F 物质(氢氟碳化物)的累计项目执行进展；这部分还载有对国家一级每个进行中项目[4]的执行情况的审查；这部分明确陈述了存在实施延

[1] UNEP/OzL.Pro/ExCom/93/1

[2] 进度报告附于本文件之后。数据已列入综合进度报告的数据库，可应要求提供。

[3] 根据第 84/12 号决定(a)(四)段，对氢氟碳化物以二氧化碳当量吨的衡量已纳入提交第九十三次会议的进度报告。

[4] 进行中的项目是指截至 2022 年 12 月 31 日正在实施的所有项目。关键进度指标包括: 已发放资金的百分比和已开始发放资金的项目的百分比；年底前预订发放的供资占核准供资的百分比；项目执行中平均预计延误时间；进度报告数据库的备注一栏提供的信息。

执行蒙特利尔议定书多边基金执行委员会的会前文件不妨碍文件印发后执行委员会可能作出的任何决定。

误的项目和对淘汰受控物质可能产生的影响，以及存在未决问题供执行委员会审议的项目。

二、 在额外自愿捐款下为附件 F 物质(氢氟碳化物)核准的为逐步减少氢氟碳化物提供快速启动支助的项目。[5]

三、 建议。

一、 在多边基金经常捐款项下核准的所有受控物质项目

一、1. 2022 年和 1991 年以来累计的项目执行进展情况

5. 截至 2022 年 12 月 31 日，执行委员会已核准开发计划署项目计 10.2 亿美元，其中 8.9508 亿美元用于执行投资和非投资项目，1.2421 亿美元用于机构支助费用，如表 1 所示。

表 1. 截至 2022 年 12 月 31 日开发计划署按行业分列的核定供资

行业	供资 (美元)
气雾剂	26,054,838
销毁	3,606,279
泡沫	173,220,709
哈龙	4,996,975
逐步减少氢氟碳化物计划	3,755,000
熏蒸剂	20,081,243
淘汰计划	387,379,811
加工剂	1,286,923
生产	1,056,000
制冷	139,623,080
多重影响	69,897,960
溶剂	63,699,996
消毒剂	417,628
小计	**895,076,443**
机构支助费用	124,211,639
共计	**1,019,288,082**

6. 2022 年核准了 38 个新项目和活动。这一供资水平预计可以淘汰 69,658 ODP 吨和 240,094 二氧化碳当量吨的受控物质消费量。附件一按国家列明了 2022 年项目执行情况。

7. 表 2 列明了截至 2022 年 12 月 31 日的项目执行情况，包括各类项目的供资发放率。附件二列明了自 1991 年以来每年的分析性信息。

表 2. 截至 2022 年 12 月 31 日各类项目执行情况

类别	项目数量*			供资 (美元)**			
	核准	完成	完成率%	核准	发放	余额	发放率%
国家方案	22	22	100	1,628,797	1,628,797	0	100

[5] 根据第 84/12 号决定(b)段，综合进度报告(UNEP/OzL.Pro/ExCom/93/14)载有一份详细的进度报告，概述各项目标、执行情况、主要结论和经验教训、酌情淘汰的氢氟碳化物的数量、核准和发放的资金数额以及完成这些项目和活动可能面临的挑战。

类别	项目数量*			供资 (美元)**			
	核准	完成	完成率%	核准	发放	余额	发放率%
示范	42	42	100	21,719,011	21,700,308	18,703	99.9
机构加强	273	253	93	59,530,103	54,808,570	4,721,532	92
投资	1,346	1,279	95	734,375,646	697,564,228	36,811,420	95
项目编制	582	541	93	26,919,029	23,042,400	3,876,632	86
技术援助	335	322	96	49,313,367	46,472,801	2,840,567	94
培训	28	28	100	1,590,489	1,590,489	0	100
共计	**2,628**	**2,487**	**95**	**895,076,443**	**846,807,593**	**48,268,853**	**95**

* 不包括已关闭或改变执行机构的项目。
**不包括机构支助费用。

8. 开发计划署 2022 年项目和活动以及 1991 年至 2022 年 12 月 31 日累计项目和活动执行情况摘要如下：

(a) **淘汰：**[6] 2022 年，淘汰了 178.3 ODP 吨和零二氧化碳当量吨的受控物质消费量，又核准淘汰另外 233.5 ODP 吨受控物质消费量。自 1991 年以来，淘汰了 68,999 ODP 吨和 240,094 二氧化碳当量吨的受控物质消费量，而核准的项目(不包括撤销的项目和改变执行机构的项目)预期总量为 69,658 ODP 吨和 240,094 二氧化碳当量吨；

(b) **发放/核准：** 2022 年共发放 2,593 万美元，根据 2021 年进度报告，计划发放 2,311 万美元，发放率为计划发放率的 112%。在核准发放的共计 8.9508 亿美元(不包括机构支助费用)中，已累计发放 8.4681 亿美元，发放率为 95%。2022 年核准了 1,377 万美元用于执行工作；

(c) **成本效益(按 ODP 计)：**[7] 自 1991 年以来，导致消费量永久减少的已核准投资项目的平均成本效益为 11.25 美元/公斤。投资项目中已完成项目的每 ODP 吨平均成本效益为 10.31 美元/公斤，进行中项目为 54.67 美元/公斤；[8]

(d) **已完成项目的数目：** 2022 年完成了 46 个项目。1991 以来在核准的 2,628 个项目中已完成 2,487 个项目 (不包括已关闭或改变执行机构的项目)，完成率达 95%；

(e) **交付速度– 投资项目：** 2022 年完成的项目平均在获准后的 37 个月内完成。自 1991 年以来，投资项目的平均完成时间为批准后 34 个月。这些项目下的首次付款平均发生在项目获准的 13 个月之后；

(f) **交付速度 – 非投资项目：** 2022 年完成的项目平均在获准后的 42 个月内完成。自 1991 年以来，非投资项目的平均完成时间为批准后 39 个月。这些项目下的首次付款平均发生在项目获准的 13 个月之后；

[6] 消耗臭氧层物质淘汰以 ODP 吨表示，氢氟碳化物淘汰以二氧化碳当量吨表示。
[7] 包括 167.8 公吨氢氟碳化物投资项目。由于核准的项目数量有限，未将二氧化碳当量的成本效益包括在内。
[8] 进行中项目的成本效益值较高主要是由于氟氯烃的 ODP 值较低，但也是各机构用于归属淘汰量的手段。

(g) **项目编制:** 在 2022 年底之前获核准的 582 个项目编制活动中，已完成 541 个，有 41 项活动仍在进行。2022 年完成了 5 个项目编制活动；

(h) **执行拖延:** 截至 2022 年底，共有 141 个项目正在执行之中，平均拖延 6 个月。这些项目中有 20 个被列为“执行拖延项目”[9]，必须按项目撤销程序处理（而示范项目、项目编制和机构加强则不受这些程序的约束）；

(i) **多年期协议：**2022 年，有 43 项氟氯烃淘汰管理计划的多年期协议正在执行中。自 1991 年以来，已核准 158 项多年期协议，完成了 115 项，完成率为 73%。

9. 表 3 总结了自 1991 年以来开发计划署取得的进展。

表 3：自 1991 年以来开发计划署取得的进展

实现的淘汰量		发放 (美元)	平均成本效益(美元/公斤)	项目数目		完成交付速度 (个月)		平均项目延迟 (个月)	多年期协议数目	
ODP 吨	二氧化碳当量吨			核准	完成	投资	非投资		核准	完成
68,999	240,094	846,807,593	11.25	2,628	2,487	34	39	6	158	115

氢氟碳化物相关项目

10. 截至 2022 年 12 月 31 日，执行委员会在经常捐款下核准了 43 个氢氟碳化物相关项目(包括 3 个投资项目，32 个项目准备，8 个扶持活动)，共计 6,995,530 美元(不包括机构支助费用)。表 4 概述了这些项目的状况，相关数据已包括在第 5 至 9 段。

表 4. 经常捐款下核准的氢氟碳化物相关项目

类别	项目数目			供资 (美元)*			
	核准	完成	完成率%	核准	发放	余额	发放率%
投资**	3	2	67	2,486,530	2,159,576	326,954	87
项目编制	32	0	0	3,865,000	479,837	3,385,164	12
技术援助- 扶持活动	8	8	100	644,000	606,300	37,701	94
共计	**43**	**10**	**23**	**6,995,530**	**3,245,713**	**3,749,819**	**46**

* 不包括项目支助费用。

**关于投资项目，核准和淘汰了 167.8 公吨 (240,094 二氧化碳当量吨)。

11. 截至 2022 年底，这 43 个项目中，有两个投资项目和 8 个扶持活动已经完成，还有 33 个正在进行。这些活动正处于不同的实施阶段。

12. 关于剩余的正在进行的投资项目，第八十七次会议已经核准延长其完成日期，预计将于 2023 年完成。

[9] 获核准超过 18 个月但付款不足 1%的项目，或在进度报告(第 22/61 号决定)提议的完成日期 12 个月后仍未完成的项目。

13. 在核定累计供资总额 6,995,530 美元(不包括机构支助费用)中，已发放 3,245,713 美元，发放率为 46% 。

一、2. 2022 年项目执行中发现的问题

14. 在审查进程之后对若干问题进行了讨论并令人满意地得到了解决，但下列问题除外：20 个被列为执行拖延项目(包括 19 个与根据第 84/45 号决定(c)段须按项目撤销程序处理的多年期协议组成部分有关的项目和一个氢氟碳化物投资项目)中的问题。本文件附件三介绍了被列为执行拖延的项目，以及秘书处要求向第九十四次会议提交报告的建议。

15. 此外，在一个多年期协议项目中发现了问题。本文件附件三也介绍了这一问题。简要说明了该项目的执行情况和未决问题，并提出了一项建议供执行委员会审议。

16. 向第九十三次会议提交了中国(工商制冷和空调行业计划及清洗行业计划)、[10] 哥伦比亚、[11] 黎巴嫩、[12] 莫桑比克、[13] 尼日利亚、[14] 特里尼达和多巴哥[15]氟氯烃淘汰管理计划相关项目的实施进展详情，以及与巴西和吉尔吉斯斯坦氟氯烃淘汰管理计划相关的有具体报告要求[16]的项目报告。关于这些项目的未决问题，包括核准项目延长申请(如果有的话)的建议，见这些文件的相关章节。老挝人民民主共和国、尼泊尔、斯里兰卡和东帝汶氟氯烃淘汰管理计划供资应在第九十三次会议上提交但未提交，伊朗伊斯兰共和国的供资虽已提交但后来撤回，与之相关的问题在关于供资提交延迟的文件中作了说明。[17]

17. 自 2021 年进度报告以来，在 80 个正在进行的项目中（不包括机构加强和项目编制），有 19 个项目修订了计划完成日期。根据第 82/11 号决定(c) (二)段，秘书处注意到，过去两年没有为中国提交延续机构加强项目的申请。

<u>性别平等主流化</u>[18]

18. 开发计划署报告称，开发计划署实施的所有项目都遵循开发计划署的性别平等战略。此外，第 5 条国家在实施多边基金支持的项目时，也遵循本国的性别政策。在项目实施期间，开发计划署组织与相关协会、网络和利益相关方的协商，纳入指标并收集具体项目活动按性别分列的数据，并根据资金供应情况促进性别平等主流化。开发计划署国家办事处跟踪其在性别平等方面的绩效以及开发计划署干预措施对实地性别平等方面的影响。

19. 为多边基金资助的项目收集与性别相关的信息和数据的工作已经为各项目开展。截至目前，这已促使更多女性参与培训课程、会议和意识提升活动。大多数项目目前都包括性别平等主流化活动，例如工作大纲中有一项关于鼓励男性和女性都可申请并跟踪与会者

[10] UNEP/OzL.Pro/ExCom/93/47
[11] UNEP/OzL.Pro/ExCom/93/48
[12] UNEP/OzL.Pro/ExCom/93/64
[13] UNEP/OzL.Pro/ExCom/93/73
[14] UNEP/OzL.Pro/ExCom/93/77
[15] UNEP/OzL.Pro/ExCom/93/89
[16] UNEP/OzL.Pro/ExCom/93/20
[17] UNEP/OzL.Pro/ExCom/93/24
[18] 执行委员会要求双边机构和执行机构根据现有资料，在 2023 年之前，作为其年度进展报告的一部分，提供一份关于性别平等主流化主要成果的简要报告(第 90/48 号决定(d)段)。

的性别构成的具体条款。在国家臭氧办公室和项目管理机构，有相当多的工作人员是女性，她们为决策和项目实施做出了贡献。本文件所附开发计划署说明的第六节提供了有关性别平等主流化活动的更多资料。

二、 在额外自愿捐款下核准的为逐步减少氢氟碳化物提供快速启动支助的项目

20. 截至 2022 年 12 月 31 日，执行委员会在额外自愿捐款下核准了 18 个氢氟碳化物相关项目，共计 5,996,295 美元(不包括机构支助费用)。表 5 概述了这些项目的状况。

表 5. 截至 2022 年底已核准的氢氟碳化物相关项目的状况

类别	项目数目			供资 (美元)*			
	核准	完成	完成率%	核准	发放	余额	发放率%
投资**	2	2	100	4,406,577	4,406,577	0	100
项目编制	5	5	100	83,511	83,511	0	100
技术援助- 扶持活动	11	11	100	1,506,207	1,461,686	44,521	97
共计	**18**	**18**	**100**	**5,996,295**	**5,951,774**	**44,521**	**99**

* 不包括项目支助费用。

** 关于投资项目，核准和淘汰了 480.6 公吨 (587,301 二氧化碳当量吨)。

21. 截至 2022 年底，所有已核准的 18 个项目均已完成。

22. 在核定累计供资总额 5,996,295 美元中，已发放 5,951,774 美元，发放率为 99%。

三、 建议

23. 谨提议执行委员会：

(a) 注意到 UNEP/OzL.Pro/ExCom/93/16 号文件所载开发计划署截至 2022 年 12 月 31 日的进度报告；

(b) 核准与本文件附件三所载存在具体问题的进行中项目有关的建议。

附件一

开发计划署 2022 年按国家的项目执行情况摘要

1. 附件一表 1 按国家列出了 2022 年在取得的淘汰量、计划的和实现的资金发放量以及项目完成方面的项目执行情况。

表 1.开发计划署 2022 年项目执行情况

国家	2022 年淘汰 (ODP 吨)	2022 年淘汰(二氧化碳当量吨)*	2022 年发放的资金估计数 (美元)	2022 年发放的资金 (美元)	2022 年发放资金超过估计数的百分比	2022 年完成的计划项目百分比**
安哥拉	2.0	0	252,410	57,847	23	100
阿根廷	0.0	0	85,237	130,575	153	100
亚美尼亚	0.0	0	743	0	0	
孟加拉国	5.0	0	719,459	1,524,213	212	100
伯利兹	0.0	0	45,021	40,373	90	100
不丹	0.0	0	9,250	0	0	
巴西	0.0	0	2,198,910	1,276,279	58	100
文莱达鲁萨兰国	0.5	0	6,457	0	0	100
柬埔寨	0.0	0	26,190	0	0	
智利	9.3	0	333,125	201,899	61	100
中国	89.2	0	4,596,551	6,452,756	140	
哥伦比亚	2.8	0	1,003,146	445,925	44	100
哥斯达黎加	0.0	0	220,707	251,205	114	50
古巴	0.0	0	257,199	277,708	108	100
刚果民主共和国	0.0	0	89,187	10,000	11	
多米尼加共和国	0.0	0	389,716	561,227	144	
埃及	2.0	0	1,081,862	792,979	73	100
萨尔瓦多	0.0	0	144,957	24,130	17	
斯威士兰	0.0	0	35,600	5,609	16	
斐济	0.0	0	127,000	28,548	22	100
格鲁吉亚	0.0	0	114,358	90,451	79	100
加纳	20.9	0	279,192	151,188	54	100
格林纳达	0.0	0	14,800	14,163	96	
圭亚那	0.0	0	53,242	45,682	86	0
海地	0.0	0	14,837	19,321	130	
印度	17.3	0	4,085,765	5,784,604	142	100
印度尼西亚	0.0	0	993,853	499,753	50	50
伊朗伊斯兰共和国	5.2	0	881,128	1,546,653	176	100
牙买加	0.0	0	95,059	73,260	77	
吉尔吉斯斯坦	0.0	0	33,931	36,673	108	
老挝人民民主共和国	0.0	0	52,540	0	0	
黎巴嫩	0.0	0	272,524	268,870	99	
马来西亚	13.7	0	1,255,939	1,404,864	112	50
马尔代夫	0.0	0	12,950	0	0	
马里	0.0	0	3,700	0	0	
墨西哥	0.0	0	31,450	26,722	85	
莫桑比克	0.0	0	3,700	0	0	
尼泊尔	0.1	0	38,018	0	0	100

国家	2022 年淘汰 (ODP 吨)	2022 年淘汰(二氧化碳当量吨)*	2022 年发放的资金估计数 (美元)	2022 年发放的资金 (美元)	2022 年发放资金超过估计数的百分比	2022 年完成的计划项目百分比**
尼日利亚	3.0	0	1,283,062	2,563,240	200	80
巴基斯坦	0.0	0	105,899	26,889	25	
巴拿马	0.0	0	317,147	375,068	118	100
巴拉圭	0.0	0	100,472	37,359	37	
秘鲁	2.0	0	142,781	99,003	69	
摩尔多瓦共和国	0.0	0	55,791	26,420	47	100
斯里兰卡	0.0	0	200,187	133,178	67	
东帝汶	0.0	0	28,305	1	0	
特立尼达和多巴哥	0.0	0	297,210	188,548	63	
乌拉圭	5.3	0	464,640	206,209	44	50
委内瑞拉玻利瓦尔共和国	0.0	0	98,492	220,878	224	
津巴布韦	0.0	0	157,973	7,914	5	
全球	0.0	0	0	0		100
总计	**178.3**	**0**	**23,111,673**	**25,928,184**	**112**	**82**

* 2022 年氢氟碳化物相关项目没有淘汰。

** 针对计划于 2022 年完成的项目。

附件二

开发计划署截至 2022 年 12 月 31 日的各年份项目执行情况摘要

1. 附件二表 1 列出了各年份项目执行情况摘要。[1] 1991 年至 2015 年期间核准的所有项目和活动目前均已完成。

表 1. 各年份项目执行情况

年份	项目数量*			供资 (美元)**			
	核准	完成	完成率%	核准	发放	余额	发放率%
1991 年	15	15	100	1,149,032	1,149,032	0	100
1992 年	67	67	100	8,619,002	8,619,002	0	100
1993 年	57	57	100	13,204,712	13,204,712	0	100
1994 年	148	148	100	49,481,580	49,481,581	-1	100
1995 年	117	117	100	29,599,445	29,599,446	-1	100
1996 年	83	83	100	27,838,805	27,838,805	0	100
1997 年	188	188	100	44,056,257	44,056,257	0	100
1998 年	172	172	100	31,305,010	31,305,010	0	100
1999 年	204	204	100	35,896,883	35,896,884	-1	100
2000 年	149	149	100	31,268,362	31,268,361	1	100
2001 年	179	179	100	35,292,272	35,292,271	1	100
2002 年	117	117	100	44,316,424	44,316,422	2	100
2003 年	64	64	100	36,336,530	36,336,530	0	100
2004 年	69	69	100	24,802,715	24,802,714	1	100
2005 年	53	53	100	29,124,834	29,124,833	1	100
2006 年	62	62	100	15,753,458	15,753,459	-1	100
2007 年	54	54	100	12,142,488	12,142,486	2	100
2008 年	84	84	100	22,873,866	22,873,866	0	100
2009 年	92	92	100	13,217,903	13,217,903	0	100
2010 年	43	43	100	19,567,971	19,567,970	1	100
2011 年	63	63	100	57,415,930	57,415,931	-1	100
2012 年	29	29	100	33,818,923	33,818,922	1	100
2013 年	43	43	100	33,958,973	33,958,972	1	100
2014 年	67	67	100	22,561,207	22,542,505	18,702	100
2015 年	75	75	100	30,276,800	30,274,905	1,895	100
2016 年	52	51	98	41,589,691	40,825,343	764,348	98
2017 年	27	25	93	30,607,053	30,322,093	284,961	99
2018 年	60	52	87	40,024,044	34,325,894	5,698,150	86
2019 年	41	32	78	10,370,972	7,702,349	2,668,622	74
2020 年	50	28	56	30,190,958	21,101,356	9,089,605	70
2021 年	66	5	8	24,646,043	8,562,794	16,083,250	35
2022 年	38	0	0	13,768,300	108,985	13,659,315	1
共计	**2,628**	**2,487**	**95**	**895,076,443**	**846,807,593**	**48,268,853**	**95**

* 不包括已关闭或改变执行机构的项目。
** 不包括机构支助费用。

[1] 数据按执行委员会核准项目的年份列报。它对所有核准项目(投资和非投资项目)一视同仁(即一个投资项目或 100 万美元的多年期协议供资付款被视为一个项目，与 30,000 美元的国家方案编制相同)。年度总结中的关键指标是：已完成项目的百分比、淘汰的 ODP 吨/二氧化碳当量吨和发放资金的百分比。付款分三种类型：执行中、执行后和追溯融资的项目付款。

附件三

开发计划署进度报告中存在未决问题的进行中项目

国家/项目编号	项目名称	发放率 (%)	现况/问题	建议
孟加拉国 BGD/PHA/81/INV/51	氟氯烃淘汰管理计划(第二阶段，第一次供资) (空调行业)	90	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
孟加拉国 BGD/PHA/81/TAS/49	氟氯烃淘汰管理计划(第二阶段，第一次供资) (项目管理机构)	72	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
巴西 BRA/PHA/82/INV/323	氟氯烃淘汰管理计划(第二阶段，第三次供资) (泡沫行业)	60	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
巴西 BRA/PHA/82/TAS/322	氟氯烃淘汰管理计划(第二阶段，第三次供资) (监管行动和项目监测)	74	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
柬埔寨 KAM/PHA/83/INV/36	氟氯烃淘汰管理计划(第四次供资)	76	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
哥斯达黎加 COS/PHA/84/INV/60	氟氯烃淘汰管理计划(第二阶段，第一次供资) (聚氨酯泡沫行业)	0	延迟 12 个月和 18 个月	请开发计划署向第九十四次会议报告执行拖延项目
埃及 EGY/PHA/84/TAS/143	氟氯烃淘汰管理计划(第二阶段，第二次供资) (项目管理和监测)	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
圭亚那 GUY/PHA/83/INV/32	氟氯烃淘汰管理计划(第二阶段，第二次供资)	0	延迟 12 个月和 18 个月	请开发计划署向第九十四次会议报告执行拖延项目
印度 IND/PHA/86/TAS/482	氟氯烃淘汰管理计划(第二阶段，第三次供资) (项目管理和监测)	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
印度尼西亚 IDS/PHA/76/TAS/210	氟氯烃淘汰管理计划(第二阶段，第一次供资) (制冷维修行业)	68	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
印度尼西亚 IDS/PHA/81/INV/213	氟氯烃淘汰管理计划(第二阶段，第二次供资) (制冷维修行业)	0	延迟 12 个月和 18 个月	请开发计划署向第九十四次会议报告执行拖延项目
伊朗伊斯兰共和国 IRA/PHA/86/INV/245	氟氯烃淘汰管理计划(第二阶段，第三次供资) (泡沫行业)	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
伊朗伊斯兰共和国 IRA/PHA/86/INV/247	氟氯烃淘汰管理计划(第二阶段，第三次供资) (制冷维修行业和项目管理机构)	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目

国家/项目编号	项目名称	发放率 (%)	现况/问题	建议
牙买加 JAM/PHA/86/INV/43	氟氯烃淘汰管理计划(第二阶段，第一次供资)	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
老挝人民民主共和国 LAO/PHA/86/INV/38	氟氯烃淘汰管理计划(第二阶段，第一次供资)	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
尼泊尔 NEP/PHA/86/INV/41	氟氯烃淘汰管理计划(第二阶段，第一次供资)	0	(i) 延迟 12 个月 (ii) 无资金发放	(i) 请开发计划署向第九十四次会议报告执行拖延项目 (ii) 请开发计划署向第九十四次会议报告资金发放情况
斯威士兰 SWA/PHA/86/INV/31	氟氯烃淘汰管理计划(第二阶段，第一次供资)	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
东帝汶 TLS/PHA/80/INV/15	氟氯烃淘汰管理计划(第二阶段，第一次供资)	36	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
乌拉圭 URU/PHA/82/INV/72	氟氯烃淘汰管理计划(第二阶段，第二次供资) (泡沫行业)	29	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目
津巴布韦 ZIM/REF/82/INV/55	将卡普里（哈拉雷中小企业）家用冰箱制造过程中使用的 HFC-134a 转为异丁烷	0	延迟 12 个月	请开发计划署向第九十四次会议报告执行拖延项目

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

UNDP Annual Progress and Financial Report Narrative: 1991-2022

92nd meeting, 15 –19 December 2023, Montreal, Canada

I. INTRODUCTION

The following narrative is based on a database of 2746 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2022. However, some updates of activities which took place during 2023 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$ of the US$ worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 70,810 ODP T/year, of which 70,187 (99%) were phased out as of 31 December 2022. 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 2022, UNDP was active in 51 countries, of which 35 are low volume consuming (LVCs). Most 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 countries, UNDP is providing technical support for countries to meet their targets set forth under the Montreal Protocol and these three key countries are progressing towards their targets. In addition, UNDP also acts as the cooperating agency in 18 countries.

UNDP has 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 received approval and implemented eight demonstration projects to replace HCFCs with low-GWP alternatives in seven countries. The technologies deployed in the HCFC demonstration projects are relevant to the HFC phase-down in the Kigali Amendment. The factsheets on these projects are available at the MLF website.

Pursuant to ExCom decision 78/3(g), UNDP prepared investment/demonstration projects to phase down HFCs and received approval for five HFC technology demonstration investment projects in Bangladesh, China, Dominican Republic, Mexico and Zimbabwe. The technology demonstration projects in Bangladesh, China, Dominican Republic, and Mexico have been completed and submitted to the Executive Committee, providing valuable information to the Executive Committee for the requirements of the HFC phasedown. The HFC technology demonstration activities in Zimbabwe will also be completed in 2023. UNDP also supported 19 countries (Bangladesh, Belize, Chile, Cuba, Haiti, Iran, Moldova, Uruguay, Colombia, Costa Rica, China, El Salvador, Fiji, Jamaica, Lebanon, Panama, Paraguay, Peru, Trinidad & Tobago) to undertake enabling activities for ratification and early implementation of the Kigali Amendment and all these countries have completed these activities.

Furthermore, UNDP continued to organize in-person, virtual and online-based activities to assist countries in meeting their Montreal Protocol obligations. For example, UNDP organized a webinar on Gender and the Montreal Protocol aimed at building the necessary capacity for UNDP gender focal points based in the regions and the UNDP country offices to provide targeted support for Montreal Protocol projects, and to ensure that

gender equality perspectives are included in all stages of the MLF project cycle in 2022. Furthermore, in collaboration with the Ministry of Environment and Forestry of Indonesia, UNDP organized a workshop in Bali, Indonesia from 27th February to 1 March 2023 to support countries in their preparation of the Kigali Amendment Implementation Plans (KIPs). The workshop brought together more than 70 experts and stakeholders from 17 countries to discuss strategies for implementing the Kigali Amendment under the Montreal Protocol. In addition, a side event was organized in Bangkok during the OEWG on *Beating the Heat: Achieving Sustainable Cooling through National Cooling Plans* (NCPs) to spotlight and share the key experiences of countries in developing the NCPs and offer space for discussion of challenges and opportunities. A side event on *Rising up for Small Island Developing States: Challenges and opportunities towards sustainable cooling and efficient cold chain* was also organized in the margins of the 34th Meeting of the Parties to the Montreal Protocol. The event emphasized the importance of the sustainable cold chain for SIDS, as well as the experiences and technical solutions for them. The UNDP Montreal Protocol team also organized five webinars[1] aimed at strengthening the capacity of NOUs on the implementation of the Montreal Protocol and the Kigali Amendment in 2022. In July 2023, UNDP organized a side event on *Greening cold chain practices and breakthrough technology of the life cycle management of refrigerants* during the 45th meeting of the OEWG of the Montreal Protocol in Bangkok, Thailand.

Finally, a guidance note on "Assessing greenhouse gas emissions from refrigerants use in UNDP operations" was developed in 2022 based on the extensive research of state-of-art GHG accounting methodologies and the experiences of the UNDP Montreal Protocol team. A guidance note on sustainable procurement and use of cooling assets was also developed to complement this methodology with practical advice for UNDP's country and regional offices. Carbon footprint reporting for 2022 showed that, for the first time, 109 UNDP offices included actual refrigerant data based on the methodology. UNDP offices reported 3,595 cooling assets so far. Preliminary results show that refrigerant emissions contribute about 6% to UNDP's total carbon footprint with 68% attributed to facility cooling, 23% to vehicle operations and 9% to refrigeration.

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 2022, UNDP had a total of 2746 approved projects under the Multilateral Fund, of which 100 had been canceled or transferred. Of the 2646 remaining projects, 2,505, or 95% have been completed. They are set to eliminate 70,810 ODP T/year, of which 70,187 ODP T (99%) have already been eliminated.

As of 31 December 2022, UNDP had received cumulative net project approvals of US$ 901,071,072 (excluding support costs). Of these, UNDP, as of end-2022, had disbursed US$ 853,076,362 excluding all obligations. This translates to 95% of approved funding. Furthermore, an additional US $2,382,909 of obligations were outstanding as of end-December 2022, representing orders placed but final payments not yet made.

B. Interest and Adjustments

Interest income earned on MLF resources in 2022 is US$ 657,877. This amount will be reported in

[1] Please see Annex 1 for more information on the webinars that were organized in 2022.

the 2022 final financial statement to be submitted to the MLF Treasurer by the agreed deadline of 30 September. The difference between the provisional and final 2022 interest income was adjusted against UNDP project approvals at the 92nd ExCom meeting.

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% of the budgets were dedicated to investment projects, 6% to technical assistance projects, 6% to institutional strengthening and 3% to project preparation activities. The remaining 3% was dedicated to country programmes and demonstration/training activities.

III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

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

GLO/SEV/91/TAS/263, the Core unit support (2023) programme approved at the 91st 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 programme is critical.

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

IV. PERFORMANCE INDICATORS

A. Results in 2022

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 X of the report of the 88th meeting of the Executive Committee contained UNDP's 2022 targets. One can see from the table below that UNDP fully met 7 out of 9 of its targets and that its score amounts to 98%.

Category of performance indicator	Item	Weight	UNDP's target for 2022	Result achieved in 2022	Score
1. Approval	Number of tranches approved vs. those planned*	10	12	9 →75 %	7.5
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	20	22 → 100%	10.0
3. Implementation	Funds disbursed	15	$ 22,523,448	$26,245,166 →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	213.43	229.2→ % (see annex 1, 4)	25.0
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	40	41→ 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 76, so target is 53)	57 finrevs	10.0
7. Administrative	Timely submission of project completion reports vs. those agreed	5	100% of those due (5)	100% achieved (5 individual PCRs)	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
TOTAL		100			**98**

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

Note on performance indicators on MYA tranches and corresponding ODP phaseout:
For Brazil, the MLF Secretariat was informed that UNDP did not need the funds from the last tranche. The agreement was updated (91/26) and the report was adopted. Based on this, UNDP did in principle submit the tranche request, but it did not include a funding request as we do not need the funds from the last tranche.

For Guyana, UNDP is waiting for the lead agency to finalize the implementation of tranche 2. We are ready for the request of tranche 3.

For Nigeria's Stage III, submission to the 91st ExCom was supported by UNDP but there was no sector/component included for UNDP. It was submitted/approved only with components for UNIDO implementation.

As UNDP's tranches were ready in 2022 as we had planned for these three countries, our performance target should be reduced from 15 to 12 and the performance indicator for ODS phase-out should be adjusted accordingly.

B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,281 investment projects have been completed, with a corresponding elimination of 63,811 ODP T. Of the US$ 657,578,531 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 34 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was $10.15/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 678 non-investment projects excluding project preparation assistance. Of the US$ 125,052,084 in their approved budgets, 99% has been disbursed. It took an average of 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 67 ongoing investment projects in the sectors of Phase-out Plans and Foam, with corresponding budgets of US$ 74,660,984. Of this amount, 53% has already been disbursed. It takes an average of 43 months from approval to the estimated project completion. The overall cost-effectiveness of the projects to the Fund was $54.67/kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

E. Cumulative ongoing non-investment projects (Table 7)

Table 7 shows that UNDP has 33 ongoing non-investment projects excluding project preparation assistance. Of the US$ 9,763,854 approved budgets, 30% has been disbursed. It takes an average of 32 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. For new projects, the UNDP country office will engage with the implementation partner in the country to sign the Project Document which details the topic, objective, activities and implementation modality of the project. There were no specific issues related to this in 2022.

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 41 PRP projects listed with US$ 4,335,000 in associated approvals, 13% has been disbursed.

VI. DESCRIPTION OF KEY ONGOING ACTIVITIES

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

A. Standalone investment projects for HFCs
B. HFC Enabling Activity projects
C. Kigali Implementation Plan (KIP) Preparation
D. Gender Mainstreaming Results Achieved
D. Country Highlights

A. HFC investment projects

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

ExCom Decision 80/42(a) approved the first HFC phase-down investment project in support of the Kigali Amendment, assisting Walton Hitech Industries Limited, Bangladesh, to convert the refrigerant used by this domestic refrigerator manufacturing facility from HFC-134a to isobutane (R-600a), including the conversion of its compressor manufacturing facility. Walton has an installed capacity of 3 million units of domestic refrigerators and of 4 million compressors (the final Report on Walton´s conversion is expected to be considered at the 86th ExCom).

UNDP supported the project's implementation, which started in January 2018 and was operationally completed in December 2019, spanning 24 months of implementation, and meeting the original timeframe agreed under the project. The project included a final safety audit on the installation. The conversion has successfully phased-out 197.30 metric tonnes of HFC-134a at Walton, with additional reduction of 33.30 metric tonnes of HFC-134a per annum in the servicing sector as an additional early phase-down commitment from the Government of Bangladesh. In terms of accumulated direct emissions, following the IPCC Methodology, the conversion from HFC-134a to HC-600a at Walton will avoid the

direct emission of 7,978,873 tons of CO2-equivalent of HFC-134a from 2020 to 2050.

A complementary K-CEP project also supported the development of improved design of the fixed-speed compressors to increase the energy efficiency performance of domestic refrigerators. The re-design of refrigerator and the compressor has resulted in 10 to 30% energy savings from baseline induction-based compressors. As result, based on the minimum increased energy efficiency of 10%, the new refrigerators are estimated to avoid the indirect emissions of, at least, 35,025,8090,980 CO2-equivalent tonnes from 2020 to 2050.

- **China**: Conversion from C5+HFC-245fa to C5+HFOs in a domestic refrigerator manufacturer (Hisense Kelon)

The 82nd Executive Committee approved the project proposal for the conversion from HFC-245fa and cyclopentane to HFO-1233zd(E) and cyclopentane in the manufacture of domestic refrigerators at Hisense Kelon in the amount of US $1,275,000 in response to the Decision 79/45, aiming to gather information related to incremental costs that could support the discussion on the cost guidelines for the HFCs Phase-down. The Project was completed in June 2021 and eliminated 250mt of HFC-245fa consumption through the conversion of a production line, by replacing the use of C5+HFC-245fa with C5+HFO1233zd as foaming co-blowing agent. In addition, in view of the high operational cost of cyclopentane + HFO-1233zd system, Hisense invested their own resources to carry out further research on low-density systems. As a result, ultra-low density three-component blowing agent composed by cyclopentane+HFO-1233zd+butane system is being developed, which can reduce the foam density the amount of raw materials by 5-8% without compromising the performance.

With the successful adoption of co-blowing cyclopentane and HFO-1233zd, 259,195 tons of CO2-eq of HFC-245fa in the annual production were reduced. The energy consumption of the refrigerator after the conversion also decreased by 2.12%. It is estimated that 1.2 million units could avoid indirect emissions of 5,847.3 tons CO2 per year.

The project achieved its objectives and provided detailed information on the alternative technology and related costs.

- **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

The project of FARCO in the Dominican Republic was approved in 2018 and completed in 2020. The completion report was submitted to the MLF in 2021. FARCO now has the capacity to produce all of its self-contained commercial refrigeration units with R-290. The consumption of HFCs in FARCO is small, however, it is an important project for the country to meet its obligations for the Kigali Amendment and reduce the production and servicing demands of HFCs. The total cost of the project was USD$ 662,986 (USD$ 129,825 from the Multilateral Fund, USD$ 50,000 from the government of Canada and USD$ 483,161 from FARCO). With the conversion, 3.95 mt of HFC-134a and R-404A were phased out. The project also supports the training of technicians for the safe handling of flammable refrigerants. This is an important achievement not only for the Dominican Republic but also for other islands in the Caribbean where FARCO sells their units.

- **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

The project was approved at the 81st meeting of the ExCom in June 2018 with USD 2,700,000 and was operationally completed in June 2020. Mabe has six manufacturing lines producing domestic refrigerators using HFC-134a. All lines have been fully converted and can use R600a safely. Safety audit was completed at both the compressor and refrigerator manufacturing plant. Additional 500,000 USD was provided by the Government of Canada and 250,000 USD by K-CEP to support the conversion and improvement of energy efficiency. The project phased out 198 MT of HFC 134a, which is equivalent to 283,140 MT of CO2. MABE provided significant co-financing in the conversion. The completion report with all detailed information was submitted by UNDP to the MLF Secretariat in 2021.

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

The HFC demonstration project for Zimbabwe on "Conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare)" was approved by the Executive Committee at its 82nd meeting for UNDP and bilateral partner of France. Due to the small levels of consumption, Capri needs to find co-financing for the conversion in addition to the grant provided by the MLF. During 2021, UNDP supported Capri in realizing the earlier committed co-finance resources, including from the company's sources and national development funds. US$ 200,000 of additional support has been identified. A tender selection process has been carried out for Capri company, and one supplier has been selected to assemble and supply technology equipment. Associated contract has been signed, and equipment has been shipped to Harare in May 2023. Training on the use of equipment with a separate expert is expected who will have a mission to Harare. Supplier's engineers are in communication with Capri's management on the process of completing the technology supply. The project will initiate the financial closure process with current commitments pending its operational closure in summer 2023.

B. HFC Enabling Activity projects

As highlighted earlier in the report, UNDP is providing support to 19 countries to undertake their HFC enabling activities (EAs) for ratifying and early implementation of the Kigali Amendment. All the EA activities have been completed by the end of 2022. For more details on the status of these activities, please see the table below.

Country	MLF Number	Project Title	Ratification Status	Latest Status
Bangladesh	BGD/SEV/81/TAS/52	Enabling activities for HFC phase-down	Ratified Kigali on 8 June 2020.	Completed in 2022. RAC servicing sector needs assessment and Alternatives assessment completed. Final consultations with stakeholders were completed in 2022.
Belize	BZE/SEV/85/TAS/37	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. Activities concluded as expected. Report submitted to MLFS in 2022.
Chile	CHI/SEV/80/TAS/03+	Enabling activities for HFC phase-down	Ratified Kigali on 19 Sept 2017.	Completed in 2022.

China	CPR/SEV/80/TAS/04+	Enabling activities for HFC phase-down	Ratified Kigali Amendment in June 2021.	Financially completed in 2022.
Colombia	COL/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 25 Feb 2021.	Financially completed in 2022.
Costa Rica	COS/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 23 May 2018.	Financially completed in 2022.
Cuba	CUB/SEV/81/TAS/57	Enabling activities for HFC phase-down	Ratified Kigali on 20 June 2019.	Completed in 2022. Review of legal framework to control HFC was completed. Update of alternative survey was completed. Awareness raising material regarding the Kigali Amendment was produced and distributed. Due to COVID-19 restrictions, some activities (especially during the first semester) were conducted virtually.
El Salvador	ELS/SEV/81/TAS/37	Enabling activities for HFC phase-down	Country has ratified Kigali on 13 September 2021.	Financially completed in 2022.
Fiji	FIJ/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 16 June 2020.	Financially completed in 2022.
Haiti	HAI/SEV/84/TAS/23	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. International and national consultants have been recruited. HFC consumption figures are being updated through a survey process. Policy paper finalized and presented
Iran	IRA/SEV/82/TAS/232	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. HFCs consumption scenarios and HFCs long term strategy document prepared and under GOV endorsement process. Final consultations with stakeholders were completed in 2022. Ratification is expected in 2024.
Jamaica	JAM/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Financially completed in 2022.

Lebanon	LEB/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Ratified Kigali Amendment on 5 Feb 2020.	Financially completed in 2022.
Moldova	MOL/SEV/85/TAS/41	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. Ratification of the Kigali amendment can be expected later on in 2023.
Panama	PAN/SEV/81/TAS/46	Enabling activities for HFC phase-down	Ratified Kigali on 28 Sept 2018.	Financially completed in 2022.
Paraguay	PAR/SEV/81/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 1 Nov 2018.	Financially completed in 2022.
Peru	PER/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 7 Aug 2019.	Financially completed in 2022.
Trinidad and Tobago	TRI/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 17 Nov 2017.	Financially completed in 2022.
Uruguay	URU/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Ratified Kigali on 12 Sept 2018.	Completed in 2022. Review of customs procedures and tariff codes for the import, export and transit of HFCs with support of international expert. Collection of HFC import, export and transit data. Awareness raising activities related to the Kigali Amendment and the national obligations.

C. KIP Preparation

As of the end of 2022, UNDP has received approval from the Multilateral Fund to provide support to 30 countries to prepare their Kigali Implementation Plans as the lead or cooperating agency. For more details on these countries, please see the table below.

Country	MLF Number	Project Title
Angola	ANG/KIP/88/PRP/24	Preparation of Kigali HFC implementation plan
Bangladesh	BGD/KIP/90/PRP/58	Preparation of Kigali HFC implementation plan
Bhutan	BHU/KIP/87/PRP/29	Preparation of Kigali HFC implementation plan
Chile	CHI/KIP/88/PRP/207	Preparation of Kigali HFC implementation plan
Colombia	COL/KIP/87/PRP/110	Preparation of Kigali HFC implementation plan
Costa Rica	COS/KIP/87/PRP/63	Preparation of Kigali HFC implementation plan
Cuba	CUB/KIP/87/PRP/65	Preparation of Kigali HFC implementation plan
Dominican Republic	DOM/KIP/87/PRP/73	Preparation of Kigali HFC implementation plan
El Salvador	ELS/KIP/88/PRP/44	Preparation of Kigali HFC implementation plan
Fiji	FIJ/KIP/88/PRP/41	Preparation of Kigali HFC implementation plan
Ghana	GHA/KIP/87/PRP/51	Preparation of Kigali HFC implementation plan

Grenada	GRN/KIP/88/PRP/28	Preparation of Kigali HFC implementation plan
Cambodia	KAM/KIP/88/PRP/40	Preparation of Kigali HFC implementation plan
Kyrgyzstan	KYR/KIP/87/PRP/45	Preparation of Kigali HFC implementation plan
Laos PDR	LAO/KIP/87/PRP/39	Preparation of Kigali HFC implementation plan
Lebanon	LEB/KIP/87/PRP/98	Preparation of Kigali HFC implementation plan
Maldives	MDV/KIP/87/PRP/36	Preparation of Kigali HFC implementation plan
Mexico	MEX/KIP/87/PRP/195	Preparation of Kigali HFC implementation plan
Mozambique	MOZ/KIP/90/PRP/36	Preparation of Kigali HFC implementation plan
Nigeria	NIR/KIP/87/PRP/156	Preparation of Kigali HFC implementation plan
Panama	PAN/KIP/87/PRP/53	Preparation of Kigali HFC implementation plan
Paraguay	PAR/KIP/87/PRP/42	Preparation of Kigali HFC implementation plan
Peru	PER/KIP/87/PRP/59	Preparation of Kigali HFC implementation plan
Philippines	PHI/KIP/91/PRP/109	Preparation of Kigali HFC implementation plan
Sri Lana	SRL/KIP/87/PRP/59	Preparation of Kigali HFC implementation plan
Eswatini	SWA/KIP/87/PRP/33	Preparation of Kigali HFC implementation plan
Trinidad & Tobago	TRI/KIP/87/PRP/40	Preparation of Kigali HFC implementation plan
Turkiye	TUR/KIP/90/PRP/112	Preparation of Kigali HFC implementation plan
Uruguay	URU/KIP/87/PRP/77	Preparation of Kigali HFC implementation plan
Zimbabwe	ZIM/KIP/91/PRP/66	Preparation of Kigali HFC implementation plan

D. Gender Mainstreaming Results Achieved

All projects implemented by UNDP must follow UNDP's Gender Equality Strategy. In addition, countries also follow their own national policies on gender. UNDP's projects organize consultations with relevant associations, networks, and stakeholders, and include data collection disaggregated by gender and the promotion of gender mainstreaming (subject to financial availability). UNDP's country offices track their performance on gender equality through the flagship Gender Seal programme, that measures progress on wide-ranging criteria, including the impact of UNDP's interventions on the ground.

The collection of gender-related information and data for projects funded by the Multilateral Fund began much earlier and the incorporation of the MLF's new gender policy in the planning and execution of projects has followed. It is important to note that gender mainstreaming activities vary from country to country and should be culturally adapted. However, the strategies so far have resulted in an increase of women's participation in courses, meetings, and awareness activities. Most projects now include gender mainstreaming activities, such as TORs with a specific clause encouraging men and women to apply and tracking of the gender composition of meeting participants. In Iran, women account for more than 50% of the NOU team and the project board of the HPMP. In the National Ozone Network, a considerable number of members are women who are staff of the Department of Environment in the provinces who are contributing to decision making and project implementation. In Bangladesh, gender actions were guided by the Gender Action Plan 2021-2023. Some of the actions implemented include: 1) considering women candidates with preferred status- terms of references for projects consultants will include clear messaging to promote women candidates; 2) strengthening women representation in key positions- Technical Advisory Committee and Project Steering Committee meetings had women participants; 3) raising awareness of all beneficiary companies to take appropriate measures to prevent sexual exploitation and harassment or abuse of authority of any beneficiary, especially women. In Peru, a working group for gender equality in the Ministry of Production was created, the participation of female RAC students at vocational schools were promoted, and

RAC training courses tailored for female technicians were developed. Likewise, in Trinidad & Tobago, education and skills development courses have been promoted for women, activities have been undertaken to sensitize the RAC sector on gender, and opportunities have been built for women to participate in all the activities of KIP Preparation.

UNDP's Montreal Protocol team at Headquarters organized a webinar on *Improving the Mainstreaming of Gender into UNDP Montreal Protocol projects and applying a gender responsive approach to activities under the Montreal Protocol* in May 2022. The audience for this webinar included gender focal points based in UNDP country offices, gender advisors based in regional centers and UNDP country offices working on Montreal Protocol projects. UNDP's Montreal Protocol team based in the regions provide inputs to countries during the development and implementation of Montreal Protocol projects. Meetings were held with key NOUs to build capacity within countries to ensure the implementation of gender mainstreaming activities in projects. A session on *Good practices on mainstreaming gender in Montreal Protocol Projects* was included in the Asia Pacific regional gender workshop in June 2022 to identify potential gender mainstreaming activities for MP projects. Data collection for KIP preparation has been gender-sensitive and the collected data includes the number of technicians, disaggregated by gender, sector and subsector. Furthermore, while UNDP is developing KIPs and new stages of HPMPs for countries, lessons learnt from past HPMPs on gender mainstreaming are extensively considered. The key challenges include the lack of baseline data on gender and the limited involvement of women in the RAC sector.

E. Country Highlights (January – December 2022)

UNDP has been dedicated to finding innovative solutions for countries to address their Montreal Protocol compliance obligations. Interventions have supported countries to strengthen the coordination of stakeholders, access emerging technologies, improve operational standards and skills of technicians, reduce energy bills for consumers, and allow indigenous manufacturers to maintain competitiveness.

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

China

Since 2012, the first Ozone2Climate Technology Roadshow and Industry Roundtable, jointly organized by UNDP, UNEP, FECO, and the China Refrigeration and Air-Conditioning Industry Association (CRAA), was successfully held during the China Refrigeration Expo.

This event has been held during the China Refrigeration Expo for more than 10 years. Each year, the event carries out a series of activities: 1) an exhibition of the technical road show, which displayed the progress of refrigerant replacement in the ICR sector; 2) organized an industry roundtable to invite representatives and experts from relevant international institutions, enterprises, universities and other institutions to share the latest policies, technological progress and practical experiences at home and abroad; and 3) held a thematic sub-forum to give keynote speeches which are related to policies and challenges, air conditioning and cold chain technology, and good maintenance of servicing topics. Meanwhile, Industry enterprises were invited to show the latest solutions and application results of zero ODP, low GWP and high efficiency energy saving alternative technologies such as CO2, NH3, HC, R-32 and HFO.

The event has become a flagship activity of the China Refrigeration Expo, which has played a positive role in protecting the ozone layer and promoting the green development of refrigeration and air conditioning industry. During the decades, through this platform, UNDP and UNEP have also invited the representatives from Japan, Iran, Thailand, Pakistan, Mongolia, Indonesia, the Philippines and other countries' ozone

institutions and industry representatives to participate in the roundtables, which give them opportunities to engage in technical and business communications.

In line with the gender mainstreaming policies approved by the ExCom Decision 84/92 and the related guidance of UNDP, FECO has been making efforts to engage gender issues into implementation activities. During the training workshops for the project enterprises under the solvent sector held by FECO and ICAC in September 2022, FECO invited a gender expert recommended by the UNDP China country office, who shared ways to promote gender mainstreaming throughout project implementation and encouraged the engagement of women in various steps, such as planning, management and decision making, and monitoring and evaluation.

The disposable medical devices sub-sector under the solvent sector has a high ratio of female workers and has paid a lot of attention to women's rights. It's worth mentioning that a project enterprise "Henan light group medical products Co., Ltd." created a number of positions with more flexible working hours for new mothers and many other enterprises in various industries have started to emulate this practice. The measures may still have room for improvement, but the important thing is that it brings the gender issue actually into the public eye and shows that they are making efforts on such issues. These kinds of actions could be used as great examples in promoting gender mainstreaming during project implementation and could also be further studied.

Georgia

In coordination between the Government of Georgia and UNDP, the HPMP Stage 2 programme was successfully launched in 2022. The programme was designed and approved by the Multilateral Fund Secretariat and its Executive Committee and included a number of key activities on the phase-out of HCFCs. Those covered gradual improvements in HCFC control legislation, capacity building for the government and technical assistance to the private sector to enhance knowledge in terms of technological developments. An important market-based mechanism was developed to incentivize a broader introduction of new non-HCFC/non-HFC/low-GWP refrigeration and air-conditioning (RAC) technologies for various economic sectors of the country. This work has been initiated with a comprehensive study of the active private sector counterparts in the cold chain/food processing and distribution business, industry, residential and commercial buildings. Once the sector will be accurately defined, the study will continue with the determination of suitable financial mechanisms, including ESCOs, to support a stronger market uptake of low GWP RAC technological solutions.

Development of HFC quota systems in the LAC Region

The Kigali Amendment on HFCs requires that A5 countries update their licensing and quota systems to include HFCs. However, HFC quota systems must have the flexibility to include many new aspects that were not relevant in the past, given that the Kigali Amendment is a phase-down, not phase-out, many more substances (pure and blends) must be controlled than in the past, and the measurement is done in CO-2eq instead of MT. UNDP therefore conducted a series of webinars and discussions about the aspects A5 countries must consider when developing their HFC quota systems. South-south collaboration was facilitated, and experts provided guidance during the process. UNDP considers this support vital given the new realities, that quota systems must have the flexibility to adjust to a very different new situation.

South-South Cooperation (Sri Lanka, Timor-Leste and India)

An exchange mission to India was organised by UNDP (with support by NOU India) from 27 to 30 March 2023 involving the delegations of Sri Lanka and Timor Leste for training/exposure to alternative technologies in the refrigeration and air-conditioning sector, especially R290 (Propane). The delegation included technicians, instructors, and master trainers along with government staff involved in the ODS control program. A total of 14 participants (7 from each country) were engaged in this programme, of which 13 were men and 1 was a woman).

The exchange began with a two day training (27-28 March) in one of the training centers (M/s Keypath India Pvt. Ltd., Delhi), whose objective was to provide hands-on exposure to good service practices and the installation of room air-conditioners with flammable refrigerants (R290).

On 29th March, the delegation met the Deputy Resident Representative, UNDP and shared their experiences from the training program and expectations from the mission. The delegation also met Additional Director and In-charge Ozone Cell, Ministry of Environment, Forest and Climate Change. The delegation also shared their views and appreciated the support of India on behalf of low-consumption countries as a participating member of the ExCom meetings from the region. The delegation also visited **one of the RAC servicing centers** in Delhi to understand the process and safety practices followed during the repair and servicing of RAC appliances.

On 30th March, the delegation visited the R290 based AC manufacturing facility of Godrej and Boyce Mfg. Company Limited in Pune. The delegation had a detailed discussion with the management of the plant and visited the AC assembly line to understand the mechanisms of safety equipment, storage yard and testing infrastructure in their manufacturing line based on R-290.

The feedback from the participants was overwhelming. The participants found this mission very useful. Some of the comments are captured below:

- Sri Lanka participants: "We got lots of experience from program specially about propane refrigerant (R 290). We would like to say that UNDP and the Govt of India has given a great opportunity for improving knowledge of handling flammable refrigerant. Thanks for organising this great workshop."
- Timor Leste participants (and NOO): "It was very useful for our trainers as they could upgrade their knowledge in R 290 and visit to Godrej was great. We could connect to our import country and this will also help us in future."

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

A. Meetings Attended by UNDP in 2022

The UNDP Montreal Protocol team carried out the following missions in 2022. In addition to this, UNDP country offices also carried out field visits in countries with MLF programmes.

From	To	Country	Details
20-Jun-22	23-Jun-22	Canada	Participation in the 89th and 90th meetings of the Executive Committee of the MLF
9-Jul-22	15-Jul-22	Thailand	Participation to the 44th OEWG meeting and the Fifth Extraordinary Meeting of the Parties to the Montreal Protocol

11-Sep-22	13-Sep-22	Dubai, UAE	Participation in the West Asia Network Meetings for Standards and Operational discussions related to HPMP and Kigali Amendment and join the UNEP-Eurovent Meeting for Middle East
19-Sep-22	21-Sep-22	Canada	Participation at the Inter-Agency Coordination Meeting
19-Sep-22	23-Sep-23	Czech Republic	Participation in UNEP ECA OzonAction Network meeting
3-Oct-22	5-Oct-22	Thailand	Participation in the Joint Southeast and South Asia Ozone Officers Network Meeting organized by UNEP OzonAction
30-Oct-22	3-Nov-22	Canada	Participation at the 34th Meeting of the Parties to the Montreal Protocol
4-Dec-22	8-Dec-22	Canada	Participation in the 91st meeting of the Executive Committee of the MLF
12-Dec-22	16-Dec-22	Trinidad and Tobago	Project oversight mission

B. **Other Issues**

None.

ANNEX 1

In 2022, UNDP organized a side event in Bangkok during the OEWG on *Beating the Heat: Achieving Sustainable Cooling through National Cooling Plans* (NCPs) to spotlight and share the key experiences of countries in developing the NCPs and offer space for discussion of challenges and opportunities. UNDP also organized a side event on *Rising up for Small Island Developing States: Challenges and opportunities towards sustainable cooling and efficient cold chain* in the margins of the 34th Meeting of the Parties to the Montreal Protocol.

In addition, UNDP organized 5 webinars for Latin America and the Caribbean. Approximately, 213 people benefited and participated in these webinars, of which approximately 40% were women.

Virtual trainings 2022										
No. webinars	**No. sessions/ virtual training**	**Month**	**Year**	**Region**	**Language**	**Title**	**Content**	**Time**	**Attendees /virtual training**	**% Participation of women**
UNDP: Montreal Protocol Unit										
1	1	February	2022	Latin America and the Caribbean	Spanish/English	Lessons learned from the project on Persistent Organic Pollutants and Mercury in the SDGs in Colombia	To learn about Colombia's main experiences and lessons learned in the development of the project to reduce the release of unintentional POPs in Healthcare waste management, Steel processing, Waste of Electric and Electronic Equipment (WEEE) and biomass burning. The actions develope	60 min	41	44

Virtual trainings 2022										
No. webinars	**No. sessions/ virtual training**	**Month**	**Year**	**Region**	**Language**	**Title**	**Content**	**Time**	**Attendees /virtual training**	**% Participation of women**
							d during the project were aligned with the Sustainable Development Goals and the National Circular Economy Strategy developed by the Colombian government			
2	1	February	2022	Trinidad and Tobago	English	Cooling as a Service	The focus was on the concept of Cooling as a Service, highlighting opportunities and benefits for both consumers (off-takers) and Service providers	80 min	105	No data available
3	2	March	2022	Latin America and the Caribbean	Spanish/English	Kigali Amendment Implementation Tools: Quota system, Report and WCO update	This virtual training is aimed at strengthening technical capacities on three core issues for the impleme	135 min	48	67

Virtual trainings 2022										
No. webinars	**No. sessions/ virtual training**	**Month**	**Year**	**Region**	**Language**	**Title**	**Content**	**Time**	**Attendees /virtual training**	**% Participation of women**
							ntation of the Montreal Protocol: a quota system for the control of HFC imports, HCFC and HFC consumption reporting, and the update to the World Customs Organization (WCO) harmonized system			
4	1	September	2022	The Caribbean	English		Possible ways to address the illegal trade of controlled substances by the Montreal Protocol	60 min	15	60
5	1	November	2022	Latin America and the Caribbean	Portuguese/Spanish/English	Environmentally Sound Management and Disposal of ODS in Brazil	240 min	No data available	No data available	

* Type

Informative
Exchange of experiences and lessons learned
Good practices or new technologies

ANNEX 2: Tables related to the Performance Indicators

1. Performance Indicator 1: MYAs

Multi-year agreements submitted in 2022 are listed in the following table.

Country	Title
Barbados	Stage II HPMP
Bangladesh	Stage II HPMP
Costa Rica	Stage II HPMP
China	Stage II HPMP
India	Stage II HPMP
India	Stage III HPMP
Iran	Stage II HPMP
Peru	Stage II HPMP
South Sudan	Stage I HPMP

2. Performance Indicator 2: Individual Projects

The number of individual projects approved in 2022 are listed in the following table.

MLF Number
BGD/KIP/90/PRP/58
COS/PHA/91/TAS/66
CUB/SEV/90/INS/67
ELS/PHA/91/TAS/45
GEO/PHA/91/TAS/45
GHA/SEV/91/INS/54
GLO/SEV/91/TAS/363
HAI/PHA/91/PRP/26
HAI/SEV/90/INS/25
IDS/SEV/90/INS/219
IRA/SEV/91/INS/263
JAM/PHA/91/TAS/45
KYR/PHA/90/TAS/47
MEX/FOA/90/PRP/198
MEX/REF/90/PRP/199
MOZ/KIP/90/PRP/36
NIR/SEV/91/INS/165
PAN/SEV/90/INS/54
PHI/KIP/91/PRP/109

SRL/SEV/91/INS/61
TUR/KIP/90/PRP/112
ZIM/KIP/91/PRP/66

3. Performance Indicator 3: Funds disbursed

2022 Disbursements	$ 26,245,166

4. **Performance Indicator 4: 2022 ODS phase-out**

Country	Project Title	ODP 2022
Barbados	Stage II HCFC phase-out management plan	
Bangladesh	Stage II HCFC phase-out management plan	8.7
Costa Rica	Stage II HCFC phase-out management plan	3.3
China	Stage II HCFC phase-out management plan	17.8
India	Stage II HCFC phase-out management plan	51.4
India	Stage III HCFC phase-out management plan	136.2
Iran	Stage II HCFC phase-out management plan	6.7
Peru	Stage II HCFC phase-out management plan	4.9
South Sudan	Stage I HCFC phase-out management plan	0.2
		229.2

5. Performance Indicator 5: Projects completed in 2022.

The following 41 projects were completed in 2022.

MLF Number
ANG/PHA/79/INV/19
ARG/SEV/82/INS/188
BGD/SEV/81/TAS/52
BGD/SEV/83/INS/55
BRA/DES/72/DEM/305
BRU/PHA/85/INV/26
BZE/SEV/85/TAS/37
CHI/PHA/81/INV/197
CHI/PHA/85/INV/201
COL/PHA/84/TAS/108
COL/PHA/88/INV/111
COL/SEV/83/INS/106
COS/PHA/84/INV/61
CPR/PHA/85/INV/600
CUB/SEV/83/INS/62
EGY/PHA/79/INV/135

EGY/PHA/79/TAS/132
FIJ/PHA/86/INV/38
GEO/PHA/85/INV/42
GEO/SEV/85/INS/43
GHA/SEV/86/INS/49
GLO/SEV/88/TAS/360
IDS/PHA/76/INV/211
IDS/SEV/84/INS/215
IND/PHA/82/TAS/477
IND/PHA/86/INV/479
IRA/SEV/82/TAS/232
MAL/PHA/77/TAS/183
MAL/PHA/84/TAS/187
MOL/PHA/86/TAS/42
MOL/SEV/85/TAS/41
NEP/PHA/86/INV/44
NIR/PHA/81/TAS/148
NIR/PHA/81/TAS/150
NIR/SEV/86/INS/155
PAN/SEV/84/INS/50
SRL/SEV/86/INS/57
URU/PHA/85/INV/75
URU/SEV/84/INS/74
VEN/SEV/82/INS/136
ZIM/PHA/86/INV/60

7. Performance Indicator 7: Final Revisions

Last year's database counted 76 projects, of which 53 should have been financially completed in 2022. This year's database counts 57 projects for which a final revision was issued in 2022.

8. Performance Indicator 8: PCRs

100% achieved (5 individual PCRs were due and submitted in 2022).

9. Performance Indicator 9

Progress Report produced on 4 September 2023 as required.