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执行蒙特利尔议定书
多边基金执行委员会
第九十七次会议
2025年12月1日至5日，蒙特利尔
临时议程¹项目 7(a)(六)

世界银行截至 2024 年 12 月 31 日的进展报告

导言

1. 本文件提交世界银行截至 2024 年 12 月 31 日的进展报告。²
2. 世界银行的进展报告包含项目执行情况，其中包括在 17 个非第 5 条缔约方提供的额外自愿捐款框架下资助的氢氟碳化物 (HFC) 相关项目，以便为实施《基加利修正案》提供快速启动资助。
3. 秘书处按国家逐一审查了正在进行的各个项目的执行情况，并考虑了相比 2024 年所报告的计划完成日期所出现的执行延误、这些延误对受控物质淘汰以及计划资金发放率的潜在影响。本文件所载分析基于所有受控物质的消耗臭氧潜能值 (ODP) 吨数据，仅有氢氟碳化物以公吨和吨二氧化碳当量计量。³
4. 本文件概述了 2024 年的项目执行进展情况，以及自 1991 年以来的累计进展，涵盖在《蒙特利尔议定书》框架下获常规资金及额外自愿捐款的所有核准项目的受控物质，包括附件 F 物质（氢氟碳化物）。本文件还包含对截至 2024 年 12 月 31 日仍在进行⁴的国家项目执行情况的审查，并识别了执行出现延误的项目及其对受控物质淘汰的潜在影响，

¹ UNEP/OzL.Pro/ExCom/97/1

² 进展报告附于本文件之后。数据已纳入综合进展报告数据库，可登录多边基金官方网站的第九十七次会议页面，在电子表格程序 Microsoft Excel 中获取。

³ 根据第 84/12(a)(四)号决定，以吨二氧化碳当量计量的氢氟碳化物数据已纳入提交至第九十七次会议的进展报告中。

⁴ 正在进行的项目指截至 2024 年 12 月 31 日仍在执行的所有项目。进展的关键指标包括：资金发放比例和已开始发放资金的项目比例；预计在年底前发放的资金占核准资金的百分比；执行中预计延误的平均时长；以及进展报告数据库备注栏中提供的信息。

以及需执行委员会审议的尚存问题项目。由于所有在额外自愿捐款下核准的项目均已完成，且剩余资金将退还秘书处，秘书处将不再单独报告此类项目。

2024 年项目执行进展情况及自 1991 年以来的累计进展情况

5. 截至 2024 年 12 月 31 日，执行委员会已为世界银行核准项目资金共计 13.6 亿美元，包含执行投资和非投资项目的 12.3 亿美元，以及 1.3102 亿美元的机构支助费用，如表 1 所示。

表 1. 世界银行截至 2024 年 12 月 31 日，分行业的已核准供资

行业	供资（美元）
气雾剂	22,984,030
销毁	600,000
能源效率	1,095,689
泡沫	136,059,064
哈龙	70,221,038
氢氟碳化物逐步减少计划	5,665,704
熏蒸剂	5,837,887
多行业	2,341,168
其他	5,059,360
淘汰计划	223,065,129
加工剂	114,342,497
生产	422,973,496
制冷	180,473,484
多重影响	30,181,553
溶剂	10,237,394
消毒剂	661,227
小计	1,231,798,720
机构支助费用	131,018,159
总计	1,362,816,878

6. 2024 年，共有九个新项目及活动获得核准。该资金规模预计将实现淘汰 318,886 消耗臭氧潜能值吨消耗臭氧层物质的生产与消费，以及 759.2 公吨（1,400,833 吨二氧化碳当量）氢氟碳化物消费。附件一列示了 2024 年按国家划分的项目执行情况。

7. 表 2 显示截至 2024 年 12 月 31 日的项目执行情况，包括按项目类型划分的资金发放状况。附件二列示了自 1991 年以来按年份划分的分析信息。

表 2. 截至 2024 年 12 月 31 日，按类型划分的项目执行情况

类型	项目数量*			资金（美元）**			
	已核准	已完成	已完成比例 (%)	已核准	已发放	余额***	已发放比例 (%)
国家方案	29	29	100	1,627,732	1,627,732	0	100
示范	8	8	100	6,172,901	6,172,901	0	100
体制强化 (IS)	50	49	98	10,013,716	9,890,357	123,359	99
投资	659	638	97	1,170,814,855	1,132,471,849	38,343,006	97
项目编制	307	299	97	28,358,320	27,425,716	932,604	97
技术援助	83	80	96	14,505,430	16,580,108	-2,074,678	114

类型	项目数量*			资金（美元）**			
	已核准	已完成	已完成比例 (%)	已核准	已发放	余额***	已发放比例 (%)
培训	4	4	100	305,766	305,766	0	100
总计	1,140	1,107	97	1,231,798,720	1,194,474,428	37,324,292	97

*不包括已关闭和已改变执行机构的项目。

**不包括机构支助费用。

***负余额产生于同一含氢氯氟烃淘汰管理计划 (HPMP) 中不同拨款批次资金余额的分配。

8. 世界银行 2024 年项目与活动执行情况及 1991 年至 2024 年 12 月 31 日的累计执行情况总结如下：

- (a) **淘汰量：**⁵2024 年已淘汰 7,909.2 ODP 吨的臭氧层消耗物质消费量和生产量；⁶另有 748.4 ODP 吨的臭氧层消耗物质消费量和 4,690.0 ODP 吨的臭氧层消耗物质生产量获核准予以淘汰。⁷自 1991 年以来，预计的 318,886 ODP 吨臭氧层消耗物质总淘汰量（包括消费和生产）中，已淘汰 150,322 ODP 吨消费量和 193,943 ODP 吨生产量；同时，预计的 759.2 公吨（相当于 1,400,833 吨二氧化碳当量）氢氟碳化物总消费淘汰量中，已淘汰 8.8 公吨（相当于 12,555 吨二氧化碳当量）。这些数据来自已核准的项目（不包括已取消或已改变执行机构的项目）；
- (b) **发放/核准：**2024 年，共发放 2,644 万美元；根据 2023 年进展报告，计划发放 1,799 万美元，实际发放率为计划发放额的 147%。截至目前，累计已发放 11.9 亿美元，占核准发放总额 12.3 亿美元（不包括机构支助费用）的 97%。2024 年，核准用于执行的金额为 2,428 万美元；
- (c) **成本效益（以消耗臭氧潜能值吨计）：**⁸自 1991 年以来，经核准的投资项目平均成本效益为：实现永久性消费削减的项目为 5.50 美元/千克，生产部门项目为 4.77 美元/千克。已完成的投资项目的每消耗臭氧潜能值吨平均成本效益为 3.24 美元/千克，在建投资项目为 6.92 美元/千克；⁹
- (d) **已完成项目数量：**2024 年共完成 7 个项目。自 1991 年以来，在获核准的 1,140 个项目中（不含已关闭或已改变执行机构的项目），共完成 1,107 个项目，完成率为 97%；
- (e) **投资项目交付速度：**2024 年完成的项目平均在核准后 50 个月内完成。自 1991 年以来，投资项目平均在核准后 40 个月内完成。这些项目首次资金发

⁵ 臭氧层消耗物质的淘汰量以消耗臭氧潜能值 (ODP) 吨表示，氢氟碳化物的淘汰量以公吨和二氧化碳当量吨表示。

⁶ 其中包括 1,962.2 消耗臭氧潜能值吨的臭氧层消耗物质消费量和 5,947.0 消耗臭氧潜能值吨的消耗臭氧层物质生产量。2024 年未产生与氢氟碳化物项目相关的淘汰。

⁷ 2024 年未核准任何与氢氟碳化物项目相关的淘汰量。

⁸ 包括 759.2 公吨的氢氟碳化物相关项目。由于获批项目数量有限，未包含二氧化碳当量的成本效益数据。

⁹ 正在执行的项目成本效益值较高，主要归因于含氢氯氟烃的臭氧消耗潜能值较低，同时也与各机构分配淘汰任务的方式有关。

放平均在核准后 24 个月内进行。

- (f) **非投资项目交付速度：**2024 年完成的项目平均在核准后 12 个月内完成。自 1991 年以来，非投资项目平均在核准后 35 个月内完成。这些项目首次资金发放平均在核准后 21 个月内进行；
- (g) **项目编制：**截至 2024 年底核准的 307 个项目编制活动中，已有 299 个完成，目前仍有 8 个活动正在进行中。2024 年共完成 1 个项目编制活动；
- (h) **执行延误：**截至 2024 年底，共有 33 个项目处于执行阶段，平均延迟 8 个月。其中 3 个项目被归类为“执行延误项目”¹⁰，需启动项目取消程序（示范项目、项目编制及执行支持不适用该程序）；
- (i) **多年期协定 (MYA)：**2024 年，共有 3 项含氢氯氟烃淘汰管理计划多年期协定、1 项含氢氯氟烃生产淘汰管理计划 (HPPMP) 多年期协定以及 2 项基加利氢氟碳化物实施计划多年期协定处于执行之中。自 1991 年以来，已核准 43 项多年期协定，其中 37 项已完成，完成率达 86%。

9. 表3总结了自1991年以来世界银行实现的进展。

表 3. 世界银行 1991 年以来实现的进展

已实现的淘汰量		发放资金 (美元)	平均成本效益 (美元/千克)		项目数量		交付完成速度 (月)		平均项目 延误 (月)	多年期协定 数量	
ODP 吨*	吨二氧化碳当量**		消费	生产	已核准	已完成	投资	非投资		已核准	已完成
344,265	12,555	1,194,474,428	5.50	4.77	1,140	1,107	40	35	8	43	37

*消耗臭氧层物质的消费和生产。

** 氢氟碳化物相关项目。

氢氟碳化物相关项目

10. 截至 2024 年 12 月 31 日，执行委员会已核准 25 个氢氟碳化物相关项目，金额为 7,718,987 美元（不包括机构支助费用）。这些项目的现状摘要见表 4，相关数据已包含在第 5 至 9 段中。

表 4. 已核准的氢氟碳化物相关项目

类型	项目数量			资金 (美元) *			
	已核准	已完成	已完成比例 (%)	已核准	已发放	余额	已发放比例 (%)
投资**	11	1	9	5,699,907	183,514	5,516,393	3
项目编制	11	7	64	1,275,000	707,919	567,081	56
技术援助	3	3	100	744,080	744,080	0	100
总计	25	11	44	7,718,987	1,635,513	6,083,474	21

* 不包括机构支助费用。

** 核准淘汰的氢氟碳化物为 759.2 公吨（1,400,833 吨二氧化碳当量）。

¹⁰ 核准的项目在 18 个月后，其资金发放额低于 1%，或在进度报告中拟议的完工日期后 12 个月仍未完成的项目（第 22/61 号决定）。

11. 在 7,718,987 美元累计核准资金总额中，已发放 1,635,513 美元，发放率为 21%。在 11 项编制活动中，已有 7 项完成，其余 4 项预计将于 2025 年和 2026 年完成。所有技术援助项目均已完成。在 11 项投资项目中，有 1 项已完成；其余 10 项投资项目（包括基加利氢氟碳化物实施计划第一阶段的 8 个项目、根据第 91/65 号决定开展的 1 个能源效率试点项目，以及根据第 94/60 号决定开展的 1 个能源效率试点项目）预计将在 2026 年和 2027 年完成。

2024 年项目执行中发现的问题

12. 在审查过程中，多项问题已得到讨论并圆满解决，除与多年期协定组成部分相关的 3 个项目问题外。这些项目被列为执行延误项目，依据第 84/45(c)号决定，需遵循项目取消程序。本文件的附件三列出了被归类为执行延误的项目，以及秘书处提出的要求向第九十八次会议提交报告的相关建议。

13. 此外，还发现了一些与淘汰含氢氯氟烃和氢氟碳化物有关的项目或多年期协定分期拨款部分的问题。这些问题也列于本文件的附件三中。针对每个项目，文件简要说明了执行情况和尚未解决的问题，并提出了供执行委员会审议的建议。

14. 与中国含氢氯氟烃淘汰管理计划相关项目（聚氨酯泡沫行业计划）¹¹的执行进展详情已提交至第九十七次会议。关于这些项目的未决问题（包括如有提出的延期核准申请）的建议，已在相关文件章节中予以说明。对于本文件附件三中未列出的其他正在执行的项目，其未决问题及项目完成日期延期申请，详见下文说明。

15. 在 24 个正在执行的项目中（不包括体制强化和项目编制活动），自 2023 年进展报告以来，已有 5 个项目修订了计划完成日期。

16. 根据第 82/11(b)号决定，¹²世界银行已申请将 1 个项目的执行期限予以延长，如表 5 所示。

表 5. 已申请完成日期延期的项目

国家/项目编码	资金发放率 (%)	需延期的活动	原来完成日期	申请完成日期
受控废弃物物质储库存量的国家清单编制及此类物质的国家管理计划的制定（第 91/66 号决定）				
越南 VIE/DES/93/PRP/94	4	顾问的聘用、数据收集与分析的完成，以及行动计划的制定	12 月 25 日	12 月 26 日

性别主流化¹³

17. 世界银行报告称，2024 年，4 个国家的 19 个项目在活动编制和执行过程中均有性别主流化报告。在基加利氢氟碳化物实施计划和含氢氯氟烃淘汰管理计划项目文件中，已采取措施确保与多边基金和世界银行的性别政策保持一致，以促进性别主流化。已与相关

¹¹ UNEP/OzL.Pro/ExCom/97/44

¹² 任何延期申请均须在项目完成日期之前提交执行委员会核准，并注意在延期核准之前不得作出新的承诺。

¹³ 执行委员会已要求双边和执行机构在其年度进展报告中，基于其掌握的信息，就截至 2023 年的关键性别主流化成果提供简要报告（第 90/48(d)号决定）。

国家利益相关方进行了磋商，以适当纳入性别主流化考虑。马来西亚和越南的相关执行机构已同意在基加利氢氟碳化物实施计划和含氢氯氟烃淘汰管理计划项目活动中监测女性参与情况。泰国国家臭氧机构系统性地监测其组织的研讨会、利益相关方磋商和公共活动中女性和男性的参与情况（在可行范围内），以确保包容性并监测进展。中国对外经济合作办公室收集其管理下所有活动的分性别数据，包括研讨会、培训课程和利益相关方磋商，并促进女性在技术和决策岗位上的参与。印度尼西亚在 2024 年开始的基加利氢氟碳化物实施计划准备工作过程中，积极考虑了女性参与情况。参与项目的企业承诺在各级提供平等的就业机会，并同意在项目执行期间持续报告女性与男性就业比例。

建议

18. 谨建议执行委员：

- (a) 注意到 UNEP/OzL.Pro/ExCom/97/16 文件中世界银行截至 2024 年 12 月 31 日的进展报告；
- (b) 核准将越南受控废弃物质储库存量国家清单编制及此类物质（第 91/66 号决定）的国家管理计划 (VIE/DES/93/PRP/94) 制定的完成日期延长至 2026 年 12 月，以便完成文件 UNEP/OzL.Pro/ExCom/97/16 的表 5 所示的剩余正在进行的活动；
- (c) 核准与本文件附件三中列示的存在特定问题的正在执行项目相关的建议。

附件一

2024 年世界银行项目按国家划分的执行情况概览

1. 附件一的表 1 列示了 2024 年按国家划分的项目执行情况，包括已实现的淘汰量、资金的计划发放额与实际发放额以及项目完成情况。

表 1. 2024 年世界银行项目执行情况

国家	2024 年淘汰量 (ODP 吨) *	2024 年淘汰量 (吨二氧化碳当量) *	2024 年预计 资金发放额 (美元)	2024 年资金 发放额 (美元)	2024 年实际 发放资金占预计 资金比例	2024 年 计划项目 完成比例**
中国	7,834.3	0	15,050,000	24,547,213	163	100
印度尼西亚	32.3	0	150,000	132,919	89	
约旦	42.6	0	732,704	753,459	103	75
马来西亚	0.0	0	84,905	56,905	67	
泰国	0.0	0	1,904,772	948,439	50	
越南	0.0	0	65,000	4,746	7	
全世界***	0.0	0	0	0		100
总计	7,909.2	0	17,987,381	26,443,681	147	86

* 包括 1,962.2 消耗臭氧潜能值吨消费量和 5,947.0 消耗臭氧潜能值吨生产量的消耗臭氧层物质。2024 年无氢氟碳化物相关项目的淘汰量。

** 针对计划 2024 年完成的项目。

*** 2024 核心单位。

附件二

截至 2024 年 12 月 31 日的世界银行项目按年份划分的执行情况概览

1. 附件二的表 1 展示按年份划分的项目执行情况概览。¹1991 年至 2017 年、2019 年及 2020 年核准的所有项目和活动现已完成。

表 1. 年度项目执行情况

年份	项目数量*			供资（美元）**			
	已核准	已完成	已完成比例 (%)	已核准	已发放	余额	已发放比例 (%)
1991	42	42	100	5,429,404	5,429,404	0	100
1992	76	76	100	28,047,705	28,047,705	0	100
1993	79	79	100	42,538,405	42,538,405	0	100
1994	91	91	100	41,081,267	41,081,267	0	100
1995	112	112	100	47,224,186	47,224,186	0	100
1996	55	55	100	29,319,479	29,319,479	0	100
1997	95	95	100	56,173,102	56,173,103	-1	100
1998	59	59	100	35,959,418	35,959,417	1	100
1999	73	73	100	64,173,138	64,173,138	0	100
2000	67	67	100	36,982,134	36,982,133	1	100
2001	29	29	100	55,212,853	55,212,854	-1	100
2002	32	32	100	64,357,778	64,357,778	0	100
2003	24	24	100	72,734,119	72,734,119	0	100
2004	29	29	100	77,111,770	77,111,770	0	100
2005	28	28	100	68,592,865	68,592,865	0	100
2006	22	22	100	64,473,260	64,473,260	0	100
2007	25	25	100	66,005,270	66,005,270	0	100
2008	28	28	100	39,934,666	39,934,666	0	100
2009	22	22	100	25,529,554	25,529,554	0	100
2010	16	16	100	1,148,623	1,148,623	0	100
2011	10	10	100	44,201,956	44,335,997	-134,041	100
2012	10	10	100	11,698,145	11,698,145	0	100
2013	7	7	100	43,736,999	43,602,958	134,041	100
2014	13	13	100	28,336,509	28,336,509	0	100
2015	13	13	100	62,990,648	62,990,648	0	100
2016	18	18	100	12,601,632	12,601,632	0	100
2017	6	6	100	2,202,713	2,202,713	0	100
2018	8	5	63	26,839,050	26,546,080	292,970	99
2019	3	3	100	2,579,179	2,579,179	0	100
2020	2	2	100	2,067,012	2,067,012	0	100
2021	7	6	86	9,608,235	9,562,359	45,876	100
2022	7	6	86	22,867,594	22,666,881	200,713	99
2023	23	4	17	15,764,363	3,255,320	12,509,043	21
2024	9	0	0	24,275,689	0	24,275,689	0
总计	1,140	1,107	97	1,231,798,720	1,194,474,428	37,324,292	97

*不包括已关闭和已改变执行机构的项目。

**不包括机构支助费用。

¹ 数据按照项目获得执行委员会核准的年份进行排列。所有核准项目（投资项目和非投资项目）一律同等对待（即一个 100 万美元的投资项目或多年期协定的资金拨款视为一个项目，与一个 30,000 美元的国家方案编制项目相同）。按年份划分的概览的关键指标包括：已完成项目比例、淘汰的消耗臭氧潜能值吨/吨二氧化碳当量数，以及已发放资金比例。发放资金分三类：执行期间发放、执行后发放，以及追溯性资助项目发放。

附件三

世界银行进展报告中存在未解决问题的正在执行项目

国家/项目编码	项目名称	资金发放比例 (%)	情况/存在问题	建议
泰国 THA/PHA/92/INV/181	含氢氯氟烃淘汰管理计划（第二阶段，第二次拨款）（项目管理机构）	100	延误 12 个月	鉴于第 77/8(j)号决定，要求世界银行就该执行延误项目向第九十八次会议提交报告
泰国 THA/PHA/92/INV/182	含氢氯氟烃淘汰管理计划（第二阶段，第二次拨款）（制冷修行业）	40	延误 12 个月	要求世界银行就该执行延误项目向第九十八次会议提交报告
泰国 THA/PHA/92/INV/183	含氢氯氟烃淘汰管理计划（第二阶段，第二次拨款）（喷涂泡沫制造行业）	0	延误 12 个月和 18 个月	要求世界银行就该执行延误项目向第九十八次会议提交报告
越南 VIE/KIP/93/INV/90	基加利氢氟碳化物实施计划（第一阶段，第一次拨款）（工业制冷行业）	0	因行政事务及该国政府 审批导致的延误	要求世界银行就执行进度和资金发放向第九十八次会议提交情况报告
越南 VIE/KIP/93/INV/91	基加利氢氟碳化物实施计划（第一阶段，第一次拨款）（铁路移动空调改造）	0		
越南 VIE/KIP/93/INV/95	基加利氢氟碳化物实施计划（第一阶段，第一次拨款）（维修行业）	0		
越南 VIE/KIP/93/INV/96	基加利氢氟碳化物实施计划（第一阶段，第一次拨款）（项目管理机构）	0		
越南 VIE/PHA/93/INV/92	含氢氯氟烃淘汰管理计划（第三阶段，第一次拨款）（项目管理机构）	0		
越南 VIE/PHA/93/INV/93	含氢氯氟烃淘汰管理计划（第三阶段，第一次拨款）（维修行业）	0		



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ANNUAL PROGRESS REPORT

BANK-IMPLEMENTED
MONTREAL PROTOCOL OPERATIONS

January - December 2024

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I. PROJECT APPROVALS AND DISBURSEMENTS

A. Annual Summary Data

1. Implementation of World Bank Multilateral Fund (MLF) activities continue to advance in the calendar year 2024. Cumulative ODP consumption and production phaseout is approximately 344,264 metric tonnes (MT). Over 100 percent of the total ODP to be phased out through World Bank conversion and closure projects has been achieved. Cumulative disbursement for the entire World Bank portfolio is over US\$1.19 billion. The nine new approvals by the MLF have increased the cumulative number of project activities approved to a net 1,135 (excluding transfers and closed activities). The number of ongoing multi-year projects in the Bank's portfolio, all HCFC phaseout projects, is six total by end 2024.
2. Implementing Agency performance is measured by a set of eight weighted performance indicators in accordance with Executive Committee Decision 71/28. The "funds disbursed" implementation indicator was more than met by 145% given that the target set in the Bank's 2022 Progress Report is US\$18.16 million but actual disbursement surpassed that target, reaching US\$ 26.4 million.
3. In 2024, two annual plans were submitted out of four targeted in the approved table of 2024 performance targets set for the World Bank. The target was reached by 50 percent. Regarding the ODP phaseout target which is now covered in one "implementation" indicator (with the most weighting) the World Bank phase-out per the Multilateral Fund (MLF) Secretariat's methodology was 7,876.9 ODP MT as compared to the set target of 5,446.1 ODP MT. This includes the Production sector phase out of 5,947 ODP MT in 2024. There were also no stand-alone investment projects for additional phaseout in 2024. World Bank performance for the three implementation indicators is highlighted in Section IV of this annual report.
4. The World Bank met all three "administrative" indicators for 2024. The 2024 Progress Report was submitted on time and 100% of 2023 project activities that completed financially were done so within 12 months.
5. According to Decision 41/93, the MLF Secretariat was requested to continue to monitor traditional indicators of performance on the basis of trend analysis. These indicators include value of projects approved, cost of project preparation, cost-effectiveness, distribution of projects among countries, speed of first disbursement, and speed of completion. The 2024 outcomes in relation to these traditional indicators are also provided in Section IV.

Table I-1: Annual Summary

Year Approved	Number of Approvals*	Number Completed	Per Cent Completed	Consumption to be Phased Out*	Consumption Phased Out*	Per Cent of Consumption Phased Out	Production to be Phased Out*	Production Phased Out*	Per Cent of Production Phased Out	Approved Funding plus Adjustment (US\$)	Funds Disbursed (US\$)	Per Cent of Funds Disbursed	Balance (US\$)	Estimated Disbursement in Current Year (US\$)	Support Costs Approved (US\$)	Support Cost Adjustments (US\$)
1991	42	42	100%	537	600	112%	0	0	0%	5,429,404	5,429,404	100%	0	0	820,000	-534,564
1992	76	76	100%	18,442	18,276	99%	0	0	0%	28,047,705	28,047,705	100%	0	0	1,347,550	-396,573
1993	79	79	100%	2,470	3,054	124%	0	0	0%	42,538,405	42,538,405	100%	0	0	1,179,000	-276,805
1994	91	91	100%	8,894	9,178	103%	1,200	1,200	100%	41,081,267	41,081,267	100%	0	0	1,418,963	113,858
1995	112	112	100%	3,648	3,565	98%	0	0	0%	47,224,186	47,224,186	100%	0	0	5,478,735	-764,882
1996	55	55	100%	3,610	3,312	92%	0	0	0%	29,319,479	29,319,479	100%	0	0	4,465,748	-621,458
1997	95	95	100%	7,343	17,257	235%	0	11,739	0%	56,173,102	56,173,103	100%	-1	0	8,100,603	-1,156,010
1998	59	59	100%	8,837	8,783	99%	5,970	5,826	98%	35,959,418	35,959,417	100%	1	0	4,804,456	-501,628
1999	73	73	100%	9,858	8,128	82%	5,970	5,970	100%	64,173,138	64,173,138	100%	0	0	6,207,035	325,317
2000	67	67	100%	2,978	3,260	109%	8,802	8,793	100%	36,982,134	36,982,133	100%	1	0	3,744,867	-182,406
2001	29	29	100%	6,067	6,067	100%	8,393	8,384	100%	55,212,853	55,212,854	100%	-1	0	4,482,836	564,673
2002	32	32	100%	6,529	6,699	103%	7,443	7,443	100%	64,357,778	64,357,778	100%	0	0	7,174,302	-69,512
2003	24	24	100%	3,966	3,978	100%	7,421	7,421	100%	72,734,119	72,734,119	100%	0	0	7,029,910	252,991
2004	29	29	100%	4,451	4,468	100%	16,065	16,065	100%	77,111,770	77,111,770	100%	0	0	7,369,146	84,125
2005	28	28	100%	19,359	23,049	119%	46,273	46,342	100%	68,592,865	68,592,865	100%	0	0	7,381,049	-597,245
2006	22	22	100%	1,260	1,260	100%	18,444	18,444	100%	64,473,260	64,473,260	100%	0	0	6,490,404	-139,971
2007	25	25	100%	2,989	2,989	100%	17,115	17,115	100%	66,005,270	66,005,270	100%	0	0	6,860,290	-442,016
2008	28	28	100%	5,952	5,952	100%	20,593	20,593	100%	39,934,666	39,934,666	100%	0	0	4,834,395	-278,146
2009	22	22	100%	14,036	14,036	100%	7,503	7,503	100%	25,529,554	25,529,554	100%	0	0	3,564,606	-520,075
2010	16	16	100%	502	674	134%	0	0	0%	1,148,623	1,148,623	100%	0	0	1,868,548	-458,586
2011	10	10	100%	81	812	998%	0	0	0%	44,201,956	44,335,997	100%	-134,041	0	5,099,184	-61,841
2012	10	10	100%	168	168	100%	0	0	0%	11,698,145	11,698,145	100%	0	0	2,765,746	-629,040
2013	7	7	100%	377	377	100%	0	1,058	0%	43,736,999	43,602,958	100%	134,041	0	3,203,077	936,084
2014	13	13	100%	127	127	100%	0	0	0%	28,336,509	28,336,509	100%	0	0	3,387,443	-412,129
2015	13	13	100%	548	548	100%	0	2,912	0%	62,990,648	62,990,648	100%	0	0	5,913,456	-455,275
2016	18	17	94%	255	735	288%	0	0	0%	12,601,632	12,601,632	100%	0	0	2,682,573	-133,222
2017	3	3	100%	71	71	100%	0	0	0%	1,651,291	1,651,291	100%	0	0	2,055,676	-212,026
2018	7	3	43%	33	0	0%	0	1,188	0%	26,408,870	25,786,875	98%	621,995	578,661	3,261,620	-43,894
2019	3	2	67%	19	0	0%	0	0	0%	2,579,179	2,141,404	83%	437,775	437,775	1,958,493	-486,154
2020	2	2	100%	809	809	100%	0	0	0%	2,067,012	2,067,012	100%	0	0	1,879,691	-260,155
2021	7	6	86%	1,930	1,934	100%	0	0	0%	9,608,235	9,562,359	100%	45,876	45,876	2,413,150	-285,698
2022	7	6	86%	98	110	112%	5,947	5,947	100%	22,867,594	22,666,881	99%	200,713	19,900	3,078,735	-121,241
2023	23	4	17%	817	0	0%	0	0	0%	15,764,363	3,255,320	21%	12,509,043	4,170,793	3,063,551	-11,900
2024	9	0	0%	748	0	0%	4,690	0	0%	24,275,689	0	0%	24,275,689	18,693,138	3,336,343	0
Total	1,135	1,102	97%	137,807	150,321	109%	181,829	193,943	107%	1,230,817,118	1,193,492,826	97%	37,324,292	23,145,194	138,721,181	-7,775,405
*Excludes Closed and Transferred Projects Includes Project Preparation																

B. Summary of Data by Project Type (CPG, DEM, INS, INV, PRP, TAS, TRA)

6. Table I-2 summarizes the entire portfolio of World Bank project approvals, adjustments, and disbursements by type of project or activity. As can be seen from the table, the major proportion of the Bank's approved funding to date has gone for investment projects, US\$1,292,410,455. The amounts that have been allocated for demonstration projects and institutional strengthening are US\$11,439,764 and US\$10,258,378, respectively.

Table I-2: Summary of Data by Project Type

Type	Number of Approvals*	Number Completed	Per Cent Completed	Approved Funding (US\$)	Adjustment (US \$)	Funds Disbursed (US \$)	Per Cent of Funds Disbursed	Balance (US\$)	Estimated Disbursement In Current Year (US \$)
Country Programme Preparation	29	29	100%	2,383,906	-756,174	1,627,732	100%	0	0
Demonstration Projects	8	8	100%	11,439,764	-5,266,863	6,172,901	100%	0	0
Institutional Strengthening Projects	50	49	98%	10,258,378	-244,662	9,890,357	99%	123,359	45,876
Investment Projects	658	637	97%	1,213,192,037	-42,560,696	1,132,288,335	97%	38,343,006	22,528,237
Project Preparation	306	298	97%	36,715,595	-8,387,275	27,395,716	97%	932,604	541,081
Technical Assistance Projects	80	77	96%	17,227,529	-3,490,187	15,812,020	115%	-2,074,678	30,000
Training Projects	4	4	100%	1,193,246	-887,480	305,766	100%	0	0
GRAND TOTAL	1,135	1,102	97%	1,292,410,455	-61,593,337	1,193,492,826	97%	37,324,292	23,145,194

*Excludes Closed and Transferred Projects.

C. Multi-year Agreements

7. As of the end of 2024, a total of six multi-year projects is ongoing under the World Bank as a Multilateral Fund Implementing Agency (IA), including China HPPMP II, HPMP II; Thailand HPMP II; Vietnam HPMP III, KIP I; and Malaysia KIP I.

8. In addition to its role in leading implementation for 36 of the 45 the cumulative multi-year projects approved (including national and sector plans), the World Bank was, and continues to be a Cooperating Agency in China for the Stage II HCFC Phase-out Management Plan (HPMP) with UNDP as the Lead Agency. The World Bank was also a Cooperating Agency for the Indonesia Stage II HPMP, which completed activities in December 2023, with UNDP as the Lead Agency. The total value of Stage I HPMPs and sector plans in the Bank's portfolio was more than US\$206 million, excluding returns and transfers. New, Stage I Kigali Implementation Plans (KIPs) approved in December 2023 increased the total value of multiyear projects by another US\$22 million. No new multiyear projects were approved for the Bank in 2024.

9. Although fully funded, some projects continued to be active in terms of reporting requirements. Decision 56/13 required that sector plans in the foam, halon and CFC production sectors in China be tracked until the full utilization of the remaining balances. In accordance with Decision 56/13, the World Bank continued to cooperate with China on monitoring the ongoing implementation of sector plan activities through 2019 despite that the grant agreement (ODS IV) under which these sector plans fall closed on June 30, 2013. In 2020, China submitted through the Bank a financial audit report confirming that all sector plans were physically and financially completed. Associated savings of \$8.7 million for the last remaining sector plan (halon) that completed end-2019 was returned by China according to Decision 87/24 in March 2022 through the World Bank.

10. The Bank and its partner countries are nearly completed with the second phase of HPMP implementation with ongoing implementation of only one Stage II HPMP in Thailand, one Stage II foam sector plan in China and the China Stage II HCFC Production Phase-out Management Plan (HPPMP) approved at the 86th Executive Committee meeting. Two multi-year projects target HCFC-141b consumption and/or use in imported pre-blended polyol (China and Thailand HPMPs). The Thailand HPMP is addressing remaining HCFC-141b consumption in spray foam as well as tackling the servicing sector. It was extended through Executive Committee decision in 2024. In June 2024, the Jordan Stage II HPMP on PU foam was physically completed.

11. There are ongoing multi-year activities in the World Bank's active HCFC phase-out portfolio worth a total of US\$ 62.5 million as of the end of the 95th Meeting of the Executive Committee. There were two approved MYAs for Malaysia and Viet Nam that focus on HFC phasedown and which will start implementation once Grant Agreements are in place. At the 84th Meeting of the Executive Committee, Decision 84/69 introduced a significant cut to China's overall Stage II HPMP, reducing in value the US\$141 million polyurethane foam sector plan by more than half. At the 86th Meeting, the Committee agreed to the revised Stage II HPMP for China which resulted in a reduction by \$113 million for the PU foam sector. The revised sector plan figure now totals \$28.3 million as per Decision 86/39. In 2021, the Committee agreed through a multi-year agreement to a reduced amount of funding for China's Stage II HPPMP at a total \$67 million including \$23 million already released in 2018 as bridging funds.

12. In 2024, two tranche implementation progress reports were approved for the third and final tranche of the Stage II HCFC production phase-out management plan in China and the fifth tranche of the Stage II HCFC phase-out management plan for PU Foam also in China, cumulatively worth a total US\$23 million. These funds released by the Executive Committee in 2024 will support China (and indirectly other Article 5 countries) to meet the 2025 67.5% reductions in HCFC consumption and production.

13. All World Bank partner countries currently implementing multi-year projects appear to have met their annual consumption and production targets for the 2024 calendar year based on verified and unverified data as of report writing. In addition, these countries have maintained the total phaseout from previous agreements, also according to preliminary information. Table I-3 presents a summary of multi-year agreements for projects under World Bank implementation. Additional country information is also found in Annex I of this report.

Table I-3. Multi-Year Projects

Country	Sector Plan/National ODS Phase-Out Plan	Date Approved	Actual Date of Completion	Funds Committed by ExCom (US\$)	Funds Released including Present Year by ExCom (US\$)	Funds Disbursed (US\$)	Total ODP Consumption to be Phased-out for the Plan	ODP Consumption Allowed for the Reporting Year*	Actual ODP Consumption for Reporting Year*	Total ODP Production to be Phased-out for the Plan*	ODP Production Allowed for the Reporting Year*	Actual ODP Production for Reporting Year*
Antigua Barbuda	CFC phase-out management plan	Dec-04	Dec-11	97,300	97,300	62,987	1.80	-	-	-	-	-
Argentina	CFC production closure plan	Nov-02	Dec-09	10,600,000	10,600,000	10,600,000	-	-	-	3,020	-	-
Argentina	National CFC phase-out plan	Nov-05	Dec-13	500,000	500,000	236,630	1.50	-	-	-	-	-
Argentina	HCFC phase-out management plan (stage I, first tranche)	Apr-12	Jun-18	914,612	914,612	914,612	18.46	-	-	-	-	-
Bahamas	Terminal CFC Phaseout Plan for The Bahamas	Dec-01	Jan-09	560,000	560,000	530,946	66	-	-	-	-	-
Chile	Phase-out of all the remaining uses of methyl bromide in soil application pest control	Apr-05		2,547,156	691,703	-	136.3	-	-	-	-	-
China	Halon Sector	Nov-97	Dec-11	62,000,000	62,000,000	62,000,000	24,480	-	-	30,060	-	-
China	CFC Production Sector	Mar-99	Dec-10	150,000,000	150,000,000	150,000,000	-	-	-	44,931	-	-
China	Foam Sector	Dec-01	Dec-10	53,846,000	53,846,000	53,846,000	14,143	-	-	-	-	-
China	TCA Sector	Jul-04	Nov-10	2,100,000	2,100,000	2,100,000	-	-	-	113	-	-
China	CTC/PA Sector Phase I	Nov-02	Dec-11	65,000,000	65,000,000	65,000,000	11,160	-	-	52,162	-	-
China	CTC/PA Sector Phase II	Nov-05	Jul-10	46,500,000	46,500,000	46,500,000	6,945	-	-	-	-	-
China	HCFC phase-out management plan (PU rigid foam sector plan) (Stage I)	Jul-11	Jun-19	73,000,000	73,000,000	73,000,000	1,615	-	-	-	-	-

Country	Sector Plan/National ODS Phase-Out Plan	Date Approved	Actual Date of Completion	Funds Committed by ExCom (US\$)	Funds Released including Present Year by ExCom (US\$)	Funds Disbursed (US\$)	Total ODP Consumption to be Phased-out for the Plan	ODP Consumption Allowed for the Reporting Year*	Actual ODP Consumption for Reporting Year*	Total ODP Production to be Phased-out for the Plan*	ODP Production Allowed for the Reporting Year*	Actual ODP Production for Reporting Year*
China	HCFC phase-out management plan (PU rigid foam sector plan) (stage II)	Dec-16 Dec-20 (revised)		28,312,039	9,112,039	9,112,039	4,449.6	2,965.7		-	-	-
China	HCFC production phase-out mgmt plan (stage I)	Apr-13	Dec-18	95,000,000	95,000,000	91,256,301	-	-	-	3,970	26,210	
China	HCFC production phase-out management plan (stage II.)	Dec-20	-	67,000,000	45,000,000	23,000,000				14,450	18,929	
Ecuador	National CFC phase-out plan	Dec-03	Sep-09	1,194,471	1,194,471	1,194,471	246.00	-	-	-	-	-
India	CFC production sector gradual phase-out project	Nov-99	Nov-11	82,000,000	82,000,000	82,000,000	-	-	-	22,588	-	-
India	Accelerated CFC Production Phaseout	4/1/2008 (in principle)	Mar-14	3,169,900	3,169,900	3,169,900	-	-	-	690	-	-
India	CTC phase-out plan for the consumption and production sectors	Jul-03	Mar-14	38,100,954	38,100,954	37,629,080	11,505.00	-	-	11,553	-	-
Indonesia	Phase-out of residual CFCs in the foam sector	Apr-04	Jun-10	2,957,564	2,957,564	2,957,564	352.00	-	-	-	-	-
Indonesia	Refrigeration sector phase-out plan: MAC servicing sector	Nov-02	Mar-10	4,317,000	4,317,000	4,317,000	915.00	-	-	-	-	-
Indonesia	National strategy for phasing out use of CFC in aerosol sector: Policies and actions, technical assistance, and enterprise investment initiatives	Dec-04	Jun-10	371,910	371,910	371,910	70.00	-	-	-	-	-
Indonesia	HCFC Phase Out Plan (Stage I): Foam Sector Plan	Jul-11	Dec-19	2,714,187	2,714,187	2,134,725	34.10	n/a	n/a	-	-	-
Indonesia	HCFC Phase Out Plan (Stage II): Foam Sector Plan	May-16		4,255,163	4,255,163	3,260,154	42.70	n/a	n/a	-	-	-

Country	Sector Plan/National ODS Phase-Out Plan	Date Approved	Actual Date of Completion	Funds Committed by ExCom (US\$)	Funds Released including Present Year by ExCom (US\$)	Funds Disbursed (US\$)	Total ODP/tCO ₂ eq. Consumption to be Phased-out for the Plan	ODP/tCO ₂ eq. Consumption Allowed for the Reporting Year*	Actual ODP/tCO ₂ eq. Consumption for Reporting Year*	Total ODP Production to be Phased-out for the Plan*	ODP Production Allowed for the Reporting Year*	Actual ODP Production for Reporting Year*
Jordan	HCFC Phase Out Plan (Stage I): Air-conditioning Sector Plan	Nov-11	Dec-19	1,070,100	1,070,100	959,300	16.78	n/a	n/a	-	-	-
Jordan	HCFC Phase Out Plan (Stage II)	Dec-16		2,075,236	2,075,236	730,145	29.2	41.50	-	-	-	-
Mexico	National CFC phase-out plan: Chiller Subsector	Apr-05	Feb-06	500,000	500,000	500,000	-	-	-	-	-	-
Malaysia	National CFC phaseout plan	Dec-01	Dec-10	11,517,005	11,517,005	11,441,013	1,910.51	-	-	-	-	-
Malaysia	Kigali HFC Implementation Plan (Stage I)	Dec-23	Dec-26	9,275,115	3,042,940	-	2,670,372	26,703,717	-	-	-	-
Philippines	National CFC phase out plan	Nov-02	Jun-11	8,381,671	8,381,671	8,381,671	2,017.60	-	-	-	-	-
Philippines	HCFC Phase Out Plan (Stage II)	Nov-17	May-19	2,750,057	1,010,023	-	24.59	-	-	-	-	-
Thailand	National CFC phaseout plan	Dec-01	Dec-13	14,728,626	14,728,626	12,638,243	3,107.52	-	-	-	-	-
Thailand	National methyl bromide phase-out plan	Dec-04	Dec-13	2,901,600	2,901,600	1,668,733	241.80	-	-	-	-	-
Thailand	HCFC phase-out management plan (stage I)	Dec-12	Dec-18	22,749,072	17,805,665	16,623,996	219.54	788.46	-	-	-	-
Thailand	HCFC phase-out management plan (stage II)	Dec-18		3,791,077	3,616,532	1,068,284	20.4	354.74	-			
Tunisia	National ODS phase-out plan	Jul-06	Jun-12	429,877	429,877	429,877	342.00	-	-	-	-	-
Turkey	CFC Phase-out plan for Turkey	Dec-01	Apr-08	9,000,000	9,000,000	8,565,903	977.00	-	-	-	-	-

Country	Sector Plan/National ODS Phase-Out Plan	Date Approved	Actual Date of Completion	Funds Committed by ExCom (US\$)	Funds Released including Present Year by ExCom (US\$)	Funds Disbursed (US\$)	Total ODP /tCO ₂ eq. Consumption to be Phased-out for the Plan	ODP/tCO ₂ eq. Consumption Allowed for the Reporting Year*	Actual ODP//tCO ₂ eq. Consumption for Reporting Year*	Total ODP Production to be Phased-out for the Plan*	ODP Production Allowed for the Reporting Year*	Actual ODP Production for Reporting Year*
Venezuela	Phased reduction and closure of the entire CFC production	Dec-04	Nov-09	16,500,000	16,500,000	16,500,000	-	-	-	4,400	-	-
Viet Nam	National CFC and halon phase-out plan	Apr-05	Dec-10	1,260,000	1,260,000	1,259,448	258.69	-	-	-	-	-
Viet Nam	National phase-out plan for methyl bromide	Nov-06	Dec-14	1,098,284	1,098,284	1,098,284	85.20	-	-	-	-	-
Viet Nam	HCFC phaseout management plan (stage I) (foam sector plan)	Apr-11	Jun-17	9,125,020	9,125,020	8,205,602	140.10	-	-	-	-	-
Viet Nam	HCFC phase-out management plan (stage II)	May-16	Dec-23	14,411,204	6,974,670	5,785,005	55.3	143.78	116.95	-	-	-
Viet Nam	HCFC phase-out management plan (Stage III)	Dec-23	Dec-26	9,220,364	3,227,127	0	143.78	143.78				
Viet Nam	Kigali HFC Implementation Plan (Stage I)	Dec-23	Dec-26	3,593,183	1,557,820	0	1,339,136 tCO ₂ eq	13,991,360	-	-	-	-

*2024

D. Sector Phaseout by Country

1. The Bank implemented several projects that resulted in sector-wide or nation-wide ODS phaseout but which were not projects with multi-year agreements. With one-time funding by the Executive Committee, these projects aimed, nonetheless, to entirely phase out the consumption of ODS through investment activities and policy measures in a sector or country-wide.
2. Three of these projects, the National Transition Strategy to CFC-free Metered Dose Inhalers (MDIs) in Indonesia and the National Methyl Bromide Phaseout Strategy in the Philippines; as well as the Argentina metered dose inhalers (MDIs) project were successfully completed in 2010 and 2014 respectively.
3. The World Bank was also an implementing agency for one other aerosol project, the China Pharmaceutical Aerosol CFC Phaseout project. Completion of the China project had been delayed although all 485 ODP tonnes CFC consumption was eliminated since 2013. The project continued in order to complete training on new substitute specifications, technical assistance activities, market promotion and administration of enterprise conversions and to facilitate approval for the marketing of alternative-based products. In May 2015, the project was declared completed.
4. The World Bank has been actively engaged across a diverse range of sectors, including aerosols, destruction, energy efficiency, foam, halons, fumigants, refrigeration, production, solvents, and sterilant. The Bank is currently expanding its engagement in energy efficiency projects in Malaysia, Indonesia, and Thailand.

Project Completions Since Last Report

5. There were six projects completed during this reporting period (January 1, 2024 to December 31, 2024), in addition to the 2024 core unit budget, which is highlighted in Table II-1 below.

A. ODP Phased Out Since Last Report

6. There were four investment project completions in 2024, and resulting in the phase-out of a total 1929.9 ODP MT. The China HCFC phase-out management plan (stage II, third tranche) in polyurethane rigid foam sector plan phased out 1,887.3 ODP MT and Jordan HCFC phase-out management plan Stage II) phased out 30.6 ODP MT through the three completed tranches.

B. Non-Investment Project Completions Since Last Report

7. Country Programs: There were no new completions in 2024 for country programs.

8. Technical Assistance: There was one new completion in 2024 for the stand-alone technical assistance (TA) activity: Verification of the HCFC production sector in 2024 for producers outside the HPPMP II in China.

9. Institutional Strengthening: There is no completion in 2024 for institutional strengthening project.

10. Project Preparation: There is one new completion in 2024 for the preparation of a pilot project on energy efficiency in the stand-alone commercial refrigeration sector in Malaysia.

11. Training: The World Bank held its 16th Annual East Asia and Pacific (EAP) and Montreal Protocol (MP) Joint Regional Workshop on MP Implementation on March 6-8, 2024 in Yogyakarta, Indonesia.

Table 0-1: Project Completions During Reporting Period

Project Title	Country	Region	Consumption ODP Phased Out	Date Approved	First Disbursement Date	Date Completed (Actual)	Date of Financial Completion	Approved Funding (US\$)	Adjustment (US\$)	Funds Disbursed (US\$)	Per Cent of Funds Disbursed	Balance (US\$)	Funds Committed (US\$)
HCFC phase-out management plan (stage II, third tranche) (polyurethane foam sector plan)	China	ASP	1,887.3	Nov-21	Apr-22	Dec-24		4,000,000	0	4,000,000	100%	0	0
Verification of the HCFC production sector	China	ASP		Dec-23	May-24	Dec-24		50,000	0	50,000	100%	0	0
Core unit budget (2024)	Global	Global		Dec-23		Dec-24		1,947,145	0	1,936,925	99%	10,220	0
HCFC phase-out management plan (stage II, first tranche) (polyurethane foam sector)	Jordan	ASP	10.0	Dec-16	Sep-19	June-24		526,956	0	526,956	100%	0	0
HCFC phase-out management plan (stage II, second tranche) (polyurethane foam sector, project management and coordination)	Jordan	ASP	19.2	Dec-19	Oct-21	June-24		1,013,554	0	1,013,554	100%	0	0
HCFC phase-out management plan (stage II, third tranche)	Jordan	ASP	13.4	Dec-22	Apr-23	June-24		534,726	0	356,214	67%	178,512	0
Total			1,929.9					8,072,381	0	7,883,649	98%	188,732	0

II. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

A. Global Projects

12. The World Bank sole active global project, the Global Chiller Replacement Project, was declared physically and financially completed in 2017. The project's original objective was to replace CFC chillers in China, India, Indonesia, Jordan, Malaysia, the Philippines, and Tunisia. Five countries had embarked on a national chiller replacement project as of the end of 2012 – demonstrating a number of implementation modalities that meet specific needs of the countries.

13. The India Chiller Energy Efficiency Project was declared completed in 2015 and a savings of US\$ 481,628 from the MLF component was returned in 2016 to the 76th Executive Committee Meeting. The Jordan CFC Chiller Replacement Project was physically completed in 2012. The project provided a 30% subsidy to building owners based on a nominal value and all 20 CFC-based chillers targeted were replaced. A total of 4 MT of mixed CFCs were safely recovered after dismantling the chillers that fell directly under the project.

14. The Philippines Energy Efficiency Project received US\$ 1million in MLF funding and US\$ 2.6 million in GEF funding. A total of 38 subgrant agreements (SGAs) were signed that covered the replacement of 72 chillers. The original target of 53 chiller replacements was surpassed by 26%. Cumulative disbursement as of the end of 2016 for the MLF component was US\$ 0.78 million and US\$ 1.78 million for the GEF component. The project was closed on 31 December 2016 and financial completion took place by 30 April 2017. US\$ 222,593 in savings were returned at the 80th Executive Committee Meeting.

15. The Indonesia chiller energy efficiency project, which aimed to bring together US \$3.66 million in GEF funding with US\$1 million from the Global Chiller Replacement Project was canceled in 2013. The allocated MLF funds, along with savings from the Jordan component were returned at the 71st Meeting of the Executive Committee in December 2013.

16. The fifth country included in the Global Chiller Replacement Project was Argentina. In 2016, the project witnessed its first chiller replacements at two separate sites. However, in 2017, the Government of Argentina decided to transfer its ongoing component of the Global Chiller Replacement Project to another Implementing Agency. The transfer of the balance of funds, US\$808,438 was made at the 80th Meeting of the Executive Committee.

17. At its 77th Meeting, the Executive Committee approved terms of reference for evaluation of chiller replacement projects by the Fund Secretariat's Senior Monitoring and Evaluation Officer. Three beneficiary countries of the Global Chiller Replacement Project, Argentina, Jordan, and the Philippines, were visited and evaluated. The findings of the evaluation were presented to the Executive Committee in November 2017.

B. Regional Projects

18. The World Bank has no outstanding regional projects.

III. PERFORMANCE INDICATORS

A. Agency Performance Goals

19. Executive Committee Decision 41/93 requests Implementing Agencies (IAs) to employ nine weighted indicators to assess their annual performance. These indicators are classified as approval, implementation, and administrative indicators. The basis for setting and measuring these indicators are the annual progress reports and annual plans of multi-year projects as implied in the background document to the indicator system, UNEP/OzL.Pro/ExCom/41/80, as well as the IA business plans. In 2013, Decision 71/28 modified the performance indicators which have been used to measure 2024 progress.

20. “Approval” indicators compare projects that received Executive Committee approval against those planned to be delivered as per multi-year agreements (MYAs) and the 2024 Business Plan. For the first approval indicator, which per the Secretariat should include both new (not approved) and existing MYAs, four (4) annual programs were targeted for approval in the 2024 Business Plan. Actual number of tranches forwarded was two (2) associated with the China HPMP (Stage II, fifth tranche, PU Foam) and the China HPPMP (Stage II, third tranche). The second approval indicator, the planned number of new individual projects (stand-alone investment projects, institutional strengthening, technical assistance, and project preparation) for approval was set at four (4) per Decision 93/33. Actual number of approved individual projects are four (4) including, two pilot projects for energy efficiency of stand-alone commercial refrigeration equipment in Malaysia in the context of the HFC phase-down (decision 91/65 and decision 94/60), verification of the newly established HCFC production lines in China, and the 2025 core unit budget.

21. There are three “implementation” indicators. The first implementation indicator measures disbursement performance against that planned in the previous year’s progress report. Based on estimates provided in the approved 2024 Business Plan, the World Bank aspired to disburse US\$18,164,125 and actual disbursement in 2024 was US\$26,409,532, meaning that the target was met by 145%.

22. The second implementation indicator now includes ODS phased out in multi-year agreements, as well as in individual projects. For 2024, the World Bank set the targeted phase-out at 5,466.1 ODP MT, representing the planned phase-out for approved tranches. The actual phase-out achieved was 7,876.9 ODP MT, including consumption and production from ongoing and completed projects.

23. The approach to setting targets creates a target nearly impossible to reach. Preparation and approval always lead to phase-out estimates different than those in the business plans. In addition, the Secretariat has the Agencies prorate phase-out in tranches of proposed MYAs in the business plans, rather than assigning the phase-out according to the year the phase-out is expected to be achieved. Moreover, phase-out, regardless of the value assigned is only claimed when the tranche or activities are completed. The Bank notes that the indicators have been revised at the 93rd Meeting to address this issue in future progress reports (starting for the year 2025).

24. For the third implementation indicator, “project completion vs that planned in the progress report for all activities (excluding project preparation), the target was set at one (1) based on the 2024 Business Plan. In 2024, five projects reached completion: two in China (HPMP Stage II, PU foam, second and third tranches) and three in Jordan (HPMP Stage III, PU foam, first, second, and third tranches).

25. There are three “administrative” indicators. The methodology for setting the target for the first, “Speed of Financial Completion,” was changed through Decision 71/28. Instead of targeting the number of months, “the extent to which projects are financially completed 12 months after project completion” is targeted. Ninety per cent was targeted in the Bank’s 2024 Business Plan. In 2024, 3 of 4 project activities were financially completed within 12 months.

26. There is no PCR to be submitted in 2024, as the Jordan HPMP Stage II was completed in December 2024. The PCR will be due six months later, which is scheduled to submit it by June 2025.

27. The third and final administrative performance target of on-time submission of the 2024 Progress Report was met with submission in agreement with the MLF Secretariat on August 25th, 2025. Table IV-1 summarizes the World Bank’s performance relative to indicators per Decision 88/27 on the Bank’s 2024 Business Plan.

Table III-1: World Bank Performance Goals

Category of Performance Indicator	Item	Weighting	2024 Target*	2024 Actual
Planning/Approval	Number of tranches approved vs. those planned	10	4	2
Planning/Approval	Number of projects/activities approved vs. those planned (including project preparation activities)	10	4	4
Implementation	Funds disbursed (based on estimated disbursement in progress report)	15	US \$18,164,125	US \$26,409,532
Implementation	ODS phased-out for the tranche when the next tranche is approved vs. those planned per business plans	25	5,466.1 ODP tonnes	7,876.9 ODP tonnes
Implementation	Project completion vs. that planned in progress reports for all activities	20	1	6
Administrative	Speed of financial completion vs. that required per progress report completion dates	10	90%	57%
Administrative	Timely submission of project completion reports vs. those agreed	5	0	0
Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On time	Extended by 1-week

* Set by the Fund Secretariat and including tranches of existing MYAs and of *newly* approved and *planned* MYAs

Table III-2: World Bank Indicators of Implementation Progress

Indicator	Measure	Unit	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Delivery Speed	First Disb.	Mos.	27	20	21	24	17	18	18	19	19	21	12	14	14	0
	Last Disb.	Mos.	51	39	50	50	37	61	39	53	45	57	33	28	26	0
Cost Effective	Average	US\$ per Kg ODP	1.82	2.13	2.26	3.01	3.34	3.61	5.46	3.17	0.64	2.57	2.45	0.86	5.26	0.77

Indicator	Measure	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Overall
Delivery Speed	First Disb.	Mos.	27	11	12	6	4	18	9	24	0	12	5	8	4	17	9
	Last Disb.	Mos.	0	0	0	0	0	0	4	0	0	0	21	38	23	36	15
Cost Effective	Average	US\$ per Kg ODP	67.85	64.60	53.74	214.00	19.84	48.54	48.41	20.57	52.04	2.56	4.55	3.85	18.30	6.92	21

28. By end 2024, 21% of funds for these activities had been disbursed. Average number of months from approval to first disbursement is 17 months, and average number of months from approval to planned completion is 58, and average length of delay in project planned completion is 36. Overall cost effectiveness to the fund (US\$/kg.) is \$6.92.

29. The Bank had four (4) cumulative ongoing non-investment projects in 2024. Approved funds plus adjustments are \$1,288,205, and 94% of funds were disbursed. Average number of months from approval to first disbursement is 21 months, and the average number of months from approval to planned completion is 67, and the average length of delay in project planned completion is 18.

B. Cumulative Completed Investment Projects

30. Since 1991, the World Bank's cumulative total of completed investment projects is at 637, resulting in the reduction in consumption of 147,508 ODP tonnes and in production of 186,808 ODP tonnes. Out of a total of US\$1,082,341,980 of approved Multilateral Fund financing for completed projects, 100 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 24, the average number of months from approval to completion has been 40, at an average cost-effectiveness of US\$3.24/kg. These averages include projects both before and after initiation of the umbrella grant agreement approval process.

31. Three investment project activities were completed in 2024. Table IV-3 which follows provides a summary of completed investment projects at both a regional and sectoral level.

Table III-3: Cumulative Completed Investment Projects

Item	Number of Projects	Approved Funds plus Adjustment (US \$)	Per Cent of Funds Disbursed	Consumption Phased Out**	Production Phased Out**	Average Number of Months from Approval to First Disbursement	Average Number of Months from Approval to Completion	Overall Cost-Effectiveness to the Fund (US\$/kg.)
GRAND TOTAL	637	1,082,341,980	100%	147,508	186,808	24	40	\$3.24
Region								
Africa	18	4,874,765	100%	777	0	25	49	\$6.27
Asia & Pacific	473	972,691,699	100%	139,447	179,388	23	41	\$3.05
Europe	36	25,729,361	100%	3,498	0	12	20	\$7.36
Latin America and Caribbean	110	79,046,154	100%	3,787	7,420	30	44	\$7.05
Global	n/a	0	0%	0	0	n/a	n/a	n/a
Sector								
Aerosol	32	22,107,868	100%	20,290	0	27	48	\$1.09
Destruction	0	0	0%	0	0	n/a	n/a	n/a
Energy Efficiency	0	0	0%	0	0	n/a	n/a	n/a
Fire fighting	0	0	0%	0	0	n/a	n/a	n/a
Foam	213	129,688,082	100%	29,594	0	25	42	\$4.38
Fumigants	11	4,208,461	100%	444	0	18	49	\$9.47
Halon	19	68,345,321	100%	38,439	41,958	19	34	\$0.85
HFC phase-down plan	0	0	0%	0	0	n/a	n/a	n/a
Multiple sectors*	4	2,287,376	100%	419	0	28	78	\$5.46
Other	2	5,059,360	100%	404	0	28	41	\$12.52
Phase-out plan	87	202,960,334	99%	25,578	10,988	21	39	\$5.55
Process agent	15	113,830,316	100%	18,663	52,162	8	18	\$1.61
Production	44	354,642,514	100%	0	81,700	10	15	\$4.34
Refrigeration	180	168,890,481	100%	13,075	0	27	47	\$12.92
Solvents	28	9,660,640	100%	562	0	29	27	\$17.18
Sterilant	2	661,227	100%	41	0	16	27	\$16.29
Implementation Characteristics								
Agency Implementation	1	997,959	113%	19	0	29	101	\$52.80
National Implementation	636	1,081,344,021	100%	147,489	186,808	24	40	\$3.23
Disbursement Method								
During Implementation	585	889,201,428	100%	140,631	182,838	24	41	\$2.75
After Implementation	25	11,189,562	100%	1,040	0	32	29	\$10.76
Retroactive Funding	15	7,143,226	100%	851	0	23	1	\$8.40
Country to Final Beneficiaries	12	174,807,764	100%	4,987	3,970	12	54	\$19.52
* No funds are listed for the multiple sector investment project, but are recorded in appropriate sector ** Total phased out for the Fund is ____ includes ____ from completed non-investment projects and ____ from ongoing projects. Note: The sum of each section (Region, Sector, etc.) equals the Grand Total.								

C. Cumulative Completed Non-Investment Projects

32. Since 1991, the World Bank's cumulative total of completed non-investment projects has grown to 168. Out of a total of US\$ 30,549,252 of approved Multilateral Fund financing, 107 percent of funds have been disbursed. The average number of months from approval to first disbursement has been 22; the average number of months from approval to completion has been 35.

Table III-4: Cumulative Completed Non-Investment Projects

Item	Number of Projects	Approved Funds plus Adjustment (US \$)	Per Cent of Funds Disbursed	Average Number of Months from Approval to First Disbursement	Average Number of Months from Approval to Completion
GRAND TOTAL	167	30,360,666	107%	22	35
Region					
Africa	17	2,865,298	100%	24	31
Asia & Pacific	72	18,486,243	111%	18	39
Europe	9	1,632,528	100%	29	43
Latin America and Caribbean	35	4,477,970	100%	27	44
Global	34	2,898,628	100%	22	18
Sector					
Aerosol	5	627,662	100%	17	26
Destruction	1	250,000	100%	17	22
Energy Efficiency	0	0	0%	n/a	n/a
Fire fighting	0	0	0%	n/a	n/a
Foam	5	3,947,421	100%	20	53
Fumigants	5	1,294,425	100%	35	102
Halon	5	1,519,717	100%	50	105
HFC phase-down plan	0	0	0%	n/a	n/a
Multiple sectors	1	53,792	100%	56	58
Other	0	0	0%	n/a	n/a
Phase-out plan	6	2,267,029	193%	27	53
Process agent	0	0	0%	n/a	n/a
Production	2	90,000	100%	5	8
Refrigeration	16	7,583,216	100%	42	62
Several	121	12,727,404	100%	14	25
Solvents	0	0	0%	n/a	n/a
Sterilant	0	0	0%	n/a	n/a
Implementation Characteristics					
Agency Implementation	72	3,556,757	100%	10	15
National Implementation	95	26,803,910	108%	25	50
Disbursement Method					
During Implementation	165	29,359,236	107%	22	35
After Implementation	2	1,001,430	100%	19	39
Retroactive Funding	0	0	0%	n/a	n/a
Country to Final Beneficiaries	0	0	0%	n/a	n/a
Note:					
(1) Per decision 22/11(a)(vi), project preparation is not included as a non-investment project.					
(2) The sum of each section (Region, Sector, etc.) equals the Grand Total.					

D. Cumulative Ongoing Investment Projects

33. The World Bank's cumulative total of ongoing investment projects is 21 (including tranches of multi-year agreements). Out of a total of US\$ 84,542,795 of approved Multilateral Fund financing, 57 percent of funds have been disbursed. The average number of months from approval to first disbursement has been 17, the average number of months from approval to the current expected completion date is 58, with an average cost-effectiveness of US\$ 6.92/kg. The cost-effectiveness value is not representative as it includes approvals for tranches that have no phase-out assigned and calculates ODP, rather than MT of HCFCs. Table IV-5 below summarizes ongoing investment projects at regional and sectoral levels.

Table III-5: Cumulative Ongoing Investment Projects

Item	Number of Projects	Approved Funds plus Adjustment (US\$)	Per Cent of Funds Disbursed	Number of Projects Disbursing	Per Cent of Projects Disbursing	Estimated Disbursement plus Funds Disbursed	Per Cent Funds Expected to be Disbursed by End of 2004	Average Number of Months from Approval to First Disbursement	Average Number of Months from Approval to Planned Completion	Average Length of Delay in Project Planned Completion	Overall Cost-Effectiveness to the Fund (US\$/kg.)*
GRAND TOTAL	21	84,542,795	57%	6	29%	71,013,517	84%	17	58	36	\$6.92
Region											
Africa	0	0	0%	0	0%	0	0%	0	n/a	n/a	n/a
Asia & Pacific	21	84,542,795	57%	6	29%	71,013,517	84%	17	58	36	\$6.92
Europe	0	0	0%	0	0%	0	0%	0	n/a	n/a	n/a
Latin America and Caribbean	0	0	0%	0	0%	0	0%	0	n/a	n/a	n/a
Global	0	0	0%	0	0%	0	0%	0	n/a	n/a	n/a
Sector											
Aerosol	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Destruction	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Energy Efficiency	2	915,689	0%	0	0%	133,138	15%	n/a	n/a	n/a	#DIV/0!
Fire fighting	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Foam	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Fumigants	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Halon	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
HFC phase-down plan	8	4,600,704	0%	0	0%	328,668	7%	n/a	n/a	n/a	\$6.13
Multiple sectors	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Other	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Phase-out plan	8	12,029,189	29%	4	50%	7,954,498	66%	17	50	27	\$14.54
Process agent	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Production	3	66,997,213	67%	2	67%	62,597,213	93%	17	90	72	\$6.30
Refrigeration	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Solvents	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Sterilant	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Implementation Characteristics											
Agency Implementation	10	28,075,133	2%	2	20%	19,530,774	70%	2	36	18	\$5.38
National Implementation	11	56,467,662	85%	4	36%	51,482,743	91%	21	90	63	\$8.07
Disbursement Method											
During Implementation	14	32,987,790	3%	3	21%	21,016,304	64%	24	50	27	\$5.49
After Implementation	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Retroactive Funding	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a
Country to Final Beneficiaries	7	51,555,005	92%	3	43%	49,997,213	97%	13	90	72	\$8.31
Note: The sum of each section (Region, Sector, etc.) equals the Grand Total.											
*Based on the ODS to be phased out according to the proposal.											

E. Cumulative Ongoing Non-Investment Projects

34. The World Bank's cumulative total of ongoing non-investment projects is 4 as captured in the following Table IV-6. Out of a total of US\$ 1,288,205 of approved Multilateral Fund financing, 94 percent of funds have been disbursed. The average number of months from approval to first disbursement has been 21; the average number of months from the date of approval to the current expected completion date is 67.

Table III-6: Cumulative Ongoing Non-Investment Projects

Item	Number of Projects	Approved Funds plus Adjustment (US\$)	Per Cent of Funds Disbursed	Number of Projects Disbursing	Per Cent of Projects Disbursing	Estimated Disbursements plus Funds Disbursed	Per Cent Funds Expected to be Disbursed by End of 2004	Average Number of Months from Approval to First Disbursement	Average Number of Months from Approval to Planned Completion	Average Length of Delay in Project Planned Completion
GRAND TOTAL	4	1,288,205	94%	2	50%	1,288,205	100%	21	67	18
Region										
Africa	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Asia & Pacific	3	1,288,205	94%	2	67%	1,288,205	100%	21	67	24
Europe	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Latin America and Caribbean	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Global	1	0	0%	0	0%	0	0%	n/a	n/a	n/a
Sector										
Aerosol	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Destruction	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Energy Efficiency	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Fire fighting	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Foam	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Fumigants	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Halon	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
HFC phase-down plan	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Multiple sectors	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Other	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Phase-out plan	1	814,470	100%	1	100%	814,470	100%	26	90	54
Process agent	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Production	1	30,000	0%	0	0%	30,000	100%	n/a	n/a	n/a
Refrigeration	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Several	2	443,735	90%	1	50%	443,735	100%	16	43	9
Solvents	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Sterilant	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Implementation Characteristics										
Agency Implementation	2	30,000	0%	0	0%	30,000	100%	n/a	n/a	n/a
National Implementation	2	1,258,205	96%	2	100%	1,258,205	100%	21	67	36
Disbursement Method										
During Implementation	4	1,288,205	94%	2	50%	1,288,205	100%	21	67	18
After Implementation	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Retroactive Funding	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Country to Final Beneficiaries	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Note: (1) Per decision 22/11(a)(vi), project preparation is not included as a non-investment project. (2) The sum of each section (Region, Sector, etc.) equals the Grand Total.										

IV. STATUS OF AGREEMENTS & PROJECT PREPARATION (WHERE APPLICABLE), BY COUNTRY

A. Agreements to be Signed/Executed/Finalized & When They Will be Ready for Disbursing

35. Projects with either new partner countries or with new operational modalities require legal agreements between the country and the World Bank. With Stage II HCFC phaseout project approvals occurring between 2016 and 2018, new grant agreements or amendment of existing agreements were required.

36. New grant agreements for HCFC Phase-out Projects were under processing for Viet Nam and China since 2016 in order to permit disbursements from initial tranches to start from the Bank to the countries for the respective Stage II HPMP and PU Foam Sector Plan. This entailed preparation of concepts, project documents, project implementation manuals (PIMs), environmental and social safeguards framework, procurement plans and other related documentation. Each country has in turn their own processing and approval steps. Because of changes in these steps for certain development assistance projects in each country, approval, negotiation and signing of the grant agreements were delayed.

37. In 2018, the overarching ODS VI Project for the Stage II PU Foam Sector Plan in China and eventually, the HPMP was appraised followed by a period of preparation and approvals of related documents, such as the project implementation manual. The new Grant Agreement (GA) between China and the WB was subsequently approved by Bank management and signed in December 2018. Effectiveness was by mid-2019 and start of disbursement was pushed to the fall of 2019.

38. The finalization of the China-World Bank Stage II GA preceded the Executive Committee's approval of the US\$23 million bridging funds for the HCFC production sector (in June 2018). The GA had to be amended in order to raise the project funding level for the Bank-project component related to production. The amendment was signed by China and the Bank in September 2019, allowing disbursement to start by the last quarter of the year. Now with Decision 86/39 on the revised Stage II HPMP – PU Foam and Decision 86/99 on the new Stage II HPMP, the GA for China will have to be restructured once again to reflect an overall reduced grant level. This process will be initiated in 2021 and expected to be completed by the end of year or early 2022.

39. A new grant agreement was likewise required for the 2018-approved, Thailand Stage II HPMP. World Bank preparation of the new project documents and the Grant Agreement took place in 2019, and the Grant Agreement was subsequently approved by the Bank in January 2020. Grant Agreement signing took place in August 2020, followed by effectiveness in October 2020. Similar to the agreements for China and Viet Nam, the GA provides for retroactive funding of activities implemented between Bank appraisal and GA effectiveness. It has been amended twice to extend project duration.

40. Stage I Kigali HFC Implementation Plans (KIPs) were approved in December 2023 for Malaysia and Viet Nam and require a new Grant Agreement respectively. The Stage III HPMP for Viet Nam, also approved in December, will also be included under the new Grant Agreement between the country and the World Bank. The two new Grant Agreements are under preparation with Malaysia and Viet Nam after incurring some delays in 2024. They are expected to be completed, negotiated, approved, and signed by September and December 2025 respectively.

B. Project Preparation by Country, Approved Amount, and Amount Disbursed

41. By the end of 2024, there were five active World Bank project preparation activities. A list of active World Bank project preparation activities is presented in the table below. Total funds approved for these five projects are US\$ 710,000, of which US\$ 145,396 have been disbursed. At the 95th meeting, three project preparation activities were approved with total funding of US\$330,000.

Table IV-7: Project Preparation by Country, Approved Amount, and Amount Disbursed

Item	Country	Date Approved (US\$)	Approved Funding (US\$)	Funds Disbursed (US\$)
Preparation of a Kigali HFC implementation plan	Indonesia	June-23	220,000	140,919
Preparation of a KIP investment project in the domestic and stand-alone commercial refrigerator manufacturing sector	Indonesia	Dec-24	80,000	0
Preparation of national inventory of banks of waste-controlled substances and development of a national plan for management of these substances (decision 91/66)	Thailand	Dec-24	100,000	0
Preparation to enhance energy efficiency and convert the use of HFCs to lower/low-global-warming-potential technology in the manufacture of light commercial air-conditioning systems	Thailand	Dec-24	150,000	0
Preparation of a Kigali HFC implementation plan (stage I)	Thailand	Dec-23	220,000	0
Preparation of an HCFC phase-out management plan (stage III) (Overarching)	Thailand	Dec-23	90,000	0
Preparation of an HPMP investment project in commercial refrigeration sector	Thailand	Dec-23	80,000	0
Preparation of national inventory of banks of waste-controlled substances and development of a national plan for management of these substances (decision 91/66)	Viet Nam	Dec-23	100,000	4,477
Total			1,040,000	145,396

V. GENDER MAINSTREAMING

42. This section on Gender mainstreaming is included in the progress report based on decision 90/48(d). In 2024, nineteen projects in four (4) countries are reporting on gender mainstreaming: the China HCFC Production Phase-out Management Plan (Stage II, second tranche), Malaysia Kigali HFC implementation plan (Stage I, first tranche), the Viet Nam Kigali HFC implementation plan (Stage I, first tranche), the Viet Nam HCFC phase-out management plan (stage III, first tranche), the Indonesia Preparation of a Kigali Implementation Plan project in domestic and stand-alone commercial refrigerator manufacturing sector.

43. The Kigali HFC implementation plan for Malaysia included consultations at the national and sector levels, and bilateral consultations with stakeholders during preparation all included discussion on gender to some extent. During the KIP preparation, gender mainstreaming and gender issues were carefully discussed. The enterprises offer equal access to positions throughout the company and agreed to continued reporting on female/male ratio during implementation. Through the approved KIP, the country executing agency (Department of Environment) agrees to continued gender mainstreaming monitoring and to seek out opportunities to help foster gender mainstreaming in project activities under its direct control. A simple gender assessment was conducted and draft report with recommendations to promote gender mainstreaming were integrated into the Malaysia-World Bank project by August 2024. Moreover, the World Bank project results framework, has included the number of women trained as one of the key indicators to monitor progress in promoting gender equality during project implementation.

44. Viet Nam's Gender Policy was taken into account during the development of the project concept. In the KIP and HPMP project documentation, measures were taken to ensure alignment with both the Multilateral Fund's and World Bank's Gender Policy to promote gender mainstreaming. Preparation of the Kigali HFC implementation plan included bilateral consultations with stakeholders on gender to some extent. The country executing agency (Department of Climate Change) agrees to continued attention to gender and to seek out opportunities to help foster gender mainstreaming in project activities under its direct control. Gender actions will be reflected in the overarching project under the Viet Nam-World Bank Grant Agreement. Moreover, the World Bank project results framework, has included the number of women trained as one of the key indicators to monitor progress in promoting gender equality during project implementation.

45. In Thailand, the National Ozone Unit (NOU) staff, comprising both government officials and consultants, are predominantly women, and the Unit is headed by a woman. The NOU systematically tracks female-to-male participation in workshops, stakeholder consultations, and public events it organizes, wherever possible, to ensure inclusiveness and monitor progress. During project preparation, gender mainstreaming will be actively integrated by considering gender issues in the design and implementation process. This includes collecting enterprise-level data on male and female employees, disaggregated by type of work and responsibilities, to better understand gender roles and potential gaps in the targeted sectors. The insights gained will inform the development of activities and capacity-building measures to enhance women's participation and leadership opportunities, while also ensuring that men and women benefit equitably from project interventions. The project will continue to embed gender considerations into monitoring and reporting frameworks to track progress and outcomes over time.

46. In China, the Foreign Economic Cooperation Office (FECO) collects gender-disaggregated data for all activities it manages, including workshops, training sessions, and stakeholder consultations. FECO incorporates gender mainstreaming throughout project implementation, addressing imbalances and promoting women's participation in technical and decision-making roles. Project implementation aligns with the gender policies of both the MLF and the World Bank, ensuring that gender considerations are embedded in planning, execution, and monitoring to support more effective and inclusive gender mainstreaming.

47. In Indonesia, gender mainstreaming and gender issues were actively considered during KIP preparation which commenced in 2024. Enterprises involved in the project committed to providing equal access to positions across all levels of the company and agreed to continue reporting on the female-to-male ratio throughout project implementation. Gender mainstreaming and gender issues were also discussed during the preparation phase and national stakeholder consultation workshops.

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

A. Meetings Attended

48. Table VI.1 indicates the meetings attended by World Bank Staff on all Montreal Protocol related work in 2024.

Table VI-I: MP Related Events Attended by World Bank Staff in 2024

Dates	Location	Meetings Attended
March 6-8, 2024	Yogyakarta, Indonesia	16 th Annual East Asia and Pacific (EAP) and Montreal Protocol (MP) Joint Regional Workshop on MP Implementation
March 12-13, 2024	Montreal	Inter-agency Coordination Meeting (IACM)
May 20-24, 2024	Guangzhou, China	Joint Network Meeting of South Asia (SA) and Southeast Asia (SEA) National Ozone Officers and Energy Efficiency Twinning Workshop
May 27-31, 2024	Montreal	94 th ExCom Meeting
July 7, 2024	Montreal	72 nd Implementation Committee Meeting
July 8-12, 2024	Montreal	46 th meeting of the Open-ended Working Group of the Parties (OEWG)
September 10-12, 2024	Montreal	Inter-agency Coordination Meeting (IACM) II
September 24-25, 2024	Chennai, India	Joint Network Meeting of South Asia and West Asia National Ozone Officers
October 25, 2024	Bangkok	73 rd Implementation Committee Meeting
October 22-27, 2024	Bangkok	36 th Meeting of the Parties, 17 th Conference of Parties
October 27, 2024	Bangkok	Workshop on life-cycle refrigerant management
December 4-8, 2024	Montreal	95 th Executive Committee Meeting

B. Implementing Agency and Other Cooperation

49. Cooperation and coordination by the World Bank with the three Implementing Agencies and Bilateral Agencies are ongoing through cooperation and coordination in project implementation of HCFC phase-out projects (for example in China, Indonesia and Jordan) and in ODS meetings and workshops that take place throughout the year.

50. The World Bank also works with bilateral agencies, namely Japan. The Government of Japan was a partner in the implementation of Thailand's Stage I HCFC Phaseout Management Plan that completed in December 2018 and Viet Nam HPMP Stage II that completed in 2023. The projects successfully delivered technical assistance to address technical and regulatory barriers to the introduction of HFC-32 technology in residential air-conditioner manufacturing. They included guidance for the conversions to ensure safe storage and use of HFC-32 in manufacturing of HFC-32 AC, technical assistance, and training on proper installation, and training for service technicians. Twelve enterprises in total benefitted from this support (including one from Viet Nam) and have been employing HFC-32 in AC manufacturing without problems since 2017 and 2023 respectively.

51. The Bank was a Cooperating Agency in Jordan in the air-conditioning sector where UNIDO served as the Lead Agency. That project was completed in 2019. The Bank is the Lead Agency for Jordan's Stage II HPMP covering most of the foam sector. UNIDO is the Cooperating Agency for a spray foam subsector and the servicing sector. The Bank is also a Cooperating Agency in Indonesia and China where UNDP is the Lead Agency of the Stage II HPMPs, in the foam and production sectors. In order to meet overall requirements of the respective Executive Committee-country agreements, the Agencies must have regular dialogue and access to relevant information to be able to execute their part, particularly in terms of annual consumption verification and preparation of the implementation progress reports. This is particularly critical in the case of China whereby the HCFC production sector plays a large role in determining compliance with targets.

52. With the concentration of efforts in delivering HPMPs and HCFC phase-out sector plans for Article 5 countries around the world, cooperation and coordination continues to be a necessity among the Implementing Agencies.

C. Other Issues

53. There are no additional issues other than those captured in the previous pages.

Annex I

COUNTRY DEVELOPMENTS

The World Bank

CHINA

A. Country Developments

1. Active projects under the Bank as an Implementing Agency for China in 2020 comprised of the HCFC Phaseout Project (Stage II) that became effective in March 2019 following Grant Agreement signing. This project includes the Stage II foam polyurethane (PU) sector plan as well as HCFC production closure bridging fund of US\$ 23million. HPMP Stage II fifth tranche PU foam sector was approved at the 95th ExCom meeting in December 2024. At the same meeting, HCFC Production sector phase-out management plan (Stage II, third tranche) was approved, along with an activity for the verification of the newly established HCFC production lines.
2. The overall Grant Agreement of the China and World Bank HCFC Phase-out Project (Stage II) that houses the Stage II sector plans for China on foam and eventually, HCFC production was signed in December 2018 and became effective in March 2019 (following successful receipt of a necessary legal opinion).
3. As of end of 2024, cumulative phase-out from the first two batches of sub projects (23 total) is 2,257 MT of HCFC-141b at an MLF cost of more than \$12.9 million. The alternative technologies deployed included hydrocarbon, HFOs and water blown technology. The system house project approach was launched in November 2023 for all three alternatives (HC, HFO and CO₂) but proposals were not prepared until 2024 when tranche funding was available to renew contracts with consultants that verify and provide technical advice on preparation. Fifteen (15) system houses qualified to participate in the project for an estimated 5,919 MT of HCFC-141b in phase out by their respective customers. In 2024, subprojects/contracts were prepared while awaiting the fifth tranche of funds, approved in December 2024, to have the baseline verifications completed by the consultants. This also included 8 new subprojects as part of the third batch of conversions for the planned phaseout of 389 MT of HCFC-141b at US\$1.7 million. On technical assistance, three new TA contracts were signed in June and July 2024 bringing foam TA contracts to four by end of 2024. One of these includes the "Research on the ban of use HCFC-141b as blowing agent in PU Foam Sector in China." By the end of 2024, the FECO consultant conducted the survey, analysis and prepared and submitted the report to FECO. FECO in turn passed on the report, results and recommendations to MEE for its consideration, internal preparation, and promulgation of the ban. FECO also continues to implement cross-cutting TA activities outside of the project's direct scope, that will support the phase-out in the PU foam sector and other sectors.

4. As of end of 2024, the total disbursement of phase-out activities is more than \$15.48 million for the first three payments to the three HCFC-141b producers. On technical assistance, the planned TA activities' contracts including Research on HCFC Feedstock Applications Status and Trends in China, Capacity Building Project for Local EEBs (another 2 provinces: Fujian and Zhejiang), Annual seminars for HCFC producers, Consultancy Services for Monitoring and Supervision on Environmental Safeguards Management on HCFCs Production Lines Closure, Investigation on 2023-2024 Consumption of Feedstock Applications of HCFCs are signed at an MLF cost of more than \$2.03 million. As of end of 2024, the total disbursement of TA activities is more than \$666 thousand. The third tranche is newly approved in December 2024. FECO signed two closure and one quota reduction contract with three producers at the end of December 2024. Verification of lines owned by enterprises that were not included in the HCFC production phase-out management plan completed in 2024 by a World Bank appointed, independent consultant. Additionally, verification of newly established HCFC production lines which was not covered by the Stage II HPPMP is approved in 2024.

INDONESIA

A. Country Developments

1. The Preparation of a Kigali HFC implementation plan was approved at the 92nd ExCom in June 2023 and was ongoing in 2024..
2. A consulting firm for the survey and KIP preparation was selected and onboarded by 29 February 2024. The KIP launch workshop was held on 3 May 2024. The preliminary data survey for 2019–2023 was completed in July and revised in November 2024, followed by focus-group discussions and sector consultations. The World Bank conducted its initial KIP preparation mission in August 2024 and participated in consultations with the rail AC and RAC sectors, as well as several bilateral meetings with industry and relevant agencies. The World Bank plans to hold a KIP strategy stakeholders' consultation workshop with industry in 2025 and submitted the KIP Stage I at the 96th ExCom meeting.
3. The preparation of a KIP investment project in the domestic and stand-alone commercial refrigerator manufacturing sector was newly approved in December 2024. The consulting firm collected detailed data on baseline equipment, historical production, and refrigerant consumption. Site visits to enterprises were conducted, accompanied by extensive email correspondence.
4. The Stage II HCFC foam sector plan second and third tranche were completed in September 2023 and the entire Stage II HPMP foam sector plan was financially completed by end 2023.

In March of 2024, the World Bank held its 16th East Asia and Pacific Regional Workshop in Yogyakarta, Indonesia.

JORDAN

A. Country Developments

1. The Stage I HPMP was completed and reported by the end of 2019. The Stage II HPMP, with the World Bank, as Lead Agency, covers all foam manufacturing (except spray foam) and is supporting Jordan to fulfill its commitment to reduce HCFC consumption by 50% of the baseline by 2022.
2. The Stage II HPMP was completed in December 2024. There were previous delays due to COVID-19 pandemic that impacted the implementation. The supplies of alternative foam materials to SMEs initiated in the second half of 2023 had been fulfilled and the Stage II HPMP for Jordan was completed as of December 2024, and financial completion by February 2024.

B. Institutional Strengthening

3. Institutional Strengthening project will be transferred to another implementing agency. NOU compiled and submitted the 2023 Country Programme to the Multilateral Fund Secretariat and Article 7 data to the Ozone Secretariat by their respective deadlines. NOU staff attended the 36th Meeting of the Parties to the Montreal Protocol (MOP36) in October 2024.

MALAYSIA

A. Country Developments

4. Malaysia's Kigali HFC implementation plan Stage I, first tranche for mobile-air conditioning, commercial refrigeration, servicing sector and technical assistance and PMU were approved in December 2023 at the 93rd ExCom and in 2024 the focus of work was to prepare the overall project and legal agreement between Malaysia and the World Bank, including the Kigali HFC implementation plan Stage I, Malaysia-WB project document, project implementation manual, environmental and social framework instruments, enterprise subprojects and other Grant Agreement requirements.
5. Two pilot projects on energy efficiency in the stand-alone commercial refrigeration sector following under the two funding windows on energy efficiency maintenance and enhance (Decision 91/65 and Decision 94/60) were newly approved at the 95th ExCom in December 2024. Meetings will be held in 2025 with the Ministry of Energy and Standards and Industrial Research Institute of Malaysia (SIRIM), as well as with two commercial refrigeration companies, to plan the implementation of activities. agree on roles and responsibilities with the NOU and integrate the projects into the overall project /Grant Agreement with Malaysia.

6.

THAILAND

A. Country Developments

1. Thailand's Stage II HCFC Phaseout Management Plan (HPMP) was approved in late 2018 and a new Grant Agreement (GA) was approved by the World Bank in January 2020 with a clause to allow retroactive finance of expenditures from January 2020 onwards. The Department of Industrial Works (DIW) and Government Saving Bank (GSB), which is the financial intermediary of the Stage II HPMP, jointly prepared the Project Implementation Manual (PIM) for the project and finalized it in February 2020. The GA was counter-signed in August 2020 and became effective in October 2020. The project remains ongoing in 2024.

2. Preparation funding for the HCFC phase-out management plan Stage III for the commercial refrigeration sector and overarching HPMP were approved at the 93rd ExCom in December 2023, with MLF funding of US\$ 80,000 and US\$ 90,000 respectively. At the same meeting, preparation of a Kigali HFC implementation plan Stage I was approved. Preparation activities commenced in 2024, with preparation of TORs. Preparation of the HCFC Phase-out Plan Stage III, top-down data have been collected and compiled, and initial intra-governmental and stakeholder consultations have commenced. For the commercial refrigeration sector, site visits were conducted, and consultations held with enterprises, the Federation of Thai Industries (FTI), and relevant government authorities. An HPMP III preparation workshop with DIW, GSB, and the World Bank is scheduled for April 2025. HPMP document preparation will be initiated in Q2 2025, and the selection of a consulting firm for supplementary data is expected to be completed in early Q3 2025.

3. As of end December 2024, three of the remaining five spray foam subprojects on conversion to HFO-preblended polyol were physically completed. The remaining activities were the IOC payments against agreed milestones, including disposal plan and PCR submission, and environment management plan implementation audit. A draft subproject was prepared for a system house to target downstream small spray foam enterprises that were identified during project preparation to adopt reduced-HFO pre-blended polyol technology. The subproject, adjusted to US\$361,728, will provide technical and financial support to small spray foam beneficiaries (Group III enterprises) and 7 remaining enterprises (Group II) using an innovative approach. The subgrant agreement is expected to be signed by January 2025. The proposed support includes: (i) rental of new spray-foam equipment; (ii) supply of reduced-HFO pre-blended polyol; and (iii) technical workshops on safe operation of spray foam equipment and demonstration of production. The first workshop is expected in February 2025. As of Dec 2024, more than 3,700 technicians out of 4,560 targeted had been trained. The PMU at GSB is fully operational. HPMP II completion date has been extended to June 2025 by the ExCom and a further extension is being sought by the Bank on behalf of Thailand. The third and last tranche of \$174,545 will not be requested however.

4. At the 95th ExCom meeting, two preparation activities were approved: the preparation of a national inventory of banks of waste-controlled substances and the development of a national plan for managing these substances (Decision 91/66), and the preparation to enhance energy efficiency and convert the use of HFCs to lower/low-GWP technology in the manufacture of light commercial air-conditioning systems. For the national inventory/ bank, Terms of Reference prepared for consultant support on data collection and compilation, consultant selection will be conducted in 2025. For Energy Efficiency and lower/low-GWP conversion in commercial AC systems, the consultations will be conducted with commercial AC manufacturers and data collection for applying the methodology under the MLF operational framework on energy efficiency will commence by 2025.

B. Institutional Strengthening

1. Institutional strengthening (IS) funds have been used to enhance the capacity of the National Ozone Unit (NOU) in the DIW and government agencies to effectively implement ODS phaseout in compliance with the country's obligations.
2. Activities completed in 2024 include issuance of quotas for HCFCs, while developing the quota allocation for HFCs for 2025, including consultations with importers and other interested parties -the 2025 import quota was finalized and announced in December 2024. In person attendance at the 46th OEWG Meeting in Montreal and at the 36th MOP in Bangkok by the Thailand delegation. DIW also attended the WB's annual MP East Asia Regional Workshop in Yogyakarta (March 2024) and a WB training seminar (October 2024). For 2024 Ozone Day, DIW developed an outreach program for raising awareness of the ozone layer and climate protection and issued a press release. The outreach program consisted of activities for the general public, relevant industry sectors, and academia including a workshop and on linked-MP agendas including sustainable cooling. HCFC consumption monitoring continued. On the admin side, NOU has filled the two positions for a technical and data officer and public outreach officer, plus a financial management officer. NOU hosted World Bank implementation support mission in April and October 2024. Terminal Report and request for IS funding extension will be submitted to 96th ExCom meeting.

VIET NAM

A. Country Developments

1. The Kigali HFC Implementation Plan Stage I was approved in December 2023. Following approval, a World Bank mission was conducted in February 2024 to initiate preparation of the legal agreement and project documentation. The new project was pending appraisal, awaiting the Government of Viet Nam's approval of its project document by the end of 2024.

2. The preparation of a national inventory of banks of controlled substances and development of a national plan for management of these substances (decision 91/66) was approved in December 2023. Overarching terms of reference prepared for the inventory and national plan for management of recovered and/or unwanted controlled substances. Consultations were held with stakeholders including visiting one of the two of the country's main waste companies for unwanted controlled substances in early 2024. Approach agreed on what support is required to collect and/or compile various sector data by Q4 2024. Consulting firms will be selected to support filling in data gaps in the inventory of refrigerants and complete the analysis in 2025.

3. Preparation for a pilot project on energy efficiency in the air-conditioning sector (Decision 91/65) was approved in December 2023. However, the energy efficiency project at the AC enterprise will not proceed, and the project preparation funds were returned at the 95th Meeting.

Viet Nam's Stage II HPMP was physically completed by the end of 2023 and financially closed by the end of April 2024. The final implementation progress report was prepared and submitted to the 95th ExCom Meeting, summarizing the achievements, disbursements, and overall outcomes of the project.