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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 9(c)

工发组织 2025 年工作方案修正案

¹ UNEP/OzL.Pro/ExCom/97/1

基金秘书处的评论和建议

1. 工发组织请求执行委员会批准 2,165,594 美元，外加 153,092 美元的机构支助费用，用于表 1 所列的 2025 年工作方案修正案。提交的材料附于本文件之后。

表 1: 2025 年工发组织工作方案修正案

国家	活动/项目	请求金额 (美元)	建议金额 (美元)
A 部分：建议一揽子批准的活动			
A1：更新一个体制强化项目			
波斯尼亚和黑塞哥维那	更新一个体制强化项目（第九阶段）	252,594	252,594
	小计		252,594
	机构支助费用		17,682
	总计		270,276
A2：含氢氯氟烃淘汰管理计划的项目制定			
中非共和国 ^a	制定含氢氯氟烃淘汰管理计划（第二阶段）	30,000	30,000
卡塔尔 ^b	制定含氢氯氟烃淘汰管理计划（第三阶段）	20,000	20,000
塞尔维亚	制定含氢氯氟烃淘汰管理计划（第三阶段）	30,000	30,000
阿拉伯叙利亚共和国 ^b	制定含氢氯氟烃淘汰管理计划（第二阶段）	15,000	15,000
	A2 小计		95,000
	机构支助费用		6,650
	A2 总计		101,650
A3：基加利氢氟碳化物执行计划的项目制定			
文莱达鲁萨兰国 ^b	基加利氢氟碳化物执行计划的制定（第一阶段）	35,000	35,000
巴基斯坦 ^a	基加利氢氟碳化物执行计划的制定（第一阶段）	175,000	175,000
	A3 小计		210,000
	机构支助费用		14,700
	A3 总计		224,700
A4：制定国家用过或不需要的受控物质库存清单以及此类物质的收集、运输和处置计划²			
阿尔及利亚	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
阿根廷	制定国家用过或不需要的受控物质库存清单和计划	100,000	100,000
波斯尼亚和黑塞哥维那	制定国家用过或不需要的受控物质库存清单和计划	80,000	80,000
佛得角	制定国家用过或不需要的受控物质库存清单和计划	80,000	80,000
中非共和国	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
科摩罗	制定国家用过或不需要的受控物质库存清单和计划	70,000	70,000
科特迪瓦	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
刚果民主共和国	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
赤道几内亚	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
加蓬	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
几内亚	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
约旦 ^a	制定国家用过或不需要的受控物质库存清单和计划	53,000	53,000
摩洛哥	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
巴基斯坦	制定国家用过或不需要的受控物质库存清单和计划	100,000	100,000
菲律宾	制定国家用过或不需要的受控物质库存清单和计划	100,000	100,000

² 本文称为编制国家使用或不需要的受控物质库存清单和计划

国家	活动/项目	请求金额 (美元)	建议金额 (美元)
圣多美和普林西比	制定国家用过或不需要的受控物质库存清单和计划	80,000	80,000
突尼斯	制定国家用过或不需要的受控物质库存清单和计划	90,000	90,000
A4 小计		1,473,000	1,473,000
机构支助费用		103,110	103,110
A4 总计		1,576,110	1,576,110
A5: 为编写氢氟碳化合物消费核查报告提供技术援助			
阿尔巴尼亚	基加利氢氟碳化合物执行计划第一阶段的核查报告	15,000	15,000
刚果	基加利氢氟碳化合物执行计划第一阶段的核查报告	30,000	30,000
北马其顿	基加利氢氟碳化合物执行计划第一阶段的核查报告	30,000	30,000
A5 小计		75,000	75,000
机构支助费用		6,750	6,750
A5 总计		81,750	81,750
A6: 在氢氟碳化合物逐步减少的背景下，制定一个试点项目，以保持和/或提高替代技术和设备的能源效率（第 91/65 号决定）³			
智利	制定一个试点项目，以保持和/或提高制冷行业的能源效率	30,000	30,000
A6 小计		30,000	30,000
机构支助费用		2,100	2,100
A6 总计		32,100	32,100
A7 在氢氟碳化合物逐步减少的背景下，制定一个提高部件和热泵制造能源效率的项目（第 95/87 号决定）			
南非	制定一个提高换热器制造能源效率的项目	30,000	30,000
A7 小计		30,000	30,000
机构支助费用		2,100	2,100
A7 总计		32,100	32,100
A1, A2, A3, A4, A5, A6, A7 总计		2,165,594	2,165,594
A1, A2, A3, A4, A5, A6, A7 机构支助费用		153,092	153,092
汇总总计		2,318,686	2,318,686

^a 环境规划署作为合作执行机构

^b 环境规划署作为牵头执行机构

A 部分：建议一揽子批准的活动

A1：更新体制强化项目

项目说明

2. 工发组织请求更新表 1 A1 部分所列国家的体制强化项目。本文件附件一介绍了该项目的情况。

³ 在此称为维持和/或提高能源效率的试点项目的制定。

秘书处的评论

3. 秘书处对照指导方针以及关于资格和供资水平的相关决定，⁴ 审查了工发组织代表政府提交的更新一个体制强化项目的请求。该请求与上一阶段的初始工作计划、国家方案和第 7 条数据、其含氢氯氟烃淘汰管理计划执行情况的最新报告、该机构的进度报告以及缔约方会议的任何相关决定进行了交叉检查。据指出，该国已提交 2024 年国家方案和第 7 条数据，符合《蒙特利尔议定书》规定的控制目标，并报告了不超过其与执行委员会签订的含氢氯氟烃淘汰管理计划协定中规定的年度最高允许消费的年度含氢氯氟烃消费。此外，根据第 91/63(b)号决定，提交的请求还包括对绩效指标、项目风险和可持续性以及体制强化目标实现情况的评估。

秘书处的建议

4. 秘书处建议以本文件表 1 A1 部分所示的供资水平一揽子核准波斯尼亚和黑塞哥维那更新体制强化的请求。敬请执行委员会向该国政府表达本文件附件二所载的意见。

A2：含氢氯氟烃淘汰管理计划的项目制定

项目说明

5. 如表 1 A2 部分所示，工发组织为四个第 5 条国家提交了制定含氢氯氟烃淘汰管理计划新阶段的请求，其中包括一个作为指定执行机构，一个作为牵头执行机构以及环境规划署作为合作执行机构，两个作为合作执行机构以及环境规划署担任牵头执行机构。

6. 工发组织作为指定/牵头执行机构，介绍了为支持中非共和国含氢氯氟烃淘汰管理计划第二阶段和塞尔维亚含氢氯氟烃淘汰管理计划第三阶段的项目制定请求而开展的活动，其中包括：请求项目制定供资的理由；关于各含氢氯氟烃淘汰管理计划前几个阶段执行情况的进度报告；以及项目制定期间将开展的活动清单和相应的预算，使用含氢氯氟烃淘汰管理计划项目制定请求的格式。环境规划署作为中非共和国项目制定的合作执行机构，在其 2025 年工作方案修正案中要求提供 10,000 美元，外加 1,300 美元的机构支助费用。⁵

7. 环境规划署作为卡塔尔含氢氯氟烃淘汰管理计划第三阶段和阿拉伯叙利亚共和国含氢氯氟烃淘汰管理计划第二阶段的牵头执行机构，已申请 85,000 美元，外加 11,050 美元的机构支助费用，并在 2025 年工作方案修正案中说明了项目制定所需的活动和每项活动的相应费用；⁶ 秘书处的评论也纳入其中。

秘书处的评论

8. 在审查这些请求时，秘书处考虑了第 71/42 号决定所载为第 5 条国家制定含氢氯氟烃淘汰管理计划供资的指导方针，以及含氢氯氟烃淘汰管理规划前几个阶段的进展情况，包

⁴ 第 91/63 号决定：(b) 批准最终报告和更新体制强化供资请求的修订格式以及相应的绩效指标；和 (c) 请第 5 条国家通过双边和执行机构，自 2023 年执行委员会第一次会议起，对所有体制强化更新请求使用上文 (b) 分段所述的修订格式。

⁵ UNEP/OzL.Pro/ExCom/97/31

⁶ 同上。

括截至本文件制定时各次付款的执行情况。秘书处指出，所请求的资金符合第 71/42 号决定，并且这些请求符合第 82/45 号决定，该决定允许在含氢氯氟烃淘汰管理计划前一阶段结束日期前两年提交含氢氯氟烃淘汰管理计划下一阶段的项目制定请求。

9. 秘书处还注意到，这些国家已提交了 2024 年第 7 条和国家方案数据，这些国家遵守了《蒙特利尔议定书》规定的控制目标，而且它们报告的年度含氢氯氟烃消费不超过其与执行委员会签订的含氢氯氟烃淘汰管理计划协定中规定的年度最高允许消费。

10. 秘书处注意到，由于中非共和国 2013 年至 2020 年的安全和行政不稳定，该国在执行《蒙特利尔议定书》活动方面出现延误，包括提交国家方案和第 7 条数据以及执行体制强化和含氢氯氟烃淘汰管理计划项目，因此要求澄清项目的现状以及为及时执行拟议项目而采取的措施。工发组织回应称，该国的局势已显著改善，2023 年通过新宪法后，局势逐渐恢复稳定。该国已批准《基加利修正案》，政府重申其遵守《蒙特利尔议定书》控制措施的承诺。国家臭氧机构已确认其对工发组织的支持，提供了一支经验丰富的国家调查人员团队协助进行实地调查。工发组织已开始制定项目执行时间表，以确保及时执行。

11. 最初，中非共和国要求为项目制定提供 60,000 美元，外加机构支助费用（工发组织 40,000 美元，环境规划署 20,000 美元），这高于第 71/42 号决定规定的合格供资额。工发组织表示，这笔资金将用于对 2018-2024 年期间该国 20 个行政省的消费情况进行全面的全国调查。然而，经过进一步讨论，根据第 71/42 号决定，制定请求被修订为 40,000 美元（工发组织 30,000 美元，环境规划署 10,000 美元）。

12. 工发组织确认，中非共和国的含氢氯氟烃淘汰管理计划第二阶段和塞尔维亚的含氢氯氟烃淘汰管计划第三阶段将在 2030 年 1 月 1 日前淘汰 100% 的含氢氯氟烃基准。

秘书处的建议

13. 秘书处建议按照表 1 A2 部分所示的供资水平，一揽子批准中非共和国和阿拉伯叙利亚共和国含氢氯氟烃淘汰管理计划第二阶段以及卡塔尔和塞尔维亚含氢氯氟烃淘汰管理计划第三阶段的项目制定。

A3：基加利氢氟碳化合物执行计划的项目制定

项目说明

14. 如表 1 A3 部分所示，工发组织为两个第 5 条国家提交了制定基加利氢氟碳化合物执行计划第一阶段的请求，其中在一个国家作为牵头执行机构，环境规划署作为合作执行机构，在另一个国家则作为合作执行机构，环境规划署作为牵头执行机构。

15. 工发组织作为巴基斯坦的牵头执行机构，使用基加利氢氟碳化合物执行计划项目制定请求的格式，说明了制定基加利氢氟碳化合物执行计划第一阶段所需的活动以及每项活动

的相应费用。环境规划署作为巴基斯坦的合作执行机构，在其 2025 年工作方案修正案中要求提供 45,000 美元，外加 5,850 美元的机构支助费用。⁷

16. 环境规划署作为文莱达鲁萨兰国基加利氢氟碳化合物执行计划第一阶段的牵头执行机构，已申请 135,000 美元，外加 17,550 美元的机构支助费用，并在 2025 年工作方案修正案中说明了项目制定所需的活动以及每项活动的相应费用；⁸ 秘书处的评论也包括在其中。

秘书处的评论

17. 在审查这些请求时，秘书处审议了第 87/50 号决定所载的制定基加利氢氟碳化合物执行计划的指导方针；拟议的项目制定活动及其与该国扶持活动和其他氢氟碳化合物相关项目的联系。

18. 巴基斯坦提交的材料包括 2021 年至 2023 年氢氟碳化合物和氢氟碳化合物混合物的消费数据，项目制定活动包括一项关于氢氟碳化合物消费的全国性调查和数据收集，对氢氟碳化合物及其替代品的使用进行行业分析，包括在制造和维修行业；审查与氢氟碳化合物逐步减少有关的国家举措、政策和法规；制冷和空调以及移动空调维修行业的需求评估；对执法能力的评估；对制造业的能力、需求以及无消耗臭氧层物质和氢氟碳化合物的替代品进行评估，开展与性别相关的活动，并制定氢氟碳化合物逐步减少总体战略。

19. 秘书处注意到该国已批准《基加利修正案》；⁹ 政府提供了一份支持项目制定的背书函；所要求的资金符合第 87/50(c)号决定。工发组织表示，基加利氢氟碳化合物执行计划总体战略的项目制定将借鉴在逐步减少氢氟碳化合物扶持活动下执行的活动，这些活动有助于该国批准《基加利修正案》。

秘书处的建议

20. 秘书处建议一揽子批准文莱达鲁萨兰国和巴基斯坦基加利氢氟碳化合物执行计划第一阶段的项目制定，供资数额见表 1 A3 部分。

A4：编制一份国家用过或不需要的受控物质库存清单，并制定此类物质的收集、运输和处置计划

项目说明

21. 如表 1 A4 部分所示，工发组织提交了关于为 16 个国家作为指定执行机构和一个国家作为牵头执行机构与环境规划署作为合作机构制定国家使用或不需要的受控物质库存清单和计划的请求。环境规划署作为约旦项目制定的合作执行机构，在其 2025 年工作方案修正案中要求提供 37,000 美元，外加 4,810 美元的机构支助费用。¹⁰

⁷ 同上。

⁸ 同上。

⁹ 巴基斯坦批准《基加利修正案》的日期是 2025 年 10 月 22 日。

¹⁰ UNEP/OzL.Pro/ExCom/97/31

秘书处的评论

22. 在审查这些请求时，秘书处考虑了第 91/66 号决定所载的制定国家用过或不需要的受控物质库存清单和计划的标准，以及拟议的项目制定活动，以及这些活动与各国的国家淘汰/逐步减少计划（即含氢氯氟烃淘汰管理计划或基加利氢氟碳化合物执行计划）的关系。秘书处指出，每项供资请求都符合第 91/66 号决定。

23. 工发组织作为指定/牵头执行机构，介绍了阿尔及利亚、阿根廷、波斯尼亚和黑塞哥维那、佛得角、中非共和国、科摩罗、科特迪瓦、刚果民主共和国、赤道几内亚、加蓬、几内亚、约旦、摩洛哥、巴基斯坦、菲律宾、圣多美和普林西比和突尼斯使用相关项目提案提交表格制定国家已用或不需要的受控物质库存清单和计划所需的活动。

24. 为 17 个国家提出的供资请求中的活动包括确定利益相关方、咨询和讲习班；关于在制定含氢氯氟烃淘汰管理计划、基加利氢氟碳化合物执行计划、消耗臭氧层物质替代品调查、设备进口商以及回收和再循环活动中进行的受控物质消费国家调查的可用数据的案头研究；收集和分析数据，以量化消耗臭氧层物质和氢氟碳化合物的库存，同时考虑到使用中的设备和库存；制定已使用和不需要的受控物质库存清单；审查与废物受控物质的回收、再循环和再生以及管理有关的政策和法规；起草各国的国家计划，包括制定商业/融资模式，对不需要的受控物质的处理和最终处置方案进行技术和经济分析；以及与性别有关的活动。在两个国家，活动包括更新组装行业消耗臭氧层物质/氢氟碳化合物消费的信息（巴基斯坦和菲律宾）；一个国家对销毁能力进行了评估，并进行了可行性研究，以评估水泥窑的销毁程序（摩洛哥）；一个国家包括确定能够分析使用或不需要的消耗臭氧层物质/氢氟碳化合物成分的实验室，以及升级这些实验室和项目管理相关活动的必要性（阿根廷）。

秘书处的建议

25. 秘书处建议一揽子批准阿尔及利亚、阿根廷、波斯尼亚和黑塞哥维那、佛得角、中非共和国、科摩罗、科特迪瓦、刚果民主共和国、赤道几内亚、加蓬、几内亚、约旦、摩洛哥、巴基斯坦、菲律宾、圣多美和普林西比和突尼斯按表 1 A4 部分所示供资水平制定国家用过或不需要的受控物质库存清单以及收集、运输和处置此类物质的计划。

A5：为编写氢氟碳化合物消费核查报告提供技术援助

项目说明

26. 执行委员会请相关双边机构和执行机构分别在提交给第九十七次会议的双边合作文件和工作方案修正案中列入八个低消费第 5 条国家的基加利氢氟碳化合物执行计划第一阶段核查报告的供资请求，以核查其基加利氢氟碳化合物执行计划协定的履约情况（第 96/22(d)号决定）。¹¹ 根据该决定，工发组织作为牵头执行机构，正在申请资金，用于核

¹¹ 向第九十七次会议提交的请求包括以下低消费国家：阿尔巴尼亚、刚果、古巴、吉尔吉斯斯坦、马拉维、莫桑比克、北马其顿和土库曼斯坦。

查阿尔巴尼亚、刚果和北马其顿的基加利氢氟碳化合物执行计划第一阶段，¹² 如表 1 第 A5 部分所示。

秘书处的评论

27. 秘书处注意到，供资请求符合第 96/22 号决定规定的核查供资指导方针，还注意到阿尔巴尼亚也在含氢氯氟烃消费核查名单上，报告将与 2026 年含氢氯氟烃淘汰管理计划下一次付款请求一起提交，根据第 96/23(b)号决定，¹³ 请求追加 15,000 美元。秘书处进一步指出，核查报告必须在寻求基加利氢氟碳化合物执行计划下一轮付款的适用执行委员会会议前至少 10 周提交。

秘书处的建议

28. 秘书处建议一揽子核准为阿尔巴尼亚、刚果和北马其顿的基加利氢氟碳化合物执行计划第一阶段编制氢氟碳化合物消费核查报告的技术援助，其供资水平如表 1 第 A5 部分所示，但有一项谅解，即核查报告必须在寻求基加利氢氟碳化合物执行计划下一轮付款的执行委员会会议前至少 10 周提交。

A6：在氢氟碳化合物逐步减少的背景下，制定一个试点项目，以保持和/或提高替代技术和设备的能源效率（第 91/65 号决定）

项目说明

29. 如表 1 A6 部分所示，工发组织作为指定执行机构，提交了一份关于制定一个项目以提高一个第 5 条国家制冷行业能源效率的请求。该呈件是根据第 91/65 号决定提交的。

30. 这项请求是为了制定制冷行业的一个项目。该项目将包括将当前的最低能源性能标准扩展到制冷行业，评估技术示范，以及评估技术示范在智利可复制性的资助模式。制定活动包括监管和政策分析、行业评估和试点项目设计、确定融资模式、利益相关者参与和提案制定。

秘书处的评论

31. 秘书处根据第 91/65 号和第 89/6 号决定规定的标准审查了项目提案。

32. 智利基加利氢氟碳化合物执行计划第一阶段（第九十三次会议批准）承诺到 2029 年将氢氟碳化合物消费量减少 10%。第九十六次会议（根据第 91/65 号决定）批准了智利提高替代技术能源效率的试点项目，以展示乳制品行业基于二氧化碳的集成热泵的性能。工发组织提到，虽然第九十六次会议批准的项目是一个特定技术的示范项目，但该项目的准

¹² 工发组织最初提交的工作方案修正案还包括对土库曼斯坦的请求。由于土库曼斯坦的基加利氢氟碳化合物执行计划付款（UNEP/OzL.Pro/ExCom/97/81）已提交第九十七次会议，并注意到第三次付款将于 2029 年到期，工发组织表示，它将在付款年度前一年而不是本次会议提交核查供资请求。工发组织还确认，核查将涵盖所有相关年份。

¹³ 将建议用于核查基准年维修消费高达 360 公吨的国家氢氟碳化合物消费的资金水平维持在 30,000 美元以下，或与含氢氯氟烃消费量核查相结合时为 45,000 美元。

备工作旨在设计一个项目，将这些示范项目整合为一个结构化的行业战略，结合监管工具、多样化的试点模式（零售/农业/公共冷链）和量身定制的融资计划，以实现智利可扩展的复制和市场转型。

33. 关于该国最低能源性能标准的现状，工发组织通报说，智利根据《第 21.305 号能源效率法》（2021 年）建立了能源效率监管框架，该法授权能源部界定和更新最低能源性能标准，并每五年公布一次《国家能源效率计划》。能源部能源效率司负责执行这些标准。目前，家用冰箱和冰柜以及功率高达 12 千瓦的非管道式空调机组都实施了强制性的最低能源性能标准。此外，商用冷藏展示柜的最低能源性能标准草案已经制定，目前正在接受政府审查。鉴于集中式或工业制冷系统的安装种类繁多，因此没有强制性的最低能源性能标准。因此，该项目建议确定冷藏展示柜采用标签和最低能源性能标准的法律途径和路线图，并根据冷藏室的最佳实践制定指导方针。

34. 将对智利选定的子行业进行可行性研究，结合行业层面的评估和特定地点的数据收集，以确定四到五个最有可能提高能源效率和减少氢氟碳化合物的试点地点。目标是确保选定的试点在智利条件下提供最佳的成本效益、市场相关性和可扩展性。该研究还将通过分析预期的能源和制冷剂节约、回报、安全性和可持续性，将技术可行性与财务可行性联系起来。

35. 关于供资模式的评估，工发组织表示，虽然一些大型企业已经开始向二氧化碳或者氨技术过渡，由于其高昂的资本成本、安全考虑和有限的技术能力，这些替代品仍然有限。智利的制冷市场是分散的，许多中小企业在采用低全球变暖潜能值技术方面面临着财务和技术挑战，尽管这些技术具有成本效益。一个关键障碍是缺乏针对制冷和空调行业的量身定制的融资模式，该行业的系统性能取决于设备和操作实践。国家金融机构没有充分满足该行业的具体需求。该项目将试图解决这一差距。

36. 因此，该项目的总体目标是为智利的一项可扩展的、以成果为导向的举措奠定必要的基础（技术、监管和财务），并可能适用于其他国家。该制定项目预期的具体成果包括一份监管和机构准备情况报告，包括采用和执行最低能源性能标准的路线图以及大型商业和工业制冷行业的指导方针；行业评估和四至五项可行性研究，量化代表性零售、农工和工业应用中的能源和制冷剂节约、投资需求和回报；设计适应智利市场和国家工具的融资模式；以及一份完整的项目文件草案，包括计算成本的组成部分、执行安排和绩效指标，提交给 2027 年第一次会议。

秘书处的建议

37. 秘书处建议一揽子批准在智利逐步减少氢氟碳化合物的背景下，按照表 1 第 A6 部分所示的供资水平，制定一个提高替代技术和设备能源效率的项目。

A7 在氢氟碳化合物逐步减少的背景下，制定一个提高部件和热泵制造能源效率的项目（第 95/87 号决定）

项目说明

38. 工发组织提交了一份请求，要求在一个第 5 条国家逐步减少氢氟碳化合物的背景下，制定一个提高热交换器制造能源效率的项目，如表 1 A7 部分所示。

39. 项目制定的目标是开发一个项目，协助三家热交换器制造企业提高其部件的能源效率。这些企业是在为提交给本次会议的南非制定基加利氢氟碳化合物执行计划期间确定的。

40. 拟议的项目筹备活动包括与相关利益相关方协商，收集和分析与零部件制造有关的企业数据，制定提高零部件能源效率的参数，以及制定行动计划。

41. 南非通过了南部非洲发展共同体（南共体）空调（南共体 HT 110:2023）和冰箱（南共体 HT111:2023）的区域最低能源性能标准。

秘书处的评论

42. 秘书处审查了筹备资金的请求，并注意到拟制定的项目是按照第 95/87(b)(二)号决定规定的标准提交的。

43. 已注意到，制定的项目将收集和分析三家企业的数据，并根据第 95/87(b)(二)号决定开发一个包括绩效参数和条件¹⁴的项目。

44. 工发组织最初提交了 50,000 美元的申请，作为该项目的筹备资金，其中包括与建立能源效率测试实验室有关的活动。然而，经秘书处和工发组织讨论，并根据第 95/87 号决定，这一请求被修订为 30,000 美元。

45. 正如提交的基加利氢氟碳化合物执行计划提案所述，所有三家热交换器制造企业¹⁵都是在截止日期之前成立的，都是当地所有的。这三家企业 2024 年的总产量为 50,752 台。据指出，三家企业中也有两家也在生产制冷和空调设备，并计划在基加利氢氟碳化合物执行计划的第二阶段从氢氟碳化合物转换为替代技术。

秘书处的建议

46. 秘书处建议一揽子核准在南非逐步减少氢氟碳化合物的背景下，按照表 1 A7 部分所示的供资水平，制定一个提高换热器制造能源效率的项目。

¹⁴ 第 UNEP/OzL.Pro/ExCom/95/87 号文件。

¹⁵ HC Heat Exchangers (Pty) Ltd., Colcab (Pty) Ltd. 和 Macs Cool (Pty) Ltd.

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSAL¹

Bosnia and Herzegovina: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNIDO
Amounts previously approved for institutional strengthening (US \$):			
Phase I:	Mar-99		118,300
Phase II:	Jul-04		100,772
Phase III:	Nov-11		102,482
Phase IV:	Dec-13		101,310
Phase V:	May-15		100,977
Phase VI:	Nov-17		130,533
Phase VII:	Dec-19		130,568
Phase VIII:	Jun-23		270,276
	Total:		1,055,218
Amount requested for renewal (phase IX) (US \$):			252,594
Amount recommended for approval for phase IX (US \$):			252,594
Agency support costs (US \$):			17,682
Total cost of institutional strengthening phase IX to the Multilateral Fund (US \$):			270,276
Date of approval of country programme:			1997
Date of approval of HCFC phase-out management plan:			2012
Date of approval of Kigali HFC implementation plan:			2025
Baseline consumption of controlled substances (ODP tonnes/CO ₂ -eq tonnes):			
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)			1.6
(b) Annex C, Group I (HCFCs) (average 2009-2010)			4.7
(c) Annex E (methyl bromide) (average 1995-1998)			3.5
(d) Annex F (HFCs) (average 2020-2022 plus 65% of HCFC baseline)			1,066,653
Latest reported ODS consumption (2024) (ODP tonnes) as per Article 7:			
(a) Annex B, Group III (methyl chloroform)			0
(b) Annex C, Group I (HCFCs)			0
(c) Annex E (methyl bromide)			0
	Total:		0
(d) Annex F (HFCs) (CO ₂ -eq tonnes) as per Article 7			1,081,601
Year of reported country programme implementation data:			2023
Amount approved for projects (as at May 2025) (US \$):			6,022,248
Amount disbursed (as at December 2024) (US \$):			5,488,707
ODS to be phased out (as at May 2025) (ODP tonnes):			285.0
ODS phased out (as at December 2024) (ODP tonnes):			316.5

1. Summary of activities and funds approved by the Executive Committee:

Summary of activities	Funds approved (US \$)
(a) Investment projects:	4,074,291
(b) Institutional strengthening:	1,055,218
(c) Project preparation, technical assistance, training and other non-investment projects:	892,739
Total:	6,022,248
(d) HFC activities funded from additional voluntary contributions	95,000

¹ Data as at December 2024 are based on document UNEP/OzL.Pro/ExCom/97/15.

Progress report

1. In phase VIII of the institutional strengthening (IS) project, the national ozone unit (NOU) issued quota for HFC consumption for the first time, following the ratification of the Kigali Amendment. The Government of Bosnia and Herzegovina was supported through increased capacity-building of the NOU, by achieving a smooth implementation of the HPMP activities, preparation and approval of stage I of the KIP, as well as preparation and submission for approval of an energy efficiency pilot project and preparation of ODS inventory and action plan. The legal procedures for controlling HCFCs and HFCs were approved by the Council of Ministers of Bosnia and Herzegovina. Bosnia and Herzegovina was an active member of the Regional Ozone Network for Europe and Central Asia, as well as a member of the MOP Bureau and serving as Vice-president. The NOU coordinated the promulgation and enforcement of policy and legislation with a specific focus on HCFCs and HFC management. Four performance indicators set for the current IS phase were fully achieved, with three partially achieved.

Plan of action

2. The NOU is committed to build capacity at country level for compliance with the HCFCs and HFCs consumption targets and expects that the ongoing regulatory efforts will be further enhanced during the upcoming phase. The NOU of Bosnia and Herzegovina will be responsible for tracking the promulgation and enforcement of policy and legislation with a specific focus on additional restrictions on HCFCs and HFCs. Special focus will be given to the cooperation with the customs authority sector in order to prevent illegal trade and to the cooperation with the refrigeration and air-conditioning association. The next phase will also focus on implementation of the KIP stage I and working together with industry and administration on its implementation. The NOU will continue cooperation with climate authorities related to the contribution of F-gases controlled consumption in the country's Nationally Determined Contributions and will continue cooperation with safety standards authorities.

Sustainability and risk assessment

3. The NOU is well established since 2000 and has a reputation in the country as a best model for coordination of implementation of multi-disciplinary multilateral environmental agreements. Political issues in the country might be the only risk for the procedures of consultations and adoptions of plans, taking into account a complex administrative structure.

附件二

执行委员会向第九十七次会议提交的关于更新体制强化项目的意见草案

波斯尼亚和黑塞哥维那

1. 执行委员会审查了与更新波斯尼亚和黑塞哥维那体制强化项目（第九阶段）的请求以及一并提交的报告，并赞赏地注意到波斯尼亚和黑塞哥维那分别向基金秘书处和臭氧秘书处报告了2023年和2024年国家方案执行数据和第7条数据，表明该国遵守了《蒙特利尔议定书》的淘汰时间表。委员会注意到，波斯尼亚和黑塞哥维那报告了氢氟碳化合物数据，并将其消费冻结在基准水平，并发布了2024年和2025年的氢氟碳化合物配额。委员会还注意到，波斯尼亚和黑塞哥维那对受控物质的消费执行了严格的监测制度，定期与进口商和制冷与空调协会举行会议，与所有相关利益相关方协调活动，并组织了许多提高认识活动，包括庆祝世界臭氧日。委员会认可波斯尼亚和黑塞哥维那政府的努力，因此希望波斯尼亚和黑塞哥维那政府在未来三年内继续成功执行活动，以保持对《蒙特利尔议定书》控制措施的遵守。



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO WORK PROGRAMME

Presented to the 97th Meeting of the Executive Committee of the Multilateral Fund

Introduction

The UNIDO Work Programme (WP) for the consideration of the 97th Meeting of the Executive Committee (ExCom) of the Multilateral Fund (MLF) has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2025-2027.

The 97th UNIDO WP is addressing preparatory assistance, institutional strengthening requests and verification reports requests.

Preparatory assistance is submitted for the 97th Executive Committee Meeting consideration for Central African Republic, Qatar, Serbia and Syria¹ to enable the countries to overview and update data necessary for the launch and implementation of HPMP Stage II and Stage III, accordingly.

UNIDO is submitting preparatory assistance for HFC phase-down plans for Brunei Darussalam² and Pakistan³ to assist the countries with the implementation of the next phase of the Kigali Amendment to the Montreal Protocol.

Based on decision 91/66, funding is requested for preparation of inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances for Algeria, Argentina, Bosnia and Herzegovina, Cabo Verde, Central African Republic, Comoros, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, Guinea, Jordan, Morocco, Pakistan, Philippines, Sao Tome and Principe and Tunisia.

Preparatory assistance funding for developing energy efficiency pilot projects is requested for Chile and South Africa.

Institutional strengthening extension request is submitted based on the country request for Bosnia and Herzegovina.

Requests for verification reports for stage I of the KIPs for Albania, Congo and North Macedonia, are requested in line with decision 96/22(d). Verification report for Turkmenistan is not requested, as the second KIP tranche was requested in advance and the last and third tranche is due only in 2029.

¹ Preparatory funding request is included in the lead agency Work Programme i.e. UNEP.

² Preparatory funding request is included in the lead agency Work Programme i.e. UNEP.

³ Kigali Amendment was ratified by the President of Pakistan on 18th August 2025. Ratification instrument was forwarded to the Ministry of Foreign Affairs of Pakistan on 19 September 2025. The Ministry of Foreign Affairs of Pakistan is now coordinating the submission of the ratification instrument to UN HQ in New York. It is expected that the ratification process will be completed by the 97th meeting of the Executive Committee.

The UNIDO Work Programme for the consideration of the 97th ExCom Meeting comprises the following sections:

- **Section 1:** Consolidated list of activities foreseen for the above requests by project types and country; and
- **Section 2:** Project concepts indicating details and funding requirements.

Funding is requested as follows:

- Preparatory assistance funding for HPMP Stage II for Central African Republic and Syria and HPMP Stage III for Qatar and Serbia amounting to US\$ 101,650 (including US\$ 6,650 representing 7.0 % agency support costs);
- Preparatory assistance funding for HFC phase-down plan in Brunei Darussalam and Pakistan amounting to US\$ 224,700 (including US\$ 14,700 representing 7.0% agency support costs);
- Preparatory assistance for preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances in Algeria, Argentina, Bosnia and Herzegovina, Cabo Verde, Central African Republic, Comoros, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, Guinea, Jordan, Morocco, Pakistan, Philippines, Sao Tome and Principe and Tunisia amounting to US\$ 1,576,110 (including US\$ 103,110 representing 7.0% agency support costs);
- Preparatory assistance funding for developing energy efficiency pilot projects in Chile and South Africa amounting to US\$ 64,200 (including US\$ 4,200 representing 7.0 % agency support costs);
- Institutional strengthening project for Bosnia and Herzegovina amounting to US\$ 270,276 (including US\$ 17,682 representing 7.0 % agency support costs); and
- Requests for verification reports for stage I of the KIPs for Albania, Congo, North Macedonia and Turkmenistan, amounting to US\$ 81,750 (including US\$ 6,750 representing 9.0 % agency support costs);

Total: US\$ 2,318,686 (including 153,092 agency support cost).

SECTION 1

Country	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.
Preparatory Assistance for HPMP									
Central African Republic	PRP	HCFC	Overarching	Preparation of Stage II HPMP	30,000	2,100	32,100	7%	24
Qatar ⁴	PRP	HCFC	Overarching	Preparation of Stage III HPMP	20,000	1,400	21,400	7%	24
Serbia	PRP	HCFC	Overarching	Preparation of Stage III HPMP	30,000	2,100	32,100	7%	24
Syria ⁵	PRP	HCFC	Overarching	Preparation of Stage III HPMP	15,000	1,050	16,050	7%	24
SUBTOTAL					95,000	6,650	101,650		
Preparatory Assistance for HFC Phase-Down Plans									
Brunei Darussalam ⁶	PRP	HFC	SEV	Preparation of HFC phase-down plan	35,000	2,450	37,450	7%	24
Pakistan	PRP	HFC	SEV	Preparation of HFC phase-down plan	175,000	12,250	187,250	7%	24
SUBTOTAL					210,000	14,700	224,700		
Preparation of national inventory of banks of waste-controlled substances and development of a national plan for management of these substances									
Algeria	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
Argentina	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	100,000	7,000	107,000	7%	24

⁴ Project Concept is included in UNEP Work Programme.

⁵ Project Concept is included in UNEP Work Programme.

⁶ Project Concept is included in UNEP Work Programme.

Country	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.
Bosnia and Herzegovina	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	80,000	5,600	85,600	7%	24
Cabo Verde	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	80,000	5,600	85,600	7%	24
Central African Republic	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
Comoros	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	70,000	4,900	74,900	7%	24
Cote d'Ivoire	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
Democratic Republic of Congo	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
Equatorial Guinea	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
Gabon	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
Guinea	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
Jordan ⁷	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	53,000	3,710	56,710	7%	24
Morocco	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24

⁷ UNIDO lead implementing agency with UNEP as cooperating implementing agency.

Country	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.
Pakistan	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	100,000	7,000	107,000	7%	24
Philippines	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	100,000	7,000	107,000	7%	24
Sao Tome and Principe	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	80,000	5,600	85,600	7%	24
Tunisia	PRP	SEV	DES	Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances	90,000	6,300	96,300	7%	24
SUBTOTAL					1,473,000	103,110	1,576,110		
Funding for preparation of energy efficiency pilot projects									
Chile	PRP	HFC	EEF	Preparation of energy efficiency pilot project	30,000	2,100	32,100	7%	24
South Africa	PRP	HFC	EEF	Preparation of energy efficiency pilot project	30,000	2,100	32,100	7%	24
SUBTOTAL					60,000	4,200	64,200		
Institutional Strengthening									
Bosnia and Herzegovina	INS	All	SEV	Institutional strengthening	252,594	17,682	270,276	7%	36
SUBTOTAL					252,594	17,682	270,276		
Verification reports									
Albania	TAS	HFC	SEV	Verification report	15,000	1,350	16,350	9%	24
Congo	TAS	HFC	SEV	Verification report	30,000	2,700	32,700	9%	24
Macedonia	TAS	HFC	SEV	Verification report	30,000	2,700	32,700	9%	24
SUBTOTAL					75,000	6,750	81.750		
GRAND TOTAL					2,165,594	153,092	2,318,686		

SECTION 2

PROJECT CONCEPT – CENTRAL AFRICAN REPUBLIC

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HCFC phase-out management plan (Overarching strategy)

Part I: Project information

Project title:	Funding request for the preparation of HCFC Phase-out Management Plan stage II		
Country:	Central African Republic		
Lead implementing agency:	UNIDO		
Cooperating agency (1):	UNEP	Click or tap here to enter text.	
Implementation period:	24 months for the PRP. HPMP Stage II to cover until 2030.		
Funding requested:			
Agency	Sector	Funding requested (US \$)*	
UNIDO	Overarching	30,000	
UNEP	Overarching	10,000	

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	☒	☐
2. Written confirmation – balances from previous PRP funding approved for stage I HPMP had been returned / will be returned (decision 71/42(i))	☐	☒
Specify meeting at which PRP funding balance had been returned/will be returned	Preparatory funding for HPMP Stage I has been fully utilized.	

A. Information required to support PRP funding (Overarching strategy)

1. Montreal Protocol compliance target to be met in ☒ stage II / ☐ stage III of the HPMP				
Phase-out commitment (%)	100%	Year of commitment	2030	
☒ Servicing only		☐ Manufacturing only	☐ Servicing and manufacturing	
2. Brief background on previous stage of the HPMP (i.e., when the HPMP was approved; a description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made.)				
Click or tap here to enter text. Due to the conflict in the country, no activity was implemented under the first stage. As per Decision 82/15(e)(i), the project was cancelled and the balance returned.				
3. Current progress in implementation of previous stage of the HPMP				
Activity	Description		Implementing agency	
(select)	Due to the conflict in the country, no activity was implemented under HPMP stage I. The project was cancelled and the balance returned.		(select)	
4. Overview of current HCFC consumption in metric tonnes by substance (last three years)				
Substance	Sector	2021	2022	2023
HCFC-22	RAC servicing	110	112	110

5. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)		
The Central African Republic imports HCFC-22 for use in the servicing sector.		
6. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.		
Information needed	Description	Agency
Updated data on HCFC consumption in manufacturing/servicing sector	A national consultant will review available data and collect additional sector-specific consumption data per refrigerant for the years 2021-2024 through questionnaires and interviews. The survey will provide more granular data covering all regions. Detailed analysis of the sectorial distribution and consumption trends of HCFCs. The collected data will be analysed using the selected methodology to estimate the consumption trends. The analysis will examine the types and volumes of consumed and imported substances, their sectoral distribution, geographic location.	UNIDO
Analysis of the types of equipment using HCFCs	Data collection and analysis on equipment using HCFCs and installed capacities will be conducted by a national consultant. Needs assessment of training tools and equipment.	UNIDO
New information on ODS regulations	Groundwork: national consultant will compile and analyze existing national regulations, policies and procedures on imports and use of controlled substances such as: the existence of quota and licensing systems; conditions for issuing licenses and stakeholders involved; authorized list of importers and, where available, distributors; where available, monitoring and reporting system of import of HCFCs; control mechanisms; sanctions or penalties to be imposed on violation of legal regulation and mechanisms and capacity for prosecution and enforcement; a preview of laws and regulations that are pending or being discussed and reviewed; capacity building of technicians and customs officers and certification system for RAC technicians.	UNIDO
Updated sectoral consumption information	Detailed analysis of the sectorial distribution and consumption trends of HCFCs	UNEP
Others, specify.	Two data validation workshops with national stakeholders.	UNEP
Others, specify.	Formulation of the HPMP stage II strategy. An international consultant will develop the overarching strategy and draft the project document.	UNIDO
7. Activities to be undertaken for project preparation and funding		
Activity	Indicative funding (US \$)	Agency
Data collection of HCFC consumption in the servicing sector and analysis of type of equipment using HCFCs	10,000	UNIDO
Compilation and analysis of ODS regulations	5,000	UNIDO
Sectoral consumption information	5,000	UNEP
Validation workshops	5,000	UNEP

Formulation of HPMP stage II overarching strategy	15,000	UNIDO
TOTAL	40,000	
8. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation for stage II of the HPMP?		
The Central African Republic has not ratified the Kigali Amendment yet.		
9. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders		

PROJECT CONCEPT – SERBIA

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HCFC phase-out management plan (Overarching strategy)

Part I: Project information

Project title:	Preparatory funding for HPMP Stage III for Serbia	
Country:	Click or tap here to enter text.	
Lead implementing agency:	UNIDO	
Implementation period:	2025-2030	
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	30,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
3. Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	☒	☐
4. Written confirmation – balances from previous PRP funding approved for stage I HPMP had been returned / will be returned (decision 71/42(i))	☐	☒
Specify meeting at which PRP funding balance had been returned/will be returned	PRP funds have been fully utilised.	

A. Information required to support PRP funding (Overarching strategy)

10. Montreal Protocol compliance target to be met in ☐ stage II / ☒ stage III of the HPMP			
Phase-out commitment (%)	100%	Year of commitment	2030
☒ Servicing only		☐ Manufacturing only	☐ Servicing and manufacturing
11. Brief background on previous stage of the HPMP (i.e., when the HPMP was approved; a description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made.)			
Click or tap here to enter text. Stage II of the HCFC Phase-out Management Plan (HPMP) for the Republic of Serbia was approved at the 85th Meeting of the Executive Committee (Montreal, July 2020) for implementation during the period 2020–2025. It aimed to achieve a 67.5 per cent reduction in HCFC consumption by 2025, reducing consumption to a sustained level of 2.73 ODP tonnes in line with the Montreal Protocol schedule. The first and second tranches were approved at the 85th (2020) and 91st (2022) meetings, amounting to US \$160,211 and US \$126,720 respectively. Substantial progress has been made under Stage II. Serbia strengthened its legal and regulatory framework, adopting updated environmental legislation and decrees regulating the use, handling, and trade of both HCFCs and HFCs. The national certification system for refrigeration and air-conditioning (RAC) technicians was significantly expanded: by 2025, the Ministry of Environment had issued over 1,000 Category A–I certificates and more than 1,700 Category B certificates, with multiple new training centres accredited and operational. Training materials have been updated to cover natural refrigerants and flammable refrigerants, and online training modules and videos were developed to maintain continuity during COVID-19 restrictions. By the end of August 2025, the Ministry of Environment issued 158 licenses to RAC servicing companies in Serbia for performing installation, maintenance and/ or repair activities as well as decommissioning of equipment and products containing ozone-depleting substances. Additionally, Serbia has 247 certified RAC servicing workshops in Serbia that have licenses for performance of installation, maintenance and/ or repair			

activities as well as decommissioning of equipment and products containing fluorinated greenhouse gasses.

Customs and enforcement capacities were also strengthened: over 50 customs officers were trained on refrigerant identification and reporting, and refrigerant identifiers have been procured for use at border points. In the servicing sector, mandatory reporting by RAC companies on recovery and recycling (R&R) began in 2024, with draft national guidelines for R&R prepared and workshops planned for roll-out. Procurement of tools and equipment to establish a functional R&R scheme is ongoing, with 50 sets of servicing tools under tender and delivery expected in early 2026. Serbia also engaged actively in awareness-raising, with regular International Ozone Day celebrations, technical forums at the annual HVAC&R Congress, and workshops on Kigali Implementation Plan preparation.

Overall, Serbia has demonstrated consistent progress under Stage II of the HPMP, both in meeting its HCFC reduction targets and in building the institutional, regulatory, and technical capacity needed to sustain compliance and prepare for Stage III.

12. Current progress in implementation of previous stage of the HPMP

Activity	Description	Implementing agency
Legal/regulatory framework	Environmental regulations in force provide the legal framework for the implementation of the Montreal Protocol and the control of ODS. Since the submission of the previous tranche request in 2022, the most important regulations currently in force are the following: Law on Air Protection (“Official Gazette RS”, No. 51/25). Some of the main provisions adopted by this law include stricter control measures regarding the consumption and use of HCFCs, as well as the handling of both HCFCs and HFCs. The law introduced a ban on the import of non-refillable cylinders containing these substances, along with penalties for improper handling of HCFCs and HFCs. Law on Environmental Protection (“Official Gazette RS”, No. 135/04, 36/09, 72/09, 43/11, 14/16, 76/18, 95/18, 95/18 and 94/24). Prior to Tranche II, Serbia had already implemented the following regulations: - Decree on the treatment of substances that deplete the ozone layer, as well as on the conditions for issuing permits for the import and export of these substances (“Official Gazette RS”, No. 114/2013, 23/18, 44/18, 95/18). This regulation prescribes the gradual reduction of the consumption of ozone-depleting substances, the conditions and procedures for issuing permits for their import and export, and rules for the treatment of ozone-depleting substances, as well as mandatory leak checks in stationary refrigeration and air-conditioning equipment. The Amendment to this Decree (“Official Gazette RS”, No. 23/2018) introduced a ban on the import of equipment containing or relying on ODS. - Decree on the treatment of fluorinated greenhouse gases, as well as on the conditions for issuing permits for the import and export of these gases (“Official Gazette RS”, No. 120/2013, 44/18). This regulation prescribes detailed conditions for issuing permits for the import and export of fluorinated greenhouse gases and of products and equipment containing these gases, as well as mandatory leak checks in stationary refrigeration and air-conditioning equipment. - Decree on certification of persons performing certain activities related to ozone-	UNIDO

	depleting substances and certain fluorinated greenhouse gases (“Official Gazette RS”, No. 24/2016). This regulation defines the minimum requirements and procedures for obtaining Certificate A and Certificate B for refrigeration and air-conditioning service technicians who perform tasks such as installation, maintenance and servicing, leak testing, recovery of ozone-depleting substances or fluorinated greenhouse gases, and decommissioning of refrigeration and air-conditioning equipment. Law on Ratification of the Kigali Amendment (“Official Gazette RS – International Agreements”, No. 17/2021).	
Refrigeration servicing sector	The national certification system for RAC technicians (Category A–I) was further strengthened during the period. Three training centres are authorized to issue Certificates A and B, and five training centres are authorized for Certificate B, all recognized by the Ministry of Environment. One additional training centre (for both A and B) is in the process of recognition. The Ministry issued 1,021 certificates to Category A–I RAC technicians, 465 permits to RAC companies, and 1,728 certificates to Category B technicians. Lists of certified technicians and licensed companies are published on the Ministry website. The NOU maintains direct communication with training centres and provided ongoing support. By the end of August 2025, the Ministry of Environment issued 158 licenses to RAC servicing companies in Serbia for performing installation, maintenance and/ or repair activities as well as decommissioning of equipment and products containing ozone-depleting substances. Additionally, Serbia has 247 certified RAC servicing workshops in Serbia that have licenses for performance of installation, maintenance and/ or repair activities as well as decommissioning of equipment and products containing fluorinated greenhouse gasses. Development of electronic systems for reporting and certification is ongoing, in line with Tranche II objectives. As part of Tranche II, support was provided for the establishment of four new training centres (three private and one public). The NOU organized four workshops: (a) One on the introduction of quotas and the method of allocation (2023), (b) One on the first allocation (early 2024) for importers/exporters, (c) Two on preparation of the KIP (2024) one for service companies and one for importers/exporters. Altogether, 119 participants attended. Topics covered included F-gases and their alternatives, EU certification standards, national RAC regulations, and the Kigali Implementation Plan. Procurement activities were also advanced: 50 sets of servicing tools will be delivered to the designated servicing counterpart(s) as part of Tranche II of the HPMP Stage III. An international tender is currently online with the contract with the selected supplier to be finalized by the end of the year. Delivery is planned for Q1 of 2026. Transparent selection criteria are simultaneously being developed for equitable distribution among small, medium, and	UNIDO

	large RAC companies through a publicly announced call. On recovery and recycling (R&R), the Ministry began receiving mandatory reports from RAC companies in 2024. Draft guidelines for R&R have been prepared and are under review. Finalization and organization of dedicated workshops are planned in the upcoming period. Additional tools and equipment will be delivered to support the establishment of a functional R&R scheme. Additionally, in May 2025 the NOU participated in a regional study tour with representatives from Bosnia-Herzegovina, Montenegro, Albania and North Macedonia to Barcelona, Spain, focused on recovery, recycling, and reclamation (RRR) practices. The tour included visits to training centres, RAC servicing companies, and reclamation facilities, providing exposure to EU policies and technologies. The lessons learned will support the strengthening of national R&R activities in Serbia. An order for four refrigerant identifiers has been placed for customs points with delivery pending for 2026 (due to manufacturing delays). The four training workshops for technicians, equipment owners, and importers on the R&R reporting system are pending and will be conducted once the guidelines are finalized. The training for trainers on the use of reclaiming units is pending and scheduled for a later stage of implementation once the equipment is delivered to the country in early 2026. Updating of training materials on flammable and high-pressure refrigerants is ongoing, in line with Tranche II commitments. Procurement of specialized tools for hydrocarbon and CO₂ units is pending. Reclamation machines repair. The existing reclamation units (model LV30-4) are the same in each training centre. Since all units are new, testing of one unit was considered sufficient, with results applicable for the others. In June 2021, testing of the reclamation unit at TC High Mechanical School Novi Sad was conducted. A visual check of the components was performed, focusing on operational possibilities. Originally, the units were designed for reclamation of R-502, R-12, R-22, and R-500. Together with the distributor's representative, tests for R-134a and R-404A were also conducted. Findings confirmed that reclamation of R-22 and R-134a is possible without modification, while R-404A and R-410A cannot be reclaimed with the existing units. The NOU is analyzing the quantities of refrigerants and related legal barriers for using these units. Testing RAC unit performance with virgin, reclaimed, and contained refrigerants is also planned for the upcoming period. Upgrade of training centres and training materials. Support for further development of training centres and training materials was provided during this period. In August 2021, a training session for new and existing trainers was organized. Discussions focused on the need to update training materials chapter by chapter, lessons learned from trainings and exams, and requirements for additional tools and equipment. Use of reclaim units was also	
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	discussed. Following this workshop, training materials for Certification Category B were updated at the beginning of 2022. Currently, review and upgrade of training materials for Certification Category A is ongoing. Web-based electronic reporting system for end-users, importers, and service technicians. In 2016, as part of the project “Survey on the consumption, distribution, and uses of various ODS alternatives in the Republic of Serbia,” a software application was developed for inputting inventory data on equipment. Initially designed for the ODS alternatives survey, the software was also considered for establishing an equipment inventory system. During Tranche 1, a review of the software’s capabilities was conducted. Since the intention is to establish a web-based reporting system, options for modification and upgrading of the database were assessed. To date, only databases for RAC service companies and RAC service technicians’ certification are in use. Data is inputted by the NOU based on reports from service companies and information from training centres. Databases for equipment owners/operators and equipment containing refrigerants are not yet in use, as the inventory system has not been established. Training manuals and materials were developed in late 2020. Three online training sessions were conducted on 18, 20, and 22 January 2021. Due to COVID-19 restrictions, the practical component was replaced with video demonstrations on the use of refrigerant analyzers. Four demonstration videos were shown, covering refrigerant cylinders, liquid and gas analysis, and result interpretation. Each part was followed by interactive Q&A sessions. Training materials and 10 instructional videos remain available for download on the Customs Administration’s portal. An international consultant also participated, delivering two presentations and commenting on the video material. A total of 53 customs officers attended. The training was well received, and it was agreed that close cooperation between NOU Serbia and the Customs Administration should continue. Plans for Tranche 3 include strengthening capacities by providing several refrigerant analyzers.	
Others, specify.	Public awareness activities => Cooperation with RAC Association to promote public awareness and ozone/climate-friendly technologies. The HVAC&R Society (KGH) of Serbia, under the Serbian Union of Mechanical and Electrical Engineers and Technicians (SMEITS), has since 2011 cooperated with UNEP and the Ministry of Environmental Protection to organize a forum entitled “Improving Energy Efficiency in Climate and Ozone-Friendly Latest Refrigeration Technologies” at the annual International HVAC&R Congress and Exhibition. This congress has been organized continuously for 56 years. Between 2021–2024, UNEP and the Ministry/NOU participated in each KGH congress and exhibition, jointly hosting a booth and organizing the forum. The 56th International HVAC&R Congress and Exhibition is scheduled for	UNEP

	8–12 December 2025 in Belgrade. The HVAC&R Society also publishes the quarterly KGH Journal, which includes the section Ozone Pages, edited by NOU Serbia and UNEP’s Regional Ozone Network for Europe and Central Asia. Public awareness activities for International Ozone Day (2021–25) => 2021: Celebrations were organized in primary schools, with activities tailored for children, including those with special needs. Activities included art, theatre, posters, and the creation of “Zone without freon” bicycle paths. NOU Serbia and UNIDO provided materials, and representatives from the Ministry participated actively. 2023: Ozone Day was celebrated under the slogan “Montreal Protocol: Fixing the Ozone Layer and Reducing Climate Change”, with art and literary activities in elementary schools and kindergartens. 2024: Events included daycare and school activities, workshops, and the production of an educational music video. Activities also included art competitions, climate change experiments, and lectures on the Montreal Protocol. The Ministry also organized two workshops on KIP preparation and the HFC phase-down. Local media covered the events. 2025: Celebrations were held under the slogan “From Science to Global Action”. Activities included daycare and school events, awareness-raising workshops, and— for the first time— a dedicated workshop for women in the refrigeration sector, highlighting gender equality.					
13. Overview of current HCFC consumption in metric tonnes by substance (last three years)						
Substance		Sector		2022	2023	2024
HCFC-22		RAC servicing		82.21	68.776	60.125
HCFC-142b		RAC servicing		0	0.741	0
TOTAL		(select)		82.21	69.517	60.125
14. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)						
There is a clear trend of decreasing in HCFC consumption. For the years 2022–2024, the allowed amount was 5.46 ODP tonnes. However, based on the data in the table, it is evident that actual consumption was significantly below the limit defined by MP Annex 2. In 2022 the consumption was 17.2% lower than the allowed amount, in 2023 was 29.8% lower, and in 2024 as much as 39.4% lower. These quantities are used exclusively in the servicing sector. For example, the total allowed import quota for 2022 was 5.46 ODP tonnes, allocated quota was 4.625 ODP tones, while actual imports amounted to 4.522 ODP tonnes. There is no domestic production of equipment containing ODS in Serbia. A ban on the import of equipment containing or relying on ODS was introduced in April 2018. All imported quantities are used exclusively for servicing purposes. Currently, large quantities of HFCs and HFC blends are still in use across various sectors. However, there is a clear and growing trend toward the adoption of natural refrigerants such as R-290 (propane), R-744 (CO ₂), and others. This shift is driven by increasing environmental concerns, regulatory pressures, and the need to reduce the global warming potential (GWP) of refrigerants. Natural refrigerants are seen as long-term sustainable alternatives due to their low or zero GWP and minimal impact on the ozone layer.						
15. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.						
Information needed		Description			Agency	
Updated sectoral consumption information		Gather and review existing information, while supplementing it with new data obtained through questionnaires, interviews, and site visits across the relevant sectors. Assess the sectoral distribution of HCFC consumption in close			UNIDO	

	consultation with key stakeholders.	
Analysis of the types of equipment using HCFCs	Identify and assess the types of equipment that continue to use HCFCs, in consultation with the relevant stakeholders for transition of these types of equipment from HCFCs to low GWP alternatives.	UNIDO
16. Activities to be undertaken for project preparation and funding		
Activity	Indicative funding (US \$)	Agency
Assessment of sectoral distribution of HCFC consumption.	10,000 USD	UNIDO
Drafting of the HPMP stage III proposal	15,000 USD	UNIDO
Workshop to validate the proposal by stakeholders.	5,000 USD	UNIDO
TOTAL	30,000 USD	
17. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation for stage II of the HPMP?		
During the preparation of stage III of the HPMP for Serbia, activities related to the implementation of the Kigali Amendment will be taken into account to ensure complementarity and avoid duplication. The Government of Serbia has submitted its Kigali Implementation Plan (KIP) to the same meeting, providing a clear framework for addressing the phase-down of HFCs. Accordingly, stage III of the HPMP will remain fully dedicated to achieving the 97.5 per cent reduction of HCFC consumption by 2030, in line with the Montreal Protocol obligations, while the KIP will specifically address the phase-down of HFCs. To maximize synergies, the preparation of stage III of the HPMP will take into consideration the findings, baseline data, and stakeholder consultations carried out under the KIP. Areas where coordination is particularly important include technician training, recovery and recycling practices, and strengthening the servicing sector, since these interventions contribute simultaneously to HCFC phase-out and to the safe and sustainable introduction of low-GWP alternatives. By structuring the projects in this manner, Serbia ensures that there will be no overlap in funding, but rather complementary actions that reinforce each other and optimize the use of resources.		
18. How will the Multilateral Fund gender policy be considered during project preparation?		
The HPMP Stage III takes into consideration the Multilateral Fund gender policy, providing gender aspects, through the whole project cycle. While the degree of relevance of gender dimensions vary depending on the area or type of engagement, accounting for gender equity and equality is an important consideration when financing projects that address global environmental issues, because gender relations, roles and responsibilities exercise important an influence on women's and men's access to and control over environmental resources and the goods and services they provide. These human resource development initiatives are open for all genders and would encourage the participation of women. Gender issues will be measured at the start of the project, such as the gender ratio of participants at the workshops/trainings and awareness programs. During the implementation, the NOU and UNIDO will facilitate the improvement of the baseline gender ratio, while at project closure these values will be reassessed and analyzed.		

PROJECT CONCEPT – PAKISTAN

Multilateral Fund FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL KIGALI-hfc IMPLEMENTATION PLAN (KIP) project preparation (PRP) Kigali HFC Phase Down plan (Overarching strategy)

Part I: Project information

Project title:	Kigali Implementation Plan Preparation (PRP)	
Country:	Pakistan	
Lead implementing agency:	UNIDO	
Cooperating agency:	UNEP	Click or tap here to enter text.
Implementation period for stage I of the KIP:	From January 2026 to December 2032	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the KIP (please specify):		
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	175,000
UNEP	Overarching	45,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	☒	☐

A. Information required for PRP funding request for the overarching strategy of the KIP

1. Montreal Protocol compliance target to be met in ☒ stage I of the KIP			
Phase-out commitment (%)	10%	Year of commitment	2032
☐ Servicing only		☐ Manufacturing only	☒ Servicing and manufacturing
2. Brief background/description/information on approved relevant projects and multi-year agreements as follows: - The current progress in implementation of any funded HFC-related project (enabling activities or stand-alone HFC investment projects) - The current progress in ongoing HCFC phase-out management plan (HPMPs) - Consideration of integrating HFC phase-down activities with HPMP activities taking into account previously approved HFC-related projects, if this information is available.			
1. <u>Progress of Funded HFC-Related Project (Enabling Activities):</u> The Enabling Activities project including Country Assessment Report (CAR) for HFC phasedown for Pakistan commenced in 2020 and ended in 2023. In order to make stakeholders aware of the benefits of the Kigali Amendment and need to ratify it, a number of Stakeholders consultation meetings and awareness programmes were carried out, to facilitate the ratification process at national level. These initiated the process and stakeholders' readiness to cooperate with the government. Consultants were engaged to carry out various needs assessments, and to provide technical assistance to the National Ozone Unit, Ministry of Climate			

Change & Environmental Coordination (MOCC&EC) to carry out the agreed activities. Awareness workshops were conducted for major HFC and HFC alternatives importers, RAC associations, customs and end-users on the provisions of the Kigali Amendment and the benefits of its ratification. Awareness workshops were also conducted for the various stakeholder agencies of the government on the need to ratify the Kigali amendment. The MOCC&EC and NOU held several meetings with the Honourable Minister of Climate Change and made presentations on the Kigali Amendment. There were also collaborations between the legal unit of the Federal Ministry of Climate Change and the Federal Ministry of Legal department regarding drafting of the ratification documents and other necessary documents. The ratification of the Kigali Amendment to the Montreal Protocol is still under process and not ratified as yet.

Also Prepared Montreal Protocol policy order 2023 for Pakistan.

2. Current Progress of Ongoing HPMP Stage:

The established HCFC Phase-out Management Plan (HPMP) of Pakistan aims to phase out HCFCs in three stages. In 95th ExCom, project proposal for second tranche of Stage III was submitted. Along with planned activities that are supposed to be carried out in second tranche, this official document also details about the progress of activities carried out under tranche I of Stage III.

2.1 Progress Status of Activities Carried out in HPMP Stage III-Tranche I

Table: Progress report on the implementation of the first tranche of stage III of HPMP

Activity	Progress/ Implementation Status
Foam manufacturing sector	- Stage III included the conversion of six remaining eligible enterprises in the PU foam manufacturing sector to phase out 8.19 ODP tonnes (74.33 mt) of HCFC-141b: one manufacturing insulation foam for commercial refrigeration (Cool Point Lahore (Cool Point)), and one manufacturing insulation foam for pipes (Islam ud Din), to cyclopentane; and four enterprises manufacturing spray foam (Symbol Industries, Master Foam Karachi, Master Foam Lahore, Razi Sons) to water-blown technology. - The pipe insulation project of the HPMP stage-III has been completed in May, 2025 and industry is now using the new cyclopentane based technology. - Regarding the four conversions in the spray foam enterprises, the bidding process for the procurement of spray foam machines has been completed. Offers have been received and are under technical review. The equipment has been delivered at each beneficiary site. - As part of the special reporting request, UNIDO has proposed alternative activities in the foam sector to the MLF Secretariat to replace one of the planned conversion projects
Legal framework	- The licensing and quota system for the import and export of HCFCs has been operational since 2013, and the importation of previously phased-out ODS substances is banned. HCFC-142b was added to the list of controlled substances under regulation SRO 634(1) as part of Pakistan's Customs Rules, which was updated in 2014. - Under the first tranche of stage III of the HPMP consultative and coordinating meetings were held to discuss policies and regulations to support a sustained phase-out of HCFCs, and the terms of reference (TOR) was drafted for the recruitment of an expert, which is under review. Coordination meetings were also held to discuss the development and implementation of an e-licensing system for imports and for the development of a mandatory certification requirement in the refrigeration and air-conditioning (RAC) sector. For both, a work plan is under development, and the TOR are under preparation to recruit an expert to develop the certification scheme. - Meetings were held to initiate the train-the-trainers programme; the TOR was drafted to recruit an international customs trainer, and a draft training agenda is under discussion for the train-the-trainers programme and for the training programme for customs officers.

Refrigeration servicing sector	- Under the first tranche, a work plan and schedule for technician training workshops have been prepared and are under discussion. The work plan includes a methodology for the selection of servicing workshops and technical institutions to receive tools and equipment under stage III and the contract for equipment procurement for workshops and technical institutions has been signed. The equipment has already been delivered and yet to be distributed to the beneficiaries. Work has commenced to update the master trainer workshop, and the national ozone unit (NOU) is discussing budget, new trainers, agenda, and locations with the technical training authority and has held stakeholder coordination meetings to discuss training workshops on specific applications. An international expert was hired to develop the specialized training for eight residential and four commercial AC manufacturers, and tools and equipment for leak detection, charging, and recovery were procured and yet to be distributed to the beneficiaries. - A business model was developed by international experts on recovery, recycling, and reclamation (RRR) and shared with the NOU, which included case studies of business models in four countries, and an agenda is under development for a study visit to a facility in Poland. Proposals have been prepared for a study trip to Poland and Mexico for industry stakeholders to exchange information on low-global-warming-potential (GWP) technologies. An application form to establish a RRR centre was developed, and candidate centres were identified based on region among other criteria. A discussion document on RRR was developed to facilitate awareness-raising and stakeholder consultation. Guidelines were developed for the selection of servicing workshops for the provision of recovery equipment and to become part of the recovery and recycling (R&R) network. The feasibility study on low-GWP technologies commenced with a field survey and stakeholder consultation. - Training and awareness sessions were organized on alternative technologies with relevant stakeholders (e.g. industry and government). Two informational flyers regarding the implementation of the HPMP were created and shared. Awareness was raised in industries on alternative technologies and the phase-out of HCFCs through an awards ceremony for five pioneer companies; celebration of the World Ozone Day and the World Refrigeration Day; and participation in the heating, ventilation, AC, and refrigeration (HVACR) exposition.
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2.2 Activities Planned to be Implemented in HPMP Stage III-Tranche II:

Table: Implementation plan for the second tranche of stage III of HPMP

Activity	Plan
Conversion of six enterprises in the foam sector	Continue the conversion of the two individual enterprises in the PU insulation foam sector and four spray foam enterprises, including developing the specifications for the equipment, procurement, delivery, installation, and commissioning
Policy/regulations study and development	Continue the review of existing policy and regulations to identify needs to support HCFC phase-out, including the servicing tail; conducting consultation meetings; continue the development of an e-licensing system, including an assessment of hardware and software required; continue the development and implementation of mandatory qualification requirements for RAC servicing technicians; develop policy and standards for reclamation centre
Enforcement and customs training	One train-the-trainers' workshop in 2025 with international experts; eight training workshops for a total of 200 customs officers on Montreal Protocol and HCFC control including risk profiling and an update of risk profiling criteria; two training workshops for a total of 60 customs agents and importers to support enforcement beyond the customs check-point; one training workshop for 20 enforcement officers in provincial governments; one border dialogue with neighboring countries
Capacity building of RAC servicing training	Organize six train-the-trainer workshops for 20 trainers in six provinces and 45 training workshops for 1,350 RAC technicians on good servicing practices; organize a master trainers' workshop in 2025; organize two training workshops for 90 trainees on good servicing practices for large commercial air conditioners/chillers in 2025; update the provincial training syllabus in

	consultation with provincial boards from technical institutions; continue work to integrate good servicing practices into National Qualification Framework and National Occupational Competency Standards; update the evaluation criteria for the recognition of prior learning (RPL), organize six training sessions for 60 assessors and implement a pilot certification programme and certify and initial 300 technicians through RPL
Capacity building of RAC servicing and training centres (tools and equipment):	Continue acquisition of 144 sets of tools/equipment for selected servicing workshops (including recovery station for HCFC-22, charging unit, vacuum pumps, weighted scales, vacuum gauges, leak detectors for hydrocarbon (HC), refillable cylinders, etc.)
National recycling, recovery and reclamation scheme	Establish two national RRR centres including refrigerant reclaim, laboratory equipment, consumables, transportation, installation and training (including inter alia recovery unit for HCFC-22, reclaim station, refrigerant identifier, cylinders, leak detector, gas chromatograph, filter chiller unit, electric liquid transfer pump); acquire and deliver 150 service kits (including inter alia cylinders, manifolds and gauges, hoses, valves, recovery station for HCFCs, vacuum pump, charging unit, brazing equipment, safety equipment); establish four training centres at selected technical colleges and conduct eight awareness workshops and training for 200 RAC technicians on RRR; develop certification procedure for reclamation center
Promotion of alternative technologies	Continue to organize study tours and webinars for 12 industries to other countries to exchange information on the development of low-GWP technologies; continue to organize the training for key residential and commercial AC manufacturers and continue procurement and delivery of tools and equipment; ongoing collaboration with RAC associations and stakeholder consultation meetings to disseminate information on new emerging technologies in RAC manufacturing and servicing sectors; technical assistance to large end users to reduce leakage and promote alternatives; establish a country-wide registration system to track refrigerant management (cylinder tracking, reporting and stock management)
Awareness-raising	Continue production and distribution of printed materials (e.g., newspaper advertisements, articles in journals), and promotion through mass media (e.g., short films) in local language; celebration of the World Refrigeration Day, World Ozone Day and Ozone2Climate roadshow and roundtable

3. Integrating HFC Phase-Down Activities with HPMP Activities

Not Applicable

3. Overview of current HFC consumption in metric tonnes by substance (last three years)				
HFC	Sector	2021	2022	2023
HFC-32	Manufacturing-AC	1105.72	854.94	535.44
HFC-125	Other, specify. (Fire Fighting)	562.45	124.00	43.00
HFC-134a	RAC servicing	2638.47	1979.96	1807.48
	Manufacturing-mobile AC			
	Manufacturing-REF			
HFC-152a	Manufacturing-Foam	34.00	0.00	0.00
HFC-227ea	Other, specify. (Fire Fighting)	3.30	9.60	0.00
HFC-236fa	Other, specify. (Fire Fighting)	6.30	3.00	0.00
HFC-365mfc	Other, specify. (Fire Fighting)	4.80	0.00	0.00
HFC-23	Other, specify. (Fire Fighting)	0.04	0.36	0.00
Total		4355.08	2971.86	2385.92
HFC Blend	Sector	2021	2022	2023
R-404A	RAC servicing	133.95	121.77	27.94
R-407A	RAC servicing	4.52	6.83	23.35
R-407C	Manufacturing-AC	73.38	46.78	0.00
	RAC servicing			
R-410A	Manufacturing-AC	1427.32	2426.54	809.54
	RAC servicing			

R-507A	RAC servicing	0.45	3.96	0.56
R-422D	RAC servicing	28.75	25.10	0.00
F-222	RAC servicing	18.04		
Total		1686.41	2630.98	861.39
Grand Total		6,023.45	5,602.84	3,247.31

4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

1. Sector/ Sub-sectors that are Involved in the Consumption of Identified HFCs and HFCs Blend:

Most of the RAC appliances used in Pakistan are either manufactured or assembled in the country, while only a very small number of RAC equipment is imported from other countries. RAC equipment that is, imported tends to be those of less common types, imported to fit specific customer demand. When it comes to MAC systems there is no manufacturing of MAC appliances in the country. However, there is a sizeable assembling of vehicles in Pakistan. The mobile ACs needed are imported from other countries to fit in the vehicles assembled in Pakistan including the gas filling. The sub-sectors identified under manufacturing and servicing sector are enlisted in the below table:

Table: Subsectors Identified under Manufacturing and Servicing Sector

Sr. #	Sectors	Sub-sectors
1.	Manufacturing Sector	- Domestic Refrigeration - Commercial refrigeration - Residential Air Conditioning - Commercial Air Conditioning - Foam manufacturing
2.	Servicing Sector (RAC/ MAC)	- Domestic refrigeration - Commercial refrigeration - Large commercial refrigeration - Industrial refrigeration - Transport - Residential air-conditioning - Commercial air-conditioning and chiller - Mobile air-conditioning - Fire protection systems

The description of sub-sectors in the manufacturing and servicing sector in Pakistan as per CAR is summarized in the table below:

Table: Description of Sub-sectors of Manufacturing and Servicing Sectors

Sub-Sectors	Description
Refrigeration (Both Manufacturing and Servicing)	
Domestic refrigeration	There are nine domestic refrigerator/ freezers manufacturers including PEL, Orient, Waves Singer, Iceage, URIL, Dawlance, Haier, Electrolux and Changhong Ruba in Pakistan. They manufacture models of refrigerators and freezers of various capacities. Currently, the country's need for domestic refrigerators is being met through local manufacturing and there is insignificant demand of imported equipment for specific application. The total number of domestic refrigerators manufactured in Pakistan in 2019 was 2,064,721. As the units are pre-charged in the premises of each manufacturer and ready for plug in, the refrigerant during the installation is not required. Further, there is no reported import of second-hand domestic refrigerator in the country. The marketing and sale of domestic refrigerators is done either directly by the manufacturer or through their authorized dealers/ distributors. There are instances where the distributors have also sub-distribution channels.
Commercial refrigeration	There are twelve commercial refrigerator/ freezers manufacturers including PEL, Orient, Waves Singer Pakistan, Iceage, URIL, Dawlance, Haier, Electrolux, Changhong Ruba, Varioline, Cool Point and Mumtaz Engineers in Pakistan. They manufacture equipment of various capacities including chest freezers, display coolers, water dispenser, candy boxes etc. for small commercial shops, restaurants, public places, super markets etc. Currently,

	the country's need of commercial refrigerators is being met through the local manufacturing and there is insignificant demand of imported equipment for specific application. The number of commercial refrigerators manufactured in 2019 was 349,440. As the units are pre-charged in the premises of each manufacturer ready to plug in, the refrigerant is not required during the installation. Further, there is no import of second-hand commercial refrigerator in the country. The marketing and sale of commercial refrigerators is done either directly by the manufacturer or through their authorized dealers/ distributors. There are instances where the distributors have also sub-distribution channels.	
	Air Conditioning (Both Manufacturing and Servicing)	
Residential air-conditioning	There are eight manufacturers including Dawlance, Haier, Orient, PEL, Digital World (Lahore), Digital World (Karachi), Pakistan Air Conditioning and Refrigeration Corporation (PARC) Dailkool, R&I Electrical that are manufacturing domestic ACs. These industries are manufacturing ACs of various capacities ranging between 1 ton to 4 tons in the domestic ACs. This includes single spilt units up to 2 tons and floor standing units up to 4 tons. Currently, most of the country's needs of domestic ACs is being met through the local manufacturing, however there is approximately 1-2% import of domestic ACs observed in the country during the survey of the traders. It was learnt that HFC-32 based domestic ACs are being imported in small quantities in the country. Since, the data for the import of domestic ACs in the country was not available, therefore, the quantity of HFC-32 ACs of various categories could not be ascertained. Total population of domestic ACs manufactured during 2019 was 877,976. 97.4% of these units were based on R-410A whereas the remaining 2.6% used HCFC-22. It is presumed that the addition of new HCFC-22 based equipment will be stopped by 2025. However, the population of installed HCFC-22 in the system will be gradually phased out in favor of alternative technologies by 2040. As the units are pre-charged at the premises of each industry and ready for plug in, the refrigerant during the installation is not required. Further, there is no import of second-hand domestic ACs in the country. The marketing of domestic ACs is done either directly by the industry or through their authorized dealers/ distributors. There are instances where the distributors have also sub-distribution channels.	
Commercial air-conditioning and chiller	There are four manufacturers that are manufacturing commercial ACs including Petal Engineering, Cool Point, Pakistan Air Conditioning and Refrigeration Corporation (PARC) Dailkool and SABRO commercial ACs. These industries are manufacturing commercial ACs of various capacities including the categories of ducted ACs, packaged ACs, large split ACs and chillers. The regular production of commercial ACs and chillers is generally up to 40 tons whereas higher capacities are also built according to the customer needs by these manufacturers. Currently, most of the need of commercial ACs is being met through the local manufacturing, however approximately 5% of commercial ACs being imported in the country. The import data for the commercial ACs was not available, however it was learnt from the market dealers that around 5% of the sale of commercial ACs is met through products generally imported from Italy. The total population of commercial ACs & chillers manufactured during 2019 was 9,670. 25.4% of these units were based on HFC-134A (mainly chillers) whereas the remaining 31.0%, 26.7% and 16.9% was for HCFC-22, R-407C & R-410A. It is presumed that the addition of new R-22 based equipment will be stopped by 2025. However, the population of installed HCFC-22 systems will be gradually phased out in favor of alternative technologies by 2040. In 2019, the share of R-407C, R-410A and R-134A refrigerants used in commercial ACs compared to the overall annual refrigerants used in the other sectors are 42.5%, 3.1% and 20.9% respectively. The historical refrigerant use trend shows that the trend of HFC-134A is on increasing side whereas R-407C and R-410A are steady. As the units are charged at the site at the time of installation, the refrigerant is required during the installation. Further, there is no import of second-hand commercial ACs in the country. The marketing of commercial ACs is done either directly by the industry or through their authorized dealers/ distributors.	

Foam (Only Manufacturing)	
Foam	There are several companies manufacturing various products in this subsector. Under the HPMPs, the production lines relying on HCFCs have been mainly converted to cyclo-pentane, full water blown systems and HFOs. Besides limited trials, there is no HFC used in this sub-sector. Each sub-sector is discussed in detail in the subsequent sections. <i>I. <u>PU Insulation Foam for Domestic Refrigeration</u></i> There are nine manufacturers in PU insulation foam for the manufacturing of domestic refrigerator/ freezers. 100% of the industries in this sub-sector have shifted from HCFC-141b to cyclo-pentane under HPMP Stage-I. <i>II. <u>PU Insulation Foam for Commercial Refrigeration</u></i> There are thirteen manufacturers in PU insulation foam for the manufacturing of commercial refrigerator/ freezers. All except one industry in this sub-sector have shifted from HCFC-141b to Cyclo-pentane under HPMP Stage-I. However, the remaining one industry is included under HPMP Stage-III to be submitted in the forthcoming ExCom. The phasing out of HCFC-141b to cyclo-pentane shall be achieved before 2025. <i>III. <u>PU Sandwich Panel</u></i> There are four manufacturers in PU sandwich panel for the manufacturing of PU discontinuous panels. Currently, the industries in this sub-sector are consuming HCFC-141b. The phase out program for these industries has already been approved in 76th ExCom for conversion to cyclo-pentane. These conversions are expected to be implemented before 2023. Currently, these industries are using HCFC-141b contained in pre-blended polyol. <i>IV. <u>Thermo-ware PU Foam</u></i> There are seven manufacturers in PU foam manufacturing in the Thermo-ware sub-sector. The phase out program for these seven industries has already been approved in the 76th ExCom. These conversions are expected to be implemented before 2023. Currently, these industries are using HCFC-141b contained in pre-blended polyol. Therefore, as the alternative technology is based on the use of Full Water Blown, this translates to nil requirement of any blowing agent. <i>V. <u>PU Pipe Insulation</u></i> Currently, there is only one industry in this sub-sector and is consuming HCFC-141b. The project for this specific industry has been planned for submission in the forthcoming ExCom under HPMP stage-III. The alternate technology is cyclo-pentane. The expected project completion is within 2025. <i>VI. <u>Spray Foam</u></i> Currently, there are four industries in this sub-sector and are consuming HCFC-141b. The project for these four industries has been planned for submission in the forthcoming ExCom under HPMP stage-III. The alternate technology is HFO. <i>VII. <u>Extruded Polystyrene Board (XPS)</u></i> Currently, there is only one industry and is consuming HCFC-142b / HCFC 22 (60:40). The industry has also tried to use HFC 152a as an alternative on trial basis. The result was not encouraging. The project to phase out HCFC142b/HCFC22 for this sub-sector was approved in 83rd ExCom. The alternative technology is CO2/ DME/ HFO. The project is expected to be completed within 2025.
Refrigerators/ Air Conditioners/ Fire Fighting (Only Servicing)	

	Large commercial refrigeration	The name and the exact number of engineering works could not be ascertained through the existing databases of Pakistan HVACR Society, Pakistan Engineering Council as well as Chamber of Commerce and Industries (CC&Is) in the country. The database of CC&Is do provide the list of engineering works covering all sectors of engineering. However, no meaningful data could be extracted for RAC sector. Understanding that there are number of Engineering Works that manufacture large commercial units in the country. They manufacture equipment of various capacities including ice plants, cold food storages, cooling/chilling/freezing application for dairy, fish and poultry in the super markets. Currently, the country's need of large commercial refrigerators is being met through local assembling from the imported main components and there is limited amount of import of large commercial refrigerators for special requirement. The total number of large commercial refrigerators manufactured in 2019 was 228. 73.4% of these units were based on R-404A whereas the remaining 18.5% and 8.1% were based on HCFC-22 and R-717 respectively. It is presumed that the HCFC-22 based equipment will be gradually phased out and be replaced with alternate technology by 2040. As the units are charged at the site at the time of installation, the refrigerant is required during the installation. Further, there is no import of second-hand large commercial refrigerator in the country. The marketing and sale of large commercial refrigerators is done either directly by the engineering works or through their authorized dealers/ distributors.	
	Industrial refrigeration	Currently, the exact number of engineering works and their location for the fabrication of industrial refrigeration units could not be ascertained in the CC&I's data bases. However, there are number of engineering works that are manufacturing industrial units in the major cities of Pakistan including Karachi and Lahore. These engineering works are manufacturing equipment of various capacities for applications including: - Fruit and vegetable supply chain - Dairy Milk chilling process - Hotel industries - Pharmaceutical industries - Meat processing - Fishing industry Currently, the country's need of industrial refrigerators is being met through the local manufacturing and there is no import of industrial refrigeration systems. The total number of industrial refrigeration systems manufactured during 2019 was 292. 94.5% of these units were based on R-717 whereas the remaining 2.8% and 2.7% was based-on HCFC-22 and R-404A respectively. It is presumed that the HCFC-22 based equipment will be gradually phased out and be replaced with the alternate technology by 2040. As the units are charged at the site at the time of installation, the refrigerant is required during the installation phase. Furthermore, there is no import of second-hand industrial refrigerator in the country. The marketing and sale of industrial refrigerators is done either directly by the engineering works or through their authorized dealers/ distributors.	
	Transport (Reefer)	There are number of engineering works that are manufacturing transport units (Reefers) in the major cities of Pakistan including Karachi & Lahore. These engineering works are in the manufacturing of cooling system for vans, 20 & 40 feet of refrigerated trucks. In addition, these engineering works also provide cooling system for fishing vessel, railway wagons etc. Currently, the country's need of Transport Reefers is being met through the local manufacturing and there is no import of transport reefers. Total number of transport reefers manufactured during 2019 was 628. 81.3% of these units were based on R-404A whereas the remaining 12.9%, 4.6% and 1.2% was based on HFC-134a, HCFC-22 and R-507A respectively. It is presumed that the HCFC-22 based equipment will be gradually phase out in favor of alternative technologies by 2040. As the units are charged at the site at the time of installation, the refrigerant is required during the installation. Further, there is limited import of transport reefer for specialized application in the country. The marketing and sale of transport reefer is done either directly by the engineering works or through their authorized dealers/ distributors.	

Mobile air-conditioning	There are eight manufacturers that are manufacturing vehicles requiring mobile ACs including Pak Suzuki Motor, Indus Motor, Honda Atlas Cars Ltd., Hinopak Motors, Gandhara Industries, Gandhara Nissan, Master Motor Corporation and Kia Motor. Most of the needs of vehicles ACs is being met through the local assembling by the manufacturer. The AC units are pre-charged in the premises of each industry in the vehicles. The typical range of charge size (HFC-134a Charge in Kg) for the various categories of vehicles having mobile ACs is: • 1 for cars • 8 for Buses • 4 for Support Utilities
Fire protection systems	Servicing only

2. Analysis of Consumption Trends of HCFCs and HFCs blend:

Pakistan neither produces nor exports any HCFCs or HFCs to other countries. However, Pakistan imports HCFCs and HFCs from different countries for use in the manufacturing and servicing sectors.

2.1 HFCs and HFCs Blend as per CP Data (2021-2023)

The main HFCs named HFC-32, HFC-125, HFC-134a, HFC-152a, HFC-227ea, HFC-236fa, HFC-365mfc, and HFC-23 and HFC blends named R-404A, R-407A, R-407C, R-410A, R-507A, and R-422D are the widely used in the country.

2.2 Analysis of Consumption Trend (2021-2023)

Analysis of CP data reveals the following:

- The main chemicals imported from 2021-2023 are HFC-134a, HFC-410A, HFC-32, and HFC-125. The rest of the identified chemicals were imported in minute quantity i.e., 2% to nearly 0% of total import in each year.
- In 2021 and 2023, highest reported import was of HFC-134a followed by R-410A, HFC-32, and HFC-125. Whereas in 2022, the highest reported import was of R-410A followed by HFC-134a, HFC-32, and HFC-125.
- A decline in import of most of the identified chemicals is observed with each passing year. These chemicals include HFC-32, HFC-125, HFC-134a, HFC-152a, HFC-227ea, HFC-236fa, HFC-365mfc, and R-404A.
- Three chemicals named HFC-23, R-410A, and R-507A has shown inconsistent consumption trend. The consumption increases in 2022 and then again reduces in 2023.
- Among the 14 identified chemicals, only one chemical named HFC-407A illustrates a continuous increase in import. From 2021-2023, a total of 34.70 MT of HFC-407A has been recorded. 67% of 34.70 MT is imported in 2023 while 20% is imported in 2022, and 13% in 2021.
- The import of HFC-152a, and HFC-365mfc is reported zero for 2022, and 2023. Similarly, in 2023, the import of HFC-227ea, HFC-236fa, HFC-23, R-407C, and R-422D is recorded zero.

5. **Description of information that needs to be gathered during project preparation. Explain how this data will be gathered**

Information needed	Description	Agency
Stakeholder Consultation	Consultant to prepare questionnaires and conduct interviews with relevant stakeholders to update available data on ODS alternatives; Conducting interviews, organizing workshops and stakeholders' consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control	UNIDO
HFC Phase-down Strategy Development	Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed	UNIDO, UNEP

	strategy, including assessment of needs to develop/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions, including assessments of the needs for enhancing training programs on recovery, recycling and destruction UNEP: Develop non-investment component and action plans based on analysis of identified needs, recommendations and results of consultations.	
Data Collection & analysis on HFC consumption in manufacturing/ Servicing sector	Data collection & analysis by sector/sub-sector/HFC substance in manufacturing and servicing sector	UNIDO
Needs assessment of regulatory and policy framework update, enforcement capacity building, RAC and MAC sectors capacity building, and outreach activities	Review and assessment of needs to develop/update regulatory and policy framework, enforcement capacity building, trainings and certification scheme in use of flammable refrigerants and recovery, developing training plan and participating in workshops with main stakeholders and training institutions, and assessment of needs for awareness rising of relevant stakeholders.	UNEP
Assessment of Newly Identified and Existing Stakeholders in the Manufacturing Sector	Newly identified and existing stakeholders in the manufacturing sector will be assessed to plan the capacity building and conversion activities for HFC-free options. Private and public operators for reclamation activities for HFC will be identified in partnering with both refrigerant suppliers, training centres and waste management operators for end-of-life vehicles and mobile cold rooms as well as refrigerator and air-conditioning equipment. Other activities include hydrocarbon supply chain management, mainstreaming energy efficiency promoted by the eco-labeling and gender equity into all the activities.	UNIDO
Inception and Validation	Inception and Validation	UNIDO
6. Activities to be undertaken for project preparation and funding (decision 87/50(c))		
Activity	Indicative funding (US \$)	Agency
Stakeholder Consultation	45,000	UNIDO
HFC Phase-down Strategy Development	25,000	UNIDO
HFC Phase-down non-investment component development	20,000	UNEP
Data Collection & Analysis	47,000	UNIDO
Needs assessment of regulatory and policy framework update, enforcement capacity building, RAC and MAC sectors capacity building, and outreach activities	25,000	UNEP
Assessment of Newly Identified and Existing Stakeholders in the Manufacturing Sector	22,000	UNIDO
Inception and Validation	25,000	UNIDO

Assessment of activities for gender mainstreaming in the KIP strategy	11,000	UNIDO
TOTAL	220,000	
7. How will activities related to preparing the KIP be linked to the current stages of the HPMP being implemented in the country? (OPTIONAL)		
Pakistan is on the way to eliminate HCFCs consumption. HPMP Stage III aims to achieve complete (100%) phase out of HCFCs by 2030. Request for Tranche II of HPMP Stage III was submitted to the ExCom in 95th Meeting. The activities focus on the sustainable phase-out of HCFCs and, as far as possible, promote the safe use of low-GWP alternatives. Pakistan will make efforts to ensure synergy between the HPMP and the KIP while preparation the KIP Stage-I.		
8. How will the Multilateral Fund gender policy be considered during project preparation?		
In line with ExCom decision 92/40 and ExCom document 92/51, the Fund Secretariat's operational gender mainstreaming policy and selected performance indicators described in Annex XXII of ExCom 92 report will be incorporated into the preparation of the HFC Phase-down overarching strategy and project implementation plan of the stage I of the KIP.		

PROJECT CONCEPT – ALGERIA

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING

CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	People's Democratic Republic of Algeria
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97 th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO, please provide explanation: Endorsement for proceeding with this project took place after the submission of the BP 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes The project will include the preparation of a comprehensive national inventory of banks of used or unwanted controlled ODS and alternatives, and the development of a plan for the collection, transport and disposal of such substances. The approach will follow the guidelines contained in document UNEP/OzL.Pro/ExCom/91/66, using the equipment-based or chemical consumption methodology for data collection and analysis to estimate current and future banks of controlled substances. This will involve an initial desk review, detailed field surveys, data collection from various sectors and consultations with key stakeholders to ensure accurate and comprehensive data collection for the preparation of the inventory. The inventory aims to provide a clear understanding of the quantities and locations of these used or unwanted substances, as well as their potential for recovery, recycling and reclamation. In addition to the inventory, the project will develop a national action plan outlining strategies for the effective collection, transport and disposal of used or unwanted ODS and alternatives. This plan will consider various options for environmentally sound management, including local recycling, reclamation and destruction technologies, as well as the possibility of exporting these substances for destruction. The plan will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national activities under the HPMP and leverage existing programmes in the refrigeration servicing sector by integrating them into the broader national strategy. By building on these existing efforts, the project aims to create a coherent and comprehensive approach to the management of ODS banks that will serve as a basis for future initiatives.
2. Description of activities that will be implemented during the preparation of the national

inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study of already available data from national surveys on consumption of controlled substances undertaken in the preparation of the HPMP, ODS alternatives survey, equipment importers, recovery and recycling activities from waste management operators, and on the collection, dismantling and recovery of the waste refrigerants and other substances from end-of-life equipment will be prepared. A review of the relevant policies and regulations related to recovery, recycling and reclamation and management of wastes will also be conducted to identify those that would be needed to support the environmentally sound management of these wastes. A national survey will then be conducted to collect specific data to quantify the stock of ODS and alternatives, taking into account both equipment in use and in bank. The national survey will be carried using methodologies outlined UNEP/OzL.Pro/ExCom/91/6 and other guidelines, such as the equipment based approach or the chemical consumption approach, depending on the results of the initial desk study. The survey will involve collecting information from stakeholders such as importers, distributors, service companies, RAC association and end-users.	UNIDO
Analysis of data collected	The data collected will be analysed based on the methodology selected to estimate the quantities of used or unwanted ODS and alternatives in different sectors. The analysis will consider the types and quantities of substances, their distribution across sectors, their location and the potential for recovery, reclamation and disposal.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of banks of used or unwanted controlled substances will be prepared. The national inventory will provide a detailed account of the types and quantities of substances, their locations and their current status (in use, stockpiled or awaiting disposal). The inventory will serve as a basis for the development of a comprehensive plan for the collection, transport and disposal of unwanted controlled substances. The plan will outline strategies for the recycling, reclamation and cost-effective destruction of ODS and alternatives. The plan will also include recommendations for policy measures, infrastructure requirements and potential	UNIDO

	funding mechanisms. The final report, consisting of the national inventory and plan, will also consider lessons learned and recommendations for future projects. The final report will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and buy-in. This will include workshops and meetings with government agencies, industry representatives, the RAC association and other relevant parties. Stakeholder consultations will help define the objective, refine methodologies, validate data and ensure that the proposed action plan is practical and widely supported.	UNIDO
3. Funding for the activities described in section 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO
Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognised the importance of gender equality, women's empowerment and women's participation in the implementation of international and national programmes. During the implementation of the HPMP, efforts have been made to mainstream gender and collect gender disaggregated data where relevant. These efforts will be continued and deepened during the implementation of this project. The project will for example ensure that gender considerations are integrated throughout its implementation. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality in the project team, and considering the different impacts of substance disposal practices on men and women. Additionally, gender-disaggregated data will be collected and analysed to ensure that the project benefits all genders equitably.		

PROJECT CONCEPT – ARGENTINA

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE

DESTRUCTION

Part I: Project information

Project title:	National Inventories Banks of Unwanted Controlled Substances for Argentina
Country:	Argentina
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th
Implementation period	2026-2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24 months	
Funding requested: US\$100,000.00	
Agency	Funding requested (US \$)*
UNIDO	100,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	☒	☐
Project included in the bilateral/IA business plan?	☐	☒
If NO , please provide explanation: Endorsement from the Government provided after the BP 2025 was submitted.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes
The Montreal Protocol has been effectively regulating the production and consumption of ozone-depleting substances (ODS) since 1989. The Kigali Amendment added hydrofluorocarbons (HFCs) to the list of controlled substances. Large banks of used and unwanted controlled substances have been accumulated globally, which are continuously being released to the atmosphere from these banks. These emissions are damaging the ozone layer and contributing to global warming. Banks of controlled substances are not regulated under the Montreal Protocol. Collection, recovery and cost-effective disposal (recycling, reclaiming, destruction) of used or unwanted controlled substances represent a challenge for developing countries. Argentina, as one of the largest economies in Latin America, has an extensive stock of RAC (refrigeration and air-conditioning) and foam equipment still containing HCFCs and HFCs. With the completion of HPMP Stage I, the ongoing execution of the final tranches of Stage II, and the planned Stage III (2026–2030), the country has advanced in eliminating HCFC consumption. Nevertheless, large banks of ODS and HFCs remain in equipment, stockpiles, and waste streams. Without proper recovery, recycling, reclamation, and destruction, these banks risk uncontrolled emissions that undermine ozone and climate goals. Therefore, Argentina has implemented infrastructure to support recovery, reclamation, and destruction of refrigerant, which includes two refrigerant reclaiming centers, technicians equipped for refrigerant recovery machine, and a project approved at the 87th ExCom Meeting in 2021 to refurbish a high-temperature incinerator at FIASA (Frío Industrias Argentinas S.A., the country's HCFC-22 production plant) for the destruction of HFC-23, through which the aim is controlling and eliminating HFC-23 emissions from HCFC-22 production (expected to avoid more than 7.9 million tonnes of CO₂-equivalent emissions). These initiatives demonstrate Argentina's technical and institutional capacity for recovery, recycling, reclamation, and destruction of substances controlled and compliance with Montreal Protocol obligations. The proposed project (National Inventories of Banks of Used or Unwanted Controlled Substances for Argentina) aims to establish a national inventory and prepare a plan for the collection, transport, and disposal

of used or unwanted controlled substances, with options for recycling, reclamation, and cost-effective destruction. It will quantify mitigation potential in line with ExCom Decision 91/66, analyze relevant legislation and policies, and involve broad stakeholder consultations. The final report and action plan will propose concrete measures to strengthen the collection and disposal of ODS and HFCs, including ozone-depleting substances like HCFCs and high-GWP HFCs.

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Others, specify. Assessment and Inventory of Banks of Used and Unwanted Controlled Substances	Activity 1 - Desk study on available data on banks of used and unwanted controlled substances, relevant institutions and stakeholders, and existing regulations and policies. - Conducting stakeholder analysis with responsibilities and roles. e.g. e-waste traders. - Identifying laboratories able to analyse the composition of used or unwanted ODS / HFCs, and the need for upgrading such laboratories. - Identifying data gaps related to banks of used and unwanted controlled substances, relevant institutions and stakeholders. - Setting up database / inventory of banks of used or unwanted controlled substances - Conducting further data collection, on-site visits and surveys as needed.	UNIDO
New information on ODS regulations	Click or tap here to enter text. Activity 2 Analysis of institutional, policy and regulatory frameworks: - Analysing the role of Government bodies, NGOs, stakeholders, recovery, recycling, reclamation, and disposal centres and other institutions involved in waste management. - Analysing existing policy and regulatory frameworks, including waste management policies.	UNIDO
Others, specify. Inventory of banks and National Action Plan	Activity 3- - Inventory of banks and preparation of action plan: - Setting up database / inventory of banks of used or unwanted controlled substances. - Technical and economic analysis to compare available options for handling and final disposal of unwanted controlled substances. - Elaborating a business / financing model to ensure long-term sustainability of collection / disposal operations. - Preparing initial action plan for collection, transport, storage and setting up the required disposal infrastructure. - Conducting stakeholder consultations presenting the draft inventory and action plan to obtain stakeholder's input, support, and validation. - Drafting a set of recommended regulations and policies supporting the collection / disposal of used or unwanted ODS / HFCs, and sustainable financing. - Finalization of the action plan for the sound handling of unwanted MP controlled substances including collection, transport, and disposal of such substances and considering stakeholder comments.	UNIDO
Others, specify. Project Management and Reporting	Activity 4 Project management, monitoring, progress reporting, final report, and evaluation:	UNIDO

3. Funding for the activities described in 2 above

Activity	Indicative funding (US \$)	Agency
1. Others, specify. Assessment and inventory of banks of used and unwanted controlled substances	30,000	UNIDO
2. New information on ODS regulations	20,000	UNIDO
3. Others, specify. Inventory of banks and National Action Plan	30,000	UNIDO

4. Others, specify. Project Management and Reporting	20,000	UNIDO
TOTAL	US\$100,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The Government of Argentina aims to achieve a higher participation of women during the plan for the correct handling of unwanted MP controlled substances including collection, transport, and disposal of substances. Statistics and indicators on women's participation will be compiled and incorporated into those generated as part of this project.		

PROJECT CONCEPT – BOSNIA AND HERZEGOVINA

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	National Inventory Banks of Unwanted Controlled Substances for Bosnia and Herzegovina
Country:	Bosnia and Herzegovina
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th
Implementation period	January 2026 - December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify):	
Funding requested:	
Agency	Funding requested (US \$)*
UNIDO	80,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	☒	☐
Project included in the bilateral/IA business plan?	☒	☐
If NO , please provide explanation:		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes
Adequate collection, recovery, and destruction of ODS banks remains a major challenge for Bosnia and Herzegovina, as it is for most developing countries. In 2015, Bosnia and Herzegovina introduced a ban on the import of ODS-based equipment. Since most of the existing equipment is more than 10 years old, it is expected to be nearing the end of its life cycle. The country has adopted legislation on the management of certain categories of waste and on climate change, and it is a signatory to international agreements related to the elimination of ODS and the reduction of HFC consumption. Bosnia and Herzegovina is also a Party to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. In accordance with waste management legislation at both the state and entity level, companies that generate hazardous waste, including ODS/HFC waste, are obligated to deliver it to a licensed company authorized to collect EE (electrical and electronic) waste or to collect and transport hazardous waste (including ODS/HFC waste). The legislation covers refrigerators, freezers, air conditioners, and other appliances, and requires pre-treatment of waste equipment, meaning that waste material and hazardous substances—including CFCs, HCFCs, HFCs, and HCs—must be removed. Licenses for companies collecting EE waste or transporting hazardous waste are issued at the entity level. Currently, two companies in Bosnia and Herzegovina are authorized at the state level to collect EE waste or to collect and transport ODS/HFC waste. In the Federation of Bosnia and Herzegovina, two companies hold valid licenses for EE waste collection. According to legislation, CFC, HCFC, and HFC waste is classified as hazardous waste, including that originating from discarded equipment containing these substances. Several companies are licensed to collect and transport

hazardous waste for disposal outside Bosnia and Herzegovina.⁸

There are no facilities for the destruction of CFCs, HCFCs, or HFCs within Bosnia and Herzegovina. Such waste must be exported in line with waste management regulations.

Nevertheless, Bosnia and Herzegovina must work towards higher recovery rates of RAC equipment and refrigerant gases. This includes promoting the collection, reclamation, recycling, and final disposal of substances controlled under the Montreal Protocol. The country also needs to establish ODS and HFC inventories to determine appropriate actions for their sound management and disposal, including potential destruction needs (for ODS). To develop a sustainable system, Bosnia and Herzegovina must first conduct a National Inventory of ODS and HFC Banks. This inventory will assess the overall need for action in ODS/HFC bank management, evaluate destruction options, and design policy measures for effective collection and sustainable financing.

The national inventory will be in line with the overarching strategy of the KIP (Kigali Implementation Plan) Stage I, and HPMP (HCFC Phase-out Management Plan) Stage II.

The inventory will be developed through the following actions:

- The methodology for the ODS/HFC banks will include a desk study on available and previously collected data from ODS alternative survey, data collected during the preparation of HPMP stage II and KIP stage I, as well as the collection of additional information and data.
- Additional data collection and surveys to complete the ODS/HFC inventory (banks in certain sector, recovery practices, collected amounts, etc.), recovery practices, collected amounts and treatment practices.
- Analysis of previously collected and newly collected data, identification of data gaps (ODS/HFC banks in certain sectors, recovery practices, collected amounts, treatment practices etc.), policy analysis including gaps, waste quality and waste treatment and e-waste collectors' practices.
- Initiating stakeholder consultations: present preliminary findings and stakeholder mapping, outline planned procedure, objectives and expected outcomes, discuss and integrate stakeholder opinions.
- Assessment of the technical feasibility of ODS/HFC treatment options (including reclamation and destruction), as well as cost estimates, based on estimated expected amounts to be treated.

The Final Report will include recommendations on improving collection in conjunction with HPMP/KIP implementation, including:

- Policies and regulations (e.g., potential EPR and incentive schemes)
- Required infrastructure and equipment
- Preferred treatment options for collected refrigerants
- A business plan for storage, collection, and treatment
- An action plan
- Stakeholder consultations for validation and refinement of the action plan
- Preparation and submission of the final report

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
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⁸ List of companies that have valid licenses for the collection and transportation of hazardous waste for their disposal outside of Bosnia and Herzegovina can be found on the following website:
<https://fmoit.gov.ba/okolis/upravljanje-otpadom/prekogranicni-promet-otpada/informacija-o-ovlastenim-privrednim-subjektima-za-izvoz-opasnog-otpada/>

Data collection	This activity foresees to include a desk study on available and previously collected data from ODS alternative surveys, data collected during the preparation of HPMP stage II and KIP stage I, as well as additional information, data collection and surveys to complete the ODS/HFC inventory (banks in certain sector, recovery practices, collected amounts, etc.), recovery practices, collected amounts and treatment practices.	UNIDO
Analysis of data collected	This activity foresees the analysis of previously collected and newly collected data, identification of data gaps (ODS/HFC banks in certain sectors, recovery practices, collected amounts, treatment practices etc.), a policy analysis including gaps, as well as waste quality, waste treatment and e-waste collectors' practices.	UNIDO
Stakeholder consultation	Two stakeholder consultation workshops are planned. The first workshop will present the preliminary findings and stakeholder mapping, outline the planned procedure, and discuss the objectives and expected outcomes, while also gathering stakeholder feedback. The second workshop will focus on refining and validating the Action Plan.	UNIDO
Preparation of inventory report/national plan	Preparation of an inventory report / national plan will include information on the estimated or expected amounts to be treated, as well as an assessment of the technical feasibility of ODS/HFC treatment options (including reclamation and destruction) and corresponding cost estimates. The national plan / final report will cover the following: • Measures to improve collection in conjunction with HPMP/KIP implementation • Policies and regulations, including potential EPR and incentive schemes • Required infrastructure and equipment • Preferred treatment options for collected refrigerants • A business plan for storage, collection, and treatment • An action plan	UNIDO

3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	40,000	UNIDO
Analysis of data collected	10,000	UNIDO
Stakeholder consultation	10,000	UNIDO
Preparation of inventory report/national plan	20,000	UNIDO
TOTAL	80,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
In line with the Gender Analysis and the Action Plan for mainstreaming gender in Montreal Protocol projects and programmes in Bosnia and Herzegovina, targeted actions are required to ensure greater participation of women in activities related to the National Inventory. To support the identification and dissemination of good practices introduced by companies to integrate a gender perspective in the service sector, RRR centres and other relevant stakeholders should be involved in the desk review process.		

PROJECT CONCEPT – CABO VERDE

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Cabo Verde
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97 th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	80,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances (ODS and HFCs) and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS and HFCs. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the HPMP and future KIP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS and HFC banks that will serve as a foundation for future initiatives.		
2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance	UNIDO

	consumption, including those prepared for the HPMP, KIP, and ODS alternatives survey. Additional sources will include information from equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS and HFCs in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS and HFCs across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP and future KIP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government	UNIDO

	agencies, industry representatives, the RAC association, and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$35,000	UNIDO
Analysis of data collected	\$13,000	UNIDO
Preparation of inventory report/national plan	\$17,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$80,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP and preparation of the KIP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – CENTRAL AFRICAN REPUBLIC

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Central African Republic
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan as its formulation results from recent discussions with the country and newly identified needs. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances ODS and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the Institutional Strengthening (Project (IS) for the Implementation of Montreal Protocol and Enabling Activities (EA) for the Implementation of the Kigali Amendment, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS banks that will serve as a foundation for future initiatives.		
2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption, include those prepared for the EA.	UNIDO

	Additional sources will include information from equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/Ozl.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the IS. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association, and other relevant parties. Stakeholder consultations will	UNIDO

	help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO
Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the IS and EA, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – COMOROS

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	The Comoros
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	70,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances (ODS and HFCs) and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS and HFCs. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the HPMP and future KIP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS and HFC banks that will serve as a foundation for future initiatives.		
2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption, including those prepared for the HPMP, KIP, and ODS alternatives survey. Additional sources will include information from equipment importers, waste management operators	UNIDO

	involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS and HFCs in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS and HFCs across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP and future KIP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association, and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	UNIDO
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$28,000	UNIDO
Analysis of data	\$11,000	UNIDO

collected		
Preparation of inventory report/national plan	\$16,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$70,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP and preparation of the KIP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – COTE D'IVOIRE

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Côte d'Ivoire
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances (ODS and HFCs) and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS and HFCs. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the HPMP and future KIP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS and HFC banks that will serve as a foundation for future initiatives.		
2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption, including those prepared for the HPMP, KIP, and ODS alternatives survey. Additional sources will include information	UNIDO

	from equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS and HFCs in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS and HFCs across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP and future KIP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association, and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	UNIDO
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO

Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP and preparation of the KIP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – DEMOCRATIC REPUBLIC OF CONGO

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Democratic Republic of Congo
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances ODS and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the HPMP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS banks that will serve as a foundation for future initiatives.		
2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption, including those prepared for the HPMP, and	UNIDO

	ODS alternatives survey. Additional sources will include information from equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association,	UNIDO

	and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO
Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – EQUATORIAL GUINEA

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Equatorial Guinea
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances ODS and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the HPMP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS banks that will serve as a foundation for future initiatives.		
2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption, including those prepared for the HPMP, and	UNIDO

	ODS alternatives survey. Additional sources will include information from equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association,	UNIDO

	and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO
Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – GABON

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Gabon
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances (ODS and HFCs) and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS and HFCs. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the HPMP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS and HFC banks that will serve as a foundation for future initiatives.		
2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption,	UNIDO

	including those prepared for the HPMP and ODS alternatives survey. Additional sources will include information from equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS and HFCs in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS and HFCs across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association, and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	UNIDO
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency

Data collection	\$40,000	UNIDO
Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – GUINEA

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Gabon
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes		
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances (ODS and HFCs) and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS and HFCs. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national initiatives, such as the HPMP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS and HFC banks that will serve as a foundation for future initiatives.		
5. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency		
Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption, including those prepared for the HPMP and ODS alternatives survey. Additional sources will include information from	UNIDO

	equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS and HFCs in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS and HFCs across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association, and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	UNIDO
6. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO

Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
7. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – JORDAN

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES
Country:	Jordan
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24 months	
Funding requested:	
Agency	Funding requested (US \$) *
UNIDO	53,000
UNEP	37,000
Total funding	90,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	☒	☐
Project included in the bilateral/IA business plan?	☒	☐
If NO , please provide explanation: According to decision 93/26, agencies are allowed to request in 2024 funding for preparation of ODS inventories even in cases where such projects had not been included in the agencies' business plans.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost- effective destruction.

- Brief overview of the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programs.**

I. Background.

According to the Executive Committee (ExCom) Decision 91/66, Multilateral Fund (MLF) will provide additional fundings to Article 5 countries for an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances contained in document UNEP/OzL.Pro/ExCom/91/66; UNEP/OzL.Pro/ExCom/91/72. Banks refer to the cumulative quantity of substances stored within operational equipment, chemical reserves, foams, and other products that have not yet been released into the atmosphere.

Under the HPMP stage I and stage II, equipment was provided to 5 training centers and to 80 maintenance workshops, under HPMP stage III Jordan will distribute equipment to 278 maintenance workshops also under KIP1 Jordan will distribute equipment to MAC maintenance workshops. ODS survey would be complement the activities related to recycling and recovery.

Given that, it is crucial to undertake preparatory activities for ODS banks, it is to be noted there is no legal framework on used or unwanted ODS bank.

Jordan issued regulations to control Import, Marketing, Export, Transit, re- Export, Transport, Use and Holding of Substances which Deplete the Ozone Layer (ODS), Hydrofluorocarbons (HCFCs), (HFCs) and their Alternatives.” This, however, does not provide the country with any legal framework on used or unwanted ODS bank.

II. Methodology.

The preparation of the inventory of used or unwanted ODS bank will be planned by desk research to be undertaken by taking stock of existing information and identifying prioritized data collection exercises. This

will help develop a tentative list of public and private stakeholders which likely have a certain amount of used or unwanted ODS than a threshold amount determined together with the National Ozone Unit (NOU) based on the total consumption of the country. The methodology would also include data collection on equipment using controlled substances (data on number of units and share of refrigerants in each type using production figures, sales figures, etc.) for an identified time frame, including estimating the amounts of controlled substances installed in the existing systems. This may need to be validated in the field with information from service shops such as the number of equipment serviced, whether the refrigerants are recovered, recycled, or when contaminated, collected. When this data is collected, there needs to be an understanding of the calculation process that will be used to determine the quantity of controlled substances contained in the equipment inventory (i.e., determine average initial charge/system, recharge amounts, what is left in the equipment during time of servicing, age of equipment, average leakage rates). Further information on the methodology development would be dragged during the research phase.

III. Project Objectives.

This project aims at making an inventory of unused or unwanted quantities of refrigerants and developing a national action plan including priorities for sound refrigerant management: identification of key stakeholders, establishment of a working group to assess unused or unwanted refrigerant, RAC equipment at the end of its life cycle, and emissions of unused or unwanted to the atmosphere; training on good practices for refrigerant management; and identification of priorities for improving future refrigerant management.

The national stakeholders would include the activities provided in the table. Where relevant, this project will carry out the project activities in consultation with the government units responsible for Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and the Stockholm Convention on Persistent Organic Pollutants.

The activities proposed under this project aim to lay the foundation for the future formulation of a comprehensive refrigerant management plan. Service workshops, owners of RAC equipment installation, the RAC association, importers, non-governmental organizations, and others will need to share the same vision and collectively contribute to the identification of priorities for refrigerant management. The timeline for development of the quality infrastructure and a national plan for refrigerant waste management depends on the available financial resources. In particular, the consultation on the Basel Convention will be given as a priority in case that export for destruction is identified as the most cost-effective disposal option.

IV. Budget.

The country did not benefit of the preparation of national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling and cost-effective destruction funding window offered by MLF. For that reason, the government has decided to take this opportunity to address the ODS bank inventories preparation, herewith submitting a proposal for activities to facilitate an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances contained in document. Based on the decision of the Executive Committee 91/66 in UNEP/OzL.Pro/ExCom/91/72, the funding for the preparation of national inventories of banks of waste-controlled substances and national action plan (US \$) is US\$ 90,000.00, understanding the country's HCFC baseline is **83 ODP tonnes**.

The proposed amount would be divided into the activities below.

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data collection (ODS consumption and their alternatives in manufacturing / service sector) and preliminary desk study on available data and assessment of regulatory compliance in Jordan.	1-Conduct a survey on HCFC, HFC consumption per refrigerant used in the servicing sector, as well as an inventory of equipment using HCFCs and HFCs. The inventory will include the type of equipment, usage area of the equipment substance used, quantity of substances recovered, reused, disposed of and stored, evaluate the existing ODS regulations pertaining to the inventory and disposal of banks. 2-Identification of existing HCFCs and HFCs	UNIDO

	banks through on -site visit and desk-based research utilizing national database and available data sources. 3-Desk -based research on national regulations pertinent to e-waste and waste management. 4- Stakeholders analysis to define relevant actors for the action plan, followed by key stakeholder consultations. 5-Evaluation of current destruction options defined in regulations within Jordan for refrigerants, including but not limited in cement factories Compilation of a list of destruction options along with optimization strategies to enhance efficiency and environmental sustainability.	
Analysis of data collected and type of equipment using HCFCs and HFCs.	1- Review the gathered and available data, conduct a study to identify and quantify the existing used unwanted refrigerant banks and estimate the quantity of future banks based on the installed RAC. 2- Conduct feasibility tests and evaluate destruction procedures in cement kilns in order to determine their viability as potential destruction points. 3- Establish a methodology for developing an inventory /action plan to guide future initiatives. 4- Identify data gaps and needs to ensure comprehensive analysis and decision -making. 5- Analyze strategies for managing the equipment and gases in RAC. 6- Assessment the installed capacity of recovery, recycle and Reclaim (RRR)and disposal / destruction facilities. Evaluation of destruction options for capacity building in RRR facilities. 7- Propose a sustainable model and financing modalities for implementation of identified strategies by considering stakeholder consultation meetings. 8- Study on quantities of unused or unwanted refrigerant gases from the identified types and sources of equipment, this is to be used for further identification of national priorities for sound refrigerant management. Stakeholders consultation, update on HCFC and HFC consumption assembling /servicing sectors referring to previous inventories for HPMP.	UNIDO
Preparation of inventory report / national plan,	1-Formulate a robust plan to improve or develop regulations on the inventory and management of used or unwanted controlled substances and the transport and disposal of these substances. 2-The national plan aims to improve the effectiveness of collection mechanism, function of RRR and disposal facilities and suggestion for improvement of their effectiveness, function of e-waste (end of life equipment) and existing regulation /mechanisms (including hazardous waste and e-waste). It also defines the roles of all actors /stakeholders, including the role of the NOU, service workshops, disposal facilities, manufacturers and other regulatory bodies	UNIDO

	to ensure coordinated efforts in implementing the national plan.	
Stakeholder consultation.	1-The national inventory and proposed action plan, and the subsequent data analysis will be discussed in consultation with the relevant stakeholder both in Government and in the private sector. 2- Stake holder consultation is necessary and will be conducted during the preparation stage as well.	UNEP

3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
1-Desk research study on Domestic regulations and Programme supporting sound management of refrigerant and other controlled substances including identification of key stakeholders (Government and private sector), i.e., waste management operators, collection centers, or waste aggregators, appliance retailers and refrigeration association.	US\$ 15,000	UNEP
2- Analysis of data collected. Study on quantities of unused or unwanted ODS and HFC from the identified types and sources of equipment that is to be used for further identification of national priorities for sound management - Data collection and preliminary Desk study on available data and assessment of regulatory compliance in Jordan	US\$ 30,000	UNIDO
3-Drafting the inventory report of unused or unwanted quantities of refrigerants and national action plan including a preliminary economic feasibility study on destruction activities for relevant private / public sector stakeholders. In case business plan is needed- to include plan of its development into a national plan. (Preparation of inventory report/National report)	US\$ 23,000	UNIDO
4- Stakeholders' consultation and sharing the vision among the Governmental / private stakeholders by establishing working group to assist unused or unwanted refrigerant, RAC equipment at the end-of-life cycle, and refrigerant emissions to the atmosphere.	US\$ 22,000	UNEP
TOTAL	90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		

Female engineers and technicians will be encouraged to participate in organized workshops. When possible, female consultants would be encouraged to work on the data survey and organize workshops.

PROJECT CONCEPT – MOROCCO

**MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

**FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS
OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE
COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING
CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE
DESTRUCTION**

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Kingdom of Morocco
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97 th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify):	24
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	X	☐
Project included in the bilateral/IA business plan?	☐	X
If NO , please provide explanation: Endorsement for proceeding with this project took place after the submission of the BP 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes
Morocco has implemented several actions under the framework of the HPMP and the preparation for the HFC phase-down plan related to the study of HCFCs and HFCs consumption, and the establishment of a recovery, recycling and reclamation system in the country. Although these activities have identified the most important substances consumed in Morocco, the most relevant consuming sectors and the basic elements of a Moroccan RRR system, additional research and strategic analysis is required to design an appropriate action plan for the life-cycle management of used and unwanted controlled substances. For this reason, funding is requested for the current project, which will include the preparation of a comprehensive national inventory of banks of used or unwanted controlled substances, and the development of a plan for the collection, transport and disposal of such substances. The approach will follow the guidelines

contained in document UNEP/OzL.Pro/ExCom/91/66, using the equipment-based or chemical consumption methodology for data collection and analysis to estimate current and future banks of controlled substances. This will involve an initial desk review, detailed field surveys, data collection from various sectors and consultations with key stakeholders to ensure accurate and comprehensive data collection for the preparation of the inventory. The inventory aims to provide a clear understanding of the quantities and locations of these used or unwanted substances, as well as their potential for recovery, recycling and reclamation. In addition to the inventory, the project will develop a national action plan outlining strategies for the effective collection, transport and disposal of used or unwanted ODS and alternatives. This plan will consider various options for environmentally sound management, including local recycling, reclamation and destruction technologies, as well as the possibility of exporting these substances for destruction. The plan will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national activities under the HPMP and the KIP and leverage existing programmes in the refrigeration servicing sector by integrating them into the broader national strategy. By building on these existing efforts, the project aims to create a coherent and comprehensive approach to the management of banks of used or unwanted controlled substances that will serve as a basis for future initiatives.

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data collection	An initial desk study of already available data from national surveys on consumption of controlled substances undertaken in the preparation of the HPMP and the KIP, equipment importers, recovery and recycling activities from waste management operators, and on the collection, dismantling and recovery of the waste refrigerants and other substances from end-of-life equipment will be prepared. A review of the relevant policies and regulations related to recovery, recycling and reclamation and management of wastes will also be conducted to identify those that would be needed to support the environmentally sound management of these wastes. A national survey will then be conducted to collect specific data to quantify the stock of ODS and alternatives, taking into account both equipment in use and in bank. The national survey will be carried using methodologies outlined UNEP/OzL.Pro/ExCom/91/6 and other guidelines, such as the equipment based approach or the chemical consumption approach, depending on the results of the initial desk study. The survey will involve collecting information from stakeholders such as importers, distributors, service companies, RAC association and end-users.	UNIDO
Analysis of data collected	The data collected will be analysed based on the methodology selected to estimate the quantities of used or unwanted ODS and alternatives in different sectors. The analysis will consider the types and	UNIDO

	quantities of substances, their distribution across sectors, their location and the potential for recovery and reclamation.	
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of banks of used or unwanted controlled substances will be prepared. The national inventory will provide a detailed account of the types and quantities of substances, their locations and their current status (in use, stockpiled or awaiting disposal). The inventory will serve as a basis for the development of a comprehensive plan for the collection, transport and disposal of unwanted controlled substances. The plan will outline strategies for the recycling, reclamation and cost-effective destruction of ODS and alternatives. The plan will also include recommendations for policy measures, infrastructure requirements and potential funding mechanisms. The final report, consisting of the national inventory and plan, will also consider lessons learned and recommendations for future projects. The final report will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and buy-in. This will include workshops and meetings with government agencies, industry representatives, the RAC association and other relevant parties. Stakeholder consultations will help define the objective, refine methodologies, validate data and ensure that the proposed action plan is practical and widely supported.	UNIDO
3. Funding for the activities described in section 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO
Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		

The NOU has recognised the importance of gender equality, women's empowerment and women's participation in the implementation of international and national programmes. During the implementation of the HPMP, efforts have been made to mainstream gender and collect gender disaggregated data where relevant. These efforts will be continued and deepened during the implementation of this project. The project will for example ensure that gender considerations are integrated throughout its implementation. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality in the project team, and considering the different impacts of substance disposal practices on men and women. Additionally, gender-disaggregated data will be collected and analysed to ensure that the project benefits all genders equitably.

PROJECT CONCEPT – PAKISTAN

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of National Inventories of Banks of Used or Unwanted Controlled Substances
Country:	Islamic Republic of Pakistan
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97 th
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify):	
Funding requested:	
Agency	Funding requested (US \$)*
UNIDO	100,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project Approval	☐	☐
Project included in the bilateral/IA business plan?	☒	☐
If NO, please provide explanation:		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programs.
I. Background
According to the Executive Committee (ExCom) Decision 91/66, Multilateral Fund (MLF) will provide additional funding to Article 5 countries for an inventory of banks of used or unwanted controlled substances and a plan for the

collection, transport and disposal of such substances contained in UNEP/OzL.Pro/ExCom/91/72. Thereafter banks refer to the cumulative quantity of substances stored within operational equipment, chemical reserves, foams, and other products that have not yet been released into the atmosphere. The following activities on recycling, recovery and reclamation has been planned in HPMP Stage III in the country.

- Develop guidelines and business model for reclamation facilities and certification procedure for reclamation facilities, RAC technicians and servicing workshops;
- Establish four (04) national RRR centers including refrigerant reclaim, laboratory equipment, consumables, transportation, installation and training²⁰; acquire and deliver 400 service kits to build RRR networks²¹; and
- Establish four training centers at selected technical colleges and conduct 16 awareness workshops and training for 400 RAC technicians on RR&R.

This ODS survey would complement the guide on recycling and recovery, given that it is crucial to undertake preparatory activities for ODS banks. Currently, there is no legal framework on used or unwanted ODS bank.

II. Methodology

The preparation of the inventory of used or unwanted ODS bank will be planned by desk research to be undertaken by taking stock of existing information and identifying prioritized data collection exercises. This will help develop a tentative list of public and private stakeholders which likely have a certain amount of used or unwanted ODS than a threshold amount determined together with the National Ozone Office (NOU) based on the total consumption of the country. The methodology would also include data collection on equipment using controlled substances (data on number of units and share of refrigerants in each type using production figures, sales figures, etc.) for an identified time frame, including estimating the amounts of controlled substances installed in the existing systems. This may need to be validated in the field with information from service shops such as the number of equipment serviced, whether the refrigerants are recovered, recycled, or when contaminated, collected. When this data is collected, there needs to be an understanding of the calculation process that will be used to determine the quantity of controlled substances contained in the equipment inventory (i.e., determine average initial charge/system, recharge amounts, what is left in the equipment during time of servicing, age of equipment, average leakage rates). Further information on the methodology development would be dragged during the research phase.

The ToRs for the proposed activities under this project will be prepared by International Consultant, whereas, the execution of the main activities mentioned in sr 2 and 3 of this proposal will be carried out by 02 national consultants/firm.

III. Project Objectives

This project aims at making an inventory of unused or unwanted quantities of refrigerants and developing a national action plan including priorities for sound refrigerant management: identification of key stakeholders, establishment of a working group to assess unused or unwanted refrigerant, RAC equipment at the end of its life cycle, and emissions of unused or unwanted substances to the atmosphere; training on good practices for refrigerant management; and identification of priorities for improving future refrigerant management.

The national stakeholders would include the Ministry of Climate Change and Environmental Coordination MOCC&EC, the Ministry of Finance, the Ministry of Industry, and the Federal Chamber of Commerce. Where relevant, this project will carry out the project activities in consultation with MOCC&EC department responsible for Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and the Stockholm Convention on Persistent Organic Pollutants.

The activities proposed under this project aim to lay the foundation for the future formulation of a comprehensive refrigerant management plan. Service workshops, owners of RAC equipment installation, the RAC association, importers, non-governmental organizations, and others will need to share the same vision and collectively contribute to the identification of priorities for refrigerant management. The timeline for development of the quality infrastructure and a national plan for refrigerant waste management depends on the available financial resources. In particular, the consultation on the Basel Convention will be given as a priority in case that export for destruction is identified as the most cost-effective disposal option.

IV. Budget

The country did not benefit of the preparation of national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling and cost-effective destruction funding window offered by MLF. For that reason, the government has decided to take this opportunity to address the ODS bank inventories preparation, herewith submitting a proposal for activities to facilitate an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances contained in document. Based on the decision of the Executive Committee 91/66 in UNEP/OzL.Pro/ExCom/91/72, the funding for the preparation of national inventories of banks of waste-controlled substances and national action plan (US \$) is US\$ 100,000.00, understanding the country's HCFC baseline is 248.11 ODP tons.

The proposed amount would be divided into the activities below:

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data on ODS/HFC consumption in manufacturing/servicing sector	1) Desk research on domestic regulations and programme supporting sound management of refrigerant and other controlled substance including Identification of key stakeholders (government and private sector (i.e., waste management operators, collection centers, or waste aggregators, appliance retailers, refrigeration associations, recycling centers, RAC service centers) 2) Update on ODS/ HFC consumption in assembling/servicing sectors; 3) Workshop with relevant stakeholders on the acquired desk research information.	UNIDO
ODS/ HFC sectoral consumption information	4) Establishment of a methodology for the inventory/action plan, linked to other HCFC phase out activities, endorsed by NOU;	UNIDO
Analysis of types of equipment using ODSs/ HFCs	5) Study on quantities of unused or unwanted refrigerants from the identified types and sources of equipment, this is to be used for further identification of national priorities for sound refrigerant management; 6) Coordinating and sharing the vision among the governmental stakeholders by establishing a working group to assess unused or unwanted refrigerant, RAC equipment at the end of life cycle, and refrigerant emissions to the atmosphere	UNIDO
Others, specify.	7) Drafting the inventory of unused or unwanted quantities of refrigerants and a national action plan including a preliminary economic feasibility study on destruction activities for relevant private/public sector stakeholders. In case business plan is needed, include plan of its development into the national plan.	UNIDO

3. Funding for the activities described in 2 above

Activity	Indicative funding (US \$)	Agency
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1) Desk research on domestic regulations and programme supporting sound management of refrigerant and other controlled substance including Identification of key stakeholders (government and private sector (i.e., waste management operators, collection centers, or waste aggregators, appliance retailers, refrigeration associations, recycling centers, and RAC service centers)	10,000	UNIDO
2) Update on ODS/ HFC consumption in assembling/ servicing sectors	15,000	UNIDO
3) Workshop with relevant stakeholders on the acquired desk research information	5,000	UNIDO
4) Establishment of a methodology of the inventory/action plan, linked to other HCFC phase out activities, endorsed by NOU	5,000	UNIDO
5) Study on quantities of unused or unwanted refrigerants from the identified types and sources of equipment, this is to be used for further identification of national priorities for sound refrigerant management;	30,000	UNIDO
6) Coordinating and sharing the vision among the governmental stakeholders by establishing a working group to assess unused or unwanted refrigerant, RAC equipment at the end of life cycle, and refrigerant emissions to the atmosphere.	10,000	UNIDO
7) Drafting the inventory of unused or unwanted quantities of refrigerants and a national action plan including a preliminary economic feasibility study on destruction activities for relevant private/public sector stakeholders. In case business plan is needed, include plan of its development into a national plan.	25,000	UNIDO
TOTAL	100,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment and women's participation in the implementation of international and national programmes. During the implementation of the HPMP and the KA enabling activities, efforts have been made to mainstream gender and collect gender disaggregated data where relevant. These efforts will be continued and deepened during the implementation of this project. The project will for example ensure that gender considerations are integrated throughout its implementation. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality in the project team, and considering the different impacts of substance disposal practices on men and women. Additionally, gender-disaggregated data will be collected and analyzed to ensure that the project benefits all genders equitably.		

PROJECT CONCEPT – PHILIPPINES

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES
Country:	The Republic of the Philippines
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th
Implementation period	1 January 2026 – 31 December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify):	
Funding requested:	
Agency	Funding requested (US \$)*
UNIDO	100,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	☒	☐
Project included in the bilateral/IA business plan?	☐	☒
If NO , please provide explanation: Endorsement from the Government was received after the submission of the BP 2025-2027.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

19. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes
I. Background According to the Executive Committee (ExCom) Decision 91/66, Multilateral Fund (MLF) will provide additional fundings to Article 5 countries for an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances contained in UNEP/OzL.Pro/ExCom/91/72. Thereafter banks refer to the cumulative quantity of substances stored within operational equipment, chemical reserves, foams, and other products that have not yet been released into the atmosphere. There have been no recycling, recovery or reclamation activities in the country and this ODS survey would complement the guide on recycling and recovery, which it to be developed as a part of Stage III activities. Given that, it is crucial to undertake preparatory activities for ODS banks. There are no any legal framework on used or

unwanted ODS bank.

II. Methodology

The preparation of the inventory of used or unwanted ODS bank will be planned by desk research to be undertaken by taking stock of existing information and identifying prioritized data collection exercises. This will help develop a tentative list of public and private stakeholders which likely have a certain amount of used or unwanted ODS than a threshold amount determined together with the Philippine Ozone Desk (POD) based on the total consumption of the country. The POD's Country Programme (CP) data in the previous years give an estimated amount of unused ODS. The methodology would also include data collection on equipment using controlled substances (data on number of units and share of refrigerants in each type using production figures, sales figures, etc.) for an identified time frame, including estimating the amounts of controlled substances installed in the existing systems. This may need to be validated in the field with information from service shops such as the number of equipment serviced, whether the refrigerants are recovered, recycled, or when contaminated, collected. When this data is collected, there needs to be an understanding of the calculation process that will be used to determine the quantity of controlled substances contained in the equipment inventory (i.e., determine average initial charge/system, recharge amounts, what is left in the equipment during time of servicing, age of equipment, average leakage rates). Further information on the methodology development would be dragged during the research phase.

III. Project Objectives

This project aims at making an inventory of unused or unwanted quantities of refrigerants and developing a national action plan including priorities for sound refrigerant management: identification of key stakeholders, establishment of a working group to assess unused or unwanted refrigerant, RAC equipment at the end of its life cycle, and emissions of unused or unwanted to the atmosphere; training on good practices for refrigerant management; and identification of priorities for improving future refrigerant management.

The national stakeholders would include the Department of Environment and Natural Resources (DENR)'s Environmental Management Bureau (EMB) (main beneficiary and counterpart), the Department of Finance (DOF), Department of Trade and Industry (DTI). Where relevant, this project will carry out the project activities in consultation with the government units responsible for Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and the Stockholm Convention on Persistent Organic Pollutants.

The activities proposed under this project aim to lay the foundation for the future formulation of a comprehensive refrigerant management plan. Service workshops, owners of RAC equipment installation, the RAC association, importers, non-governmental organizations, and others will need to share the same vision and collectively contribute to the identification of priorities for refrigerant management. The timeline for development of the quality infrastructure and a national plan for refrigerant waste management depends on the available financial resources. In particular, the consultation on the Basel Convention will be given as a priority in case that export for destruction is identified as the most cost-effective disposal option.

IV. Budget

The country did not benefit of the preparation of national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling and cost-effective destruction funding window offered by MLF. For that reason, the government has decided to take this opportunity to address the ODS bank inventories preparation, herewith submitting a proposal for activities to facilitate an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances contained in document. Based on the decision of the Executive Committee 91/66 in UNEP/OzL.Pro/ExCom/91/72, the funding for the preparation of national inventories of banks of waste-controlled substances and national action plan (US \$) is US\$ 100,000.00, understanding the country's HCFC baseline is 162.87 ODP tonnes.

The proposed amount would be divided into the activities below.

20. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data on HFC consumption in manufacturing/servicing sector	1) Desk research on domestic regulations and programme supporting sound management of refrigerant and other controlled substance including	UNIDO

	Identification of key stakeholders (government and private sector (i.e., waste management operators, collection centres, or waste aggregators, appliance retailers, refrigeration associations, recycling centres (once established), service centres) 2) Update on HFC consumption in assembling/servicing sectors; 3) Workshop with relevant stakeholders on the acquired desk research information.	
HFC sectoral consumption information	4) Establishment of a methodology of the inventory/action plan, linked to other HCFC phase down activities, endorsed by POD;	UNIDO
Analysis of types of equipmentt using HFCs	5) Study on quantities of unused or unwanted refrigerants from the identified types and sources of equipment, this is to be used for further identification of national priorities for sound refrigerant management; 6) Coordinating and sharing the vision among the governmental stakeholders by establishing a working group, if relevant, as a subgroup of the National Ozone Committee, to assess unused or unwanted refrigerant, RAC equipment at the end of life cycle, and refrigerant emissions to the atmosphere	UNIDO
Others, specify.	7) Drafting the inventory of unused or unwanted quantities of refrigerants and a national action plan including a preliminary economic feasibility study on destruction activities for relevant private/public sector stakeholders. In case business plan is needed – to include plan of its development into a national plan.	UNIDO

21. Funding for the activities described in 2 above

Activity	Indicative funding (US \$)	Agency
1) Desk research on domestic regulations and programme supporting sound management of refrigerant and other controlled substance including Identification of key stakeholders (government and private sector (i.e., waste management operators, collection centres, or waste aggregators, appliance retailers, refrigeration associations, recycling centres (once established), service centres)	10,000	UNIDO
2) Update on HFC consumption in assembling/servicing sectors	15,000	UNIDO
3) Workshop with relevant stakeholders on the acquired desk research information	5,000	UNIDO
4) Establishment of a methodology of the inventory/action plan, linked to other HCFC phase down activities, endorsed by POD	5,000	UNIDO
5) Study on quantities of unused or unwanted refrigerants from the identified types and sources of	32,000	UNIDO

equipment, this is to be used for further identification of national priorities for sound refrigerant management;		
6) Coordinating and sharing the vision among the governmental stakeholders by establishing a working group, if relevant, as a subgroup of the National Ozone Committee, to assess unused or unwanted refrigerant, RAC equipment at the end of life cycle, and refrigerant emissions to the atmosphere	8,000	UNIDO
7) Drafting the inventory of unused or unwanted quantities of refrigerants and a national action plan including a preliminary economic feasibility study on destruction activities for relevant private/public sector stakeholders. In case business plan is needed – to include plan of its development into a national plan	25,000	UNIDO
TOTAL	100,000	
22. How will the Multilateral Fund gender policy be considered during project preparation?		
Female engineers and technicians will be encouraged to participate in organized workshops. When possible, female consultants would be encouraged to work on the data survey and organize workshops.		

PROJECT CONCEPT – SAO TOME AND PRINCIPE

**MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

**FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS
OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE
COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING
CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE
DESTRUCTION**

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	São Tomé and Príncipe
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	80,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	☒	☐
Project included in the bilateral/IA business plan?	☐	☒
If NO , please provide explanation: The project was not included in UNIDO's business plan but was reflected in UNEP's business plan for 2025-2027. It is now included in the proposed amendments to UNIDO's work programme for 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes
The project will prepare a comprehensive national inventory of banks of used or unwanted controlled substances (ODS and HFCs) and develop a plan for their collection, transport, and disposal. The inventory will be prepared in line with the guidelines in UNEP/OzL.Pro/ExCom/91/66, applying equipment-based and/or chemical consumption methodologies to estimate current and future banks of controlled substances. This process will involve an initial desk review, detailed field surveys, sectoral data collection, and consultations with key stakeholders to ensure accuracy and completeness. The inventory will provide a clear picture of the quantities and locations of these substances. Building on the inventory, the project will develop a national action plan outlining strategies for the environmentally sound collection, transport, and disposal of ODS and HFCs. The plan will examine options such as recovery, local recycling, reclamation, and destruction technologies, as well as the potential for exporting substances for destruction. It will also address the regulatory and policy framework needed

to support these activities. The project will link with ongoing national initiatives, such as the HPMP, and leverage existing programmes in the refrigeration servicing sector by integrating them into a broader national strategy. By building on these efforts, the project aims to establish a coherent and comprehensive approach to the management of ODS and HFC banks that will serve as a foundation for future initiatives.

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data collection	An initial desk study will be conducted using existing data from national surveys on controlled substance consumption, including those prepared for the HPMP and ODS alternatives survey. Additional sources will include information from equipment importers, waste management operators involved in recovery and recycling, and activities related to the collection, dismantling, and recovery of refrigerants and other substances from end-of-life equipment. A review of relevant policies and regulations on recovery, recycling, reclamation, and waste management will also be undertaken to identify the measures needed to support environmentally sound practices. Building on the desk study, a national survey will be carried out to collect data from the assembly and servicing sectors and to quantify the stock of ODS and HFCs in both in-use and banked equipment. The survey will follow the methodologies outlined in UNEP/OzL.Pro/ExCom/91/6 and other applicable guidelines, such as the equipment-based approach and the chemical consumption approach. It will involve collecting data from key stakeholders, including importers, distributors, service companies, the RAC association, and end-users.	UNIDO
Analysis of data collected	The collected data will be analysed using the selected methodology to estimate the quantities of unwanted ODS and HFCs across different sectors. The analysis will examine the types and volumes of substances, their sectoral distribution, geographic location, and the potential for recovery and reclamation.	UNIDO
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of ODS and HFC banks will be prepared. This inventory will detail the types and quantities of substances, their locations, and their current status (in use, stockpiled, or awaiting disposal). It will serve as the foundation for a comprehensive plan addressing the collection, transport, and disposal of unwanted controlled substances. The plan will outline strategies for recycling, recovery, reclamation, and cost-effective destruction of ODS and HFCs, supported by associated economic feasibility studies and business and business models. It will also present policy recommendations, taking into account regulations developed under the HPMP. These will cover, among other areas, the transboundary movement of waste-controlled substances. In addition, the plan will address infrastructure requirements and explore potential funding mechanisms. The final report — comprising both the national inventory and the plan — will incorporate lessons learned and recommendations for future	UNIDO

	projects, and will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and ownership. Engagement will include workshops and meetings with government agencies, industry representatives, the RAC association, and other relevant parties. Stakeholder consultations will help define objectives, refine methodologies, validate data, and ensure that the proposed action plan is both practical and widely supported.	UNIDO
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$35,000	UNIDO
Analysis of data collected	\$13,000	UNIDO
Preparation of inventory report/national plan	\$17,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$80,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognized the importance of gender equality, women's empowerment, and women's participation in the implementation of international and national programmes. Under the HPMP, efforts are being made to mainstream gender and collect gender-disaggregated data where relevant. These efforts will be sustained and further strengthened during this project. The project will, for example, integrate gender considerations across all activities. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality within the project team, and assessing the differentiated impacts of substance disposal practices on men and women. In addition, gender-disaggregated data will be collected and analyzed to ensure that the project's benefits are equitably shared across genders.		

PROJECT CONCEPT – TUNISIA

**MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

**FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS
OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE
COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING
CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE
DESTRUCTION**

Part I: Project information

Project title:	Preparation of an inventory of banks of used or unwanted controlled substances and a plan for the collection, transport, and disposal of such substances
Country:	Republic of Tunisia
Lead implementing agency:	UNIDO
Meeting where request is being submitted	97th meeting of the Executive Committee
Implementation period	January 2026 – December 2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24	
Funding requested:	
Agency	Funding requested (US \$)
UNIDO	90,000

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	☒	☐
Project included in the bilateral/IA business plan?	☐	☒
If NO , please provide explanation: Endorsement for proceeding with this project took place after the submission of the BP 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes
Tunisia has implemented several actions under the framework of the HPMP and the preparation for the HFC phase-down plan related to the study of HCFCs and HFCs consumption, and the establishment of a recovery, recycling and reclamation system in the country. Although these activities have identified the most important substances consumed in Tunisia, the most relevant consuming sectors and the basic elements of a Tunisian RRR system, additional research and strategic analysis is required to design an appropriate action plan for the life-cycle management of used and unwanted controlled substances. For this reason, funding is requested for the current project, which will include the preparation of a comprehensive national inventory of banks of used or unwanted controlled substances, and the development of a plan for the collection, transport and disposal of such substances. The approach will follow the guidelines contained in document UNEP/OzL.Pro/ExCom/91/66, using the equipment-based or chemical consumption

methodology for data collection and analysis to estimate current and future banks of controlled substances. This will involve an initial desk review, detailed field surveys, data collection from various sectors and consultations with key stakeholders to ensure accurate and comprehensive data collection for the preparation of the inventory. The inventory aims to provide a clear understanding of the quantities and locations of these used or unwanted substances, as well as their potential for recovery, recycling and reclamation. In addition to the inventory, the project will develop a national action plan outlining strategies for the effective collection, transport and disposal of used or unwanted substances. This plan will consider various options for environmentally sound management, including local recycling, reclamation and destruction technologies, as well as the possibility of exporting these substances for destruction. The plan will also address the regulatory and policy framework needed to support these activities. The project will link with ongoing national activities, such as the HPMP and the KIP, and leverage existing programmes in the refrigeration servicing sector by integrating them into the broader national strategy. By building on these existing efforts, the project aims to create a coherent and comprehensive approach to the management of banks of used or unwanted controlled substances that will serve as a basis for future initiatives.

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data collection	An initial desk study of already available data from national surveys on consumption of controlled substances undertaken in the preparation of the HPMP and the KIP, ODS alternatives survey, equipment importers, recovery and recycling activities from waste management operators, and on the collection, dismantling and recovery of the waste refrigerants and other substances from end-of-life equipment will be prepared. A review of the relevant policies and regulations related to recovery, recycling and reclamation and management of wastes will also be conducted to identify those that would be needed to support the environmentally sound management of these wastes. A national survey will then be conducted to collect specific data to quantify the stocks of ODS and alternatives, taking into account both equipment in use and in bank. The national survey will be carried using methodologies outlined UNEP/OzL.Pro/ExCom/91/6 and other guidelines, such as the equipment based approach or the chemical consumption approach, depending on the results of the initial desk study. The survey will involve collecting information from stakeholders such as importers, distributors, service companies, RAC association and end-users.	UNIDO
Analysis of data collected	The data collected will be analysed based on the methodology selected to estimate the quantities of used and unwanted controlled substances in different sectors. The analysis will consider the types and quantities of substances, their distribution across	UNIDO

	sectors, their location and the potential for recovery and reclamation.	
Preparation of inventory report/national plan	Based on the analysed data, a national inventory of banks of used or unwanted controlled substances will be prepared. The national inventory will provide a detailed account of the types and quantities of substances, their locations and their current status (in use, stockpiled or awaiting disposal). The inventory will serve as a basis for the development of a comprehensive plan for the collection, transport and disposal of unwanted controlled substances. The plan will outline strategies for the recycling, reclamation and cost-effective destruction of ODS and alternatives. The plan will also include recommendations for policy measures, infrastructure requirements and potential funding mechanisms. The final report, consisting of the national inventory and plan, will also consider lessons learned and recommendations for future projects. The final report will be submitted to the Multilateral Fund for the Implementation of the Montreal Protocol.	UNIDO
Stakeholder consultation	Key stakeholders will be engaged throughout the project to ensure their input and buy-in. This will include workshops and meetings with government agencies, industry representatives, the RAC association and other relevant parties. Stakeholder consultations will help define the objective, refine methodologies, validate data and ensure that the proposed action plan is practical and widely supported.	UNIDO
3. Funding for the activities described in section 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection	\$40,000	UNIDO
Analysis of data collected	\$15,000	UNIDO
Preparation of inventory report/national plan	\$20,000	UNIDO
Stakeholder consultation	\$15,000	UNIDO
TOTAL	\$90,000	
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The NOU has recognised the importance of gender equality, women's empowerment and women's participation in the implementation of international and national programmes. During the implementation of the HPMP, efforts have been made to mainstream gender and collect gender disaggregated data where relevant. These efforts will be continued and deepened during the implementation of this project. The project will for example ensure that gender considerations are integrated throughout its implementation. This includes ensuring balanced gender representation in stakeholder consultations, promoting gender equality in the project team, and considering the different impacts of substance disposal practices on men and women. Additionally, gender-disaggregated data will be collected and analysed to ensure that the project benefits all genders equitably.		

PROJECT CONCEPT – CHILE

**MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

**FUNDING REQUEST FOR THE PREPARATION OF ENERGY EFFICIENCY PILOT
PROJECT UNDER DECISION 91/65**

Part I: Project information

Project title:	Preparatory assistance for a strategic refrigeration sector project on MEPS, technology demonstration pilots, and financial mechanisms for replicability in Chile	
Country:	Chile	
Lead implementing agency:	UNIDO	
Implementation period for stage RPR EE:	24 months	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the project proposal (please specify): 12 months		
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Servicing	30,000 USD

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	☒	☐

A. Information required for PRP funding request for investment projects/sector plans as part of Energy Efficiency Funding Window

1. Agency:	UNIDO
2. Sector:	Refrigeration
3. HFC consumption in item #2 reported under country programme data?	☒ Yes , please specify reported amount and year: 2024 ☐ No
4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	☐ Yes , please provide support letter _____ ☐ No ☒ N/A
5. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	☐ Yes ☐ No ☒ N/A

6. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	The project will directly contribute to Chile's strategy to integrate HFC phase-down with national energy efficiency objectives, by embedding MEPS and EnMS into RAC policy, piloting low-GWP efficient systems, and testing financing models for SMEs and agroindustry.
7. Background information	
Chile has demonstrated strong commitment to the objectives of the Montreal Protocol and Kigali Amendment. It ratified the Kigali Amendment in 2017 and has since made progress in establishing the enabling environment for HFC phase-down while advancing its ambitious energy and climate goals. Through Stage I of its Kigali HFC Implementation Plan (KIP), Chile has committed to reduce HFC consumption by 10 per cent by 2029. Complementing this compliance effort, Chile is implementing a decision 91/65 pilot project to demonstrate the performance of CO₂-based integrated heat pumps in the dairy sector, with potential energy savings of 30–50 per cent compared to conventional systems. At the policy level, Chile has strengthened its domestic framework through the Energy Efficiency Law (2021), which mandates the publication of a National Energy Efficiency Plan every five years and establishes a target to reduce energy intensity by at least 10 per cent by 2030. The updated Long-Term Energy Policy (PELP, 2021) commits the country to a clear decarbonization pathway towards net-zero emissions by 2050, placing energy efficiency at the centre of its strategy. Within the refrigeration sector, Chile has made significant advances through projects supported by the Multilateral Fund and other complementary initiatives. Under a recent UNIDO-led programme draft Minimum Energy Performance Standards (MEPS) for refrigerated vitrines (stand-alone appliances) had been developed, currently under governmental review, and pilot projects applying best-practice guidelines for cold chambers had been implemented. These pilots demonstrated measurable reductions in both energy consumption and refrigerant leakage, confirming the potential of standards, good design, and operational practices to improve efficiency and reduce emissions. Despite this progress, important challenges remain. Chile's HFC consumption has grown at a pace faster than GDP and population growth, indicating a sharp and growing dependence on HFC-based refrigeration and air conditioning systems. The structure of HFC use is highly concentrated in five high-GWP refrigerants — R-507A, R-404A, HFC-134a, R-410A and HFC-227ea — facilitating the design of a targeted phase-down strategy. However, direct drop-in alternatives remain limited in availability and affordability across several key applications. In 2022, commercial refrigeration systems in Chile had substantial installed capacity and consumption of HFCs. Most of this capacity was concentrated on centralized systems used in supermarkets and logistics facilities, which together accounted for the majority of direct emissions. These installations were dominated by R-507A (476.32 tonnes) and R-404A (120.10 tonnes), followed by minor use of R-410A. In contrast, stand-alone commercial units, including small retail and restaurant equipment, relied mainly on R-134a (4.10 tonnes) and R-407C (7.20 tonnes), with smaller charge sizes but high leakage rates. In total, centralized commercial refrigeration systems emitted more than 1.79 million tonnes of CO₂-equivalent, representing over 95 per cent of emissions from the commercial refrigeration subsector. The industrial refrigeration sector, primarily serving food and beverage processing, further adds to the country's HFC footprint. Installed capacity in 2022 reached nearly 850 tonnes of refrigerant, again dominated by R-507A (716.95 tonnes), followed by R-407C (73.80 tonnes) and R-404A (51.17 tonnes). Correspondingly, HFC consumption in this sector reached over 600 tonnes per year, resulting in 2.41 million tonnes of CO₂-equivalent emissions — with R-507A accounting for 93 per cent of the total. These large, high-charge systems often have limited containment and are serviced through conventional maintenance practices, leading to both high leakage rates and low energy efficiency. Overall, commercial and industrial refrigeration together represent more than 60 per cent of Chile's total HFC-related emissions, confirming their critical importance for HFC phase-down and energy-efficiency	

improvement under the KIP. The dominance of R-507A and R-404A underscores the need for sector-specific interventions focused on centralized systems, cold chambers, and agro-industrial applications.

While a few large enterprises in the dairy and meat processing industries have begun transitioning to CO₂ or ammonia technologies, these alternatives remain limited due to high capital costs, safety considerations, and limited technical capacity. The majority of small and medium-sized enterprises (SMEs) in retail and agro-industry continue to rely on HCFC- and high-GWP HFC-based systems with poor energy performance.

Chile's refrigeration market is highly fragmented, with many SMEs facing financial and technical barriers to adopting low-GWP technologies, despite often attractive payback periods. The current pipeline of pilot projects and draft MEPS is promising but remains fragmented and not yet anchored in binding policy, scalable financing instruments, or a structured national programme to support widespread replication.

Another major constraint is the limited availability of financial mechanisms tailored to the specific needs of the RAC sector, where the performance of systems depends on both equipment and operational practices. While national institutions such as CORFO (Corporación de Fomento de la Producción de Chile) and AgenciaSE (Agencia de Sostenibilidad Energética) offer energy-efficiency credit lines, these do not yet reflect the technical complexity and investment profiles of refrigeration technologies. International experience suggests that instruments such as MiniESCO (simplified ESCO) models for small retail, and ESCO with energy savings insurance (ESI) schemes for agro-industry and public cold chains, could effectively de-risk investments enabling wider replicability for alternative technologies — but these mechanisms have not yet been tested in Chile at scale.

Given these circumstances, there is a strong case for designing a strategic national project that:

Consolidates regulatory progress by adopting and extending Minimum Energy Performance Standards (MEPS) to additional refrigeration equipment and by formalizing refrigeration best practices through ISO 50001-based Energy Management Systems (EnMS);

Expands demonstration pilots beyond the dairy and meat processing sector to include retail vitrines, cold chambers in agro-industry, and public cold-chain facilities. These pilots will specifically test the replacement of equipment, transition to low-GWP refrigerants, and associated changes in system design and control, generating robust evidence on energy efficiency improvements, refrigerant charge reduction, and emission savings.

Develops and tests financing mechanisms tailored to the refrigeration sector, with the aim of unlocking investment by SMEs and agro-industry. These instruments will help enable market transformation at scale by addressing both technical and financial barriers.

The proposed preparatory project will therefore generate the technical, regulatory, financial, and stakeholder evidence needed to design a well-grounded and results-oriented pilot initiative for submission to the Executive Committee, ensuring that Chile's efforts under the KIP and energy efficiency pilot are consolidated into a comprehensive and scalable approach. Such approach can be also applied in other countries.

8. Activities to be undertaken for preparation of the investment project and funding requested

Activity	Indicative funding (US \$)	Bilateral/implementing agency
Regulatory and policy analysis: Review legal pathway for adoption of vitrine MEPS; scope extension to cold chambers and other RAC equipment; prepare enforcement and surveillance plan; integrate best practices into ISO 50001 EnMS; assess supplier and laboratory	6,000	UNIDO

readiness.		
Sector assessment and pilot design: Conduct sectoral survey and site-level data collection; identify 4–5 candidate sites (retail vitrines, agro cold chambers, CO ₂ -HP); prepare pre-feasibility studies (technical/financial, energy and HFC savings, payback, safety screening); develop a standardized MRV framework aligned with KIP.	11,000	UNIDO
Financing mechanisms design: Develop MiniESCO model for small retail (aggregation, leasing/as-a-service); design ESCO/ESI model for agro/public cold chains; hold consultations with banks and insurers; align financing models with national instruments (CORFO, AgenciaSE).	8,000	UNIDO
Stakeholder engagement and proposal development: Organize two national workshops (regulatory/MEPS and pilots/financing); conduct bilateral consultations with suppliers, retailers, agro-industry, public cold-chain stakeholders; incorporate gender and inclusion analysis; prepare and submit full project proposal with costed components, co-financing commitments, and implementation arrangements.	5,000	UNIDO
TOTAL	30,000	

PROJECT CONCEPT – SOUTH AFRICA

**MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

**FUNDING REQUEST FOR THE PREPARATION OF ENERGY EFFICIENCY PILOT
PROJECT**

Part I: Project information

Project title:	Energy Efficiency Project in RAC Sector
Country:	South Africa
Lead implementing agency:	UNIDO
Meeting where request is being submitted	ExCom 97
Implementation period for stage RPR EE:	2026-2027
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the project proposal (please specify): 24 Months	
Funding requested:	
Agency	Funding requested (US \$)*
UNIDO	30,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved)	☒	☐
Project included in the bilateral/IA business plan?	☐	☒
If NO , please provide explanation: Most of the guidelines pertaining to EE Projects were issued in ExCom 93, 94 and 95.		

A. Information required for PRP funding request for the preparation of Energy Efficiency Project Document

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the EE Project and how it is linked to other activities in the country (i.e., national plans like the KIP)
To develop the EE project, the overview of country's consumption, production, and regulatory framework with regard to MEPS and labelling has been studied. Detailed data collection from the target industries (SMEs and Micro SMEs) has already been carried out by the country under KIP stage-I. Further, data collection for component manufacturing of Heat Exchangers from the industries identified under KIP Stage-I shall be carried out. Based on the analysis of the data, the project parameters shall be decided and action plan will be formulated. The energy performance data provided by the industries and regulator shall be utilized to establish benchmark.

Consultations shall be carried out with the manufacturers of the heat exchangers to propose efficiency targets, as per the requirement of guideline 94/61, decision 95/87, and document 95/87.

Based on the commitments provided by the stakeholders, the project document shall be prepared for submission in the 99th ExCom.

2. Description of activities that will be implemented during the preparation of the EE Project and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data Collection for Component Manufacturing (Heat Exchanger)	Data collection of the three (03) industries, identified in KIP Stage-I under component manufacturing section for heat exchanger.	UNIDO
Analysis of data collected	Analysis of data for heat exchanger manufacturer, and propose targets for EE	UNIDO
Stakeholder consultation	Consultation with the industries and finalization of EE targets for different products produced	UNIDO
Others, specify.	Other activities including but not limited to travel, workshops, etc.	UNIDO

3. Funding for the activities described in 2 above

Activity	Indicative funding (US \$)	Agency
Data Collection for Component Manufacturing (Heat Exchanger)	10,000	UNIDO
Analysis of Data Collected	10,000	UNIDO
Stakeholder Consultation	5,000	UNIDO
Travel, Workshops, etc.	5,000	UNIDO
TOTAL	30,000	

4. How will the Multilateral Fund gender policy be considered during project preparation?

Participation from different genders shall be ensured and at least 20% of the total input of female professionals shall be included in the project.

Annex
List of potential industries in Component Manufacturing for EE project

Three (03) Industries in component manufacturing Heat Exchanger (stand-alone), were identified in KIP Stage-I. These three industries could be considered for energy efficiency project and have been listed in the below table.

Sr.	Sub-Sector	Name of Industry
1	Heat Exchanger	HC Heat Exchangers (Pty) Ltd
2	Heat Exchanger	Colcab (Pty) Ltd
3	Heat Exchanger	Macs Cool (Pty) Ltd

The below table provides the summary of annual manufacturing Capacity of Heat Exchangers in the Identified Industries from 2020-2024 as per data provided by the country.

Sr.#	Company	Production in each Year				
		2020	2021	2022	2023	2024
1	HC Heat Exchangers	19,300	22,630	26,402	30,880	36,560
2	Colcab (Pty) Ltd.	5,666	6,997	9,264	8,794	14,192
3	Macs Cool (Pty) Ltd	714	731	883	934	945
	Total	25,680	30,358	36,549	40,608	51,697

As per initial information gathered though the industrial visit, the industries are in the production of fin and tube heat exchangers (FTHXs).

Country: BOSNIA AND HERZEGOVINA

Title: Institutional Strengthening for the implementation of Montreal Protocol in Bosnia and Herzegovina

Project Duration: 36 months (June 2026 – May 2029)

Project Budget: 252,594 (excl. 7% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: National Ozone Unit (NOU)/ Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina

Project Summary

Bosnia and Herzegovina is an active member of the ECA Regional Ozone Network for Europe and Central Asia. Bosnia and Herzegovina was member of Bureau MOP and served as vice-president. Bosnia and Herzegovina was a co-opted member of the Executive Committee and participated its meetings. The National Ozone Unit of Bosnia and Herzegovina is responsible for monitoring the implementation of the HCFCs National phase-out plan. The NOU is coordinating the promulgation and enforcement of policy and legislation with a specific focus on HCFCs and HFC management. During the reporting period, the NOU issued for the first time quota for HFC consumption. Under the current phase, the Government of BiH was supported through increased capacity building of the NOU, by achieving a smooth implementation of the HPMP activities, preparation and approval of the KIP Stage I, as well as preparation and submission for approval of an energy efficiency pilot project (decision 91/65) and preparation of ODS inventory and action plan (decision 91/66). The legal procedures for controlling the HCFCs and HFCs (quota system for HCFCs, quota for HFCs and ban on HCFC and its mixtures based equipment) are approved by Council of Ministers of Bosnia and Herzegovina and are operated smoothly by BiH NOU in cooperation with BiH ITA. Performance indicators set for the current IS phase were fully achieved.

The NOU is further committed to build up capacity at country level in view of compliance with the HCFCs and HFCs consumption phase-out/down targets and it is expected that the ongoing regulatory efforts will be further enhanced by the implementation of new phase of IS. The National Ozone Unit of Bosnia and Herzegovina will be responsible for tracking the promulgation and enforcement of policy and legislation with a specific focus on HCFCs and HFC additional restrictions; special focus will be given to the cooperation with the customs authorities sector in order to prevent illegal trade and to the cooperation with the RAC Association. Next phase will also focus on implementation of the KIP Stage I which was approved in May 2025 and work together with industry and administration on its implementation. The NOU will continue cooperation with climate authorities related to the contribution of F gases controlled consumption in NDC and will continue cooperation with safety standards authorities.

Country:	Albania
Title:	Verification report of national HFC consumption targets
Project Duration:	24 months
Project Budget:	US\$ 15,000 (excl. 9% Agency Support Costs)
Implementing Agency:	UNIDO
Coordinating Agency:	<u>Ministry of Tourism and Environment / National Ozone Unit (NOU)</u>

Project Summary

Funding requirement for the preparation of verification report of national program is being requested in accordance with decision 96/22(d).

The Kigali HFC Implementation Plan, Stage I for Albania was approved in December 2023 at the 93rd Meeting of Executive Committee of the Multilateral Fund for the implementation of the Montreal Protocol. As per the agreement between the country and the Multilateral Fund, the next tranche request under this project is due at the first meeting in 2026. The verification report will be submitted with the 2026 tranche.

Decision 96/22 (d): *The Executive Committee decided: To request relevant bilateral and implementing agencies acting as lead agencies to include in their bilateral cooperation documents and work programme amendments, respectively, to be submitted to the 97th meeting, as applicable, funding for verification reports for stage I of the KIPs for Albania, Congo, Cuba, Kyrgyzstan, Malawi, Mozambique, North Macedonia and Turkmenistan, for submission with their tranches in 2026, noting that Albania was also on the list for verification of HCFC consumption, with the report to be submitted with the request for the tranche of its HCFC phase-out management plan in 2026.*

Country:	Congo
Title:	Verification report of national HFC consumption targets
Project Duration:	24 months
Project Budget:	US\$ 30,000 (excl. 9% Agency Support Costs)
Implementing Agency:	UNIDO
Coordinating Agency:	Ministry of Environment and Sustainable Development / National Ozone Unit (NOU)

Project Summary

Funding requirement for the preparation of verification report of national program is being requested in accordance with decision 96/22(d).

The Kigali HFC Implementation Plan, Stage I for Congo was approved in December 2023 at the 93rd Meeting of Executive Committee of the Multilateral Fund for the implementation of the Montreal Protocol. As per the agreement between the country and the Multilateral Fund, the next tranche request under this project is due at the first meeting in 2026. The verification report will be submitted with the 2026 tranche.

Decision 96/22 (d): *The Executive Committee decided: To request relevant bilateral and implementing agencies acting as lead agencies to include in their bilateral cooperation documents and work programme amendments, respectively, to be submitted to the 97th meeting, as applicable, funding for verification reports for stage I of the KIPs for Albania, Congo, Cuba, Kyrgyzstan, Malawi, Mozambique, North Macedonia and Turkmenistan, for submission with their tranches in 2026, noting that Albania was also on the list for verification of HCFC consumption, with the report to be submitted with the request for the tranche of its HCFC phase-out management plan in 2026.*

Country:	North Macedonia
Title:	Verification report of national consumption targets
Project Duration:	24 months
Project Budget:	US\$ 30,000 (excl. 9% Agency Support Costs)
Implementing Agency:	UNIDO
Coordinating Agency:	Ministry of Environment and Physical Planning / National Ozone Unit (NOU)

Project Summary

Funding requirement for the preparation of verification report of national program is being requested in accordance with decision 96/22(d).

The Kigali HFC Implementation Plan, Stage I for North Macedonia was approved in December 2023 at the 93rd Meeting of Executive Committee of the Multilateral Fund for the implementation of the Montreal Protocol. As per the agreement between the country and the Multilateral Fund, the next tranche request under this project is due at the first meeting in 2026. The verification report will be submitted with the 2026 tranche.

Decision 96/22 (d): *The Executive Committee decided: To request relevant bilateral and implementing agencies acting as lead agencies to include in their bilateral cooperation documents and work programme amendments, respectively, to be submitted to the 97th meeting, as applicable, funding for verification reports for stage I of the KIPs for Albania, Congo, Cuba, Kyrgyzstan, Malawi, Mozambique, North Macedonia and Turkmenistan, for submission with their tranches in 2026, noting that Albania was also on the list for verification of HCFC consumption, with the report to be submitted with the request for the tranche of its HCFC phase-out management plan in 2026.*