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执行蒙特利尔议定书
多边基金执行委员会
第八十八次会议
2021 年 11 月 15 至 19 日，蒙特利尔[1]

开发计划署 2021 年工作方案修正案

[1] 由于 2019 冠状病毒病（Covid-19），将于 2021 年 11 月和 12 月举行在线会议和闭会期间批准程序。

基金秘书处的评论和建议

1. 开发计划署请执行委员会为表 1 所列其 2021 年工作方案修正案核准 2,753,347 美元，外加机构支助费用 193,334 美元。来文附于本文件之后。

表 1：开发计划署 2021 年工作方案修正案

国家	活动/项目	申请数额（美元）	建议数额（美元）
A 节：建议一揽子核准的活动			
A1： 延长体制强化项目			
孟加拉国	延长体制强化项目(第十期)	166,400	166,400
哥伦比亚	延长体制强化项目(第十三期)	352,768	352,768
哥斯达黎加	延长体制强化项目(第十四期)	179,857	179,857
印度	延长体制强化项目(第十三期)	477,734	477,734
马来西亚	延长体制强化项目(第十四期)	357,760	357,760
特立尼达和多巴哥	延长体制强化项目(第十一期)	85,000	85,000
乌拉圭	延长体制强化项目(第十四期)	193,024	193,024
	A1 小计	1,812,543	1,812,543
	机构支助费用	126,878	126,878
	A1 共计	1,939,421	1,939,421
A2: 氟氯烃淘汰管理计划的项目编制			
巴西 [a b]	编制氟氯烃淘汰管理计划(第三阶段)	40,000	40,000
	A2 小计	40,000	40,000
	机构支助费用	2,800	2,800
	A2 共计	42,800	42,800
A3: 为编写氟氯烃消费情况核查报告提供技术援助			
古巴	氟氯烃淘汰管理计划第二阶段核查报告	30,000	30,000
	A3 小计	30,000	30,000
	机构支助费用	2,700	2,700
	A3 共计	32,700	32,700
A4: 基加利氢氟碳化合物执行计划(基加利执行计划)的项目编制			
安哥拉	编制基加利执行计划(第一阶段)	170,000	170,000
柬埔寨 [c]	编制基加利执行计划(第一阶段)	35,000	35,000
智利 [d]	编制基加利执行计划(第一阶段)	170,000	170,000
萨尔瓦多	编制基加利执行计划(第一阶段)	170,000	170,000
斐济 [d]	编制基加利执行计划(第一阶段)	95,000	95,000
格林纳达 [c]	编制基加利执行计划(第一阶段)	40,000	40,000
	A4 小计	680,000	680,000
	机构支助费用	47,600	47,600
	A4 共计	727,600	727,600
	总计(A1、A2、A3、A4)	2,742,521	2,742,521

[a] 德国政府担任合作双边机构。

[b] 工发组织担任合作执行机构。

[c] 环境规划署担任牵头执行机构。

[d] 环境规划署担任合作执行机构。

A 节：建议一揽子核准的活动

A1: 延长体制强化项目

项目说明

2. 开发计划署提交了表 1 的 A1 节所列各国延长体制强化项目的申请。这些项目的说明载于本文件附件一。

秘书处的评论

3. 秘书处参照有关资格和供资数额的准则和相关决定，审查了开发计划署代表有关国家政府提交的七项延长体制强化项目的申请。秘书处对照前一阶段的原始体制强化工作计划、国家方案和第 7 条数据、上一份氟氯烃淘汰管理计划执行情况报告、执行机构的进度报告以及缔约方会议的任何相关决定检查了这些申请。秘书处注意到，这些国家提交了 2020 年国家方案数据，遵守了《蒙特利尔议定书》规定的控制目标，其年度氟氯烃消费量未超过分别与执行委员会签订的氟氯烃淘汰管理计划协定中的年度最高允许消费量。此外，提交的申请均按照第 74/51 号决定(e)段列入了计划在体制强化项目下一阶段开展的活动的绩效指标。

秘书处的建议

4. 秘书处建议依照本文件表 1 的 A1 节所示供资数额一揽子核准孟加拉国、哥伦比亚、哥斯达黎加、印度、马来西亚、特立尼达和多巴哥以及乌拉圭的延长体制强化项目申请。谨建议执行委员会向上述国家政府转达本文件附件二中的评论。

A2: 氟氯烃淘汰管理计划的项目编制

项目说明

5. 开发计划署提交了一项作为牵头执行机构，并由德国政府和工发组织作为合作机构，为巴西编制氟氯烃淘汰管理计划第三阶段的申请。表 1 的 A2 节开列了这项申请。

6. 作为合作机构，德国政府在双边合作下总共申请资金 25,000 美元，外加机构支助费用 3,250 美元；[2] 工发组织在其 2021 年工作方案修正案中申请资金 25,000 美元，外加机构支助费用 1,750 美元。[3]

7. 提交的材料包括：申请项目编制资金的理由；巴西氟氯烃淘汰管理计划第二阶段执行进度报告；可能开展的活动和相关费用。

秘书处的评论

8. 秘书处在审查这一请求时考虑了第 71/42 号决定所载为第 5 条国家编制氟氯烃淘汰管

[2] UNEP/OzL.Pro/ExCom/88/29。

[3] UNEP/OzL.Pro/ExCom/88/32。

理计划提供资金的准则；[4] 巴西氟氯烃淘汰管理计划的第二阶段和截至本文件编写时各次付款的执行情况；第 84/46 号决定(e)段。[5] 秘书处注意到，供资申请符合第 71/42 号决定，而且开发计划署确认，将按照巴西政府与执行委员会之间的协定所载时间表提交其余的付款申请。

9. 开发署确认，巴西氟氯烃淘汰管理计划第三阶段将在 2030 年 1 月 1 日之前淘汰 100% 的氟氯烃基准消费量，只有结尾维修时期的消费量除外。

秘书处的建议

10. 秘书处建议一揽子批准巴西氟氯烃淘汰管理计划第三阶段的项目编制，供资数额如表 1 的 A2 节所示。

A3: 为编写氟氯烃消费情况核查报告提供技术援助

项目说明

11. 执行委员会要求相关双边机构和执行机构在各自提交第八十八次会议的工作计划修正案中列入为选定的第 5 条国家编写核查报告的资金。开发计划署作为牵头执行机构，申请为古巴氟氯烃淘汰管理计划第二阶段的核查工作提供资金。[6]

秘书处的评论

12. 秘书处指出，供资申请与以前的会议为类似核查工作核准的资金相一致。秘书处还指出，应在寻求氟氯烃淘汰管理计划下一次付款的适用执行委员会会议之前至少 10 个星期提交核查报告。

秘书处的建议

13. 秘书处建议一揽子核准古巴氟氯烃淘汰管理计划（氟氯烃淘汰管理计划）第二阶段核查报告的编写工作，供资数额如表 1 的 A3 节所示，但有一项谅解是，应在寻求氟氯烃淘汰管理计划下一次付款的适用执行委员会会议之前至少 10 个星期提交核查报告。

A4: 基加利氢氟碳化合物执行计划的项目编制

项目说明

14. 开发计划署提交了作为指定执行机构为两个第 5 条国家、作为牵头执行机构为两个第 5 条国家、作为合作执行机构为两个第 5 条国家编制基加利执行计划第一阶段的申请，如表 1 的 A4 节所示。环境规划署作为柬埔寨和格林纳达的牵头执行机构以及作为智利和斐济的合作执行机构，在其 2021 年工作计划修订案[7]中申请供资 250,000 美元，外加机构支助费用 32,500 美元。

[4] 为第 5 条国家编制氟氯烃淘汰管理计划第二阶段提供资金的准则。

[5] 仅允许在业务计划中列入那些其氟氯烃淘汰管理计划第二阶段获得申请，且削减目标低于 2025 年履约目标的国家的氟氯烃淘汰管理计划第三阶段。

[6] 第 87/27 号决定。

[7] UNEP/OzL.Pro/ExCom/88/31。

秘书处的评论

15. 秘书处在审查这项申请时考虑了第 87/50 号决定所载基加利执行计划编制准则；拟议的项目编制活动及其与各国的扶持活动和其他氢氟碳化合物相关项目之间的联系。秘书处注意到，这项供资申请符合第 87/50 号决定，开发计划署作为指定执行机构或牵头执行机构，使用基加利执行计划项目编制申请格式，提供了为安哥拉、智利、萨尔瓦多和斐济编制基加利执行计划总体战略所需开展的活动的说明。提交的材料包括 2014 - 2020 年或 2016 - 2020 年期间进口氢氟碳化合物和氢氟碳化合物混合剂的估计消费量，其依据是进行扶持活动期间收集的数据；拟议制定总体战略、分析氢氟碳化合物的行业分布和消费情况并与利益相关者进行磋商；制定沟通和外联计划；三个国家（安哥拉、智利和萨尔瓦多）的培训和认证工作评估；整在两个国家（智利和萨尔瓦多）合国家法规和程序以及进行良好制冷做法、回收和再循环培训；对一个国家（智利）控制氢氟碳化合物的海关能力和配额制度进行评估；在一个国家（斐济）为数据收集、利益攸关方磋商和数据分析工作进行一次全国调查。申请的资金是以基加利执行计划编制准则[8]为依据。

16. 开发计划署澄清说，四个国家逐步减少氢氟碳化合物总体战略的项目编制工作将借鉴在扶持活动下进行的各项活动，这些活动是与逐步减少氢氟碳化合物相关的第一批行动，为批准《基加利修正案》做出了贡献。

17. 秘书处在审查后注意到，所有六个国家都批准了《基加利修正案》；[9] 各国已提供认可函，表明打算尽早采取行动逐步减少氢氟碳化合物；供资申请符合第 87/50 号决定。

秘书处的建议

18. 秘书处建议一揽子批准安哥拉、柬埔寨、智利、萨尔瓦多、斐济和格林纳达的基加利氢氟碳化物执行计划的项目编制，供资数额如表 1 的 A4 节所示。

[8] 第 87/50 号决定。

[9] 批准(或接受)《基加利修正案》的日期：安哥拉，2020 年 11 月 16 日； 柬埔寨，2021 年 4 月 8 日； 智利，2017 年 9 月 19 日； 萨尔瓦多，2021 年 9 月 13 日； 斐济，2020 年 6 月 16 日；格林纳达，2018 年 5 月 29 日。

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS[10]

Bangladesh: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Sept-94	150,000
	Phase II:	Nov-99	100,000
	Phase III:	Dec-01	100,000
	Phase IV:	Dec-04	130,000
	Phase V:	Nov-07	130,000
	Phase VI:	Jul-10	130,000
	Phase VII:	Dec-13	130,000
	Phase VIII:	Dec-16	166,400
	Phase IX:	May-19	166,400
		Total:	1,202,800
Amount requested for renewal (phase X) (US $):			166,400
Amount recommended for approval for phase X (US $):			166,400
Agency support costs (US $):			11,648
Total cost of institutional strengthening phase X to the Multilateral Fund (US $):			178,048
Date of approval of country programme:			1994
Date of approval of HCFC phase-out management plan (stage I):			2011
Date of approval of HCFC phase-out management plan (stage II):			2018
Baseline consumption of controlled substances (ODP tonnes):			
Annex B, Group III (methyl chloroform) (average 1998-2000)			0.9
Annex C, Group I (HCFCs) (average 2009-2010)			72.6
Annex E, (methyl bromide) (average 1995-1998)			0.0
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:			
Annex B, Group III (methyl chloroform)			0.00
Annex C, Group I (HCFCs)			46.53
Annex E, (methyl bromide)			0.00
		Total:	46.53
Year of reported country programme implementation data:			2020
Amount approved for projects (as at July 2021) (US $):			14,025,051
Amount disbursed (as at December 2020) (US $):			11,032,529
ODS to be phased out (as at July 2021) (ODP tonnes):			735.9
ODS phased out (as at December 2020) (ODP tonnes):			724.4

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

Summary of activities		Funds approved (US $)
(a)	Investment projects:	9,455,248
(b)	Institutional strengthening:	1,202,800
(c)	Project preparation, technical assistance, training and other non-investment projects:	3,367,003
	Total:	14,025,051
(d)	HFC activities funded from additional voluntary contributions	3,131,610

[10] Data as at December 2020 are based on document UNEP/OzL.Pro/ExCom/88/12.

Progress report

2. During phase IX, Bangladesh has continued its efforts towards implementation of the Montreal Protocol obligations and ODS phase-out activities through the institutional strengthening project. The NOU continued to monitor the controlled substances consumption and their related phase-out, phase-down and enabling projects. It provided coordination support to the completion of the first HFC phase-down investment project, which supported Bangladesh to phase-out 230 metric tonnes of HFC-134a in the domestic refrigerator manufacturing sector. The Government of Bangladesh continued to control the consumption of ODS with an operational licensing and quota system and achieved the 2020 reduction targets for stage II of its HPMP and sustained the consumption reduction of HCFCs. Bangladesh ratified the Kigali Amendment on 8 June 2020, and, despite delays caused by the COVID-19 pandemic, advanced in the implementation of the enabling activity project. The NOU reported consumption data to both the Fund and Ozone Secretariats, was active in regional and global meetings and organized the celebrations for the International Day for the Preservation of the Ozone Layer in 2019 and 2020. Of the 20 performance indicators, all were fully achieved.

Plan of action

3. Phase X will continue implementation of ODS phase-out activities including stage II of the HPMP, leading towards achieving and sustaining the 2023 obligations, and reporting consumption data to both the Fund and Ozone Secretariats. The NOU will assist, coordinate, consult and engage with ministries, organizations, and industry associations for implementation of the Montreal Protocol and related regulations; planning and implementation of information outreach activities; and supporting the completion of the enabling activities project, the enforcement of the HFCs control system and the reporting of the HFCs consumption.

Colombia: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Mar-94	317,790
	Phase II:	Mar-98	212,000
	Phase III:	Mar-00	212,000
	Phase IV:	Nov-02	275,600
	Phase V:	Apr-05	275,600
	Phase VI:	Jul-07	275,600
	Phase VII:	Jul-09	275,600
	Phase VIII:	Jul-11	275,600
	Phase IX:	Jul-13	275,600
	Phase X:	May-15	275,600
	Phase XI:	Jul-17	352,768
	Phase XII:	May-19	352,768
		Total:	3,376,526
Amount requested for renewal (phase XIII) (US $):			352,768
Amount recommended for approval for phase XIII (US $):			352,768
Agency support costs (US $):			24,694
Total cost of institutional strengthening phase XIII to the Multilateral Fund (US $):			377,462
Date of approval of country programme:			1994
Date of approval of HCFC phase-out management plan (stage I):			2010

Summary of the project and country profile	
Date of approval of HCFC phase-out management plan (stage II):	2015
Baseline consumption of controlled substances (ODP tonnes):	
Annex B, Group III (methyl chloroform) (average 1998-2000)	0.6
Annex C, Group I (HCFCs) (average 2009-2010)	225.6
Annex E, (methyl bromide) (average 1995-1998)	110.1
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:	
Annex B, Group III (methyl chloroform)	0.00
Annex C, Group I (HCFCs)	63.21
Annex E, (methyl bromide)	0.00
Total:	63.21
Year of reported country programme implementation data:	2020
Amount approved for projects (as at July 2021) (US $):	38,699,988
Amount disbursed (as at December 2020) (US $):	33,774,257
ODS to be phased out (as at July 2021) (ODP tonnes):	2,058.6
ODS phased out (as at December 2020) (ODP tonnes):	1,951.9

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

Summary of activities		**Funds approved (US $)**
(a)	Investment projects:	27,300,686
(b)	Institutional strengthening:	3,376,526
(c)	Project preparation, technical assistance, training and other non-investment projects:	8,022,776
	Total:	38,699,988
(d)	HFC activities funded from additional voluntary contributions	250,000

Progress report

5. During phase IX, Colombia continued implementation of the Montreal Protocol and ODS phase-out activities; reported consumption data to both the Fund and Ozone Secretariats; the Government has achieved its HCFC consumption reduction targets through implementation of activities under stage II of the HPMP and maintained the total phase-out of other ODS. Colombia has ratified of the Kigali Amendment and continued participating in regional and global Montreal Protocol meetings. The country fully achieved all its performance indicators during the current phase.

Plan of action

6. In phase X, Colombia will work to continue achieving and maintaining the 65 per cent reduction in HCFCs consumption from 2021 and will continue the compliance with the phase-out commitment in stage III of the HPMP. The NOU will assist in reinforcing inter-institutional coordination with the Customs authority through monitoring trade, coordinating the collection, analysis, verification and submission of progress reports on the implementation of country programmes and reporting consumption under Article 7 of the Montreal Protocol; strengthening of the legal framework to control and monitor HCFC consumption through import/export licensing and quota systems and new regulations; and completing a roadmap to comply with the measures of the Kigali Amendment including consideration of synergies with climate change initiatives. The NOU will continue participation in Montreal Protocol related meetings.

Costa Rica: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Oct-92	213,160
	Phase II:	Feb-97	108,087
	Phase III:	Mar-99	108,087
	Phase IV:	Dec-01	108,087
	Phase V:	Dec-03	140,513
	Phase VI:	Nov-05	140,513
	Phase VII:	Nov-07	140,513
	Phase VIII:	Nov-09	140,513
	Phase IX:	Nov-11	140,513
	Phase X:	Dec-13	140,513
	Phase XI:	Nov-15	179,857
	Phase XII:	Nov-17	179,857
	Phase XIII:	Dec-19	179,857
		Total:	1,920,071
Amount requested for renewal (phase XIV) (US $):			179,857
Amount recommended for approval for phase XIV (US $):			179,857
Agency support costs (US $):			12,590
Total cost of institutional strengthening phase XIV to the Multilateral Fund (US $):			192,447
Date of approval of country programme:			1992
Date of approval of HCFC phase-out management plan (stage I):			2011
Date of approval of HCFC phase-out management plan (stage II):			2019
Baseline consumption of controlled substances (ODP tonnes):			
Annex B, Group III (methyl chloroform) (average 1998-2000)			0.0
Annex C, Group I (HCFCs) (average 2009-2010)			14.1
Annex E (methyl bromide) (average 1995-1998)			342.5
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:			
Annex B, Group III (methyl chloroform)			0.0
Annex C, Group I (HCFCs)			4.04
Annex E (methyl bromide)			0.0
		Total:	4.04
Year of reported country programme implementation data:			2020
Amount approved for projects (as at July 2021) (US $):			12,712,372
Amount disbursed (as at December 2020) (US $):			12,136,916
ODS to be phased out (as at July 2021) (ODP tonnes):			810.114994
ODS phased out (as at December 2020) (ODP tonnes):			799.4

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

Summary of activities		**Funds approved (US $)**
(a)	Investment projects:	7,877,281
(b)	Institutional strengthening:	1,920,071
(c)	Project preparation, technical assistance, training and other non-investment projects:	2,915,020
	Total:	12,712,372
(d)	HFC activities funded from additional voluntary contributions	150,000

Progress report

8. During phase XIII HCFC imports were reduced by 72 per cent by December 2020; workshops were organized for Customs officers and the Fiscal Control Police to reduce the risk of illicit ODS trafficking. Costa Rica ratified the Kigali Amendment in 2017; efforts were made to prepare new regulations and increase awareness. Nineteen voluntary standards were adopted for the refrigeration and air-conditioning sector on the environment and safety; In 2021, the celebration of World Ozone Day was organized jointly between Panama, Nicaragua, Honduras, Guatemala and Costa Rica. Costa Rica also submitted Article 7 and country programme data to the respective Secretariats. The NOU considered the issues of gender equity by using inclusive language in all documents and correspondence and promoting the participation of women in its work and training sessions. Of 21 indicators selected for this phase, two indicators related to the layout of virtual technical training courses were pending completion during 2021 and one indicator will be transferred to the next phase for completion. All other indicators were completed successfully.

Plan of action

9. During phase XIV, Costa Rica will continue implementing the licensing process for the control of HCFCs and HFCs, making complementary use of virtual training modules for Customs, in order to reduce the risk of illicit trafficking. Development of preparatory activities for the implementation of the Kigali Amendment will continue and the acquisition of the use of sustainable technologies will be promoted. A strategy will be developed to implement the national plan for efficient and sustainable refrigeration and air-conditioning. Coordination will be established to strengthen other technical training centres; and Article 7 and country programme data will be submitted to the respective Secretariats. The commemoration of World Ozone Day will continue increasing awareness. Gender equality will also continue to be an integral part of the work during the upcoming phase.

India: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US $):		
	Phase I: Oct-92	430,600
	Phase II: Oct-96	287,100
	Phase III: Mar-99	287,100
	Phase IV: Jul-01	287,100
	Phase V: Dec-03	373,230
	Phase VI: Nov-05	373,230
	Phase VII Apr-08	373,230
	Phase VIII: Apr-10 & Nov-11	373,230
	Phase IX: Apr-12	373,230
	Phase X: May-14	373,230
	Phase XI: May-16	477,734
	Phase XII: Dec-19	477,734
	Total:	4,486,748
Amount requested for renewal (phase XIII) (US $):		477,734
Amount recommended for approval for phase XIII (US $):		477,734
Agency support costs (US $):		33,441
Total cost of institutional strengthening phase XIII to the Multilateral Fund (US $):		511,175

Summary of the project and country profile	
Date of approval of country programme:	1993
Date of approval of HCFC phase-out management plan (stage I):	2012
Date of approval of HCFC phase-out management plan (stage II):	2016
Baseline consumption of controlled substances (ODP tonnes): Annex B, Group III (methyl chloroform) (average 1998-2000) Annex C, Group I (HCFCs) (average 2009-2010) Annex E (methyl bromide) (average 1995-1998)	 122.2 1,608.2 0.0
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7: Annex B, Group III (methyl chloroform) Annex C, Group I (HCFCs) Annex E (methyl bromide) Total:	 0.00 297.49 0.00 297.49
Year of reported country programme implementation data:	2020
Amount approved for projects (as at July 2021) (US $):	311,993,169
Amount disbursed (as at December 2020) (US $):	269,199,60
ODS to be phased out (as at July 2021) (ODP tonnes):	24635.36
ODS phased out (as at December 2020) (ODP tonnes):	28672.6

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

Summary of activities		**Funds approved (US $)**
(a)	Investment projects:	292,019,461
(b)	Institutional strengthening:	4,486,748
(c)	Project preparation, technical assistance, training and other non-investment projects:	15,486,960
	Total:	311,993,169
(d)	HFC activities funded from additional voluntary contributions	0

Progress report

11. Under phase XII, India continued its efforts in the implementation of the Montreal Protocol and ODS phase-out activities. The Ozone Cell achieved the 2019 and 2020 compliance obligations under the Protocol and in line with its agreement with the Executive Committee. The IS project provided tools for coordinated and complementary actions for competency enhancement of small and medium sized enterprises in the foam sector. The Ozone Cell also carried out awareness campaigns at national and state levels to sensitize stakeholders on ODS phase-out in various sectors. Mechanisms for prevention of illegal trade in ODS including competency enhancement of customs and enforcement agencies were undertaken and several knowledge products, including "The Montreal Protocol- India's Success Story" were developed and launched. The Ozone Cell submitted Article 7 and country programme data to the respective Secretariats, and participated in Montreal Protocol meetings. Fiscal measures covering Customs and Excise duty exemptions on capital goods for establishment of industry with non-ODS technology continued and the Ozone Cell organized the World Ozone Day celebrations during 2020 and 2021. All 27 indicators for the phase were completed successfully.

Plan of action

12. The objectives of phase XIII include continuing implementation of ODS phase-out activities, leading towards sustaining the ODS phase-out; submitting Article 7 and country programme data

to the respective Secretariats; completing implementation of stage II of the HPMP and finalizing the project preparation for stage III and implementation after its approval; assisting, coordinating, consulting and engaging with concerned ministries, organizations and industry associations, for implementation of the Montreal Protocol and national regulations; planning and implementation of information outreach activities and executing the national strategy for phase-down of HFCs in coordination with stakeholders.

Malaysia: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Mar-93	322,520
	Phase II:	Oct-96	215,000
	Phase III:	Nov-98	215,000
	Phase IV:	Dec-00	215,000
	Phase V:	Nov-02	279,500
	Phase VI:	Dec-04	279,500
	Phase VII:	Nov-07	279,500
	Phase VIII:	Jul-09	279,500
	Phase IX:	Jul-11	279,500
	Phase X:	Jul-13	279,500
	Phase XI:	Nov-15	357,760
	Phase XII:	Nov-17	357,760
	Phase XIII:	Dec-19	357,760
		Total:	3,717,800
Amount requested for renewal (phase XIV) (US $):			357,760
Amount recommended for approval for phase XIV (US $):			357,760
Agency support costs (US $):			25,043
Total cost of institutional strengthening phase XIV to the Multilateral Fund (US $):			382,803
Date of approval of country programme:			1992
Date of approval of HCFC phase-out management plan (stage I):			2011
Date of approval of HCFC phase-out management plan (stage II):			2016
Baseline consumption of controlled substances (ODP tonnes):			
Annex B, Group III (methyl chloroform) (average 1998-2000)			49.5
Annex C, Group I (HCFCs) (average 2009-2010)			515.8
Annex E (methyl bromide) (average 1995-1998)			14.6
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:			
Annex B, Group III (methyl chloroform)			0.0
Annex C, Group I (HCFCs)			228.41
Annex E (methyl bromide)			0.0
		Total:	228.41
Year of reported country programme implementation data:			2020
Amount approved for projects (as at July 2021) (US $):			66,964,243
Amount disbursed (as at December 2020) (US $):			60,816,800
ODS to be phased out (as at July 2021) (ODP tonnes):			7,042.17
ODS phased out (as at December 2020) (ODP tonnes):			6,892.90

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

Summary of activities	**Funds approved (US $)**
(a) Investment projects:	53,640,742
(b) Institutional strengthening:	3,717,800

(c)	Project preparation, technical assistance, training and other non-investment projects:	9,605,701
	Total:	66,964,243
(d)	HFC activities funded from additional voluntary contributions	250,000

Progress report

14. During phase XII, the Government of Malaysia has successfully implemented the activities under the IS project, which was critical to support the management of ODS phase-out activities and ensure compliance with Montreal Protocol obligations. The NOU submitted Article 7 and country programme data to the respective Secretariats, and worked with other agencies and stakeholders to ensure monitoring of ODS phase-out and implemented various activities for awareness and training, HCFC phase-out in small and medium-sized enterprises in the foam and the refrigeration and air-conditioning servicing sectors. The NOU assisted in preparation for stage III of the HPMP and for its Kigali HFC implementation plans. Malaysia ratified the Kigali Amendment during this phase. In spite of the difficult COVID-19 situation, all 16 indicators for the phase were completed successfully.

Plan of action

15. During phase XIV, the IS activities will support continuing effective management, monitoring and enforcement of ODS phase-out activities including sustainability of the ODS phase-out and HFC phase-down; submitting Article 7 and country programme data to the respective Secretariats; monitoring implementation of the HCFC phase-out management plan, sustaining the sectors ban on the polyurethane foam and the air-conditioning manufacturing sectors, strengthening institutional engagement in order to support achieving the compliance targets; continuing implementation and enforcement of the ODS legal framework; and continuing the awareness-raising and outreach activities.

Trinidad and Tobago: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US $):		
Phase I:	Oct-96	66,000
Phase II:	Dec-00	44,000
Phase III:	Nov-02	57,200
Phase IV:	Dec-04	60,000
Phase V	Nov-06	60,000
Phase VI:	Nov-09 and Dec-10	60,000
Phase VII:	Dec-12	60,000
Phase VIII:	Nov-14	60,000
Phase IX:	Jul-17	85,000
Phase X:	May-19	85,000
Total:		637,200
Amount requested for renewal (phase XI) (US $):		85,000
Amount recommended for approval for phase XI (US $):		85,000
Agency support costs (US $):		5,950
Total cost of institutional strengthening phase XI to the Multilateral Fund (US $):		90,950
Date of approval of country programme:		1996
Date of approval of HCFC phase-out management plan (stage I):		2011
Date of approval of HCFC phase-out management plan (stage II):		2021

Summary of the project and country profile	
Baseline consumption of controlled substances (ODP tonnes):	
Annex B, Group III (methyl chloroform) (average 1998-2000)	0.7
Annex C, Group I (HCFCs) (average 2009-2010)	46.0
Annex E, (methyl bromide) (average 1995-1998)	1.7
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:	
Annex B, Group III (methyl chloroform)	0.00
Annex C, Group I (HCFCs)	14.5
Annex E, (methyl bromide)	0.00
Total:	14.5
Year of reported country programme implementation data:	2020
Amount approved for projects (as at July 2021) (US $):	4,662,453
Amount disbursed (as at December 2020) (US $):	3,429,371
ODS to be phased out (as at July 2021) (ODP tonnes):	141.7
ODS phased out (as at December 2020) (ODP tonnes):	131.4

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

Summary of activities		**Funds approved (US $)**
(a)	Investment projects:	2,343,059
(b)	Institutional strengthening:	637,200
(c)	Project preparation, technical assistance, training and other non-investment projects:	1,682,194
	Total:	4,662,453
(d)	HFC activities funded from additional voluntary contributions	150,000

Progress report

17. During phase X, the Government of Trinidad and Tobago, through its NOU at the Ministry of Planning and Development has successfully implemented the IS activities. The NOU submitted Article 7 and country programme data to the respective Secretariats, assisted in the implementation of the first tranche of stage II of its HPMP including an effective licensing and quota system of HCFC management, assuring compliance with HCFC reductions targets of the Montreal Protocol and its Agreement with the Executive Committee. The NOU also performed work on sustainable cooling and energy efficiency efforts, linking the Montreal Protocol with the climate change agenda. During this phase, all 11 indicators were achieved.

Plan of action

18. Phase XI will provide support for the reinforcement of the ODS licensing and quota system for the import of ODS and will allow the country to continue the implementation of training programmes on good refrigeration practices and the expansion of its certification programme for refrigeration and air-conditioning technicians. The NOU will continue submitting Article 7 and country programme data to the respective Secretariats, training border control officials on ODS regulation and HFC phase-down; assist in implementing the first tranche of stage II of the HPMP; and continue its active participation in global and regional network meetings, relevant trainings and meetings for the promotion of the Montreal Protocol in the country.

Uruguay: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US $):		
	Phase I: Jun-93 & May-96	202,800
	Phase II: Oct-96	116,000
	Phase III: Jul-98	116,000
	Phase IV: Jul-00	116,000
	Phase V: Jul-02	150,800
	Phase VI: Jul-04	150,800
	Phase VII: Jul-06	150,800
	Phase VIII: Nov-08	150,800
	Phase IX: Nov-11	150,800
	Phase X: Dec-13	150,800
	Phase XI: Nov-15	193,024
	Phase XII: Nov-17	193,024
	Phase XIII: Dec-19	193,024
	Total:	2,034,672
Amount requested for renewal (phase XIV) (US $):		193,024
Amount recommended for approval for phase XIV (US $):		193,024
Agency support costs (US $):		13,512
Total cost of institutional strengthening phase XIV to the Multilateral Fund (US $):		206,536
Date of approval of country programme:		1993
Date of approval of HCFC phase-out management plan (stage I):		2011
Date of approval of HCFC phase-out management plan (stage II):		2016
Baseline consumption of controlled substances (ODP tonnes):		
Annex B, Group III (methyl chloroform) (average 1998-2000)		0.0
Annex C, Group I (HCFCs) (average 2009-2010)		23.4
Annex E (methyl bromide) (average 1995-1998)		11.2
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:		
Annex B, Group III (methyl chloroform)		0.0
Annex C, Group I (HCFCs)		11.15
Annex E (methyl bromide)		0.0
	Total:	11.15
Year of reported country programme implementation data:		2020
Amount approved for projects (as at July 2021) (US $):		10,189,347
Amount disbursed (as at December 2020) (US $):		8,213,152
ODS to be phased out (as at July 2021) (ODP tonnes):		537.6
ODS phased out (as at December 2020) (ODP tonnes):		448.5

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

Summary of activities	**Funds approved (US $)**
(a) Investment projects:	4,982,902
(b) Institutional strengthening:	2,034,672
(c) Project preparation, technical assistance, training and other non-investment projects:	3,171,773
Total:	10,189,347
(d) HFC activities funded from additional voluntary contributions	150,000

Progress report

20. Phase XIII was successfully implemented with 10 out of 12 performance indicators fully achieved and two partially achieved. The NOU continued the implementation of the quota system, improving the tools for reviewing and collecting information in close cooperation with the

National Customs Directorate. The NOU established communication with stakeholders which assist in the exchange of information on the implementation of the Montreal Protocol. Uruguay reported the 2019 and 2020 country programme and Article 7 data to the respective Secretariats and continued with implementation of stage II of the HPMP and the enabling activities projects. Stage III of the HPMP was prepared and approved by the Executive Committee. Uruguay participated in international Montreal Protocol meetings. The COVID-19 pandemic impacted the implementation of the Montreal Protocol projects, but the Ozone Unit took the required measures to ensure that implementation of the projects continued.

Plan of action

21. During phase XIV, the Government of Uruguay will maintain control of ODS already banned and the reduction in HCFC consumption already achieved. The NOU will report country programme and Article 7 data to the respective Secretariats, will work with public and private entities to enforce HCFC consumption control measures and coordinate activities including investment projects and the enabling activities for HFC phase-down, incorporating the preparation of the Kigali HFC implementation plan. The Government of Uruguay will complete the implementation of stage II of the HPMP and begin the implementation of stage III in coordination with all stakeholders. Uruguay will continue its participation in Montreal Protocol meetings.

附件二

执行委员会就提交第八十八次会议的延长体制强化项目申请所表示的意见草案

孟加拉国

1. 执行委员会审查了延长孟加拉国体制强化项目（第九期）的申请所附报告，赞赏地注意到孟加拉国政府上报了国家方案执行数据和第 7 条数据，表明该国实现了商定的2020年氟氯烃削减目标。执委会还注意到孟加拉国继续努力执行控制措施，保持对消耗臭氧层物质的淘汰，同时更新规则和条例以及氟氯烃许可证和配额制度。执委会赞扬孟加拉国采取步骤在 2020 年批准《基加利修正案》，并按时完成了第一个氢氟碳化合物投资项目，淘汰了家用冰箱制造行业的 HFC-134a 消费量。执行委员会因此确信，孟加拉国政府将继续在政策和项目两个层面执行其氟氯烃淘汰管理计划，开展体制强化项目活动，实现《蒙特利尔议定书》的今后目标。

哥伦比亚

2. 执行委员会审查了延长哥伦比亚体制强化项目（第十二期）的申请所附报告，赞赏地注意到哥伦比亚政府向臭氧秘书处上报了 2019 年和 2020 年的数据，表明该国遵守了《蒙特利尔议定书》，并向多边基金秘书处提供了国家方案执行情况数据。委员会还注意到，哥伦比亚政府已采取步骤淘汰消耗臭氧层物质的消费，包括通过许可证和配额制度来控制氟氯烃的进口以及对海关官员和制冷技师进行培训。执委会还赞赏地确认为促进《基加利修正案》的执行所开展的活动以及该国参加蒙特利尔议定书会议的情况。执行委员会称赞哥伦比亚政府进行的努力，因此抱有希望地认为，该国将在今后两年内继续成功执行氟氯烃淘汰管理计划，开展体制强化项目活动，从而保持在 2021 年 1 月 1 日之前把氟氯烃消费量削减 65%的成果。

哥斯达黎加

3. 执行委员会审查了延长哥斯达黎加体制强化项目（第十四期）的申请所附报告，赞赏地注意到哥斯达黎加政府向臭氧秘书处上报了 2019 年和 2020 年的数据，表明该国遵守了《蒙特利尔议定书》，并向多边基金秘书处提供了国家方案执行情况数据。执委会还注意到，哥斯达黎加政府已采取步骤淘汰消耗臭氧层物质的消费，到 2020 年禁止进口使用氟氯烃的设备。执委会赞扬哥斯达黎加批准了《基加利修正案》，并已经按照《修正案》下的义务把氢氟碳化合物纳入许可证制度。执委会称赞哥斯达黎加政府进行的努力，因此抱有希望地认为，该国将继续实施氟氯烃淘汰管理计划第二阶段，开展体制强化项目活动，从而实现与执行委员会签订的协定所规定的氟氯烃消费量削减目标。

印度

4. 执行委员会审查了延长印度体制强化项目（第十三期）的申请所附报告，赞赏地注意到印度政府上报了国家方案执行情况数据和第 7 条数据，表明该国实现了 2020 年氟氯烃削减目标。执委会又注意到，印度政府继续努力执行控制措施，保持对消耗臭氧层物质的淘汰，包括对其消耗臭氧层物质配额和许可证制度进行监测。执委会还注意到该国在执

行氟氯烃淘汰管理计划第二阶段方面取得进展，而且政府开展了协调和监督活动，确保实施和达到业绩指标。执委会称赞印度政府参加与《蒙特利尔议定书》有关的会议。执委会赞扬印度最近批准《基加利修正案》，因此确信，印度政府将继续进行活动，实现《蒙特利尔议定书》的今后目标。

马来西亚

5. 执行委员会审查了延长马来西亚体制强化项目（第十四期）的申请所附报告，赞赏地注意到马来西亚政府按时向臭氧秘书处上报了 2019 年和 2020 年的数据，表明该国遵守了《蒙特利尔议定书》，并向多边基金秘书处提供了国家方案执行情况数据。执委会又注意到，马来西亚政府努力监测和控制对消耗臭氧层物质的淘汰，为此实行各种政策，开展各种监管活动，包括技术转让和提高认识活动。执委会还注意到，尽管 COVID-19 大流行造成的困难情况，马来西亚政府仍确保按计划开展执行工作，淘汰消耗臭氧层物质的消费，批准了《基加利修正案》，并开始采取行动逐步减少氢氟碳化合物。执委会称赞马来西亚政府进行的努力，因此抱有希望地认为，该国将在今后两年内继续成功开展《蒙特利尔议定书》下的活动，包括实施氟氯烃淘汰管理计划第二阶段和制定第三阶段计划，制定基加利氢氟碳化合物执行计划并开展体制强化项目活动。

特立尼达和多巴哥

6. 执行委员会审查了延长特立尼达和多巴哥体制强化项目（第十一期）的申请所附报告，赞赏地注意到特立尼达和多巴哥政府按时向臭氧秘书处提交了 2019 年和 2020 年的数据，表明该国遵守了《蒙特利尔议定书》，并向多边基金秘书处提交了国家方案执行情况数据，而且该国正采取必要步骤，遵守与氟氯烃有关的《蒙特利尔议定书》控制措施和落实氢氟碳化合物控制措施。执委会又注意到，特立尼达和多巴哥政府努力开展活动，执行氟氯烃淘汰管理计划；制定消耗臭氧层物质、消耗臭氧层物质混合剂和使用消耗臭氧层物质的设备的进口法规，并制定制冷剂容器的强制性标识标准；进行关于良好制冷做法的培训；开展提高认识的活动和参加《蒙特利尔议定书》的会议。执委会因此抱有希望地认为，特立尼达和多巴哥政府将在今后两年内继续成功执行氟氯烃淘汰管理计划和开展体制强化项目活动，从而保持迄今对氟氯烃消费量的削减。

乌拉圭

7. 执行委员会审查了延长乌拉圭体制强化项目（第十三期）的申请所附报告，赞赏地注意到乌拉圭政府向臭氧秘书处提交了 2019 年和 2020 年的数据，表明该国遵守了《蒙特利尔议定书》，并向多边基金秘书处提交了国家方案执行情况数据。执委会又注意到，乌拉圭政府已采取步骤控制氟氯烃的进口，包括实施许可证和配额制度以及对海关官员和制冷技师进行培训。执委会还赞赏地注意到该国开展了与执行《基加利修正案》有关的活动和参与《蒙特利尔议定书》的活动。执委会称赞乌拉圭政府进行的努力，因此抱有希望地认为，该国将在今后两年内继续成功执行氟氯烃淘汰管理计划第二和第三阶段，开展体制强化项目活动，从而保持迄今对氟氯烃消费量的淘汰。

United Nations Development Programme
Montreal Protocol Unit / Chemicals and Waste

88th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

(15 – 19 November 2021)

UNDP
2021 WORK PROGRAMME AMENDMENT

1 November 2021

2021 WORK PROGRAMME AMENDMENT

I. EXECUTIVE SUMMARY

The present document constitutes UNDP's 2021 Work Programme Amendment and is being submitted for consideration of the Executive Committee (ExCom) at its 88th Meeting. The list of submissions for all funding requests (including investment projects) that will be submitted by UNDP to the 88th ExCom meeting in Annex 1 to this document is provided for information. Project documentation such as multi-year agreements (MYA) tranche requests, investment and demonstration project proposals and other individual/investment proposals are not included in this document and are submitted separately as per normal practice. Only the following (non-investment) submissions are part of this document.

II. FUNDING REQUESTS PART OF THE WORK PROGRAMME

Institutional Strengthening Extensions

UNDP is submitting the requests for funding the extension of institutional strengthening projects to the 88th ExCom Meeting as tabulated below. Relevant terminal reports and requests for extension of funding are being submitted separately.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Bangladesh	INS	Institutional Strengthening Renewal (Phase X)	24	166,400	11,648	178,048
Colombia	INS	Institutional Strengthening Renewal (Phase XIII)	24	352,768	24,694	377,462
Costa Rica	INS	Institutional Strengthening Renewal (Phase XIV)	24	179,857	12,590	192,447
India	INS	Institutional Strengthening Renewal (Phase XIII)	24	477,734	33,441	511,175
Malaysia	INS	Institutional Strengthening Renewal (Phase XIV)	24	357,760	25,043	382,803
Trinidad and Tobago	INS	Institutional Strengthening Renewal (Phase XI)	24	85,000	5,950	90,950
Uruguay	INS	Institutional Strengthening Renewal (Phase XIV)	24	193,024	13,512	206,536
Total (7 requests)				**1,812,543**	**126,878**	**1,939,421**

Preparation funding request for HPMP stage III

UNDP is submitting the following funding request for the preparation of stage III of HPMPs to the 88th ExCom meeting. The Annex 2 contains the PRP submission.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Brazil	PRP	Stage III HPMP Preparation	18	40,000	2,800	42,800
Total (1 requests)				**40,000**	**2,800**	**42,800**

Requests for funding for the preparation of HFC phase down plans

UNDP is submitting the requests for the preparation of an overarching strategy for stage I of the Kigali HFC implementation plan (KIP) as per the table below. The requests can be found in the Annex 3; the requests for Cambodia and Grenada will be submitted by UNEP in their role of a Lead Agency.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Angola	PRP	PRP for Kigali HFC implementation plan (KIP)	24	170,000	11,900	181,900
Cambodia	PRP	PRP for Kigali HFC implementation plan (KIP)	24	35,000	2,450	37,450
Chile	PRP	PRP for Kigali HFC implementation plan (KIP)	24	170,000	11,900	181,900
El Salvador	PRP	PRP for Kigali HFC implementation plan (KIP)	24	170,000	11,900	181,900
Fiji	PRP	PRP for Kigali HFC implementation plan (KIP)	24	95,000	6,650	101,650
Grenada	PRP	PRP for Kigali HFC implementation plan (KIP)	24	40,000	2,800	42,800
Total (6 requests)				**680,000**	**47,600**	**727,600**

Other requests for non-investment projects

Pursuant to the ExCom decision taken during the intersessional approval process for the 87th meeting, as part of the Work Programme Amendment, UNDP is requesting the ExCom to approve the funding for the following countries for verification reports for the HPMPs at the 88th ExCom meeting.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Cuba	TAS	Verification report for stage I of HPMP	15	30,000	2,700	32,700
Total (1 requests)				**30,000**	**2,700**	**32,700**

III. SUMMARY OF FUNDING REQUESTS (WORK PROGRAMME)

The table below summarizes the funding requests for non-investment activities and proposals being submitted to the 88th ExCom Meeting as part of UNDP's Work Programme Amendment for 2021:

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Angola	PRP	PRP for Kigali HFC implementation plan (KIP)	24	170,000	11,900	181,900
Bangladesh	INS	Institutional Strengthening Renewal (Phase X)	24	166,400	11,648	178,048
Brazil	PRP	Stage III HPMP Preparation	18	40,000	2,800	42,800
Cambodia	PRP	PRP for Kigali HFC implementation plan (KIP)	24	35,000	2,450	37,450
Chile	PRP	PRP for Kigali HFC implementation plan (KIP)	24	170,000	11,900	181,900
Colombia	INS	Institutional Strengthening Renewal (Phase XIII)	24	352,768	24,694	377,462
Costa Rica	INS	Institutional Strengthening Renewal (Phase XIV)	24	179,857	12,590	192,447
Cuba	TAS	Verification report for stage I of HPMP	15	30,000	2,700	32,700
El Salvador	PRP	PRP for Kigali HFC implementation plan (KIP)	24	170,000	11,900	181,900
Fiji	PRP	PRP for Kigali HFC implementation plan (KIP)	24	95,000	6,650	101,650
Grenada	PRP	PRP for Kigali HFC implementation plan (KIP)	24	40,000	2,800	42,800
India	INS	Institutional Strengthening Renewal (Phase XIII)	24	477,734	33,441	511,175
Malaysia	INS	Institutional Strengthening Renewal (Phase XIV)	24	357,760	25,043	382,803
Trinidad and Tobago	INS	Institutional Strengthening Renewal (Phase XI)	24	85,000	5,950	90,950
Uruguay	INS	Institutional Strengthening Renewal (Phase XIV)	24	193,024	13,512	206,536
Total (15 requests)				**2,562,543**	**179,978**	**2,742,521**

ANNEX 1

List of all UNDP submissions for funding to the 88th ExCom Meeting

No	Country	Type	Description	Funding Request to the 88th ExCom (US$)		
				Amount	Agency Fee	Total
1	Angola	INV	Stage II HPMP - second tranche	363,600	25,452	389,052
2	Angola	PRP	PRP for Kigali HFC implementation plan (KIP)	170,000	11,900	181,900
3	Bangladesh	INS	Institutional Strengthening Renewal (Phase X)	166,400	11,648	178,048
4	Brazil	INV	Stage II HPMP - fourth tranche	1,400,000	98,000	1,498,000
5	Brazil	PRP	Stage III HPMP Preparation	40,000	2,800	42,800
6	Cambodia	PRP	PRP for Kigali HFC implementation plan (KIP)	35,000	2,450	37,450
7	Chile	PRP	PRP for Kigali HFC implementation plan (KIP)	170,000	11,900	181,900
8	China	INV	Stage II HPMP Solvents - fourth tranche	2,500,000	175,000	2,675,000
9	China	INV	Stage II HPMP ICR - fourth tranche	9,000,000	630,000	9,630,000
10	Colombia	INV	Stage II HPMP - fourth tranche	257,134	17,999	275,133
11	Colombia	INV	Stage III HPMP - first tranche	544,000	38,080	582,080
12	Colombia	INS	Institutional Strengthening Renewal (Phase XIII)	352,768	24,694	377,462
13	Costa Rica	INS	Institutional Strengthening Renewal (Phase XIV)	179,857	12,590	192,447
14	Cuba	TAS	Verification report for stage I of HPMP	30,000	2,700	32,700
15	Democratic Republic of Congo	INV	Stage III HPMP - first tranche	289,500	20,265	309,765
16	Egypt	INV	Stage II HPMP - third tranche	816,620	57,163	873,783
17	El Salvador	PRP	PRP for Kigali HFC implementation plan (KIP)	170,000	11,900	181,900
18	Fiji	INV	Stage II HPMP - 1st tranche	176,000	12,320	188,320
19	Fiji	PRP	PRP for Kigali HFC implementation plan (KIP)	95,000	6,650	101,650
20	Georgia	INV	Stage II HPMP - first tranche	233,705	16,359	250,064
21	Global	TAS	Core Unit costs	2,444,912		2,444,912
22	Grenada	PRP	PRP for Kigali HFC implementation plan (KIP)	40,000	2,800	42,800
23	India	INS	Institutional Strengthening Renewal (Phase XIII)	477,734	33,441	511,175
24	Indonesia	INV	Stage II HPMP - third tranche	627,086	43,896	670,982
25	Malaysia	INV	Stage II HPMP - third tranche	154,900	10,843	165,743
26	Malaysia	INS	Institutional Strengthening Renewal (Phase XIV)	357,760	25,043	382,803
27	Nigeria	INV	Stage II HPMP - second tranche	1,400,000	98,000	1,498,000
28	Republic of Moldova	INV	Stage III HPMP - first tranche	71,500	5,005	76,505
29	Timor Leste	INV	Stage II HPMP - second tranche	41,500	3,735	45,235
30	Trinidad and Tobago	INS	Institutional Strengthening Renewal (Phase XI)	85,000	5,950	90,950
31	Uruguay	INS	Institutional Strengthening Renewal (Phase XIV)	193,024	13,512	206,536
Total (31 requests)				**22,883,000**	**1,432,096**	**24,315,096**

Notes:

a. All amounts in are in US dollars.

b. Special reports due (delays, balances, status reports, etc.) as well as other projects not part of the WPA will be submitted separately.

ANNEX 2

Requests for the preparation of stage III of HPMPs in:

1. Brazil

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:	Brazilian HCFC Phase out Management Plan – Stage III	
Country:	Brazil	
Lead implementing agency:	UNDP	
Cooperating agency (1):	UNIDO	Click or tap here to enter text.
Cooperating agency (2):	Other (Bilateral), specify.	GIZ
Cooperating agency (3):	(select)	Click or tap here to enter text.
Implementation period:	2023-2030	

Funding requested:

Agency	Sector	Funding requested (US$1.00)*
UNDP	Overarching	40,000.00
UNIDO	Overarching	25,000.00
Other (Bilateral)	Overarching	25,000.00
(select)	(select)	Click or tap here to enter text.

*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 II HPMP had been returned / will be returned (D**ecision 71/42(i)**)	☒	☐
• Specify meeting at which PRP funding balance had been returned/will be returned	UNDP – 79th ExCom Meeting / UNIDO – 80th ExCom Meeting/ GIZ – no remaining resources	

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 (%)	**97.5%**	**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.)			

The Brazilian HCFC Phase-Out Management Programme (Brazilian HPMP) established that the actions to phase out the HCFCs in the country should be implemented in stages. Stage I, approved in the 64th Meeting of the Executive Committee (ExCom) of the MLF, held in July 2011, set forth guidelines, objectives and specific targets for reducing the consumption of 220.3 tonnes of Ozone Depleting Potential (ODP tonnes) of HCFCs by 2015 by means of activities of industrial conversion, technical assistance, capacity building and regulatory actions in the PU (polyurethane) foam sector and in the RAC (refrigeration and air conditioning) sector. With the implementation of Stage I of the HPMP, Brazil reduced the consumption of HCFCs by 16.6% in relation to the baseline of 2015. The resources granted enabled the support to the conversion of 249 enterprises in the PU foam sector to technologies which are free of substances that deplete the ozone layer and that have a low global warming potential, including 226 small and medium-sized enterprises, and the training of 4,800 refrigeration technicians in good practices for the commercial refrigeration area of supermarkets and 100 refrigeration technicians in good practices for split air conditioning systems.

Stage II of the Brazilian HPMP, approved in the 75th ExCom Meeting in November of 2015, and scheduled to be implemented in the country until 2023, addresses the actions which will progressively phase out 464.06 ODP tonnes of HCFCs by means of activities of industrial conversion, technical assistance, training, and regulatory measures in the sectors of PU foam manufacturing and RAC services and manufacturing. In 2020, the country met the goal of reducing the HCFC consumption by 39.3% in relation to the baseline by banning the import of HCFC-141b for the PU foam manufacturing sector and, in 2021, a reduction of 51.6% will have been achieved. The progress made in the sectors mentioned above is detailed in item 3 of this form.

It is worth pointing out that the import quota system for HCFCs and mixtures containing HCFC, established and regulated by IBAMA Normative Instruction no. 14 of December 20, 2012 and updated by IBAMA Normative Instruction (IN) no. 04 of February 14, 2018, coupled with the actions that have been implemented under the Brazilian HPMP, have ensured fulfillment of the country's commitment to gradually phase out its HCFC consumption. Additionally, under the framework of the HPMP - Stages I and II, the Brazilian government and the implementing agencies UNDP, UNIDO and GIZ have been supporting the Brazilian Association of Technical Standards (ABNT) in developing and discussing specific technical standards to ensure, at the national level, the standardization of handling, installation and maintenance of equipment using flammable HCFC alternatives.

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

Activity	Description	Implementing agency
Manufacturing Foam PU	103 end beneficiaries converted; 10 individual investment project enterprises (Artico, Cold Air, Gelopar, IBF, Furgão Ibiporã, Isar, Niju, Refrimate, São Rafael, Thermjet / Thermotelha), 8 system houses (Amino, Ariston, Eco Blaster, Flexible, M. Cassab, Poly Urethane, Purcom and UTech) and 85 end users. 72.57 ODP tonnes of HCFC-141b were phased-out; Currently, 2 individual enterprises are in the process of converting: Ananda Metais and Bulltrade, and 9 contracts under the Long-Term Agreement between the UNDP and the system houses are under execution (Amino, Ariston, Eco Blaster, Flexible, M. Cassab, Poly Urethane, Purcom, Shimtek and Univar).	UNDP
Manufacturing REF	Two manufacturers of larger refrigerating systems for retail sector were converted (Eletrofrio and Plotter Racks), both through developing a modular chiller with R-290. The developed chillers were installed in two supermarkets. The projects generated a database on performance, two illustrative videos and a technical bulletin. Two companies producing beverage coolers were converted (Chopeiras Memo and Aquagel) and are in the process of starting the production also with R-290. Seven SMEs commercial refrigeration enterprises started the execution and one enterprise (JJ) has already completed the project. The other six enterprises (Refrimate, Klima, CCITTI, Kitfrigor, Mecalor and Refriac) are due to finish by the end of 2021. Five workshops and 3 technical bulletins, on the alternative fluids R-290, CO2 and HFOs, were produced for the cooling. A total of 15.58 ODP tons of HCFC-22 have been phased-out.	UNIDO

Manufacturing AC	Two workshops on alternative fluids were carried out for the residential air conditioning sector. A market study was conducted on alternative fluids for the RAC sector, focusing on R-290 and R-32, to be published by June 2021. The three eligible companies included in the HPMP stage II did convert their production lines with their own resources, for use of the R-410A during implementation of the HPMP stage II; and as a result, these projects have been cancelled. A total of 45.31 ODP tones of HCFC-22 phased-out.	UNIDO
Refrigeration servicing sector	Training and Capacity Building for better HCFC-22 Containment: Educational material (presentations and handbooks on best practices) for training of refrigeration technicians updated and published; Tools and components for demonstrations and practical training purposes (educational kits) were purchased and delivered to the selected regional training institutions; Nine "Train the Trainer" workshops were conducted and 93 trainers trained; 4374 technicians trained in best practices for split and window type air conditioning systems; 895 technicians trained in best practices for commercial refrigeration; monitoring of training courses.	Other (Bilateral)
Refrigeration servicing sector	Training and Capacity Building for Safe Use of low GWP alternatives: Training handbooks and presentations on the safe use of CO2 and propane under development; Two technical training institutions for the training project for the safe use of CO2 and propane in commercial refrigeration systems selected and contracted; Tender for the acquisition of two minisupermarkets, which will be installed in the two training institutions selected for the training of refrigeration technicians and mechanics on the safe design, installation, operation and maintenance of commercial refrigeration systems operating with natural refrigerants, namely CO2 and propane, is ongoing.	Other (Bilateral)

Refrigeration servicing sector	Outreach: Updating and operation of the project website (www.boaspraticasrefrigeracao.com.br); Operation of the Project fanpage on Facebook (https://www.facebook.com/camadadeozonioerefrigeracaoeclima); Photos of the activities implemented published on Flickr: https://www.flickr.com/photos/147992141@N07/collections/72157690669896345/; Interviews with participants of the best practice training courses performed, and testimonials published and disseminated; Three best practice handbooks (Leak Control, Sealed System Design, Planned Preventive Maintenance) printed and disseminated; Poster on the "10 Golden Rules for the Maintenance of RAC Systems" prepared, printed and disseminated; Technical rulers for the quick conversion of pressure and temperature developed, produced and distributed; Stickers/stamps for dissemination of best practices for RAC systems developed and distributed; Educational video for leak reduction in the servicing sector produced (three versions are available: original video with Portuguese audio, video with English subtitles, and video with Portuguese subtitles); Project folder and posters developed, printed and distributed; Card listing the specific gravity of refrigerants developed, produced and distributed; Video for awareness raising of end users towards contracting appropriate services for air conditioning systems produced (three versions are available: original video with Portuguese audio, video with English subtitles, and video with Portuguese subtitles); Video for dissemination of best practices in the commercial refrigeration sector produced (three versions are available: original video with Portuguese audio, video with English subtitles, and video with Portuguese subtitles); Two videos of the series "Capacity Building in Focus", whose purpose is depicting the life and work of refrigeration professionals who disseminate best practices and new technologies in the sector for the protection of the environment, were produced; Five videos of the series "Best Practices in Minutes" were produced (it is a series of educational videos bringing together technology and audio-visual communication to convey knowledge to technicians of the refrigeration and air conditioning sector throughout Brazil); Participation in trade shows, events, seminars, etc., of the sector and partners.	Other (Bilateral)

4. Overview of current HCFC consumption in metric tonnes by substance (last three years)

Substance	Sector	2018	2019	2020
HCFC-22	Manufacturing-REF	1,324.61	1,541.57	1,147.91
HCFC-22	RAC servicing	7,506.11	8,735.57	6,504.88
HCFC-141b	Manufacturing-Foam PU	3.095,78	2,356.72	0.0
HCFC-141b	Solvent	0.0	124.04	282.48
HCFC-142b	Manufacturing-REF	0.36	0.0	0.0
HCFC-142b	RAC servicing	1.66	0.0	0.0
HCFC-142b	Manufacturing-Foam PU	0.0	0.35	0.0
HCFC-123	Manufacturing-REF	1.80	0.0	0.0
HCFC-123	RAC servicing	7.19	14.92	14.89
HCFC-124	Manufacturing-REF	5.50	0.0	24.73
HCFC-124	RAC servicing	20.71	26.69	0.0

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)

HCFC-22

The HCFC-22 consumption in Brazil is mainly concentrated in the service sector, especially involving the assembly, installation and maintenance of refrigeration and air conditioning equipment.

In the case of the air conditioning equipment manufacturing sector, according to a recent study developed by the MMA and UNIDO, entitled "Market Study for the Air Conditioning Manufacturing Sector in Brazil", there was a massive migration from HCFC-22 to the HFC-410A, with a negligible share of R-32, marketed by a single manufacturer.

On the other hand, in the commercial refrigeration equipment manufacturing sector, the HCFC-22 consumption can still be observed in some small companies for the manufacturing of commercial refrigerators, monoblock systems, among other equipment.

It is believed that there may still be a small consumption of HCFC-22, as a blowing agent, to produce XPS foam.

For year of 2021, there will be a reduction in the HCFC-22 consumption by 27.10% because of IBAMA Normative Instruction no. 4, of February 14, 2018. With this reduction, the maximum import of HCFC-22 will be limited to 577.34 ODP tonnes (10,497.01 metric tonnes), an amount even higher than the imports made by the country in the years of 2018 (8,830.72 metric tonnes), 2019 (10,277.10 metric tonnes) and 2020 (7,652.80 metric tonnes), already considering the manufacturing and services sectors.

The trend is that the HCFC-22 consumption, in the period from 2021 to 2024, will be close to the maximum allowed import limit (10,497.01 metric tonnes), based on the following justifications:

- the installed base of commercial refrigeration and air conditioning equipment using HCFC-22 is still large with increasing needs for maintenance services,
- HCFC-22 consumption in 2020 was greatly affected by the Covid-19 pandemic and may not reflect the actual consumption scenario of this substance,
- the financial crisis that the country has been facing since 2013 worsened with the Covid-19 pandemic, thus, the equipment in use should be kept in operation for a longer time, with more frequent maintenance services.

The remaining HCFC-22 consumption eligible for financing by the Multilateral Fund is 577.34 ODP tonnes.

HCFC-141b

The import of HCFC-141b in Brazil was reduced by 94.04%, as of January 1, 2020, in relation to the baseline of this substance, and import for the manufacturing of polyurethane foams is no longer permitted. As such, HCFC-141b consumption is only allowed as a solvent for the pharmaceutical industry, for the electro-electronic and mechanical industry, and for cleaning refrigeration circuits (flushing).

According to consumption data presented for HCFC-141b, the solvent sector consumed 124.04 metric tonnes in 2019 and 282.42 metric tonnes in 2020, values well below the permitted 472.72 metric tonnes. The consumption of this substance in 2018 was null, which may indicate that part of the HCFC-141b import destined to the foam sector had been used by the solvent sector. Therefore, with the ban on imports of HCFC-141b for the manufacturing of polyurethane foam, there was an increase in declared imports of HCFC-141b for the solvent sector. Therefore, the imports of HCFC-141b to the solvent sector are expected to grow in the forthcoming years, in virtue of the economic recovery forecast after the vaccination of the Brazilian population against Covid-19.

The remaining consumption of HCFC-141b eligible for financing by the Multilateral Fund is 52 ODP tonnes.

HCFC-123, HCFC-142b and HCFC-124

In Brazil, the HCFC-123 consumption is destined to the maintenance of large-sized centrifugal chillers. However, the HCFC-142b is used as a blowing agent in the production of XPS foams, a material mainly used as insulation for civil construction.

In 2019 and 2020, the HCFC-123 imports were very close to the authorized limit. The expectation is that its consumption remains close to the limit value for the next few years, being channeled to the maintenance of the

installed base of chillers using this substance in the country, since the current demand in the sector is greater than the maximum import level allowed into Brazil.

Consumption of HCFC-142b and HCFC-124 between 2018 and 2020 are well below the import limit. The trend is that these values will remain at the same level for the next few years. A more accurate survey of the use of these substances can be carried out in the preparation study for Stage III of the HPMP.

The remaining consumption of HCFC-123 eligible for financing by the Multilateral Fund is 0.3 ODP tonnes.

The remaining consumption of HCFC-142b eligible for financing by the Multilateral Fund is 5.6 ODP tonnes.

The remaining consumption of HCFC-124 eligible for financing by the Multilateral Fund is 7.7 ODP tonnes.

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	Considering that the survey for the preparation of Stage II of the Brazilian HPMP was carried out in 2013, an updated version is required to better understand the current scenario of HCFC use in the country and to evaluate, in a more detailed way, the consumption and application of other HCFCs (HCFC-141b - remaining consumption, HCFC-142b, HCFC-123 and HCFC-124), especially after the import ban on HCFC-141b for the PU foam sector. The current scope of the Integrated ODS Waste Management System that is under implementation in the country also needs to be assessed, along with the necessary actions for strengthening it. UNDP's strategy for Stage III will focus on central air conditioning, industrial air conditioning and commercial air conditioning subsectors. More specifically, the following items will be analyzed: 1) current consumption of HCFCs in the service sector relevant to these subsectors; 2) market trends and the use of alternative substances to HCFCs; 3) existing barriers to the use of low GWP alternatives and the definition of a strategy to overcome the identified barriers; 4) HCFC phaseout strategy for the listed sub-sectors. Regarding the management of ODS waste: 5) identification of bottlenecks and definition of a strategy to improve the market capacity to recover, recycle, regenerate, and dispose of ODSs; 6) evaluation of the availability of recovery machines for larger volumes and modernization of equipment for leakage control and recovery of ODSs; 7) technical assistance for the installation of new equipment to improve the containment of fluids. The strategies will be combined with training.	UNDP
Updated HCFC consumption in manufacturing/servicing sector	The data collection and the evaluation of relevant information about the service sector will help to understand and plan the necessary actions for the commercial and industrial refrigeration services sector, for the residential air conditioning sector and to meet needs related to the demand for information to phase-out the use of HCFC-22. The preparation of the Brazilian HPMP Stage III will include the following activities: 1) to collect and analyze data on large cold stores in the food sector (dairy, meat, fish, fruit), heat pump service sector, commercial refrigeration equipment and chillers, including those for industrial processes; 2) to collect and analyze data on the residential air conditioning sector, with a focus on the significant portion of installed equipment with HCFC-22, which requires maintenance, decommissioning and final disposal, assessing the installed liabilities and the sector's demands; 3) to develop a strategy for the dissemination of information on the use of low GWP fluids and zero ODP based on the analysis of the data obtained in these two sectors. In order to updated and review the data and information obtained in 2013, during the preparation of Stage II of the Brazilian HPMP, it is necessary to include the knowledge acquired in the implementation of this Stage II, and to include other possible applications and equipment, which have not been identified and previously evaluated. As a result, in addition to the review of the available data, additional data will be collected through surveys, visits, questionnaires and interviews, expanding the network of contacts with the inclusion of new institutional contacts, associations, the private sector and equipment manufacturers, allowing the formulation of an effective strategy, focused on a real situation and according to the demand of the sectors,	UNIDO

	which should provide an effective implementation of Stage III of the Brazilian HPMP.	
Updated data on HCFC consumption in manufacturing/servicing sector	The preparation will analyse the commercial refrigeration (supermarkets, bakeries, restaurants, butcheries) and residential air conditioning sub-sectors and will address the following elements: 1) Collection of updated HCFC consumption data in the servicing sector; 2) Analysis of the current situation and market trends regarding HCFCs substitutes; 3) Identification of existing barriers for the introduction of low GWP alternatives; 4) Elaboration of strategies to overcome the identified barriers; 5) Analysis of current practices and tools used in the installation, maintenance and repair of equipment; 6) Elaboration of a strategy to address the two sub-sectors mentioned above in Stage III of the Brazilian HPMP with prioritization of training activities that promote the safe use of low GWP refrigerants. The data collection in the framework of the HPMP Stage II preparation was carried out in 2013. Therefore, after an eight-year period, updating the data is necessary to obtain a real view of the current market and to be able to formulate the most appropriate strategy for each subsector. Like this, recently introduced refrigerants and technologies could also be identified and considered.	Other (Bilateral)

7. Activities to be undertaken for project preparation and funding

Activity	Indicative funding (US$)	Agency
Conduction of survey; Stakeholders consultations; Data collection, Strategy development for the central air conditioning, industrial air conditioning and commercial air conditioning subsectors, and ODS management system within the scope of Stage III of the Brazilian HPMP; Consolidation of strategies for all subsectors to be included in Stage III of the Brazilian HPMP.	40,000.00	UNDP
To conduct data collection, analysis, interviews, field visits, in order to establish effective governance in the commercial and industrial refrigeration and residential air conditioning sectors, including end users, manufacturers, suppliers, technology suppliers, wholesalers, etc. To elaborate the strategy for the dissemination of information.	25,000.00	UNIDO
Conduction of survey; Stakeholder consultations; Data collection, Strategy development for the commercial refrigeration and residential air conditioning sub-sectors in the framework of Brazilian HPMP Stage III.	25,000.00	Other (Bilateral)
TOTAL	**90,000.00**	

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 HCFC phase-out activities will include replacing these substances by alternatives that do not harm the Ozone Layer and have a low impact on the global climate system, thereby contributing to the objectives of the Kigali Amendment.

The strategy to be adopted by Brazil continues to be the dissemination of the goals to be achieved by the Kigali Amendment to avoid increasing the HFCs consumption.

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

During the preparation of Stage III of the HPMP, due consideration will be given to the gender policy of the Multilateral Fund and the gender baseline will be developed according to the best practices. It is important to note that during the implementation of Stages I and II of the HPMP, the participation of women has had a significant weight, particularly in the UN and in the implementing agencies. The implementing agencies UNDP, UNIDO and GIZ promote gender equality and the elimination of disadvantages and gender-specific discrimination as an integral part of their internal policies on gender and equal opportunities. The Terms of Reference for hiring consultants to support activities, such as data collection, will encourage women to apply and/or will have gender inclusion as a tiebreaker criterion. In the process of data collection, whenever possible, data disaggregated by gender and qualitative information will be provided to enable the analysis and tracking of gender issues. Based on this approach, the aim is to develop a strategy for Stage III of the Brazilian HPMP that is based on results and activities designed to meet the different needs and priorities of women and men, and therefore of gender equality. The Brazilian Government is committed to implementing the gender policy in accordance with Decision 84/92 (d). However, it is worth pointing out that the lack of specific funds to address this issue within the scope of the MLF is a limiting aspect that renders its implementation challenging for developing countries.

B. Information required for PRP funding request for investment projects as part of the HPMP (not applicable – n/a)

1. Agency: n/a	(select)
2. Sector: n/a	(select)
3. HCFC consumption in item #2 reported under country programme (CP) data? N/A	☐ **Yes**, please specify reported amount and year: _____ ☐ **No**

4. Information on remaining eligible consumption

Substance	**Remaining eligible consumption (ODP tonnes)**
(select) n/a	n/a

5. Information on enterprise(s) for which funding is being sought

Enterprise	**Year established**	**HCFC consumption (ODP tonnes) (last three years)**			**HCFC phase-out to be achieved**
		2018	**2019**	**2020**	
n/a	n/a	n/a	n/a	n/a	n/a

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

Activity	Indicative funding (US $)
Click or tap here to enter text.	n/a
TOTAL	n/a

ANNEX 3

Preparation funding requests for the Kigali HFC implementation plans (KIP) in:

1. **Angola**
2. **Chile**
3. **El Salvador**
4. **Fiji**

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL
HFC PROJECT PREPARATION REQUEST FORM
HFC Phase-down Management plan (OVERARCHING)

Part I: Project Information

Project title:	HFC Phase-Down Management Plan Preparation	
Country:	Angola	
Lead Implementing agency:	UNDP	
Cooperating Agency		
Implementation period:	J**anuary** 202**2** – **June** 202**3**	
Funding requested:		
Agency	Sector	Funding requested (US $)*
UNDP	Overarching	170,000

*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 for choice of agency	☒	☐
2. Letter of intent to ratify the KA – Angola ratified the KA.	☒	☐

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

1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down

Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/50(e), funding was approved for Angola for *Enabling Activities to prepare for the HFC phase-down* and to assure the early ratification of the Kigali Amendment (KA) which happened on May 23, 2018.

Taking into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, and that Angola has updated its reporting mechanism to include HFCs, the country will be able to follow up on the standard reporting obligation under the Kigali Amendment. Angola has already created an enabling environment for the phasedown of HFCs.

Likewise, under the aforementioned project, it should be noted that information was obtained on the consumption and use of HFCs and their substitutes for the period 2014-2020. In addition, the economic evaluation of the implications that the implementation of the Kigali amendment would generate in the country was estimated. All this, focused on the consumption of said substances in the refrigeration and air conditioning sector, pending the collection of information in sectors such as the production of foams, solvents, aerosols, firefighting, and others that are identified as consuming HFCs, and the use of new blends that have been introduced in different international markets in the already surveyed sectors.

2. Current progress in implementation of Enabling Activities for HFC phase-down Budget: 150,000 USD

In the Project "Enabling Activities for the Kigali Amendment", activities were carried out, including the following:

- Evaluation and analysis to adapt the existing licensing system, which is applicable for HCFCs, in order to implement control for HFCs.
- Preparation of the proposal to open tariff codes for HFCs, in order to have specific codes for each type of HFC substance.
- Dissemination activities on the commitments made in the framework of the Kigali Amendment and the promotion of environmentally friendly alternatives to HFCs.

• Collection of information on HFC consumption in the refrigeration and air conditioning sectors.

In this sense, it is necessary to complement the information on the consumption of HFCs, focusing on the uptake of the consumption of these substances in the foam, solvent, aerosol, firefighting and other production sectors; as well as, identify their training and certification needs, which will constitute inputs for the elaboration of the national strategy that will allow the country to comply with the first stage of the HFC gradual reduction calendar.

Another important activity that must be carried out is to assess the introduction of other alternatives either new developed blends of HFC or other refrigerants such as HFO, HC, CO2 and NH3. This will give a key information to design the strategy on the sectors and their readiness and preference to move forward in the adoption of alternatives to HFCs.

3. Overview of estimated use of ODS alternatives 2014 – 2020 in Mt

Information on the consumption of HFCs was obtained under the activities of the "Enabling Activities for the Kigali Amendment" project, which is detailed in the following table, which specifies each type of HFC that is used as a refrigerant in the sector refrigeration and air conditioning. In this sense, according to what has been indicated above, is important to obtain information on the consumption of HFCs in other sectors in order to identify them, evaluate their consumption, the available alternatives and thus form part of the national strategy that allows the country compliance with the first control measures for HFCs, related to freezing and a 10% reduction in the consumption of these substances.

In the following table is contained the general information on the consumption since 2014 to 2020, substance by substance, considering the most important HFC used in Angola.

Substances	2014	2015	2016	2017	2018	2019	2020	Total
R-404A	45.57	41.73	152.18	166.41	226.22	368.79	511.36	1,512.26
R-407C	20.03	16.69	19.15	24.98	21.18	43.15	36.8	181.98
R-410A	54.68	50.73	105.69	112.22	152.39	162.77	276.11	914.59
R-507A	0	0	0	0	23.94	32.15	27.53	83.62
R-507C	0	8.84	8.84	7.72	12.37	0	0	37.77
HFC-134a	63.79	58.18	310.07	517.01	567.01	1,090.33	727.86	3,334.25
Other HFCs	0	0	0	0	0	0	0	0
Total HFC consumption	**184.07**	**176.17**	**595.93**	**828.34**	**1,003.11**	**1,697.19**	**1,579.66**	
HCFCs 22	240.2	176.6	162.04	190	190	170	158.5	1287.34
HC600a	13.04	12.61	12.91	16.99	17.86	0	0	73.41
HC 290	0	0	0	0	0	0	0	0
R-717	30.32	26.15	0	0	0	0	0	56.47
R-744	14.84	14.84	0	0	0	0	0	29.68

**Best estimates available, which will be verified during the PRP phase*

The HFC consumption in MT has increased by 118% from 2016 to 2020. Main uses of HFCs are described in the following section.

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)

The main uses of HFC are commercial refrigeration, mobile air conditioning and the domestic refrigeration is still one of the largest consumers; but the residential air conditioning it is expected to grow in a large scale due to the replacement of HCFC based ACs into HFC based, and in the commercial refrigeration in large scale if there is no other alternative introduced soon.

Also, currently after the economic recession during the COVID-19 Pandemic, it is expected an economic recovery that will increase the AC and refrigeration markets increasing consequently the use of HFCs since is the cheapest and available technology by the time being. With the Kigali Amendment implementation, it is expected to curve

that possible increase and start the reduction in the consumption of HFCs.

The sectoral consumption calculation developed under the implementation of the Kigali EA have shown the distribution of HFC consumption among the following sectors during the last two years:

Sector	2019	2020	Total
MAC			
HFC-134a	326.3	217.8	544.1
Commercial AC			
HFC-134a	82.2	54.9	137.1
R-404A	21.2	29.4	50.6
Residential AC			
R-410A	122.1	207.2	329.3
Commercial Refrigeration			
HFC-134a	195.9	130.8	326.8
R-404A	271.8	376.9	648.7
R-407C	43.2	36.8	80.0
R-410A	20.7	35.1	55.8
R-507	32.2	27.5	59.7
Domestic Refrigeration			
HFC-134a	327.4	218.6	546.0
Industrial Refrigeration			
HFC-134a	52.3	34.9	87.3
R-404A	28.1	38.9	67.0
Chillers			0.0
HFC-134a	53.3	35.6	88.9
Transport Refrigeration			
HFC-134a	52.8	35.3	88.1
R-404A	47.7	66.2	113.9
R-410A	19.9	33.8	53.7
Total (MT)	**1697.2**	**1579.7**	**3276.9**

**Best estimates available, which will be verified during the PRP phase*

The table above sheds some light towards the main sectors that the phasedown plan should focus on, however, additional information towards the alternatives and strategies for the technologies to be introduced should be performed.

Finally, the MAC sector in Angola, played an important role during CFC phase-out but there have been no activities in this sector in the past 10 years as HCFCs are not used in MAC. It will be important to better understand the dynamics of this sector as it is a key sector in the country.

5. Activities to be undertaken for project preparation and funding

Activity	Indicative funding (US $)	Lead Agency
Collection of information on consumption of HFCs and its substitutes in sectors pending analysis such as foam production, solvents, aerosols, firefighting and others that are identified, which is through the execution of interviews and surveys that they make it possible to determine the sectoral distribution and consumption projections of HFCs in their pure state and in mixtures; specifically, the development of an economic evaluation of the replacement of HFCs to environmentally friendly substitutes in the controlled sectors. Also, verification of the current conditions in the different sectors already surveyed and updating the consumption of HFC and alternatives introduced, including new blends that are already developed.	70,000	UNDP
Assessment of training and certification needs at the country level in the use of flammable refrigerants, development of a training plan and organization of workshops with the main stakeholders and training institutions.	50,000	UNDP
Preparation of the national strategy for the gradual reduction of HFCs, which includes the evaluation and identification of sectors to prioritize, which must include the analysis of emission reductions (CO2-equiv.) according to the potential of global warming (GWP) that each substance has, the uses and the availability of alternatives in each sector.	20,000	UNDP
Dissemination and awareness-raising actions for the actors involved, in order to present the results obtained on the consumption of HFCs and to raise awareness of them in order to reduce them.	30,000	UNDP
TOTAL	**170,000**	

6. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?

The Stage II HPMP for Angola was approved at the 79th meeting of the ExCom to phase out 67.5% of HCFCs by 2025. The activities in the stage II HPMP focus on the sustainable phase-out in the use of HCFCs and, to the extent possible; promote the safe use of low GWP alternatives. The stage II HPMP for Angola is implemented by the Ministry of Culture, Tourism and Environment.

It is expected that there will be synergies among the HPMP and the HFC phase-down, particularly taking into account that the HPMP II focuses very much on the certification of technicians and training in good refrigeration practices in the use of flammable refrigerants, nevertheless, these programs should be expanded to other refrigerants, including the recovery of HFC pure and blends.

However, it is important to note that HCFC phase-down can be achieved by applying currently available non-flammable /non-toxic technologies mainly the HFCs. The HFC phase down is a much more complex task as it requires inevitably the full-scale introduction of flammable and/or toxic refrigerants in Angola. The safe handling of these substances by ALL technicians in the country is a task of a completely different magnitude compared to what has been seen before. This includes not only the training of technicians, but an associated update / introduction of standards, safety guidelines, regulation, etc. for the safe handling of refrigerants.

UNDP sees the main synergy is being achieved by coordinating all the activities by the same governmental entity –Ministry of Culture, Tourism and Environment (National Ozone Unit) for both the HPMPs and the HFC phase down.

The funding request has been based on HFC PRP funding guidelines. The government of Angola and UNDP believe that additional resources would be needed to fully conduct the preparation work that is needed for all the tasks listed in this document.

PROJECT CONCEPT - CHILE

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM KIGALI IMPLEMENTATION PLAN (OVERARCHING)

Part I: Project Information

Project title:	Kigali Implementation Plan Preparation	
Country:	CHILE	
Lead Implementing agency:	UNDP	
Cooperating Agency	UNEP	
Implementation period:	December 2021 to December 2023	
Funding requested:	USD$ 190,000	
Agency	**Sector**	**Funding requested (US $)***
UNDP	**Overarching**	**170,000**
UNEP	**Overarching**	**20,000**

*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 for choice of agency	☒	☐
2. Chile ratified the KA.	☒	☐

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

1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down

Enabling activities were focused on capacity building in the Ozone Unit and its counterparts, to prepare the country for the implementation of the Kigali Amendment. Work was carried out on the following components, with UNDP, UNEP and UNIDO as implementing agencies:

Component 1: Facilitate early ratification of the Kigali Amendment (UNDP)

7 workshops to disseminate the Kigali Amendment were held in the central and northern areas of the country, for 113 people, such as Customs officers (Valparaiso, San Antonio - Los Andes, Iquique, Antofagasta), customs agents (Valparaiso), importers, public and private sector (Santiago, Iquique, Valparaiso). In addition, prior to the workshops, sectoral meetings were held with 27 representatives from: RAC sector, public sector (Ministries of the Environment, Energy, Health; National Customs Service, Agency of Sustainability and Climate Change), to collect concerns, queries and comments on the Amendment. They were trained on issues of the Montreal Protocol, the relationship of HFCs with climate change, current regulations and the customs control system, which was complemented with a brochure on the amendment and the benefits for the country, which was delivered to the assistants. A series of workshops are pending in the southern part of the country, which have been postponed due to the Covid-19 pandemic.

Component 2: Capacity-building & training for alternatives (UNIDO)

3 specific trainings were carried out on energy efficiency in maintenance and servicing processes of cold systems, for students (1 day), installation companies (2 days) and maintenance companies (2 days).

The general training of the Ozone Unit staff and their public and private sector counterparts was adapted to Webinar format due to the Covid-19 pandemic. The first part of the webinars was held in November 2020, where 24 experts from 11 countries presented topics on: Policies, legislations and regulations to phase-down HFCs (EU F-gas Regulation No 517/2014; Green Deal; implementation of F -Gas and control of HFCs); Data collection mechanism and reporting of HFC; Licensing, quota system and instruments on trade control of HFCs and its alternatives (including customs and case studies); Specific measures for refrigeration, air conditioning and heat pump (RACHP) application (refrigerants and products), and market control (HFC control mechanisms, penalties and voluntary actions; leakage control and end-user responsibilities / incentives); Refrigerant

reclamation and waste management; Energy efficiency (EE) aspects. In line with the collaboration between A5 countries, 11 delegates from Turkey joined the Webinars (Ester Monroy, UNIDO; "Webinar Series Report - Towards HFC Phase-down & Control in the Republic of Chile & The Republic of Turkey - 03 November - 09 December 2020"; 16 December 2020). From Chile, 15 people participated, representing the Ministry of the Environment (2), Ozone Unit (4), Ministry of Energy (1), Ministry of Health (1), National Customs Service (2), Chilean Chamber of Refrigeration and Air Conditioning (2), Association of Professionals in Air Conditioning and Refrigeration DITAR (1), and teachers on R&AC (2).

The execution of the second part of the webinars is pending, which will include the topics of:

1. HFC policies – to expand the training focused on the EU:
    i. Control of substances/products (tariff codes) at EU and national level - illegal trade;
    ii. Handling natural refrigerants: control measures;
    iii. Policies, strategies, and climate-friendly technology solutions;
    iv. EU F-gas Regulation Element 5: Training and certification/regulations for RAC sector and EE.
2. Energy efficiency aspects for RAC equipment;
3. Safety in the handling of flammable alternatives;
4. Personnel certification schemes.

Component 3: Article 4B licensing & Reporting (UNEP)

With the advice of an international Customs expert, the ODS license and quota allocation system was reviewed and a system for HFCs was proposed. A review of the tariff items was also made, and a proposal was submitted to the National Customs Service for the Harmonized System that will enter in force in January 2022.

Likewise, 4 trainings were carried out in online mode (due to the Covid-19 pandemic) by the international expert, for officials from 16 Customs (including Laboratory personnel), from the macrozones north, centre and south, achieving the training 130 Customs officers and 61 customs agents, on matters such as: ozone layer; international response to the ozone layer problem; import and export procedure of substances controlled by the Montreal Protocol (PM); identification of substances and products controlled by the PM; security aspects; global and regional panorama of production and consumption of substances controlled by the PM; prevention of illegal traffic of ODS; risk analysis of imports and exports of ODS.

Bilateral complementary enabling activities:

Environment and Climate Change Canada, Complementing Enabling Activities for the Ratification and Implementation of the Kigali Amendment

Sectoral inventories were made on the use of HFCs in: supermarkets, mobile air conditioning, refrigerated transport, fisheries, shipping companies, and fruit industry. The results were presented in a Webinar with the counterparts of the RAC sector, infographics of each sector were elaborated.

Kigali Cooling Efficiency Program, Energy Efficiency Interventions

A Proposal of National Cooling Plan was elaborated, which contains 6 strategic axes, focused on: 1) Support to the management of refrigerants and energy efficiency in the refrigeration and air conditioning sector (RAC); 2) Capacity building in the RAC sector; 3) Financing and investment; 4) Regulation and inspection; 5) Female participation in the RAC sector and 6) Dissemination and awareness. The proposal was discussed with representatives from the sectors of: import substances and RAC equipment, installation and maintenance technical services, educational centres, RAC end-users, reclaiming centre, trade associations and public and private institutions related to RAC, and its final version was validated in a final workshop with all the counterparts involved. The document (Spanish and English version) is published at https://ozono.mma.gob.cl/documentos-tecnicos/

In addition, a study was carried out about the air conditioning equipment sold in Chile, comparing the refrigerants used, their energy consumption and their carbon footprint. The study will be published at https://ozono.mma.gob.cl/documentos-tecnicos/.

2. Current progress in implementation of Enabling Activities for HFC phase-down
Budget: 150,000 USD

Component	Agency	Budget (USD)	Expenditures (USD)	Balance (USD)
1. Facilitate early ratification of the KA	UNDP	33,000	27,057.66	5,942.34
2. Capacity-building & training on alternatives	UNIDO	86,000	22,156.70	63,843.30
3. Article 4B licensing and reporting	UNEP	31,000	25,228.90	5,771.10
		150,000	74,443.26	75,556.74

3. Overview of estimated use of HFC in Mt

Current consumption of HFCs in CHILE is presented in the table below. There is no production of HFCs in Chile and there are very low exports. In accordance with the consumption estimation, the table below reports the difference between imports and exports.

HFC consumption, 2016-2020 (metric tons)

Substance / blend	2016	2017	2018	2019	2020
HFC-32				0.62	0.06
HFC-125	6.00	2.21	0.89	3.31	4.76
HFC-134a	550.04	612.64	493.37	591.65	644.23
HFC-152a	2.56	1.92			0.64
HFC-227ea	49.91	31.50	31.19	40.31	47.82
HFC-227ea / HFC-245fa				3.02	
HFC-245fa			0.04	2.72	6.00
HFC-365mfc	116.64	0.96			
HFC-23				0.31	0.73
R-404A	193.92	181.00	200.25	210.76	219.26
R-407A				1.36	
R-407C	41.48	56.82	46.41	48.75	49.08
R-407F			0.14		
R-408A	0.55	4.14	0.87		
HFC-365mfc/HFC-227ea	9.60	32.40	9.12	19.20	
R-410A	150.59	198.64	197.22	231.22	215.40
R-417A	1.70	3.39		2.29	2.71
R-438A	13.62	17.93	2.72	4.99	1.47
R-448A	0.57		0.45	0.11	
R-449A				0.57	
R-449C					0.19
R-452A				0.57	
R-507A	443.69	468.27	738.45	585.26	487.93
R-508B	0.61		0.06	0.03	-0.01
R-513A				0.14	
Blend Inert-HFC Polycold				0.07	
LPS QB Duster					2.65
Chesterton 296					0.40
Total	**1,581.48**	**1,611.82**	**1,721.18**	**1,747.27**	**1,683.33**

Source: Servicio Nacional de Aduanas / National Customs Service (data 2016 - 2018).
Country Programme Reports (data 2019 - 2020).

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)

As part of the implementation of the Enabling Activities for the implementation of the Kigali Amendment, Chile has collected information on the HFCs consumption.

The main HFCs used in the country are HFC-134a, R-404A, R-407A, R-410A and R-507A, whose details are described below:

HFC-134a is the highest consumed substance, being its main application in mobile air conditioning, including light cars, buses, trucks and other vehicles. Its main use is in servicing, mainly on recharging of refrigerant. It also has other uses, such as in the food industry, air conditioning (shopping centers, hospitals), refrigerated display cabinets, propellants, solvents and others to be identified.

R-404A is mainly used in industrial refrigeration systems (food, health) and a lesser amount is used in commercial refrigeration (e.g. supermarkets).

R-410A and R-407C are used as alternatives to HCFC-22 in comfort air conditioning (e.g. hospitals, offices and buildings in general).

R-507A is the second substance with the highest consumption in the country and is used mainly in agro-industrial facilities and in refrigeration and air conditioning systems in supermarkets, among other applications.

HFC-227ea and HFC-125 are used in fire extinguishing. HFC-227ea is imported for charging and recharging of fire extinguishing systems.

There are small imports of blends such as R-408A, R-417A, R-438 A, R-452 and R-449C which are used to replace HCFC-22 in different refrigeration applications.

The HFC-365mfc/HFC-227ea blend is imported as a blend to make fully formulated polyols and as fully formulated polyols itself.

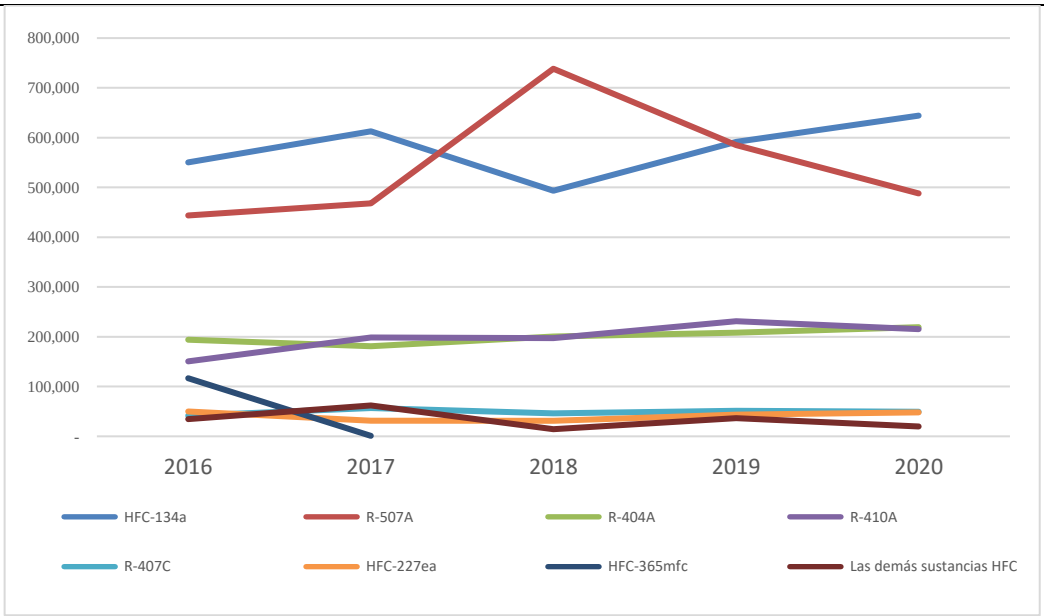
HFC-365mfc is used in the mixture to formulate polyols.

HFC-245fa, has increasing imports since 2018 and up to date its use has not been identified.

HFC-32 has minor imports in recent years. However, there is a high interest from air conditioning equipment importers to enter equipment with this substance into the country as a technological alternative to HCFCs and high-GWP HFCs, which would require having HFC-32 available in the local market, to be used for repairs and refills. This situation shows there would be increasing imports of this substance, in line with equipment imports.

Regarding to the uses of HFCs as propellants or aerosols, such as HFC-134a and HFC-227ea, there is some information regarding the manufacture of contact cleaners in the country.

HFC consumption, 2016-2020 (metric tons)



Source: Servicio Nacional de Aduanas (data 2016 - 2018).
Country Programme Reports (data 2019 - 2020).

There is a certain stabilization in the consumption of HFC, being R-507A the substance that shows a certain decreasing tendency, which could be explained by the entry of natural alternative refrigerants in the supermarket sector.

On the other hand, there is an upward trend in HFC-134a consumption which could be explained by the increasing number of cars in the last years.

5. Activities to be undertaken for project preparation and funding

The main objective of this funding request is to prepare the Kigali Implementation Plan Overarching strategy and to prepare Chile for the implementation of the first stage HFCs phase-down activities, considering already the legislative framework in place in the country and the requirements for additional policies and national regulations for enforcement.

Activity	Indicative funding (US $)	Lead Agency
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	30,000	UNDP
Assessment of country level needs for enhancing trainings (GRP, recovery and recycling and reclaiming) and certification in use of alternative refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions.	30,000	UNDP
Assessment of gender mainstreaming in R&AC sector and the HFC phase-down.	10,000	UNDP
Communication and outreach plan preparation and development of awareness raising activities.	10,000	UNEP

Assessment of the customs capacities to control HFCs and quota system of HFCs, and identification of needs.	10,000	UNEP
Detailed analysis of the sectorial distribution and consumption trends of HFCs (pure and blends).	60,000	UNDP
Consultations, review and validation of the consolidated overarching HFC phase down strategy	10,000	UNDP
International consultant for the preparation of the proposal.	30,000	UNDP
TOTAL	**190,000**	

6. How will activities related to the stage III of the HPMP implementation be considered during project preparation for the Kigali Implementation plan?

Chile is well on its way to phase-out of use the HCFCs. The stage III of the HPMP was already prepared and submitted for consideration at the 88th meeting of the ExCom. The Stage III of the HPMP for Chile will phase-out 100 % of HCFCs by 2030. The activities in the stage III of the HPMP will focus on the sustainable elimination in the use of HCFCs and, to the extent possible, promote the safe use of low GWP alternatives. The stage III of the HPMP for Chile is being implemented via the National Implementation Modality (NIM) by the Ozone Unit, part of the Office of Climate Change at the Ministry of Environment. The Ozone Unit will also be in charge of the preparation of the overarching strategy for the KIP for the HFC phase down in Chile and its subsequent implementation.

It is expected that there will be synergies among the HPMP and the KIP. However, it is important to note that HCFC phase-down can be achieved by applying currently available non-flammable /non-toxic technologies, mainly the HFCs. The HFC phase down is a much more complex task as it requires inevitably the full-scale introduction of flammable and/or toxic refrigerants in Chile. The safe handling of these substances by all technicians in the country is a task of a completely different magnitude compared to what has been seen before. This includes not only the training of technicians, but an associated update/introduction of standards, safety guidelines, regulation, etc. for the safe handling of refrigerants.

Synergies will be achieved by coordinating all the activities by the same governmental entity – Ozone Unit in this case – for both the HPMPs and the KIP.

The funding request has been based on existing KIP PRP funding guidelines.

The NOU is focusing the activities in line with the climate change activities, avoiding the increase of the carbon footprint in the HFC's end-users sector.

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM KIGALI IMPLEMENTATION PLAN (OVERARCHING)

Part I: Project Information

Project title:	Kigali Implementation Plan Preparation	
Country:	EL SALVADOR	
Lead Implementing agency:	UNDP	
Cooperating Agency	N/A	
Implementation period:	December 2021 to December 2023	
Funding requested:	USD$ 170,000	
Agency	Sector	Funding requested (US $)*
UNDP	Overarching	170,000

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

Part II: Prerequisites for submission

Item	Yes	No
7. Official endorsement letter from Government for choice of agency	☒	☐
8. Kigali Amendment ratified	☒	☐

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

3. Brief background on previous activities related to the Kigali amendment and the HFC phase-down

The Enabling Activity for HFC Phase-down in El Salvador was approved at the 81st meeting of ExCom to assure the early ratification of the Kigali Amendment (KA). UNDP is the lead agency while Environment Canada is the cooperating agency.

The Kigali Amendment was ratified by the National Assembly by the legislative decree No. 859 of May 18, 2021, while the ratification mechanism was deposited on September 13, 2021, therefore the legal framework is enabled for El Salvador to begin compliance with the obligations derived from this Amendment for the reduction of HFC consumption.

4. Current progress in implementation of Enabling Activities for HFC phase-down Budget: 175,000 USD

El Salvador is advancing in the implementation of the Enabling Activities project in the country, the following activities has been developed:

With the support of an international expert on the Montreal Protocol, 3 workshops and a field visit were held in January 2019 to disseminate the Kigali Amendment for a total of 81 people, starting with a first workshop attended by 4 participants from the institutions responsible for the regulation and control of Ozone Depleting Substances identified by the Ministry of Environment and Natural Resources (MARN) and Customs of El Salvador, followed by a second workshop addressed to the Refrigeration and Air Conditioning Sector (RAC) with the participation of 62 participants including equipment installers and repairers, a third workshop with the participation of 12 participants from 5 refrigerant importers and distributors, and finally a field visit to the Customs Risk Management Unit to report on the management process to ratify the Kigali Amendment and the role of Customs in the control of new substances due to their impact on the climate.

In the second half of 2020 and first quarter of 2021, a diagnosis of the existing legal framework was conducted with the support of a local legal expert in order to find elements of support to facilitate, once the Kigali Amendment was ratified, the inclusion of legal regulations that control the import and consumption of HFCs, as well as the diagnosis of regulations related to the management of natural refrigerants, especially hydrocarbons, in order to facilitate their promotion as alternatives to HFCs. The system of refrigerant import licenses or permits was also reviewed, and a proposal was made to modify the environmental permit forms to

include HFCs in the formats used by the Single Window for Imports of the MARN, which is responsible for the control of substances controlled by the Montreal Protocol.

In December 2019, with the support of an international customs expert, two face-to-face workshops were held, starting with a workshop for the review of the customs structure with the participation of a member of the Ministry of Economy, two members of Customs and a member of the Ministry of Environment and Natural Resources, followed by a second workshop for training on harmonized customs codes adopted online with pure HFC substances and in mixtures; Finally, in September 2021, a third workshop was held virtually due to the local emergency conditions due to the COVID-19 pandemic, targeting 25 customs members and training them on the updates to the Kigali amendment in El Salvador, which included the segment on the seventh amendment of the Harmonised System by the World Customs Organisation (WCO).

In the fourth quarter of 2020 and first quarter of 2021, a general top-down analysis of the consumption of HFCs and their alternatives in the RAC sector was conducted and the training plans of the technical training academy were reviewed. The results of HFC consumption by the RAC sector identified R-134a, R-410A, R-404A and R-507 as the most used HFCs.

For the technical training academy, the formal curricula established by the Ministry of Education in the technical area and the training programmes of the Salvadoran Institute of Vocational Training (INSAFORP) were reviewed and did not include the promotion of environmentally friendly alternatives and the safe handling of natural refrigerants, so proposals were drawn up to improve the technical formation offer and the guidelines to facilitate the training of RAC technicians.

Finally, in December 2020, a virtual workshop was held due to the restrictions generated by the COVID-19 emergency, with the participation of 19 representatives from the technical area of maintenance of supermarkets, hospitals, plastic industry with water cooling systems (chiller), textile industry, pharmaceuticals, among others. The workshop aimed to inform the RAC sector about the commitments to be acquired once El Salvador ratified the Kigali Amendment.

Information awareness activities and material have been developed to support targeting groups and stakeholders involved in the ratification and future implementation processes of the Kigali Amendment.

9. Overview of estimated use of HFC in Mt

The current HFC consumption in El Salvador is presented in the table below. El Salvador does not produce or export HFCs and has no manufacturing of refrigeration and air-conditioning equipment.

Consumption of HFC, 2016-2020 (metric tonnes)

Substance	2016	2017	2018	2019	2020
HFC-134a	167.63	192.43	193.19	232.60	154.11
R-410A	31.10	30.74	46.94	50.50	55.27
R-404A	34.09	27.17	43.71	25.90	35.35
R-507A	28.12	13.59	30.05	16.22	21.55
R-438A	4.04	15.37	7.46	3.29	1.82
R-422D	6.08	15.26	0.00	0.23	1.04
R-407C	3.27	8.89	2.38	3.46	0.86
R-437A	1.58	1.19	0.92	1.21	0.03
R-407A	0.00	0.00	0.00	0.00	1.45
R-407F	0.00	0.00	0.00	0.36	0.14
HFC-32	0.07	0.00	0.00	0.00	0.00
R-452A	0.00	0.00	0.02	0.00	0.00

Source: MARN, cross-referencing importers' data with customs data.

10. 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)

Consumption of HFC in El Salvador is centered around the Refrigeration and Air Conditioning (RAC) sector; being the main substances consumed HFC-134a, R-410A, R-404A and R-507A.

HFC134a is the most imported and consumed substance, mainly used in domestic refrigeration and automotive air conditioning. Its main consumption is in servicing equipment with refrigerant recharge, to a lesser extent it is used in other areas of comfort and food production. An increasing trend in its consumption is foreseen.

R-410A is the second most imported and used mostly in servicing residential, commercial and industrial stationary air conditioning equipment and to a lesser extent in water cooling applications used in the plastics industry and food production. An increasing trend in its consumption is expected.

R-404A is the third most imported and used for commercial refrigeration for high volume food preservation and in refrigerated transport and food production. An increasing trend in consumption is foreseen.

R-507A is the fourth most imported and used in commercial refrigeration for food and in refrigerated transport and food production. An increasing trend in its consumption is foreseen.

The following HFCs were found with lower usage in the RAC sector:

R-438A and R-422D, HFC blends, are used as a direct replacement in equipment using HCFC-22. Since it has been observed to be used to replace HCFC-22, an increasing trend in its consumption is expected.

R-407C, an HFC blend, used in original industrial OEM equipment and also used as a substitute in equipment using HCFC-22. No trend of increasing consumption is foreseen, as R-438A and R-422D are being imported more.

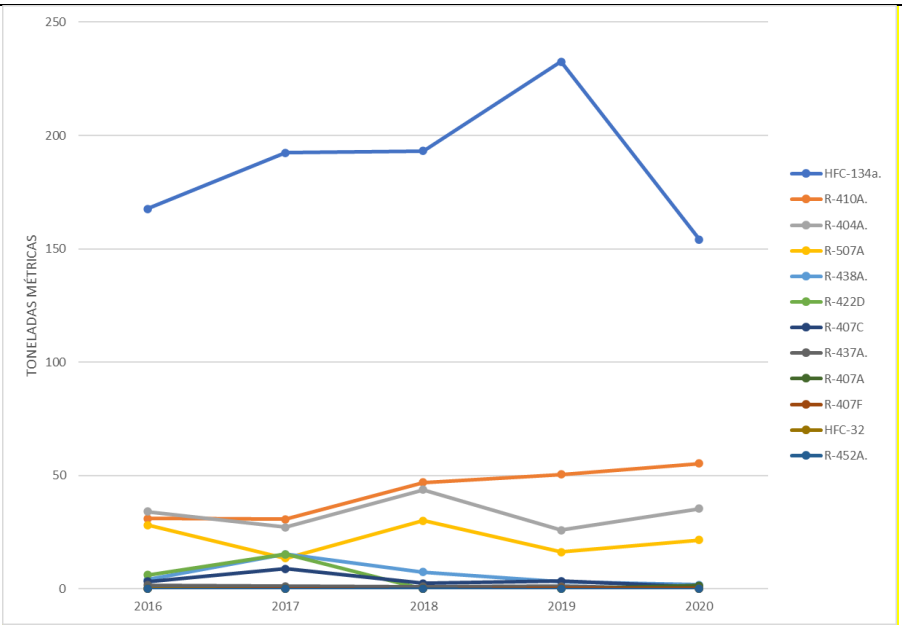
R-437A, an HFC blend, used for drop-in in equipment that used CFC-12. No trend of increasing consumption is foreseen as there is little equipment in operation that used CFC-12.

R-407A, a newly imported HFC blend, used to replace R-404A and R-507A and HCFC-22. Due to its recent import in 2020, no further elements are available to consider a trend.

R-407F is an HFC blend, also used as a direct substitute in equipment using HCFC-22, but with the added value of improved capacity and efficiency compared to R-438A and R-422D, and due to its lower GWP than R-404A and R-507A and its adaptability to substitute them also directly, it is expected to increase its import and consumption trend.

Other HFCs such as HFC-32 and R-452A are used in very small amounts for AC and commercial refrigeration.

Consumption of HFC, 2016-2020 (metric tonnes)



According to the graph, the trend of major consumption corresponds to HFC-134a until 2019, whereas in 2020, there was a notable reduction that can be explained by the contraction of the local economy generated by the emergence of COVID19, in addition to the fact that HFC134a is used to a large extent in air conditioning in cars and, as there are restrictions on mobility due to COVID19, the maintenance of the aforementioned mobile air conditioners did not generate demand. For the remaining HFCs, consumption remained stable in 2020, because R-410A is used in stationary air conditioning and R-404A and R-507 are used in supermarkets and food production, which maintained their consumption in the face of the COVID19 pandemic.

11. Activities to be undertaken for project preparation and funding

The main objective of this funding request is to prepare the Kigali Implementation Plan and its HFC phase-down overarching strategy and to prepare El Salvador for the implementation of the first stage HFCs phase-down activities, considering already the legislative framework in place in the country and the requirements for additional policies and national regulations for enforcement.

Activity	Indicative funding (US $)	Lead Agency
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.	20,000	UNDP
Detailed analysis of the sectorial distribution and consumption trends of HFCs (pure and blends).	30,000	UNDP
Assessment of country level needs for trainings and certification in use of alternative refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions.	25,000	UNDP
Assessments of the needs for enhancing training programs on GRP, recovery, recycling and destruction.	25,000	UNDP

Communication and outreach plan preparation and development of awareness raising activities.	20,000	UNDP
Consultations, review and validation of the consolidated overarching HFC phase down strategy.	30,000	UNDP
International consultant for the preparation of the proposal.	20,000	UNDP
TOTAL	**170,000**	

12. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the Kigali Implementation plan?

El Salvador has met its reduction commitments for HCFCs with 10 per cent in the year 2015 and a cumulative 35 per cent by the year 2020, the above reductions were implemented during the implementation of the first stage of the HPMP. The second and final stage for the HPMP was presented and approved at the 87th ExCom meeting for the total phase-out of HCFCs. The second stage activities will focus on accelerating HCFC consumption and promoting low GWP alternatives. However, it will be important to consider the alternatives that local refrigerant importers bring into the country and to have the opportunity to find lower GWP substances; initially, it is envisaged that the preference would be for hydrofluoroolefins (HFOs) and hydrocarbons for domestic and small, stand-alone commercial refrigeration.

The second stage of the HPMP and the preparation of the strategy for the Kigali Implementation Plan (KIP) will be executed in such a way that there will be synergies and no interference between the two. The promotion of natural refrigerants will be facilitated by the use of hydrocarbons in small size equipment, but for larger capacity equipment, it implicates a challenge mainly because of the flammability or toxicity of environmentally friendly alternatives which would involve not only training of technicians, but also an associated updating and introduction of standards, safety guidelines, regulations, etc.

As the current trend in El Salvador for alternatives to HCFCs is still the use of HFCs, it will be a challenge to the country to foster the introduction of natural refrigerants, HFCs with the lowest GWP available and HFOs, therefore the importance of the KIP and its coordination with the activities planned under the HPMP stage II.

The funding request has been based on existing KIP PRP funding guidelines.

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL
KIGALI IMPLEMENTATION PLAN PROJECT PREPARATION REQUEST FORM

Part I: Project Information

Project title:	Kigali Implementation plan (Preparation)	
Country:	Fiji	
Lead implementing agency:	UNDP	
Cooperating agency:	UNEP	
Implementation period:	January 2022-December 2023	
Funding requested: US $130,000		
Agency	**Sector**	**Funding requested (US $)**
UNDP	Overarching	95,000
UNEP	Overarching	35,000

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. Ratification of the Kigali Amendment	☒	☐

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

1. Montreal Protocol compliance target to be met in ☒ stage I of the Kigali Implementation plan			
Phase-down commitment	**Freeze and 10 %**	**Year of commitment**	**2024 and 2029**
☒Servicing only		**☐Manufacturing only**	**☐Servicing and manufacturing**

2. Brief background on previous activities related to the Kigali Amendment and HFC phase-down, as well as HPMP stages (i.e. Information on approval and implementation of ODS alternatives survey; approval and progress in implementation of Enabling Activities project with the expected completion date;HPMP implementation)

Previous activities related to the Kigali Amendment, HFC Phase-down and the HCFC Phase-out Management Plan (HPMP) are summarized below:

- **The Enabling Activities for HFC phase-down project** (EA) was approved at the 80th ExCom meeting in November 2017 vide Decision 80/46 at the total amount of US$ 150,000 through UNDP. The objective was to support Fiji to (i) enable the Legal Framework for the ratification, (ii) assess legislation and policies for the implementation of the Amendment , (iii) assess coordination mechanisms needed to implement the Amendment , (iv) review the licensing and data reporting systems on HFC, (v) raise awareness on the ratification and implementation processes of the Kigali Amendment and (vi) conduct technical assessments on the industry to gage projections on HFC consumption and introduction of new alternatives. The Technical Assessment Report which summarizes the existing contexts, challenges and recommendation for Fiji to phase-down HFC in different aspects is under finalization.
- **HCFC Phase-out Management Plan Stage I**: The HCFC Phase-out Management Plan (HPMP) stage I of Fiji was approved at the 65th meeting of the ExCom held in November 2011.

The total funding for stage I of HPMP was USD 315,000 plus agency support cost of US$33,370, consisting of US$189,500 plus agency support costs of US$17,055 for UNDP, and US$125,500 plus agency support costs of US$16,315 for UNEP, with UNDP as the lead implementing agency and UNEP as the cooperating implementing agency. HPMP Stage-I was approved to meet the 35 per cent reduction in HCFC consumption. As part of HPMP Stage I activities, the Government of Fiji has established a comprehensive legal framework for the control of ODS, including an enforceable national licensing and quota system for imports and exports of HCFCs since 2013. Apart from policy, the project also worked on introduction of low GWP alternative refrigerant through replacement programme, strengthening capacity of enforcement officers and RAC technicians through training and organising awareness activities. Project is on-going under its fourth tranche implementation. Project end date is 31 December 2021. However, some activities are delayed due to impact of pandemic. The Government of Fiji has requested for an extension up to 31 December 2022.

- **HCFC Phase-out Management Plan Stage II –** The proposal for HPMP Stage II for the period 2022-2030 aiming at phasing out 100% HCFCs by 2030, is submitted for consideration of the 88th ExCom meeting.

3. Current progress in the implementation of Enabling Activities for HFC phase-down project

Activity	Description	Implementing agency
Enable the Legal Framework for the ratification	Stakeholders (relevant for the Kigali Amendment) meetings were held to discuss the Kigali Amendment and impact of its ratification. The EA activities including revision of legislation, development of country assessment report, awareness activities etc. supported in ratification of the Kigali amendment. Fiji ratified the Kigali Amendment on 16 June 2020.	**UNDP**
Assess legislation and policies for the implementation of the Amendment	The ODS Act 1998 was reviewed and amendment to the Act was developed. Stakeholder consultations were held to discuss the amendment Act. The ODS (Amendment) Act 2020 commencement date is 01.01.2021	
Review the licensing and data reporting systems on HFC	Reviewed and identified method to include HFCs into the licensing system and data reporting in coordination with Fiji Customs. Legal notice no. 103 of the ODS (Amendment) Act 2020 includes HFCs to the list of substances controlled.	
Raise Awareness on the ratification and implementation processes of the Kigali Amendment	Five awareness workshops for different stakeholders were held for raising awareness about HFC phase-down. Also, stakeholder consultations were held to seek inputs for various activities under this project.	
Conduct technical assessments on the industry to gage projections on HFC consumption and introduction of new alternatives	An assessment was done which included HFC baseline survey and HFC consumption analysis. The report included identification of appropriate policies and regulations, to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies. Further, a roadmap was developed for HFC phase-down in Fiji as a part of the Country Assessment Report	

4. Overview of estimated consumption (i.e., use in RAC servicing sector) of ODS alternatives (as per technical assessment report on the current and future demand of HCFCs and HFCs in Fiji for the years 2016-2020) data is in MT

Substance	2016	2017	2018	2019	2020
HFC-32	0.41	0.04	0.12	0.18	3.60
HFC-134a	11.40	49.50	19.54	18.39	44.68
R-507C	0.11	0	5.52	5.55	3.39
R-404A	28.80	7.00	33.30	43.82	29.65
R-407C	3.20	3.56	1.61	1.58	3.60
R-410A	20.44	14.74	33.13	27.32	10.42
Total	**64.36**	**74.84**	**93.22**	**96.84**	**95.34**

Source: *2016-2018 - draft technical assessment report of EA; 2019-2020 -as per A7 report*

5. 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)

The above table reveals that HFC consumption in Fiji has been dominated by R-410A, R-404A and HFC-134a respectively. Since 2016, HFC consumption in Fiji has increased mainly due to the following reasons:

- Implementation of HPMP to reduce HCFCs consumption and policy measures (like duty on import of HCFCs) resulted in the introduction of HFCs to replace HCFCs in some sectors in particular R-410A in the air-conditioning sector;
- Rapid economic growth of the country in recent years, which in turn increased the demand for refrigerant for installation and servicing in particular in air-conditioners and MAC.

Based on the study conducted under the enabling activity, the largest subsectors that consume HFCs are MAC subsector, rooms and other air-conditioning subsector. Sector specific detail on the use of HFCs and other ODS alternatives are as follow:

- *Domestic refrigeration:* There is no refrigerator manufacturing in Fiji. As per the customs data, the country imported 35,470 domestic and commercial refrigeration units in the year 2019. In fast few years the majority of the domestic refrigerators are based on iso-butane as a refrigerant, however a small portion of new fridges also use HFC-134a.
- *Commercial refrigeration*: Commercial refrigeration subsector includes stand-alone units (water-coolers, display cool cabinets and small ice making machine) and condensing units. It primarily consists of usage in fisheries sector (off-shore refrigeration systems on fishing vessels, onshore fish processing units, and storage) and other commercial applications including food processing units, cold storages, etc. Fisheries sub-sector is the largest sub-sector using HCFC-22. Some new vessels also use HFC-404A. Onshore processing units normally include storage freezer, blast freezer, and cold storage. R-404A and HCFC-22 are main refrigerants used for these systems.
- *Air-conditioning*: These include small self-contained air-conditioning, split air-conditioning, ducted and packaged rooftops, water chillers, heat pumps for heating and mobile air-conditioning systems. As per 2019 residential AC equipment data, the share of R-410A was 93% with HCFC 22 at 5% and HFC 32 at 2%.
- *Chiller:* Refrigerants being used in the existing chiller subsector is R410A and HFC 134a. HFC 134a chiller system is the large-size cooling capacity chillers and small capacity use R410A.
- *Mobile Air-conditioning (MAC)*: This sub-sector only uses HFC-134a as refrigerant. While there is no need to charge refrigerant for new vehicles, all second-hand vehicles need to be fully charged with refrigerant after changing the filter and lubricant oil, which causes high demand of HFCs in this subsector.

6. Activities to be undertaken for project preparation and funding			
Activity	**Cost items**	**Indicative funding (US $)**	**Agency**
National Survey for data collection, stakeholder consultation, data analysis	Conduct interviews, identify stakeholders, organize national consultation workshops and stakeholder meetings	20,000	UNDP
	Data collection by sector/sub-sector/HFC substances and equipment, and servicing sector usage and needs	25,000	UNDP
HFC phase-down strategy development	-Consultations with key stakeholders and development of detailed overarching strategy with action plan, including investment component and non-investment component in coordination with cooperating agency. -National consultation workshop for finalization of overarching strategy and HFC Phase-down Management Plan -Development of the Gender strategy	30,000	UNDP
	Supporting strategy and action plan development, travel and workshop related to non-investment component	35,000	UNEP
Analysis and Validation	-Analysis of the Sectoral distribution and consumption trend of HFCs-Consultation, review and validation of the consolidated overarching HFC phase down Strategy	20,000	UNDP
TOTAL		130,000	
7. How will activities related to the implementation of the HPMP be considered during project preparation for HFCs phase-down plan?			
Development of strategies and action plans for the Kigali Implementation Plan will use the networks established during HPMP and take into account infrastructures established during the HPMP implementation, trainings provided, and need of the sector, as learnt during HPMP. It is expected that there will be synergies among the HPMP and the HFC phase-down. However, the HFC phase-down is a much more complex task as it makes the full-scale introduction of flammable and/or toxic refrigerants. Lessons learned from the HPMP will be considered in the preparation of the Kigali Implementation Plan.			
8. How will the Multilateral Fund gender policy be considered during project preparation?			
The Government of Fiji is well aware of the Multilateral Fund Gender Policy and the relevant Executive Committee decision 84/92. During the project preparation, gender considerations and actions on gender mainstreaming will be assessed and a Gender Management Plan is to be included in the HFC phase down over-arching strategy: The following actions are expected to be carried in the preparation phase: • Look into introduction of gender considerations when designing components and activities • Assess barriers or bottlenecks for women engagement in the sector			

- Incorporate gender aspects in the recruitment of staff for the PRP and consultants
- Draft a Gender Management Plan to be supported as part of the Kigali Implementation plan