



联合国



环境规划署

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执行蒙特利尔议定书
多边基金执行委员会
第九十三次会议
2023年12月15日至19日，蒙特利尔
临时议程¹项目7(a)(五)

截至2022年12月31日工发组织的进度报告

导言

1. 本文件介绍了工发组织截至2022年12月31日的进度报告。²
2. 工发组织的进度报告包括各个项目的执行情况报告，其中包括35个与氢氟碳化物相关的项目，这些项目由17个非第5条缔约方的额外自愿捐款资助，为执行《基加利修正案》提供快速启动支助。
3. 秘书处按国家分别审查了每个正在进行的项目实施情况，同时根据2022年报告的计划完成日期考虑到在实施工作方面的各种延误、这些延误对受控物质的淘汰以及资金的计划发放可能产生的影响。这份文件所载的分析根据所有受控物质的ODP吨数计算，但氢氟碳化物则以CO₂-当量吨计算。³
4. 本文件由以下各部分组成：
 - 一. 根据多边基金定期捐款批准的所有受控物质项目。它总结了2022年以及自1993年以来⁴针对《蒙特利尔议定书》规定的所有受控物质（包括附件F的物质（氢氟碳

¹ UNEP/OzL.Pro/ExCom/93/1。

² 进度报告作为附件附于本文件。数据都已包括在综合进度报告数据库内，供查阅索取。

³ 根据第84/12号决定(a)(四)段，以CO₂-当量吨为氢氟碳化物测量单位的规定已列入提交给第九十三次会议的进度报告。

⁴ 工发组织在1993年成为执行机构。

化物)) 的项目的实施进展情况。它还载有对每个正在进行的国家一级的项目⁵的实施情况的审查。它查明了有实施延误和对淘汰受控物质可能产生影响的项目, 以及有待执行委员会审议的未决问题的项目。

二. 利用快速启动逐步减少氢氟碳化物的额外自愿捐款为附件 F 物质 (氢氟碳化物) 批准的项目⁶

三. 建议

一. 根据多边基金定期捐款批准的所有受控物质的项目

一.1 2022 年以及 1993 年以来累计实施的项目取得的进展

5. 如表 1 所示, 截至 2022 年 12 月 31 日, 执行委员会已批准工发组织的项目 10.2 亿美元, 其中包括为实施投资和非投资项目编列的 8.9588 亿美元和机构支持费用 1.1922 亿美元。

表 1: 截至 2022 年 12 月 31 日按行业为工发组织核准的供资

行业	供资金额(美元)
气雾剂	34,397,921
销毁	3,805,540
泡沫塑料	89,066,904
哈龙	1,780,369
逐步减少氢氟碳化物计划	4,194,000
熏蒸剂	78,028,741
多种行业	139,440
其他	11,317,246
淘汰计划	388,710,642
加工剂	6,337,359
化工生产	50,638,105
制冷	182,310,825
若干行业	21,904,344
溶剂	23,247,443
小计	895,878,878
机构支助费用	119,222,126
共计	1,015,101,004

6. 2022 年, 核准了 66 个新项目和活动。这笔供资预期将淘汰 84,246 ODP 吨受控物质的消费量和生产量和 226,432 CO₂ 当量吨受控物质的消费量。附件一显示 2022 年每个国家的项目实施情况。

⁵ 正在进行的项目是指截至 2022 年 12 月 31 日正在实施的所有项目。进展的主要指标包括发放的资金的比例和已经开始发放资金的项目的比例; 根据核准的供资的比例, 预期在年底以前发放的资金; 项目执行的平均拖延时间; 进度报告数据库说明栏内提供的信息。

⁶ 根据第 84/12 号决定 (b) 段, 一份详细的进度报告载于综合进度报告 (UNEP/OzL.Pro/ExCom/93/14) 内, 其中应概述各项目标、实施状况、主要结论和经验教训、在适用情况下淘汰的氢氟碳化物数量、批准和发放的资金数额以及完成这些项目和活动所面临的潜在挑战。

7. 表 2 显示截至 2022 年 12 月 31 日的项目实施情况，包括按项目类型的资金发放情况。附件二分析了 1993 年以来提供的信息。

表 2：截至 2022 年 12 月 31 日按类型分列的项目实施情况

项目类别	项目数目*			供资数额(美元)**			
	已批准	已完成	完成%	已批准	已发放	余额	发放%
国家方案	11	11	100	722,669	722,669	0	100
示范项目	43	42	98	23,405,832	22,730,368	675,464	97
体制强化	102	83	81	17,306,395	14,307,697	2,998,698	83
投资项目	1,000	879	88	801,373,629	723,710,037	77,663,592	90
项目编制	597	534	89	27,274,254	23,312,172	3,962,082	85
技术援助	213	186	87	24,599,563	21,453,904	3,145,659	87
培训项目	23	23	100	1,196,535	1,196,535	0	100
共计	1,989	1,758	88	895,878,878	807,433,382	88,445,496	90

* 不包括关闭的项目和移交的项目。

** 不包括机构支助费用。

8. 工发组织在 2022 年以及自 1993 年至 2022 年 12 月 31 日累计执行的项目和活动总结如下：

- (a) **淘汰：**⁷2022 年，淘汰了 424.0 ODP 吨受控物质消费量，⁸并另外核准淘汰 938.1 ODP 吨受控物质消费量。1993 年以来，在核准的项目预期淘汰的总量 84,246 ODP 吨和 226,432 CO₂-当量吨中，已淘汰 64,672 ODP 吨受控物质的消费量和 17,381 ODP 吨受控物质的生产量⁹（不包括取消的项目和移交的项目）；
- (b) **资金发放/批准：**2022 年，发放了 2,229 万美元，此外，根据 2021 年进度报告预备发放 2,122 万美元，这表示达到计划的发放率的 105%。总计而言，在核准发放的总额 8.9588 亿美元中，已经发放了 8.0743 亿美元（不包括机构支助费用），这表示达到发放率 90%。2022 年，为实施工作核准了 2,032 万美元。
- (c) **成本效益（以 ODP 吨计）：**¹⁰1993 年以来，导致永久削减消费量的核准投资项目的平均成本效益为每公斤 11.52 美元，所有生产行业活动（氟氯化碳和甲基溴）的平均成本效益为每公斤 2.90 美元。投资项目每 ODP 吨的平均成本效益是已完成的项目为每公斤 8.74 美元和正在进行的项目为每公斤 33.13 美元。¹¹
- (d) **完成的项目数目：**2022 年，完成了 67 个项目。1993 年以来，在核准的 1,989 个项目中，完成了 1,758 个项目（不包括取消的项目和移交的项目），这表示完成率为 88%。

⁷ 淘汰的消耗臭氧层物质以 ODP 吨表示和氢氟碳化物以 CO₂ 当量吨表示。

⁸ 2022 年没有与淘汰氢氟碳化物相关的项目。

⁹ 至今没有与氢氟碳化物相关的淘汰项目。

¹⁰ 其中包括氢氟碳化物投资项目的 129.1 公吨。由于核准的项目数目有限，以 CO₂-当量吨计算的成本效益未列入其中。

¹¹ 正在进行的项目的成本效益较高，主要是由于氟氯烃的 ODP 值较低，但也由于各机构指定使用的淘汰方式。

- (e) **交付速度 – 投资项目：**2022 年完成的项目平均在其得到核准后 61 个月内完成。1993 年以来，完成投资项目的平均时间为项目得到批准后 40 个月。这些项目平均在其得到批准后 9 个月开始首次发放资金。
- (f) **交付速度 – 非投资项目：**2022 年完成的项目平均在其得到核准后 45 个月内完成。1993 年以来，完成非投资项目的平均时间为项目得到批准后 36 个月。这些项目平均在其得到批准后 9 个月开始首次发放资金。
- (g) **项目编制：**到 2022 年底，在得到核准的 597 个项目的编制活动中，534 个项目已经完成，只有 63 项活动仍在进行。2022 年，已完成 26 项编制活动。
- (h) **执行拖延：**截至 2022 年底，在执行的 231 个项目中，平均拖延 15 个月。在这些项目中，有 38 个项目被认为“执行拖延的项目”，¹²它们会受到项目撤销程序的审议（示范项目、项目编制和体制强化项目不会受到这些程序的审查）；和
- (i) **多年期协定：**2022 年，实施的项目有 2 项控制和淘汰 HFC-23 排放的多年期协定、74 项氟氯烃淘汰管理计划的多年期协定和 1 项基加利氢氟碳化物实施计划。1993 年以来，核准了 208 项多年期协定和完成了 131 项多年期协定，这代表完成率为 63%。

9. 表 3 总结了 1993 年以来工发组织取得的进展。

表 3： 1993 年以来工发组织取得的进展

实现的淘汰		资金发放 (美元)	平均成本效益 (美元/公斤)		项目数目		完成交付速度(月)		项目平均拖 延(月)	多年期协定数目	
ODP 吨*	CO ₂ 当量 吨		消费量	生产量	已批准	已完成	投资项目	非投资项目		已批准	已完成
82,053	0	807,433,382	11.52	2.90	1,989	1,758	40	36	15	208	131

* 消费量和生产量

氢氟碳化物相关项目

10. 截至 2022 年 12 月 31 日，执行委员会已在定期捐款项下批准 54 个与氢氟碳化物相关的项目（包括 5 个投资项目、46 个项目编制项目和 3 个扶持活动项目），金额为 8,699,914 美元（不包括机构支助费用）。表 4 总结了这些项目的状况，相关数据已包含在第 5 至第 9 段中。

表 4： 根据定期捐款核准的氢氟碳化物相关项目

项目类别	项目数目			供资金额(美元)*			
	已批准	已完成	完成%	已批准	已发放	余额	发放%
投资项目**	5	0	0	3,996,404	2,445,970	1,550,434	61
项目编制	46	4	9	4,303,510	1,121,060	3,182,450	26
技术援助 – 扶持活 动	3	3	100	400,000	359,057	40,943	90
共计	54	7	13	8,699,914	3,926,087	4,773,826	45

* 不包括机构支助费用。

** 核准淘汰氢氟碳化物 129.1 公吨（226,432 CO₂-当量吨）。

¹² 项目核准超过 18 个月以上而发放资金少于 1%，或项目完成日期超过进度报告预期完成日期 12 个月以上的项目（第 22/61 号决定）。

11. 截至 2022 年底，在已批准的 54 个项目中，已完成 4 个项目编制项目和 3 个扶持活动项目，尚有 47 个项目正在进行。

12. 在五个目前正在进行的氢氟碳化合物投资项目中，尼日尔的基加利氢氟碳化合物实施计划第一阶段（预先供资）已在第九十一次会议获得批准，预计将于 2025 年完成。在第八十一次、第八十六次、第八十七次和第九十一次会议批准的其他项目，目前正处于实施的各个阶段。

13. 在核准的累计供资总额 8,699,914 美元中（不包括机构支助费用），已发放 3,926,087 美元，这代表发放率达到 45%。

一.2 2022 年项目实施发现的问题

14. 继审查过程之后，除了被归类为执行拖延项目的 38 个项目的问题（包括依照第 84/45 号决定（c）段，与受项目撤销程序审查的多年期协定的组成部分的 36 个项目；和 1 个投资项目）外，对一些问题进行了讨论并得到了满意解决。本文件附件三载列了被认定有执行拖延的项目以及秘书处要求向第九十四次会议提交一份报告的建议。

15. 此外，还确定了一些与淘汰氟氯烃的多年期协定相关的项目和各次付款有关的问题。这些问题也列在附件三中。对于这些项目中的每一个项目，都简要说明其执行情况 and 各项未决问题，并提出建议供执行委员会审议。

16. 已向第九十三次会议提交了以下各国与执行氟氯烃淘汰管理计划相关的各个项目的详细进度报告：巴林、¹³多民族玻利维亚国、¹⁴中国（挤塑聚苯乙烯泡沫塑料行业计划）¹⁵、厄瓜多尔、¹⁶冈比亚、¹⁷危地马拉、¹⁸几内亚、¹⁹摩洛哥、²⁰北马其顿、²¹阿曼、²²菲律宾、²³卡塔尔、²⁴塞拉利昂、²⁵苏里南、²⁶土耳其、²⁷和委内瑞拉玻利瓦尔共和国；²⁸并报告了以下国家与具体报告²⁹有关的项目的报告：阿根廷（副产品 HFC-23 和全球制冷机更换项目）、科特迪瓦（氟氯烃淘汰管理计划）和利比亚（氟氯烃淘汰管理计划）。有关这些项目的未决问题的建议，包括批准申请延期的要求，都在这些文件的相关部分讨论。与阿富汗、阿尔及利亚、波斯尼亚和黑塞哥维那、博茨瓦

¹³ UNEP/OzL.Pro/ExCom/93/41。

¹⁴ UNEP/OzL.Pro/ExCom/93/43。

¹⁵ UNEP/OzL.Pro/ExCom/93/47。

¹⁶ UNEP/OzL.Pro/ExCom/93/52。

¹⁷ UNEP/OzL.Pro/ExCom/93/54。

¹⁸ UNEP/OzL.Pro/ExCom/93/57。

¹⁹ UNEP/OzL.Pro/ExCom/93/58。

²⁰ UNEP/OzL.Pro/ExCom/93/72。

²¹ UNEP/OzL.Pro/ExCom/93/78。

²² UNEP/OzL.Pro/ExCom/93/79。

²³ UNEP/OzL.Pro/ExCom/93/82。

²⁴ UNEP/OzL.Pro/ExCom/93/83。

²⁵ UNEP/OzL.Pro/ExCom/93/86。

²⁶ UNEP/OzL.Pro/ExCom/93/88。

²⁷ UNEP/OzL.Pro/ExCom/93/90。

²⁸ UNEP/OzL.Pro/ExCom/93/92。

²⁹ UNEP/OzL.Pro/ExCom/93/20 或 UNEP/OzL.Pro/ExCom/93/21。

纳、埃及、伊拉克、科威特和塞内加尔氟氯烃淘汰管理计划有关的问题其中部分付款应在第九十三次会议提交但尚未提交以及中国（室内空调制造和热泵热水器行业计划）和伊朗伊斯兰共和国已提交部分付款但后来又撤回的问题都在付款提交延迟的文件中加以讨论。³⁰ 未列入本文件附件三的其余正在进行的项目的未决问题以及要求延长完成日期的申请都在下文讨论。

17. 在 149 个正在进行的项目中，除体制强化项目和项目编制外，自 2021 年进度报告以来，53 个项目已修改了计划完成日期。

18. 如表 5 所示，根据第 82/11 号决定（b），³¹工发组织要求延长 2 个项目的期限。

表 5. 已提出要求延长完成日期的申请的项目

国家/项目编号	项目名称	资金发放 (%)	现况/问题	原定完成日期	申请完成日期
约旦 JOR/PHA/91/INV/114	氟氯烃淘汰管理计划(第二阶段, 第三次付款)	0	需要更多时间完成识别器的采购和培训良好维修做法的培训师	2023 年 12 月	2024 年 12 月
苏丹 SUD/PHA/75/INV/38	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (泡沫塑料行业)	31	需要更多时间完成在 Mina 工厂和 Target 钢厂的设备采购、安装和调试	2023 年 12 月	2024 年 12 月

19. 关于缅甸的氟氯烃淘汰管理计划，工发组织告知秘书处，由于该国的政治局势，它无法与该政府进行沟通并继续进行实施工作。经与工发组织协商后，同意取消氟氯烃淘汰管理计划第二阶段的编制（MYA/PHA/83/PRP/20），并依照第 28/7 号决定退还剩余款项。

性别平等主流化³²

20. 2022 年，作为第八十五次会议以来批准的项目的一部分，工发组织在 66 个国家实施了多边基金关于性别平等主流化的政策。在编制和提交项目提案时，工发组织试图尽可能纳入解决性别平等和妇女赋权问题的活动。项目指南所列的清单和可能指标就用于此目的。

21. 工发组织作为一个组织认识到性别平等和妇女赋权对持续经济增长和促进可持续工业发展具有重大积极影响。这些因素有助于推动减贫和促进社会融合。因此，工发组织制定了它自己的性别平等主流化政策和战略，以期取得切实成果。

22. 将性别平等主流化纳入项目实施包括几个关键方面，就是从妇女在项目团队组建和招聘过程中的代表性、妇女参与不同的能力建设和宣传活动以及项目实施的其他监测和报告过程作为起点。

23. 工发组织积极寻找在这个行业求职的女性技术人员和工程师，并提供量身定制的培训方案。这些举措的成功程度因国家而异。本文件所附工发组织说明的第六部分提供了与国家一级活动有关的更多信息。

³⁰ UNEP/OzL.Pro/ExCom/93/24。

³¹ 任何延期的申请都必须在项目完成日期之前提交执行委员会批准，并指出在批准延期之前不得作出新的付款承诺。

³² 执行委员会要求双边和执行机构根据其掌握的信息，作为年度进展报告的一部分，提供一份截至 2023 年关于性别平等主流化关键成果的简要报告（第 90/48 号决定(d)）。

24. 从迄今汲取的经验来看，在《蒙特利尔议定书》的一揽子计划内推进性别平等主流化举措显然存在巨大潜力。在这方面，工发组织准备继续实施多边基金关于性别平等主流化的政策，将性别平等主流化活动纳入现有预算范围，同时还准备在氟氯烃淘汰管理计划和基加利氢氟碳化物实施计划等多年期协定的项目的各个阶段制定更全面的方案。

二. 根据快速启动逐步减少氢氟碳化物的额外自愿捐款批准的项目

25. 截至 2022 年 12 月 31 日，执行委员会已在额外自愿捐款项下批准了 35 个与氢氟碳化物相关的项目，金额为 8,043,152 美元（不包括机构支助费用）。表 6 载列了这些项目的状况。

表 6. 截至 2022 年底核准的氢氟碳化物相关项目的状况

项目类别	项目数目			供资金额(美元)*			
	已批准	已完成	完成%	已批准	已发放	余额	发放%
投资项目**	3	3	100	3,898,752	2,450,030	1,448,722	63
项目编制	4	4	100	101,270	101,270	0	100
技术援助 – 扶持活动	28	28	100	4,043,130	3,697,732	345,398	91
共计	35	35	100	8,043,152	6,249,032	1,794,120	78

* 不包括机构支助费用。

** 在 286.0 公吨（508,586 CO₂ 当量吨）氢氟碳化物中，已淘汰 189.4 公吨（370,517 CO₂-当量吨）。

26. 截至 2022 年底，批准的 35 个项目已全部完成。

27. 在核准的累计供资总额 8,043,152 美元中，已发放 6,249,032 美元，支付率达到 78%。

三. 建议

28. 谨请执行委员会：

- (a) 注意到载于 UNEP/OzL.Pro/ExCom/93/18 号文件工发组织截至 2022 年 12 月 31 日的进度报告；
- (b) 批准将下列国家的氟氯烃淘汰管理计划的完成日期延长至 2024 年 12 月 31 日，以便完成 UNEP/OzL.Pro/ExCom/93/18 号文件表 5 所列的目前正在进行的剩余活动：
 - (i) 约旦（第二阶段，第三次付款）（JOR/PHA/91/INV/114）；和
 - (ii) 苏丹（第二阶段，第一次付款）（泡沫塑料行业）（SUD/PHA/75/INV/38）；
- (c) 取消缅甸氟氯烃淘汰管理计划第二阶段的编制工作（MYA/PHA/83/PRP/20），并请工发组织根据第 28/7 号决定退还剩余余额；和
- (d) 核准本文件附件三所载与具有特殊问题的正在进行的项目有关的建议。

附件一

2022 年按国家分列的工发组织实施的项目概况

1. 附件一表 1 列出了 2022 年按国家分列的项目执行情况，包括已实现的淘汰、计划和已实现的资金发放和项目完成情况。

表 1. 2022 年工发组织项目实施情况

国家	2022 年的淘汰量 (ODP 吨)	2022 年的淘汰量 (CO ₂ 当量吨)	2022 年估计发放的资金 (美元)	2022 年发放的资金 (美元)	2022 年估计发放的资金的百分比 (%)	2022 年计划完成的项目的百分比 (%) **
阿富汗	0.0	0	3	9	316	0
阿尔巴尼亚	0.0	0	79,400	47,792	60	
阿尔及利亚	0.0	0	58,002	57,316	99	100
阿根廷	17.1	0	800,804	760,557	95	
亚美尼亚	0.0	0	50,000	90,601	181	
巴哈马	0.0	0	28,400	10,038	35	100
巴林	0.0	0	79,001	38,744	49	100
贝宁	0.1	0	600	4,703	784	100
玻利维亚多民族国	0.4	0	100,000	141,982	142	
波斯尼亚和黑塞哥维那	0.6	0	93,280	50,712	54	100
博茨瓦纳	0.1	0	55,700	21,750	39	50
巴西	6.1	0	194,000	295,297	152	
布基纳法索	0.0	0	11,500	7,816	68	0
布隆迪	0.0	0	6,500	5,775	89	100
喀麦隆	0.3	0	118,000	107,107	91	
乍得	0.0	0	20,000	19,144	96	100
智利	8.6	0	130,001	131,704	101	
中国	1.0	0	10,782,503	11,002,040	102	
刚果	0.0	0	2,600	0	0	100
科特迪瓦	10.7	0	160,000	362,670	227	100
朝鲜民主主义人民共和国	0.0	0	3	20,548	684,931	
厄瓜多尔	0.0	0	380,000	458,930	121	0
埃及	11.3	0	1,071,302	807,371	75	50
赤道几内亚	0.0	0	1,000	0	0	0
厄立特里亚	0.0	0	1	12	1,182	
埃塞俄比亚	0.0	0	6,301	1,103	18	
加蓬	4.9	0	35,000	5,149	15	50
冈比亚	0.0	0	23,001	1,424	6	
格林纳达	0.0	0	1	0	0	
危地马拉	0.4	0	101,650	110,912	109	
几内亚	0.0	0	16,000	4,273	27	100
几内亚比绍	0.0	0	3,000	0	0	0
洪都拉斯	0.4	0	78,000	152,090	195	
伊朗伊斯兰共和国	3.8	0	122,000	45,060	37	
伊拉克	0.0	0	856,501	314,883	37	
约旦	0.0	0	143,002	171,605	120	100
科威特	204.0	0	712,834	213,596	30	100
黎巴嫩	0.0	0	10,000	24,155	242	

国家	2022 年的淘汰量 (ODP 吨)	2022 年的淘汰量 (CO ₂ 当量吨)	2022 年估计发放的资金 (美元)	2022 年发放的资金 (美元)	2022 年估计发放的资金的百分比 (%)	2022 年计划完成的项目的百分比 (%) **
莱索托	0.0	0	5,000	2,974	59	
利比里亚	0.0	0	7,000	6,933	99	100
利比亚	2.7	0	265,000	201,783	76	25
马达加斯加	0.0	0	24,000	23,517	98	100
马拉维	0.0	0	60,000	2,211	4	
毛利塔尼亚	0.0	0	5,000	0	0	
墨西哥	18.1	0	584,300	1,384,363	237	0
黑山	0.1	0	91,802	68,017	74	
摩洛哥	8.1	0	103,600	122,022	118	100
莫桑比克	0.0	0	60,000	32,263	54	100
缅甸	0.0	0	2	0	9	
纳米比亚	0.0	0	20,000	29,567	148	
尼加拉瓜	0.1	0	96,000	96,452	100	
尼日尔	1.1	0	163,001	227,803	140	100
尼日利亚	0.0	0	16,250	8,766	54	
北马其顿	0.1	0	150,003	165,795	111	100
阿曼	0.0	0	106,073	96,447	91	100
巴基斯坦	41.3	0	719,601	1,537,370	214	75
菲律宾	0.0	0	90,000	124,335	138	
卡塔尔	0.0	0	80,001	58,233	73	
卢旺达	0.0	0	55,001	4,629	8	
圣卢西亚	0.0	0	20,001	51	0	
沙特阿拉伯	0.0	0	225,006	543,572	242	50
塞内加尔	0.0	0	53,000	12,262	23	100
塞尔维亚	0.0	0	110,002	113,062	103	0
塞拉利昂	0.0	0	25,002	6,221	25	
索马里	0.0	0	83,000	66,701	80	50
南非	78.5	0	603,001	599,708	99	100
苏丹	4.2	0	170,900	232,935	136	100
苏里南	0.0	0	1,501	8,500	566	100
叙利亚	0.0	0	153,201	197,467	129	100
多哥	0.0	0	11,900	7,447	63	100
突尼斯	0.0	0	205,001	221,899	108	0
土耳其	0.0	0	147,000	175,017	119	0
土库曼斯坦	0.0	0	93,000	83,474	90	0
乌干达	0.0	0	28,000	26,377	94	
坦桑尼亚联合共和国	0.0	0	40,000	10,406	26	
委内瑞拉玻利瓦尔共和国	0.0	0	99,000	136,152	138	50
赞比亚	0.0	0	35,001	40,026	114	0
全球	0.0	0	87,000	130,665	150	100
总计	424.0	0	21,222,040	22,292,292	105	72

* 2022 年没有与淘汰氢氟碳化物相关的项目。

** 计划于 2022 年完成的项目。

附件二

截至 2022 年 12 月 31 日按年分列的工发组织实施的项目概况

1. 附件二表 1 按年度概述了项目实施情况。¹1993 年至 2011 年批准的所有项目和活动现都已完成。

表 1: 按年开列的项目实施情况

年份	项目数目*			供资数额(美元)**			
	已批准	已完成	完成%	已批准	已发放	余额	发放%
1993	22	22	100	11,815,540	11,815,540	0	100
1994	52	52	100	30,645,899	30,645,899	0	100
1995	59	59	100	25,662,092	25,662,092	-1	100
1996	46	46	100	19,820,493	19,820,493	0	100
1997	130	130	100	42,083,037	42,083,038	-1	100
1998	88	88	100	23,638,291	23,638,291	0	100
1999	123	123	100	34,140,324	34,140,324	0	100
2000	96	96	100	30,180,752	30,180,752	0	100
2001	119	119	100	24,700,254	24,700,255	-1	100
2002	76	76	100	35,992,041	35,992,041	0	100
2003	49	49	100	29,997,305	29,997,305	0	100
2004	44	44	100	33,105,459	33,105,460	-1	100
2005	74	74	100	52,035,808	52,035,806	2	100
2006	44	44	100	20,760,312	20,760,312	0	100
2007	42	42	100	24,186,740	24,186,740	0	100
2008	77	77	100	33,386,108	33,386,111	-3	100
2009	70	70	100	15,345,924	15,054,995	290,929	98
2010	69	69	100	46,081,793	45,558,786	523,006	99
2011	71	71	100	76,542,461	76,542,380	81	100
2012	52	49	94	32,670,641	31,681,748	988,893	97
2013	37	36	97	31,117,693	31,086,604	31,089	100
2014	55	53	96	27,835,611	27,094,088	741,523	97
2015	83	75	90	37,085,970	32,640,253	4,445,716	88
2016	58	49	84	35,651,882	23,545,443	12,106,439	66
2017	28	24	86	16,417,092	14,442,589	1,974,503	88
2018	62	52	84	27,012,958	12,127,844	14,885,114	45
2019	66	35	53	19,210,508	7,432,234	11,778,274	39
2020	58	27	47	15,346,833	13,196,259	2,150,574	86
2021	73	7	10	23,091,580	4,531,688	18,559,892	20
2022	66	0	0	20,317,479	348,013	19,969,466	2
共计	1,989	1,758	88	895,878,878	807,433,382	88,445,496	90

* 不包括关闭的项目和移交的项目。

** 不包括机构支助费用。

¹ 这项数据依照执行委员会核准项目的年份列出。它将所有核准的项目（投资项目和非投资项目）等同对待（即将投资项目或多年期协定项目的供资达 100 万美元的项目视为一个项目，同样的方法用于 30,000 美元的国家方案编制项目）。年度总结的关键指标是：完成的项目百分比、淘汰的 ODP 吨/CO₂ 当量吨和发放的资金百分比。三种资金发放方式：在项目执行期间、项目执行后和资金追溯项目。

附件三

工发组织进度报告中目前正在进行的有未决问题的项目

国家/项目编号	项目名称	资金发放 (%)	现况/问题	建议
阿富汗 AFG/PHA/79/INV/22	氟氯烃淘汰管理计划（第一阶段，第三次付款）	14	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
阿富汗 AFG/PHA/85/INV/28	氟氯烃淘汰管理计划（第一阶段，第四次付款）	0	延后 12 个月至 18 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
阿富汗 AFG/PHA/85/INV/30	氟氯烃淘汰管理计划(第二阶段，第一次付款)	3	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
阿尔及利亚 ALG/PHA/66/INV/76	氟氯烃淘汰管理计划（第一阶段，第一次付款）（Condor 室内空调机的制造不再使用 HCFC-22）	64	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
阿尔及利亚 ALG/PHA/66/INV/77	氟氯烃淘汰管理计划(第一阶段，第一次付款)（制冷维修行业的活动，包括淘汰用于冲洗和项目监测的 HCFC-141b）	62	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
阿根廷 ARG/PHA/84/INV/192	氟氯烃淘汰管理计划(第二阶段，第二次付款)（泡沫塑料行业）	1	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
阿根廷 ARG/PHA/84/TAS/193	氟氯烃淘汰管理计划(第二阶段，第二次付款)（制冷维修行业）	10	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
波斯尼亚和黑塞哥维那 BHE/PHA/86/TAS/38	实施氟氯烃淘汰管理计划第一阶段的核查报告	0	延后 12 个月至 18 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
博茨瓦纳 BOT/PHA/82/INV/21	氟氯烃淘汰管理计划（第一阶段，第二次付款）	12	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
博茨瓦纳 BOT/PHA/86/INV/27	氟氯烃淘汰管理计划(第二阶段，第一次付款)	0	拖延 18 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
巴西 BRA/PHA/75/INV/311	氟氯烃淘汰管理计划(第二阶段，第一次付款)（商用制冷和空调行业）	97	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
巴西 BRA/PHA/75/TAS/308	氟氯烃淘汰管理计划(第二阶段，第一部分)（项目监测）	99	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
巴西 BRA/PHA/82/INV/320	氟氯烃淘汰管理计划(第二阶段，第三次付款)（商用制冷和空调行业）	48	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告

国家/项目编号	项目名称	资金发放 (%)	现况/问题	建议
喀麦隆 CMR/PHA/82/INV/45	氟氯烃淘汰管理计划(第二阶段, 第一次付款)	47	(一) 拖延 12 个月 (二) 由于运行改变导致实施拖延	(一) 请工发组织就执行拖延的这个项目向第九十四次会议提出报告 (二) 请工发组织就执行进展情况向第九十四次会议提出情况报告
智利 CHI/PHA/81/TAS/196	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (制冷维修行业)	30	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
中国 CPR/PHA/77/INV/576	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (室内空调制造和热泵水热器行业计划)	30	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
中国 CPR/PHA/81/INV/588	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (室内空调制造和热泵水热器行业计划)	30	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
中国 CPR/PHA/88/INV/605	氟氯烃淘汰管理计划(第二阶段, 第三次付款) (室内空调制造和热泵水热器行业计划)	0	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
埃及 EGY/PHA/79/INV/133	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (聚氨酯泡沫塑料行业)	76	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
埃及 EGY/PHA/84/INV/141	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (制冷维修行业和项目管理股)	64	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
埃及 EGY/PHA/84/INV/147	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (室内空调制造行业)	26	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
伊朗伊斯兰共和国 IRA/PHA/77/INV/228	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (泡沫塑料行业)	65	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
伊朗伊斯兰共和国 IRA/PHA/84/INV/239	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (泡沫塑料行业)	7	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
伊朗伊斯兰共和国 IRA/PHA/84/TAS/240	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (制冷维修行业)	2	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
约旦 JOR/PHA/77/INV/101	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (制冷维修行业)	99	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
约旦 JOR/REF/81/INV/103	将 Petra Engineering Industries Co.生产供冷达 400 kW 的大型商用单元式房顶空调组件的设施的制冷剂 HFC (R134a、R-407C、R-134a)转换为丙烷 R290	93	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
墨西哥 MEX/PHA/73/INV/174	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (淘汰制冷维修行业的清洁剂)	100	拖延 12 个月	注意到第 77/8 号决定 (j), 请工发组织就执行拖延的这个项目向第九十四次会议提出报告

国家/项目编号	项目名称	资金发放 (%)	现况/问题	建议
墨西哥 MEX/PHA/77/INV/183	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (制冷维修行业)	100	拖延 12 个月	注意到第 77/8 号决定 (j), 请工发组织就执行拖延的这个项目向第九十四次会议提出报告
墨西哥 MEX/PHA/81/INV/189	氟氯烃淘汰管理计划(第二阶段, 第三次付款) (制冷维修行业)	32	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
莫桑比克 MOZ/PHA/83/INV/31	氟氯烃淘汰管理计划 (第一阶段, 第三次和第四次付款)	27	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
巴基斯坦 PAK/PHA/76/INV/94	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (聚氨酯泡沫塑料行业)	77	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
巴基斯坦 PAK/PHA/83/INV/102	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (聚氨酯泡沫塑料行业)	39	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
巴基斯坦 PAK/PHA/83/INV/99	氟氯烃淘汰管理计划(第二阶段, 第二次付款) (空调行业)	55	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
巴基斯坦 PAK/PHA/83/TAS/100	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (项目管理股)	53	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
南非 SOA/FOA/67/INV/03	氟氯烃淘汰管理计划(第一阶段, 第一部分) (聚氨酯泡沫塑料行业计划)	99	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
南非 SOA/PHA/71/INV/06	氟氯烃淘汰管理计划(第一阶段, 第二次付款) (制冷维修、海关培训和监测)	96	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告
苏丹 SUD/PHA/75/INV/38	氟氯烃淘汰管理计划(第二阶段, 第一次付款) (泡沫塑料行业)	31	(一) 拖延 12 个月 2) 由于政治局势, 执行拖延	(一) 请工发组织就执行拖延的这个项目向第九十四次会议提出报告 (二) 请工发组织就活动执行进展情况向第九十四次会议提出报告
苏丹 SUD/PHA/88/INV/48	氟氯烃淘汰管理计划(第三阶段, 第一次付款)	3	由于政治局势, 执行拖延	请工发组织就活动执行进展情况向第九十四次会议提出报告
赞比亚 ZAM/PHA/77/INV/33	氟氯烃淘汰管理计划 (第一阶段, 第三次付款)	28	拖延 12 个月	请工发组织就执行拖延的这个项目向第九十四次会议提出报告



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO Progress and Financial Report 2022

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I. Project Approvals and Disbursements

Annual summary data

- 1) Table 1 “Annual Summary” in the Excel file includes the most relevant annual data, such as number of approvals, corresponding ODP (wherever applicable), approved funding, adjustment and disbursement characteristics. The cumulative funds for the period 1993-2022 approved for UNIDO activities under the Multilateral Fund amount to US\$ 895,878,878, excluding agency support cost, the core unit funding and projects funded by the additional contributions for implementation of the Kigali Amendment. This amount, however, includes the adjustments made until end 2022. The details are contained in the attached database (Annex II in the Excel file). In this annex, the data are sorted by regions and within each region the completed, financially completed; ongoing and closed (cancelled) projects are listed.
- 2) From 2017 a total of US\$ 8,066,306 were approved for UNIDO activities from the additional contributions to provide fast-start support for implementation of the Kigali Amendment. The details are contained in the attached database (Annex IIa in the Excel file)
- 3) As of 31 December 2022, UNIDO’s cumulative disbursement for all projects (completed and ongoing) amounts to US\$ 807,433,382 excluding agency support cost, core unit funding and disbursements in projects funded by additional contributions. This corresponds to a delivery rate of 90 per cent. Out of this amount, US\$ 723,710,037 relate to cumulative disbursement for investment projects (Table 2, “Summary Data by Project Type” in the Excel file).

Interest

- 4) The interest earned for the period 1993 – 2022 amounts to US\$ 42,413,373 and is shown by years in the Table 1 “Annual Summary” in the Excel file. The interest earned in 2022 amounts to US\$ 553,638.

Summary data by type

- 5) The cumulative activities of UNIDO approved by the Multilateral Fund are listed in Annex II in the Excel file. The following table summarizes their breakdown by types.

Type	Approved Funding US\$*	Share of portfolio in per cent	Number of projects*	Share of portfolio in per cent
CPG (Country Programme Preparation)	815,000	0.09%	11	0.55%
DEM (Demonstration projects)	26,091,990	2.87%	43	2.16%
INS (Institutional strengthening)	17,383,590	1.91%	102	5.13%
INV (Investment projects)	807,051,102	88.75%	1,000	50.28%
PRP (Project preparation)	30,234,552	3.32%	597	30.02%
TAS (Technical Assistance)	26,535,300	2.92%	213	10.71%
TRA (Training)	1,249,459	0.14%	23	1.16%
Total (excluding agency support cost)	909,360,993	100%	1,989	100%

* These figures are without adjustments, which are in total US\$ -13,482,115.

** Excluding Closed and Transferred Projects.

- 6) Table 2 “Summary of Data by Project Type” in the Excel file, shows approvals, adjustments and disbursements by type of project/activity. In 2022 UNIDO’s overall disbursement rate (excluding agency support cost) was 90%. Disbursements by activity type and as percentage of activity allocations are summarized as follows:

Type	Funds Disbursed US\$	Disbursement rate in per cent
CPG (Country Programme Preparation)	722,669	100%
DEM (Demonstration projects)	22,730,368	97%
INS (Institutional strengthening)	14,307,697	83%
INV (Investment projects)	723,710,037	90%
PRP (Project preparation)	23,312,172	85%
TAS (Technical Assistance)	21,453,904	87%
TRA (Training)	1,196,535	100%
Total (excluding agency support cost)	807,433,382	90%

Multi-Year Agreements

In the reporting year, 14 new multi-year performance based projects were approved for UNIDO’s implementation, the Stage II HCFC Phase-out Management Plan in the Bahamas, Benin, Brunei Darussalam¹, Chad, Eritrea, Grenada, Liberia, Libya, Madagascar, Niger, South Africa and Togo, the Stage III HCFC Phase-out Management Plan in Nigeria and Pakistan.

- 7) As shown in Annex II in the Excel file, UNIDO has been implementing one hundred and eighty seven performance-based, multi-year agreements. One hundred and thirty six of these agreements are HCFC Phase-out Management Plans as listed in the table below.

¹ HPMP Stage II for Brunei Darussalam has been approved at the 86th meeting for UNEP and UNDP. At the 91st meeting, project was transferred from UNDP to UNIDO.

Country name	HPMP Stage I	HPMP Stage II	HPMP Stage III
Afghanistan	yes	yes	
Albania	yes	yes	
Algeria	yes		
Argentina	yes	yes	
Bahamas (the)	yes	yes	
Bahrain	yes	yes	
Benin	yes	yes	
Bolivia (Plurinational State of)	yes	yes	
Bosnia and Herzegovina	yes	yes	
Botswana	yes	yes	
Brazil		yes	
Brunei Darussalam		yes	
Burkina Faso	yes		
Burundi	yes		
Cameroon	yes	yes	
Central African Republic (the)	yes		
Chad	yes	yes	
Chile		yes	yes
China	yes	yes	
Congo (the)	yes		
Cote d'Ivoire	yes		
Croatia	yes		
Democratic People's Republic of Korea (the)	yes		
Ecuador	yes	yes	
Egypt	yes	yes	
Equatorial Guinea	yes		
Eritrea	yes	yes	
Ethiopia	yes	yes	
Gabon	yes		
Gambia (the)	yes	yes	
Grenada	yes	yes	
Guatemala	yes	yes	
Guinea	yes		
Guinea-Bissau	yes		
Honduras	yes	yes	
Indonesia	yes		
Iran (Islamic Republic of)	yes	yes	
Iraq	yes	yes	
Jordan	yes	yes	

Kuwait	yes	yes	
Liberia		yes	
Libya	yes	yes	
Madagascar	yes	yes	
Malawi	yes	yes	
Mauritania	yes		
Mexico	yes	yes	
Montenegro	yes	yes	
Morocco	yes	yes	
Mozambique	yes		
Myanmar	yes		
Nicaragua	yes	yes	
Niger (the)	yes	yes	
Nigeria	yes	yes	yes
North Macedonia	yes	yes	
Oman	yes	yes	yes
Pakistan	yes	yes	yes
Philippines (the)	yes	yes	
Qatar	yes	yes	
Rwanda	yes	yes	
Saint Lucia	yes	yes	
Saint Vincent and the Grenadines	yes		
Saudi Arabia	yes		
Senegal	yes	yes	
Serbia	yes	yes	
Sierra Leone	yes	yes	
Somalia	yes		
South Africa	yes	yes	
Sudan (the)	yes	yes	yes
Suriname	yes		
Syrian Arab Republic	yes		
Togo	yes	yes	
Tunisia	yes	yes	
Türkiye	yes		
Turkmenistan	yes	yes	
Uganda	yes	yes	
United Republic of Tanzania (the)	yes	yes	
Venezuela (Bolivarian Republic of)	yes	yes	
Yemen	yes		
Zambia	yes	yes	
Total	75	56	5

At the 91st meeting, UNIDO submitted on behalf of Niger the first ever Kigali HFC Implementation Plan (KIP). Although funding to start with the activities has been approved, the project has not yet been approved as multi-year agreement. Further discussion of the KIP Stage I for Niger has been deferred by the Executive Committee to the 93rd meeting.

Sector phase out by country

- 8) Information on funded ODP phase-out by region/country for ongoing projects is given in Table 3 “ODP Phase-out by Region, Country and Sector – Ongoing Projects” in the Excel file.

Ongoing projects	
Sector	ODP tonnes
Phase-out	2,537.8
Refrigeration	129.1
Total	2,666.9

- 9) As per Table 3a “ODP Phase-out by Region, Country and Sector – Completed Projects” in the Excel file, until end of the reporting period, UNIDO eliminated 81,799 ODP tonnes. ODP phase by sector is summarized in the below table.

Completed projects	
Sector	ODP tonnes
Aerosols	4,209.7
Foams	13,288
Fumigants	5,561.7
Halons	2,002.8
Other (Tobacco)	1,170
Process agents	1,028.2
Phase-out	16,185.9
Production	17,381
Refrigeration	18,688.4
Several	39.3
Solvents	2,194
Total	81,799

- 10) Partial ODP phase out is reported in Table 3b “Partial ODP Phase-out by Sector, Region, Country” and in Annex II in the Excel file.

The partial phase-out achieved in 2021 is 192.7 ODP tonnes for phase-out sector.

II. Project Completion since last Report

ODP phased out since last report - investment projects

- 11) As per Table 4 in the Excel file, the cumulative ODP phase out through investment projects completed in the reporting period (1 January – 31 December 2022) amounts to 289.4 ODP tonnes. In addition, 192.7 ODP tonnes were partially phased-out from ongoing projects. The details are shown in Table 3b and Table 4 in the Excel file. Table 4 in the Excel file lists all investment, demonstration, technical assistance and institutional strengthening projects completed in 2022.

Non-investment project completions since last report

- 12) Since the last report, 38 non-investment projects, with approved funding of US\$ 4,182,575 were completed: 19 in Africa, 12 in Asia and the Pacific, 3 in Europe, 2 in Latin America and the Caribbean, one global and the Core Unit Funding.

III. Global and Regional Project Highlights

Global Projects

- 13) Core Unit Funding for the year 2023 was approved in December 2022. The core unit funding for the year 2022 that was approved in 2021 for UNIDO as a global project in the amount of US\$ 2,036,154 was completed in December 2022.
- 14) The following global project has been completed in the reporting year:
 - Global chiller replacement project (Argentina)

Regional Projects

- No regional projects were ongoing during 2022.

IV. Performance Indicators

Business Plan Performance Goals as decided by the Executive Committee

- 15) The 71st Meeting of the Executive Committee in December 2013 reviewed and modified the performance indicators established by earlier decisions. The new weightings, based on Decision 71/28, are indicated in the below table.
- 16) The targets and achievements for the year 2022 performance indicators approved during the 88th Meeting of the ExCom are indicated below.

A1. Planning – Approvals

- 17) Tranches approved: Number of tranches approved vs. those planned

In 2022, 23 tranches were approved in total against the updated target of 30. The original target was 47, however, the below projects were not approved beyond UNIDO's control:

- UNIDO was ready for submission of the following tranches from HPMPs Stage I: Suriname; HPMPs Stage II for Antigua and Barbuda, Burkina Faso, Burundi, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Iran, Sao Tome and Principe and Suriname; and HPMP Stage III for Jordan, but the lead agencies were not ready for submission;
- The tranche request for Algeria (x2) were not submitted based on MLF Secretariat advice;
- The tranche request for Iraq could not be submitted due to Executive Committee decision related to other project in Iraq;
- The tranche request for Myanmar could not be requested due to the freeze of all UN activities in the country.

In addition to the approvals from the Business Plan, additional project that were not part of the Business Plan for 2022, were prepared, submitted and approved by the Executive Committee. These are two tranches from already approved MYA for Morocco and Syria and first tranche from 3 newly approved multi-year agreements for Brunei Darussalam and Grenada. The first ever Kigali HFC Implementation Plan (KIP) was submitted by UNIDO for Niger. Initial funding was approved to start with the activities. That brings the total number of additional tranches approved to five, leading to total of 29 tranches approved compared to the updated target of 30 tranches.

- 18) Projects/activities approved: Number of projects/activities approved vs. those planned (including project preparation activities)

During 2022, 23 individual projects were approved against the originally agreed target of 29. However the target should be updated to 24 taking into account the projects not approved for reasons beyond UNIDO's control:

- The project on conversion of HFC-134a (or R-410a) to R-290 in the manufacturing of air-conditioning units at J.M. Group/Mina factory in Sudan was submitted in 2021, but decision has been deferred to the next in-person meeting in 2022. In 2022, official request was received from the beneficiary, Mina, to change the technology for conversion from R290 to R32 due to an inability to commit to the former. Based on this request, an updated proposal was submitted to the MLF during which time, UNIDO simultaneously communicated with the beneficiary on the detailed time

framework, including a deadline to halt the use of R410. After consultations with Midea and Samsung (the beneficiary's license holders), Mina decided to withdraw the project and sent an official request to UNIDO and the NOU. The same information was communicated with the Secretariat;

- The preparations for HFC phase down plans for Egypt, Guatemala and Sudan could not be submitted due to the fact that the countries did not ratify the Kigali Amendment;
- UNIDO was ready for requesting the preparatory funding for HPMP Stage II for Central African Republic and Jordan, but lead agencies were not.

The approvals include 6 renewals of institutional strengthening projects (Armenia, Egypt, Libya, Syrian Arab Republic, Turkmenistan and Türkiye), one project preparation for HPMPs Stage III, 15 project preparations for Kigali HFC implementation plan and one global project for UNIDO's 2023 Core Unit Funding.

In addition to the approvals from the Business Plan, additional project that were not part of the Business Plan for 2022, were prepared, submitted and approved by the Executive Committee. These are four project preparations for Kigali HFC implementation plan, one project preparation for HPMPs Stage III, one institutional strengthening project, three verification reports and one project for conversion of the manufacturing of domestic and commercial refrigerators from HFC-134a to isobutane (R-600a) and propane (R-290) at Induglob. That brings the total number of additional projects/activities approved to 10, leading to total of 33 projects/activities approved; 9 more compared to the updated target of 24.

A2. Implementation

19) Funds disbursed: Based on estimated disbursement in Progress Report

During 2022 the funds disbursed as per IPSAS were US\$ 22,198,935 against the estimated disbursements for year 2022 established in the Progress Report for year 2021 of US\$ 26,753,292.

20) ODS phased-out: ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans

242.58 ODP tonnes can be recorded as achievements for all MYA projects approved in 2022. However, 26.83 ODP tonnes need to be deducted from the original target of 372.5 ODP as explained in section 17 due to the non-submission and/or non-approval of several tranches beyond UNIDO's control. The adjusted target should be 345.68 ODP tonnes.

As explained in paragraph 17, additional projects were approved for which the total ODS phase out is 18.2 ODP tonnes, bringing the total ODS tonnes to be recorded as achievement to 260.78 ODP tonnes against the updated target of 345.68 ODP tonnes. Furthermore, no ODP phase out has been allocated to the project in Morocco for phasing out HCFC-141b contained in imported pre-blended polyols in the polyurethane foam sector. The phase-down of HFCs associated with the approval of the KIP for Niger has not been recorded as an achievement.

21) Project completion for activities: Project completion vs. planned in progress reports for all activities (excluding project preparation)

During 2022, UNIDO completed 39 projects against the target of 42. It should be noted that three of the projects comprising the target are in Afghanistan where projects are delayed beyond UNIDO control. Therefore target should be adjusted to 39.

22) The performance indicators with the weightings are summarized in the following table:

Performance indicators: Targets and achievements in 2022

Type of Indicator	Short title	Calculation	Weighting	Target 2022	Achievement 2022	Additional Achievements 2022
Planning-- Approval	Tranches approved	Number of tranches approved vs. those planned	10	30 ²	23	5 ³
Planning-- Approval	Projects/ activities approved	Number of projects/activities approved vs. those planned (including project preparation activities)	10	24 ⁴	23	10 ⁵
	Sub-total		20			
Implementation	Funds disbursed	Based on estimated disbursement in progress report (USD)	15	26,753,292 US\$	22,198,936 US\$ ⁶	

² The original target was 47, however, the below projects were not approved beyond UNIDO's control: (1) UNIDO was ready for submission of the following tranches from HPMPs Stage I: Suriname; HPMPs Stage II for Antigua and Barbuda, Burkina Faso, Burundi, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Iran, Sao Tome and Principe and Suriname; and HPMP Stage III for Jordan, but the lead agencies were not ready for submission; (2) The tranche request for Algeria (x2) were not submitted based on MLF Secretariat advice; (3) The tranche request for Iraq could not be submitted due to Executive Committee decision related to other project in Iraq; (4) The tranche request for Myanmar could not be requested due to the freeze of all UN activities in the country.

³ Five additional tranches were prepared, requested and approved that were not initially part of the 2022 Business Plan. These are two tranches from already approved MYA for Morocco and Syria and first tranche from 2 newly approved multi-year agreements for Brunei Darussalam and Grenada. The first ever Kigali HFC Implementation Plan (KIP) was submitted by UNIDO for Niger. Initial funding was approved to start with the activities.

⁴ During 2022, 23 individual projects were approved against the originally agreed target of 29. However the target should be updated to 24 taking into account the projects not approved for reasons beyond UNIDO's control: (1) The project on conversion of HFC-134a (or R-410a) to R-290 in the manufacturing of air-conditioning units at J.M. Group/Mina factory in Sudan was submitted in 2021, but decision has been deferred to the next in-person meeting in 2022. In 2022, official request was received from the beneficiary, Mina, to change the technology for conversion from R290 to R32 due to an inability to commit to the former. Based on this request, an updated proposal was submitted to the MLF during which time, UNIDO simultaneously communicated with the beneficiary on the detailed time framework, including a deadline to halt the use of R410. After consultations with Midea and Samsung (the beneficiary's license holders), Mina decided to withdraw the project and sent an official request to UNIDO and the NOU. The same information was communicated with the Secretariat; (2) The preparations for HFC phase down plans for Egypt, Guatemala and Sudan could not be submitted due to the fact that the countries did not ratify the Kigali Amendment; (3) UNIDO was ready for requesting the preparatory funding for HPMP Stage II for Central African Republic and Jordan, but lead agencies were not.

⁵ In addition to the approvals from the Business Plan, additional project that were not part of the Business Plan for 2022, were prepared, submitted and approved by the Executive Committee. These are four project preparations for Kigali HFC implementation plan, one project preparation for HPMPs Stage III, one institutional strengthening project, three verification reports and one project for conversion of the manufacturing of domestic and commercial refrigerators from HFC-134a to isobutane (R-600a) and propane (R-290) at Induglob. That brings the total number of additional projects/activities approved to 10, leading to total of 33 projects/activities approved; 9 more compared to the updated target of 24.

⁶ Disbursement value does not include disbursements made during 2022 under the projects funded from additional

Type of Indicator	Short title	Calculation	Weighting	Target 2022	Achievement 2022	Additional Achievements 2022
Implementation	ODS phase- out	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	345.68 ODP tonnes ⁷	242.58 ODP tonnes	18.2 ODP tonnes⁸
Implementation	Project completion for activities	Project completion vs. planned in progress reports for all activities (excl. project preparation)	20	39 ⁹	39	
	Sub-total		60			
Administrative	Speed of financial completion	The extent to which projects are financially completed 12 months after project completion	10	12 months after operational completion	12 months	
Administrative	Timely submission of project completion reports	Timely submission of project completion reports vs. those agreed	5	On time	On time	
Administrative	Timely submission of progress reports	Timely submission of progress reports and business plans and responses unless otherwise agreed	5	On time	On time or as agreed	
	Sub-total		20			

In addition to the above, UNIDO's approvals in 2022 amounted to US\$ 20,317,479 (excluding agency support costs).

Cumulative completed investment projects

- 23) Since 1993, UNIDO's cumulative number of completed investment projects has grown to 878 with a total of US\$ 688,120,404 of approved funding including adjustments. The average number of months from approval to first disbursement was 9 months. The average number of months from approval to completion was 40 months. The cost effectiveness of completed projects is US\$ 8.74/kg. Table 5 "Cumulative completed investment projects by region, sector and implementation characteristics" in the Excel file illustrates more details, presenting information both on a regional and on a sector basis.

voluntary contributions from non-Article 5 countries.

⁷242.58 ODP tonnes can be recorded as achievements for all MYA projects approved in 2022. However, 26.83 ODP tonnes need to be deducted from the original target of 372.5 ODP as explained in section 17 due to the non-submission and/or non-approval of several tranches beyond UNIDO's control. The adjusted target should be 345.68 ODP tonnes.

⁸ As explained in paragraph 17, additional projects were approved for which the total ODS phase out is 18.2 ODP tonnes, bringing the total ODS tonnes to be recorded as achievement to 260.78 ODP tonnes against the updated target of 345.68 ODP tonnes.

⁹ Three of the projects comprising the target for project completion for activities are in Afghanistan where projects are delayed beyond UNDO control. Therefore the target should be reduced to 39.

The vast majority of completed investment projects have been implemented with disbursements of funds during implementation; only ten retroactively funded projects were implemented by UNIDO. In addition, UNIDO has completed one investment project funded by additional contributions for the Kigali Amendment.

Cumulative completed non-investment projects

- 24) Since 1993, UNIDO's cumulative number of completed non-investment projects is 344. Out of a total of US\$ 55,660,099 approved funding, 98 per cent of funds have been disbursed. Except for 78 institutional strengthening projects, all UNIDO completed non-investment projects were objective-sensitive. Table 6 "Cumulative completed non-investment projects by region, sector and implementation characteristics" in the Excel file provides details according to geographic region and sectors. In addition, UNIDO has completed 6 Technical Assistance and project preparations funded by additional contributions for the Kigali Amendment.

Cumulative ongoing investment projects

- 25) By the end of 2022, UNIDO's cumulative portfolio of ongoing investment, demonstration and recovery and recycling projects contained 122 projects. Of the US\$ 107,103,317 approved budget, 52 per cent has been disbursed. It took an average of 9 months from approval to first disbursement. The Africa region had 50 ongoing projects, Asia and the Pacific 36 ongoing projects, Europe 13 ongoing projects and Latin America and the Caribbean 23 ongoing projects. Table 7 "Cumulative ongoing investment projects by region, sector and implementation characteristics" in the Excel file illustrates the implementation characteristics among regions and sectors for UNIDO's ongoing investment projects. The ongoing projects are objective sensitive and the disbursement of funds takes place during implementation.

Cumulative ongoing non-investment projects

- 26) At the end of 2022, UNIDO's cumulative portfolio of ongoing non-investment projects (excluding preparatory funding) consisted of 48 projects. Out of a total of US\$ 11,384,909 of approved funding, 47 per cent has been disbursed. The ongoing non-investment projects include 18 Technical Assistance projects (tranches of HPMPs), 19 Institutional Strengthening projects, 9 Verification Reports, 1 Demonstration project and 1 Core Unit Budget. Table 8 "Cumulative ongoing non-investment projects by region, sector and implementation characteristics" in the Excel file illustrates details, presenting the projects according to regions, sectors and types.

V. Status of Agreements and Project Preparation by Country

Agreements to be signed/executed/finalized and ready for disbursing

- 27) As soon as a project is approved by the Executive Committee and after having notified the respective authorities, UNIDO secures officially from the recipient country's Ozone and project authorities, validity/confirmation of basic project data, such as actual ODS consumption; validity of counterpart commitment, etc., since by this time, a substantial period of time might have elapsed from the time of formulation of the project, and the projects, in most cases, are adjusted as a result of the negotiations during the approval process. After this, wherever it is required by the Country, UNIDO prepares and signs with the Ozone Authorities the agreement of cooperation. UNIDO prepares detailed Terms of Reference (TOR) for services to be rendered under the project. The TOR and the list of potential suppliers are approved by the counterpart. The bidding and subcontracting takes place based on the mutually agreed TOR. The first payment is due upon entry into force of the first contract. Even if the first payment is released, as per the IPSAS, disbursements are not reflected until after services have been delivered. Under UNSAS, any payment outflow was recorded as disbursement. The above-illustrated preparatory work explains, for multi-year programmes and projects, the time elapsing between project approval and first disbursement.

Project preparation by country, approved amount and amounts disbursed

- 28) As of the end of 2022, UNIDO had on-going project preparation in 51 countries with approved funding amounting to US\$ 4,961,500 out of which US\$ 1,198,766 has been disbursed.

The list and details of active project preparation accounts are shown in Table 9 “Active project preparation accounts” in the Excel file.

Activities related to the phase-out of HCFCs

- 29) UNIDO is lead agency or only implementing agency for altogether 32 **Stage IHPMPs**. These MYAs/projects are listed below:

#	Mtg	Country	Main / Cooperating agency
1.	64	Albania	UNIDO lead agency with UNEP
2.	66	Algeria	UNIDO only implementing agency
3.	66	Argentina	UNIDO lead agency with World Bank
4.	74	Bolivia	UNIDO only implementing agency
5.	66	Bosnia and Herzegovina	UNIDO only implementing agency
6.	64	Cameroon	UNIDO only implementing agency
7.	64	China – RAC sector	UNIDO only implementing agency
8.	64	China – XPS sector	UNIDO lead agency with GIZ
9.	73	Democratic People's Republic of Korea	UNIDO lead agency with UNEP
10.	65	Ecuador	UNIDO lead agency with UNEP
11.	65	Egypt	UNIDO lead agency with UNDP
12.	64	Guatemala	UNIDO lead agency with UNEP
13.	63	Honduras	UNIDO lead agency with UNEP
14.	65	Jordan	UNIDO lead agency with WB
15.	75	Libya	UNIDO only implementing agency
16.	64	Mexico	UNIDO lead agency with UNDP
17.	63	Montenegro	UNIDO only implementing agency
18.	65	Morocco	UNIDO only implementing agency
19.	66	Niger	UNIDO lead agency with UNEP
20.	60	North Macedonia	UNIDO only implementing agency
21.	65	Oman	UNIDO lead agency with UNEP
22.	62	Pakistan	UNIDO lead agency with UNEP
23.	65	Qatar	UNIDO lead agency with UNEP
24.	68	Saudi Arabia	UNIDO lead agency with UNEP
25.	62	Serbia	UNIDO lead agency with UNEP
26.	67	Somalia	UNIDO only implementing agency
27.	67	South Africa	UNIDO only implementing agency
28.	66	Sudan	UNIDO only implementing agency
29.	72	Tunisia	UNIDO lead agency with UNEP and France

#	Mtg	Country	Main / Cooperating agency
30.	62	Turkmenistan	UNIDO only implementing agency
31.	68	Turkey	UNIDO lead agency with UNEP
32.	63	Venezuela	UNIDO lead agency with UNEP

Furthermore, UNIDO is co-implementing agency for the **Stage I HPMs** for the following countries with the below agencies:

- UNEP: Afghanistan, Bahamas, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Congo (Rep. of), Cote d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Grenada, Guinea, Guinea-Bissau, Iraq, Kuwait, Madagascar, Malawi, Mauritania, Mozambique, Myanmar, Nicaragua, Philippines, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Senegal, Sierra Leone, Suriname, Syria, Tanzania, Togo, Uganda, Yemen and Zambia;
- UNDP: Indonesia, Iran and Nigeria;

Other **Stage I HPMs**:

- Croatia, implemented by UNIDO. Croatia is no longer Article-5 country.

30) UNIDO is involved in **Stage II HPMs** as single, lead or cooperating implementing agency in the following countries:

	Mtg	Country	Main / Cooperating agency
1.	85	Afghanistan	UNEP lead with UNIDO as cooperating implementing agency
2.	85	Albania	UNIDO lead with UNEP as cooperating implementing agency
3.	79	Argentina	UNIDO lead with Italy as cooperating bilateral agency
4.	90	Bahamas	UNEP lead with UNIDO as cooperating implementing agency
5.	88	Bahrain	UNEP lead with UNIDO as cooperating implementing agency
6.	90	Benin	UNEP lead with UNIDO as cooperating implementing agency
7.	87	Bolivia	UNEP lead with UNIDO as cooperating implementing agency
8.	87	Bosnia and Herzegovina	UNIDO single implementing agency
9.	86	Botswana	UNEP lead with UNIDO as cooperating implementing agency
10.	75	Brazil	UNDP lead with UNIDO, Germany and Italy as cooperating implementing and bilateral agencies
11.	90	Brunei Darussalam	UNEP lead with UNIDO as cooperating implementing agency
12.	82	Cameroon	UNIDO single implementing agency
13.	90	Chad	UNEP lead with UNIDO as cooperating implementing agency
14.	76	Chile	UNDP lead with UNIDO as cooperating implementing agency
15.	77	China- RAC Sector	UNIDO lead with Italy as cooperating bilateral agency
16.	77	China – XPS sector	UNIDO lead with GIZ as cooperating bilateral agency
17.	86	Ecuador	UNIDO lead with UNEP as cooperating implementing agency ¹⁰
18.	79	Egypt	UNIDO lead with UNDP, UNEP and Germany as cooperating implementing and bilateral agencies

¹⁰ At the 87th meeting a decision was made to transfer UNEPs components to UNIDO and UNIDO became single implementing agency for this project.

19.	91	Eritrea	UNEP lead with UNIDO as cooperating implementing agency
20.	88	Ethiopia	UNEP lead with UNIDO as cooperating implementing agency
21.	86	Gambia	UNEP lead with UNIDO as cooperating implementing agency
22.	90	Grenada	UNEP lead with UNIDO as cooperating implementing agency
23.	86	Guatemala	UNEP lead with UNIDO as cooperating implementing agency
24.	86	Honduras	UNIDO lead with UNEP as cooperating implementing agency
25.	77	Iran	UNDP lead with UNEP, UNIDO and Germany as cooperating implementing and bilateral agencies
26.	87	Iraq	UNEP lead with UNIDO as cooperating implementing agency
27.	77	Jordan	World Bank lead with UNIDO as cooperating implementing agency
28.	88	Kuwait	UNEP lead with UNIDO as cooperating implementing agency
29.	90	Liberia	UNEP lead with UNIDO as cooperating implementing agency
30.	90	Libya	UNIDO single implementing agency
31.	90	Madagascar	UNEP lead with UNIDO as cooperating implementing agency
32.	85	Malawi	UNEP lead with UNIDO as cooperating implementing agency
33.	73	Mexico	UNIDO lead with Germany, Italy, Spain and UNEP as cooperating implementing and bilateral agencies
34.	85	Montenegro	UNIDO single implementing agency
35.	88	Morocco	UNIDO single implementing agency
36.	86	Nicaragua	UNEP lead with UNIDO as cooperating implementing agency
37.	90	Niger	UNIDO lead with UNEP as cooperating implementing agency
38.	81	Nigeria	UNDP lead with UNIDO as cooperating implementing agency
39.	88	North Macedonia	UNIDO single implementing agency
40.	75	Oman	UNIDO lead with UNEP as cooperating implementing agency
41.	76	Pakistan	UNIDO lead with UNEP as cooperating implementing agency
42.	83	Philippines	UNIDO single implementing agency
43.	88	Qatar	UNIDO lead with UNEP as cooperating implementing agency
44.	86	Rwanda	UNEP lead with UNIDO as cooperating implementing agency
45.	87	Saint Lucia	UNEP lead with UNIDO as cooperating implementing agency
46.	88	Senegal	UNEP lead with UNIDO as cooperating implementing agency
47.	85	Serbia	UNIDO lead with UNEP as cooperating implementing agency
48.	87	Sierra Leone	UNEP lead with UNIDO as cooperating implementing agency
49.	91	South Africa	UNIDO single implementing agency
50.	75	Sudan	UNIDO single implementing agency
51.	87	Tanzania	UNEP lead with UNIDO as cooperating implementing agency
52.	91	Togo	UNEP lead with UNIDO as cooperating implementing agency
53.	84	Tunisia	UNIDO lead with UNEP as cooperating implementing agency
54.	86	Turkmenistan	UNIDO single implementing agency
55.	86	Uganda	UNEP lead with UNIDO as cooperating implementing agency
56.	76	Venezuela	UNIDO single implementing agency
57.	86	Zambia	UNEP lead with UNIDO as cooperating implementing agency

31) UNIDO is involved in **ongoing Stage III HPMPs** as single, lead or cooperating implementing agency in the following countries:

	Mtg	Country	Main / Cooperating agency
1.	88	Chile	UNDP lead with UNIDO and UNEP as cooperating

			implementing agencies
2.	91	Nigeria	UNDP lead with UNIDO as cooperating implementing agency
3.	88	Oman	UNIDO lead with UNEP as cooperating implementing agency
4.	90	Pakistan	UNIDO lead with UNEP as cooperating implementing agency
5.	88	Sudan	UNIDO single implementing agency

- 32) At the 91st meeting, UNIDO submitted the first ever Kigali HFC Implementation Plan (KIP) for Niger, with UNEP as cooperating implementing agency. The Executive Committee agreed to approve funding for starting with the activities, but did not approve the project as a multi-year agreement.

Climate impact of Montreal Protocol activities

- 33) In the selection of alternative technologies to replace ODS, energy efficiency, has been taken into account since the first investment projects, from early 1990s in UNIDO. In the recent years, the introduction of low Global Warming Potential and high energy efficiency alternatives has gained high attention to achieve additional climate benefits in the ODS phase-out process. UNIDO has been looking into the assessment of climate impacts of the MP activities in order to respond to the needs of Dec XIX/6 of the Meeting of the Parties. In Decision 72/40 (May 2014) bilateral and implementing agencies have been encouraged to submit proposals for demonstration projects for low GWP alternatives to HCFCs in the refrigeration and air-conditioning subsectors and feasibility studies, including business cases for district cooling.

- 34) During the reporting period, the following demonstration project was ongoing:

- Demonstration project on promoting HFO-based low-global warming potential refrigerants for air-conditioning sector in high ambient temperatures (Saudi Arabia).

Activities related to HFC phase down

- 35) In 2022, funding was approved for 19 countries to start with the preparation of Stage I of their Kigali HFC implementation Plans. This brings the total number of countries where UNIDO is preparing the submission of Stage I of the KIPs, either as single, lead or cooperating implementing agency, to 42.
- 36) The first ever KIP, was submitted for Niger at the 91st meeting of the Executive Committee with UNIDO as lead and UNEP as cooperating implementing agency. A multi-year agreement between the Executive Committee meeting and the country was not issued, however funding was approved to initiate the activities under the Stage I.
- 37) A project for conversion of the manufacturing of domestic and commercial refrigerators from HFC-134a to isobutane (R-600a) and propane (R-290) at Induglob, Ecuador was submitted and approved at the 91st meeting of the Executive Committee.
- 38) UNIDO continues with implementation of the projects for control and phase-out of HFC-23 emissions in production of HCFC-22 in Argentina and Mexico.
- 39) During 2022, the remaining ongoing Enabling activities for HFC phase-down implemented by UNIDO have been completed.

VI. Gender Mainstreaming

During 2022, UNIDO has been implementing the MLF Gender Policy in 66 countries as part of projects approved from the 85th meeting. When preparing and submitting the project proposals, UNIDO tries to include to the extent possible activities that would address gender equality and women's empowerment. The checklists and potential indicators included in the project guides are used for that purpose. UNIDO, as an organization, acknowledges the substantial positive impact of gender equality and women's empowerment on sustained economic growth and the promotion of sustainable industrial development. These factors are instrumental in driving poverty reduction and fostering social integration. Consequently, the organization has instituted its own policy and strategy for gender mainstreaming with the goal of achieving tangible outcomes.

The integration of gender mainstreaming into project implementation encompasses several key facets:

- Project teams are conscientiously composed to ensure a balanced representation of both male and female members.
- The recruitment process is closely monitored to track the proportion of applications received from men and women.
- Vacancy announcements include provisions that actively encourage women to apply.
- Recruitment panels are constituted with a gender-balanced composition.
- Participation rates of male and female beneficiaries in capacity-building and awareness-raising activities are diligently monitored.
- All documents generated under the project are tailored to be responsive to gender considerations, including policies, strategies, training materials, and knowledge products.
- Online platforms, events, trainings, workshops, discussions, roundtables, and side events at conferences are designed with gender responsiveness in mind.
- Capacity-building initiatives are structured to be sensitive to gender-related nuances.
- Public awareness campaigns are crafted to incorporate gender perspectives, aiming to increase female involvement in the ozone protection process.
- Prioritizing women-led or women-owned business to be supported under the project activities.
- Monitoring and evaluation activities include dedicated reporting on gender-related issues.

In many countries, the technical workforce in the RAC sector is predominantly male. UNIDO is actively engaged in identifying potential female technicians and engineers who could pursue careers in this sector, offering tailored training programs. The success of these initiatives varies from country to country. For instance, in Albania, UNIDO successfully organized a training program for female engineers in the RAC sector, although efforts to organize similar training for female technicians were not as fruitful. In Tunisia, UNIDO training sessions have been conducted for female engineering students. In Nigeria, UNIDO has established a scholarship program to incentivize young women to pursue studies in refrigeration and air conditioning, with the first scholarships awarded in the first half of 2023. In Oman, as part of the HPMP Stage III training for end-users, a dedicated session on gender mainstreaming was included. Between August-September 2022, 14 female RAC technicians were trained in Sudan. Considering that a few years ago there were no women in the field, the participation of the 14 female participants was notable. In October 2022, a seminar was organized for custom officers to review Sudan's harmonized system codes and the tackling of illegal trade. From a total of 35 custom officers that attended the seminar, 6 were female officers. In Niger, 20 female customs officers were trained between 2020 and 2022.

From the experiences garnered thus far, it is evident that there exists immense potential for advancing gender mainstreaming within the Montreal Protocol portfolio. Engaging girls and women in ozone and climate protection initiatives has the potential to double human capacities in each country dedicated to

these pursuits. However, in some regions, sustained investments are imperative to bolster the number of female technicians and engineers. Additionally, in the case of LVC countries, budget constraints pose a challenge, with gender mainstreaming competing with other priorities. Adequate funding for gender mainstreaming activities, extending beyond mere participant tallies, holds the promise of yielding enduring results. The TEAP report assessing the funding requirement for the replenishment 2024-2026 analysed the funding for gender mainstreaming of other global funds and recognizes that “without a requirement to earmark funding for those activities, not all countries will be able to properly respond to gender required actions and will not prioritise it”¹¹. In this regard, UNIDO stands prepared to continue implementing the MLF Gender Policy, incorporating gender mainstreaming activities within existing budgetary constraints, while also being ready to develop more comprehensive programs within the stages of multi-year agreement projects, such as HCFC phase-out management plans or Kigali HFC implementation plans.

¹¹ <https://ozone.unep.org/system/files/documents/TEAP-DecisionXXXIV2-replenishment-TF-report-May2023-RTF-report.pdf>

VII. Administrative Issues (Operational, Policy, Financial and Other Issues) Meetings attended

40) UNIDO attended/participated in the following meetings in 2022:

#	Meeting	Location	Dates
1.	Inter – agency coordination meeting	Online	31 March – 1 April 2022
2.	89 th meeting of the Executive Committee – part I	Online	16, 18 and 20 May 2022
3.	89 th meeting of the Executive Committee – part II	Montreal, Canada	16 – 18 June 2022
4.	90 th meeting of the Executive Committee	Montreal, Canada	20 – 23 June 2022
5.	68th Implementation Committee Meeting	Bangkok, Thailand	09 July 2022
6.	44th Open-Ended Working Group Meeting	Bangkok, Thailand	11 – 16 July 2022
7.	5th Extraordinary Meeting of the Parties	Bangkok, Thailand	16 Jul 2022
8.	Joint Network Meeting of the South Asia, Southeast Asia and Pacific Island Countries, National Ozone Officers	Bangkok, Thailand	17 – 21 July 2022
9.	Network Meeting of the West Asia National Ozone Officers	Dubai, United Arab Emirates	15 – 16 September 2022
10.	Montreal Protocol meetings including the Europe and Central Asia (ECA)	Prague, Czech Republic	20 – 21 September 2022
11.	Inter – agency coordination meeting	Montreal, Canada	20 – 22 September 2022
12.	Joint Africa Network and Kigali HFC Implementation Plan (KIP) Preparation Meeting	Nairobi, Kenya	3 – 7 October 2022
13.	Joint Network Meeting of the South Asia and Southeast Asia National Ozone Officers	Chiangmai, Thailand	3 – 5 October, 2022
14.	69th Implementation Committee Meeting	Montreal, Canada	29 October 2022
15.	34th Meeting of the Parties	Montreal, Canada	31 October – 04 November 2022
16.	91 st meeting of the Executive Committee	Montreal, Canada	5 – 9 December 2022

It should be noted that the number of online meetings attended by UNIDO is significantly higher. In the above table are listed only the key meetings attended in 2022.

Implementing agency and other cooperation

- 41) Cooperation with UNDP and the World Bank:
Several ongoing HPMP activities in different countries and regions are being implemented together with UNDP and/or the World Bank, among others the following Stage II HPMP in Brazil, Chile, Egypt, Iran, Jordan and Nigeria and Stage III HPMP in Chile and Nigeria.
- 42) Cooperation with UNEP: UNIDO has been implementing 95 HPMPs together with UNEP until 2022. In 2021, 17 tranches of ongoing and new HPMPs were approved with UNEP as lead or co-implementing agency in Albania, Bahamas, Benin, Brunei Darussalam, Chad, Eritrea, Grenada, Liberia, Madagascar, Mauritania, Mexico, Niger, Pakistan, Serbia, Syria and Togo. In addition to the cooperation under the HPMPs, the first ever KIP was submitted to the 91st meeting for Niger. The project document was submitted by UNIDO with UNEP as cooperating implementing agency. Although the multi-year agreement was not approved, funding was approved to initiate the activities under the KIP.
- 43) Participation in inter-agency meetings: During 2022, UNIDO attended the two inter-agency meetings that were organized in preparation for the 89th/90th and for the 91st Executive Committee meetings. The first meeting took place online and the second meeting took place at the MLF Secretariat premises in Montreal.
- 44) Cooperation with Bilateral Agencies: During 2022, UNIDO continued implementation of the ongoing bilateral projects.
- 45) Those bilateral projects under UNIDO's implementation, which have been ongoing or have been completed in 2022 are listed in the below table. The list is sorted in alphabetical order of the bilateral agencies. The list includes one HFC phase-down enabling activity project for Tunisia.

#	Bilateral Agency	Project Title	Country	Impact	Approved Funding (US\$)	Status
1.	Austria	HCFC phase-out management plan (stage II, third tranche) (room air-conditioning manufacturing and heat pump water heaters sector plan)	China	27.3	350,000	ONG
2.	Italy	HCFC phase-out management plan (stage II, first tranche) (reclamation of HCFC refrigerants)	Mexico	0	458.191	COM
3.	Italy	HCFC phase-out management plan (Stage II, first tranche)(RAC sector)	China	10,3	891.892	ONG
4.	Italy	HCFC phase-out management plan (stage II, first tranche) (foam sector)	Iran (Islamic Republic of)	7,1	403.203	ONG

5.	Italy	HCFC phase-out management plan (stage II, second tranche) (foam sector)	Iran (Islamic Republic of)	8,9	504.004	ONG
6.	Italy	HCFC phase-out management plan (stage II, first tranche) (refrigeration servicing sector)	Argentina	2,9	250.000	ONG
7.	Spain	HCFC phase-out management plan (stage II, second tranche) (cleaning agent phase-out in refrigeration servicing sector)	Mexico	2,3	76.991	ONG
8.	Spain	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing sector)	Mexico	0	280.000	ONG
9.	Spain	HCFC phase-out management plan (stage II, third tranche) (refrigeration servicing sector)	Mexico	13,1	1.070.000	ONG

Other issues

- 46) The status of ongoing projects is described in Annex II. The success and timely implementation of these activities are crucial in the current compliance period. In order to ensure timely project completion of projects approved so far, and to facilitate compliance of the recipient countries with their MP obligations, in 2022, UNIDO has continued to practice the following initiatives, which supported successful project implementation:
- Regular follow up of the implementation process is being done by the staff of the ozone office together with UNIDO’s national and international consultants and project managers. This ensures that effective actions on critical issues such as resolving bottlenecks in site preparation, customs clearance, installation, commissioning and safety certification, monitoring of HCFC-related equipment are taken.
 - Following the approval of the cost-guidelines for preparation of HFC phase-down plans, UNIDO has intensified the work with countries related to the support and service that UNIDO can offer in implementation of the Kigali Amendment.
 - Communication and interaction between regional and country offices about the implementation process has ensured the smooth flow of project plans. As in previous years, directors of UNIDO regional and country offices are regularly briefed on ongoing and possible future activities. They are involved in the implementation process and are following up the progress of the programmes. In turn, the representatives brief headquarter staff working in a specific country on the regular activities in the field and problems faced, if any.
 - During 2022, in-person meetings slowly resumed to pre-pandemic level. Online meetings continue to take place as part of the daily communication.
 - Due to security and/or political issues, in addition to the pandemic, UNIDO experienced delays in project implementation during 2022 in several countries.
- 47) UNIDO is regularly attending Regional Network Meetings and respective workshops, organized online and in-person during 2022, providing additional support to our counterpart countries.
- 48) UNIDO also provides, when requested, support such as policy assistance, putting in place relevant legislation etc.
- 49) In April 2022, first time after the covid-19 pandemic, and as conditions allowed, UNIDO organized an in person meeting for several countries, namely Albania, Bosnia and Herzegovina and North Macedonia in preparation for their Kigali HFC Phase-down Plans (KIPs) preparations. This meeting was a prelude to larger KIP meetings that took place in 2023.
- 50) On the occasion of the World Refrigeration Day, on 22 June 2022, UNIDO organized a webinar on “Flammable refrigerants: future-proof, environmentally friendly and safe to use”, marking the World Refrigeration Day under the message “Cooling matters”. Speakers at the webinar were representatives from the World Refrigeration day (WRD) Secretariat, UNIDO and the Austrian Association of Refrigeration (ÖGKT). The webinar delved into many topics including the Kigali Amendment and stricter HFC regulations with the revised EU F-gas

Regulation, as well as terminology for discussing cooling to ensure the greatest outreach. Discussions centered on flammable refrigerants as future-proof, environmentally friendly and safe to use, when safety aspects are taken into consideration and when proper, safe handling and training practices are maintained.

- 51) At the 34th Meeting of the Parties (MOP) to the Montreal Protocol on Substances that Deplete the Ozone Layer that took place in Montreal, Canada, in October 2022, UNIDO organized a side event on the topic “Taking stock of existing RAC training tools and exploring future training needs and approaches”. At the side event, various training tools made by GIZ, UNEP and other stakeholders to handle flammable refrigerants were presented to provide a better overview of all existing RAC tools and learning materials. Key questions were discussed, such as how we could better design and distribute future RAC training tools in consultation with all stakeholders in each country to harmonize the use of alternative refrigerants, in particular, A2L and A3 refrigerants. Canada, North Macedonia and Tunisia shared their countries experiences with regards to the training centers for flammable refrigerants, certification schemes and curricula.

- 52) At the 91st meeting of the Executive Committee, that took place in December 2022 in Montreal, Canada, UNIDO submitted the first ever KIP for Niger, ahead of the cost-guidelines agreement. The country decided to move forward considering that the first commitment under the Kigali Amendment is on the 1st of January 2024. The KIP was not approved in full, however funding has been approved to initiate the project activities. This was the first time that funding has been approved under a KIP.

VIII. Tables and Annexes*

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