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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-eighth Meeting
Montreal, 15-19 November 2021¹

PROGRESS REPORT OF UNDP AS AT 31 DECEMBER 2020

1. This document presents the progress report of UNDP as at 31 December 2020.²

Introduction

2. The progress report of UNDP includes the status of implementation of projects, including 18 HFC-related projects that have been funded under the additional voluntary contributions by 17 non-Article 5 Parties to provide fast-start support for implementation of the Kigali Amendment.
3. The Secretariat reviewed the status of implementation of each ongoing project on a country-by-country basis, taking into account implementation delays that have occurred with respect to planned completion dates that had been reported in 2020, the potential impact of these delays on the phase-out of controlled substances and the rate of planned disbursements. The analysis contained in the present document is based on ODP tonnes for all controlled substances except for HFCs which are measured in mt CO₂-eq.³

Scope of the document

4. This document consists of the following parts:

Part I: Projects approved under the regular contributions to the Multilateral Fund. It presents a summary of progress in implementation of projects for 2020 and cumulative since 1991 addressing all controlled substances under the Montreal Protocol, including Annex F substances (HFCs); it contains a review on the status

¹ Online meetings and an intersessional approval process will be held in November and December 2021 due to coronavirus disease (COVID-19).

² The progress report is attached to the present document. The data has been included in the Consolidated Progress Report database that is available upon request.

³ In line with decision 84/12(a)(iv), the measurement for HFCs in mt CO₂-eq is included in the progress reports submitted to the 88th meeting.

of implementation of each ongoing⁴ project at the country level; and it identifies projects with implementation delays and the potential impact on the phase-out of controlled substances, and projects with outstanding issues for consideration by the Executive Committee.

Part II: Projects approved under the additional voluntary contributions for fast-start support for HFC phase-down. It provides a summary on the status of implementation of HFC phase-down projects funded under the voluntary contributions.⁵

Recommendation.

5. The document also contains the following annexes:

Annex I: A summary status and a recommendation for each ongoing project with outstanding issues for consideration by the Executive Committee.

Annex II: An analysis of the progress report.

PART I: PROJECTS APPROVED UNDER THE REGULAR CONTRIBUTIONS TO THE MULTILATERAL FUND

Summary of progress in implementation of projects for 2020 and cumulative

6. Implementation of projects and activities by UNDP for 2020 and cumulative since 1991 up to 31 December 2020, is summarized as follows:

- (a) **Phase-out:** In 2020, 418.1⁶ ODP tonnes of consumption of controlled substances were phased out and an additional 620.2 ODP tonnes of consumption of controlled substances were approved for phase-out. Since 1991, 67,872 ODP tonnes and 224,221 mt CO₂-eq of consumption of controlled substances had been phased out, of an expected total of 69,033 ODP tonnes and 240,094 mt CO₂-eq from projects approved (excluding cancelled and transferred projects);
- (b) **Disbursements/approvals:** In 2020, US \$27.7 million was disbursed and US \$21.9 million was planned for disbursement based on the 2019 progress report, representing a rate of disbursement of 126 per cent of that planned. Cumulatively, US \$796.36 million had been disbursed out of the total US 861.36 million approved for disbursement (excluding agency support costs), representing a rate of disbursement of 92 per cent. In 2020, US \$30.21 million was approved for implementation;

⁴ Ongoing projects are all projects that were under implementation as at 31 December 2020. Key indicators of progress include: percentage of funds disbursed and percentage of projects that have begun disbursing funds; funding expected to be disbursed by the end of the year as a percentage of the approved funding; the average length of projected delay in implementation; and information provided in the remarks column in the progress report database.

⁵ In line with decision 84/12(b), a detailed progress report providing an overview of the objectives, status of implementation, key findings and lessons learned, the amounts of HFC phased out where applicable, the level of funds approved and disbursed and potential challenges in completing the projects and activities, is presented in the consolidated progress report (UNEP/OzL.Pro/ExCom/88/12).

⁶ Including 70.1 mt (100,243 mt CO₂-eq.) phased out in 2020 for HFC-related projects.

- (c) **Cost-effectiveness (in ODP):**⁷ Since 1991, the average cost-effectiveness of investment projects approved leading to a permanent reduction in consumption was US \$10.97/kg. The average cost-effectiveness of investment projects per ODP tonne was US \$9.69/kg for completed projects and US \$68.60/kg for ongoing projects;⁸
- (d) **Number of projects completed:** In 2020, 34 projects were completed. Since 1991, 2,379 projects of the 2,526 projects approved (excluding closed or transferred projects) were completed, representing a completion rate of 94 per cent;
- (e) **Speed of delivery – investment projects:** Projects that were completed in 2020 were completed on average 37 months after their approval. Since 1991, the average time for completion of investment projects has been 34 months after their approval. First disbursements under these projects occurred, on average, 13 months after they had been approved;
- (f) **Speed of delivery – non-investment projects:** Projects that were completed in 2020 were completed on average 27 months after their approval. Since 1991, the average time for completion of non-investment projects has been 39 months after their approval. First disbursements under these projects occurred, on average, 13 months after they had been approved;
- (g) **Project preparation:** Of the 540 project preparation activities approved by the end of 2020, 522 have been completed, leaving 18 ongoing activities. In 2020, four projects preparation activity has been completed;
- (h) **Implementation delays:** A total of 147 projects were under implementation at the end of 2020, experiencing, on average, a delay of seven months. Thirteen of these projects are classified as “projects with implementation delays”⁹ that are subject to the procedures of project cancellation (as demonstration projects, project preparation and IS are not subject to those procedures); and
- (i) **Multi-year agreements (MYAs):** In 2020, 51 MYAs for HCFC phase-out management plans (HPMPs) were under implementation. Since 1991, 148 MYAs have been approved and 97 MYAs have been completed, representing a completion rate of 66 per cent.

Project implementation progress in 2020

7. Further to the review process, a number of issues were discussed and satisfactorily addressed, except for 13 projects classified as projects with implementation delays (including 10 projects related to components of MYAs that are subject to procedures for project cancellation, in line with decision 84/45(c); one technical assistance project, one HFC investment project and one enabling activities for the phase-down of HFCs in Article 5 countries (“enabling activities”)). Annex I to the present document presents those projects classified with implementation delays, and the Secretariat’s recommendation requesting the submission of a report to the 90th meeting.

⁷ Including 167.8 mt of HFC investment projects. Cost-effectiveness in CO₂-eq. is not included due to the limited number of projects approved.

⁸ The higher value of the cost-effectiveness for ongoing projects is largely due to the lower ODP values of HCFCs but also due to the means of assigning phase-out by agencies.

⁹ Projects approved over 18 months with disbursement less than 1 per cent, or projects that had not been completed 12 months after the proposed completion date in the progress report (decision 22/61) (as demonstration projects, project preparation, and institutional strengthening (IS) are not subject to those procedures).

8. In addition, one issue was identified regarding project preparation of an HPMP. This issue is also presented in Annex I to the present document. For this project, a brief description on the status of implementation and the outstanding issue are presented and a recommendation is proposed for consideration by the Executive Committee.

9. Details of progress in implementation of projects associated with the HPMPs for Angola,¹⁰ Brazil,¹¹ Chile,¹² China (industrial and commercial refrigeration and air-conditioning sector plan and solvents sector plan),¹³ Colombia,¹⁴ Democratic Republic of Congo,¹⁵ Egypt,¹⁶ Fiji,¹⁷ Georgia,¹⁸ Indonesia,¹⁹ Malaysia,²⁰ Nigeria,²¹ Republic of Moldova²² and Timor-Leste²³ and reports on projects with specific reporting requirements²⁴ associated with Brazil (ODS disposal) and Ghana (HPMP), have been submitted to the 88th meeting. Recommendations for outstanding issues for these projects, including approval of extension requests, if any, are addressed in the relevant sections of those documents. The issues relating to the HPMPs for Bangladesh, Costa Rica, Guyana, Islamic Republic of Iran, Mali, Mauritania and South Sudan, that were due at the 88th meeting but were not submitted, are addressed in the document on tranche submission delays.²⁵

10. Of the 102 ongoing projects, excluding IS and project preparation, 30 projects have revised planned dates of completion since the 2019 progress report.

11. In line with decision 82/11(b),²⁶ UNDP has requested the extension of the duration of a number of HPMPs to beyond 31 December 2022; those that have not been submitted as part of the tranche requests are addressed in the reports on projects with specific reporting requirements.²⁷

12. In line with decision 82/11(c)(ii), the Secretariat noted that renewal of the IS projects for Argentina, China and Venezuela (Bolivarian Republic of) had not been submitted for the last two years; the main reasons are lower disbursements on account of limited number of activities such as workshops and meetings undertaken due to restrictions imposed by the COVID-19 pandemic, currency devaluation in certain countries and other administrative matters relating to IS renewal submissions. UNDP informed that it is planning to submit the renewal requests in 2022.

¹⁰ UNEP/OzL.Pro/ExCom/88/36

¹¹ UNEP/OzL.Pro/ExCom/88/39

¹² UNEP/OzL.Pro/ExCom/88/42

¹³ UNEP/OzL.Pro/ExCom/88/43

¹⁴ UNEP/OzL.Pro/ExCom/88/44

¹⁵ UNEP/OzL.Pro/ExCom/88/45

¹⁶ UNEP/OzL.Pro/ExCom/88/47

¹⁷ UNEP/OzL.Pro/ExCom/88/49

¹⁸ UNEP/OzL.Pro/ExCom/88/50

¹⁹ UNEP/OzL.Pro/ExCom/88/51

²⁰ UNEP/OzL.Pro/ExCom/88/53

²¹ UNEP/OzL.Pro/ExCom/88/56

²² UNEP/OzL.Pro/ExCom/88/61

²³ UNEP/OzL.Pro/ExCom/88/65

²⁴ UNEP/OzL.Pro/ExCom/88/18

²⁵ UNEP/OzL.Pro/ExCom/88/21

²⁶ Any request for an extension would have to be submitted for approval by the Executive Committee in advance of the project completion date, noting that no new commitments were to be made before the extension had been approved.

²⁷ UNEP/OzL.Pro/ExCom/88/18

PART II: PROJECTS APPROVED UNDER THE ADDITIONAL VOLUNTARY CONTRIBUTIONS FOR FAST-START SUPPORT FOR HFC PHASE-DOWN

13. As of 31 December 2020, the Executive Committee had approved 18 HFC-related projects under the additional voluntary contributions amounting to US \$6,051,258 (excluding agency support costs). A summary of the status of these projects is presented in Table 1.

Table 1. Status of approved HFC-related projects as of the end of 2020

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	2	1	50	4,406,610	4,150,023	256,587	94
Project preparation	5	5	100	124,066	83,511	40,555	67
Technical assistance - Enabling activities	11	4	36	1,520,582	1,309,290	211,292	86
Total	18	10	56	6,051,258	5,542,824	508,434	92

* Excludes agency support costs.

** 330.6 mt (432,801 mt CO₂-eq) of 480.6 mt (587,301 mt CO₂-eq.) of HFCs had been phased out.

14. As of the end of 2020, of the 18 projects approved, ten projects had been completed including one investment project, four enabling activities and five preparation activities, leaving eight ongoing. Extension of the completion dates of the seven ongoing enabling activities was approved; these activities are at various stages of implementation. Further to the review process, three projects for enabling activities are classified as projects with implementation delays and are included in Annex I to the present document containing the Secretariat's recommendation requesting the submission of a report to the 90th meeting.

15. In line with decision 82/11(b),²⁸ UNDP has requested further extension of the duration of one project for enabling activities as shown in Table 2.

Table 2. Project for which an extension of the completion date has been requested

Country/Project code	Project title	Disbursement (%)	Status / Issues	Revised completion date	Date of completion requested
Uruguay URU/SEV/80/TAS/02+	Enabling activities for HFC phase-down	74	Due to COVID-19 restrictions, delays in completion of needs assessment for Customs capacity building for control of HFCs and completion of diagnosis of legal framework for implementation of HFC amendment	Dec-21	Jun-22

16. The remaining ongoing investment project approved at the 82nd meeting, with 80 per cent of the approved funds disbursed, is expected to be completed in 2021.

17. Of the total cumulative funding approved of US \$6,051,258, US \$5,542,824 had been disbursed, representing a disbursement rate of 92 per cent.

Recommendation

18. The Executive Committee may wish:

- (a) To note the progress report of UNDP as at 31 December 2020 contained in document UNEP/OzL.Pro/ExCom/88/14;

²⁸ Any request for an extension would have to be submitted for approval by the Executive Committee in advance of the project completion date, noting that no new commitments were to be made before the extension had been approved.

- (b) To approve the extension of the completion date, to 30 June 2022, of the enabling activities for HFC phase-down for Uruguay (URU/SEV/80/TAS/02+), to allow for completion of the remaining ongoing activities as reflected in Table 2 of document UNEP/OzL.Pro/ExCom/88/14; and
- (c) To approve the recommendations related to ongoing projects with specific issues contained in Annex I to the present document.

Annex I

ONGOING PROJECTS WITH OUTSTANDING ISSUES IN THE PROGRESS REPORT FOR UNDP

Country/project code*	Project title	Disbursement (%)	Status/Issues	Recommendation
Bangladesh BGD/PHA/81/INV/51	HCFC phase-out management plan (stage II, first tranche) (air-conditioning sector)	0	18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Bangladesh BGD/PHA/81/TAS/49	HCFC phase-out management plan (stage II, first tranche) (project management unit)	0	18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Colombia COL/SEV/80/TAS/01+	Enabling activities for HFC phase-down	97	12 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
China CPR/SEV/80/TAS/04+	Enabling activities for HFC phase-down	100	12 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
El Salvador ELS/PHA/79/TAS/36	Verification report for stage I of HCFC phase-out management plan	0	12 and 18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Guyana GUY/PHA/83/INV/32	HCFC phase-out management plan (stage II, second tranche)	0	18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
India IND/PHA/77/TAS/472	HCFC phase-out management plan (stage II, first tranche) (project management and monitoring)	0	12 and 18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
India IND/PHA/82/INV/475	HCFC phase-out management plan (stage II, second tranche) (polyurethane foam sector plan)	0	18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
India IND/PHA/82/TAS/477	HCFC phase-out management plan (stage II, second tranche) (project management and monitoring)	0	18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Jamaica JAM/PHA/76/INV/36	HCFC phase-out management plan (stage I, third tranche)	64	12 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Lebanon LEB/PHA/81/TAS/92	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing and project management and coordination)	0	18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Lebanon LEB/SEV/80/TAS/02+	Enabling activities for HFC phase-down	39	12 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Mauritania MAU/PHA/80/INV/25	HCFC phase-out management plan (stage I, first tranche)	0	18 months delays;	To request UNDP to report to the 90 th meeting on this project with implementation delays
Mali MLI/PHA/84/PRP/41	Preparation of a HCFC phase-out management plan (stage II)	0	Political situation resulting in difficulties in completing preparation	To request UNDP to provide a status report to the 90 th meeting on implementation progress and on disbursement level

Country/project code*	Project title	Disbursement (%)	Status/Issues	Recommendation
			activities; disbursement is nil	
Panama PAN/PHA/76/INV/44	HCFC phase-out management plan (stage II, first tranche) (foam sector)	11	12 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Panama PAN/SEV/81/TAS/46	Enabling activities for HFC phase-down	40	12 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays
Zimbabwe ZIM/REF/82/INV/55	Conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare)	0	12 and 18 months delays	To request UNDP to report to the 90 th meeting on this project with implementation delays

*Codes ending with “+” are from the additional contributions.

Annex II

ANALYSIS OF THE PROGRESS REPORT OF UNDP AS AT 31 DECEMBER 2020

1. This Annex consists of the following two parts:

Part I: Projects approved under the regular contributions to the Multilateral Fund.

Part II: Projects approved under the additional voluntary contributions for fast-start support for HFC phase-down.

PART I: PROJECTS APPROVED UNDER THE REGULAR CONTRIBUTIONS TO THE MULTILATERAL FUND

2. As of 31 December 2020, the Executive Committee had approved US \$978.98 million, consisting of US \$861.36 million for the implementation of investment and non-investment projects and US \$117.63 million for agency support costs, as shown in Table 1. In 2020, 51 new projects and activities were approved. This level of funding is expected to result in the phase-out of 69,033 ODP tonnes of consumption of controlled substances and 240,094 mt CO₂-eq of consumption for HFC related projects.

Table 1. Approved funding by sector for UNDP as at 31 December 2020

Sector	Funding (US \$)
Aerosol	26,054,837
Destruction	3,606,279
Foam	173,331,512
Halon	4,996,973
Fumigants	20,081,241
Phase-out plan	361,740,925
Process agent	1,286,923
Production	1,056,000
Refrigeration	139,603,919
Several	65,479,103
Solvents	63,699,997
Sterilant	417,628
Sub-total	861,355,337
Agency support costs	117,625,135
Total	978,980,472

3. A summary of the status of projects implemented by category is presented in Table 2.

Table 2. Status of project implementation by category

Type	Number of projects*			Funding (US \$)**			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Country programme	22	22	100	1,628,797	1,628,797	0	100
Demonstration	42	41	98	21,910,507	21,550,701	359,806	98
Institutional strengthening (IS)	256	229	89	55,111,246	50,254,147	4,857,099	91
Investment	1,311	1,243	95	709,402,352	659,814,365	49,587,987	93
Project preparation	540	522	97	22,409,988	21,887,077	522,911	98
Technical assistance	327	294	90	49,301,958	39,633,179	9,668,779	80
Training	28	28	100	1,590,489	1,590,489	0	100
Total	2,526	2,379	94	861,355,337	796,358,755	64,996,582	92

*Excludes closed and transferred projects.

**Excludes agency support costs.

4. Table 3 presents an overview of the status of project implementation by year.²⁹ All projects and activities approved between 1991 and 2013, have now been completed.

Table 3. Status of project implementation by year

Year	Number of projects*			Funding (US \$)**			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
1991	15	15	100	1,149,032	1,149,032	0	100
1992	67	67	100	8,619,002	8,619,002	0	100
1993	57	57	100	13,204,712	13,204,712	0	100
1994	148	148	100	49,481,581	49,481,581	0	100
1995	117	117	100	29,599,446	29,599,446	0	100
1996	83	83	100	27,838,805	27,838,805	0	100
1997	188	188	100	44,056,257	44,056,257	0	100
1998	172	172	100	31,305,010	31,305,010	0	100
1999	204	204	100	35,896,884	35,896,884	0	100
2000	149	149	100	31,268,361	31,268,361	0	100
2001	179	179	100	35,292,271	35,292,271	0	100
2002	117	117	100	44,316,422	44,316,422	0	100
2003	64	64	100	36,336,530	36,336,530	0	100
2004	69	69	100	24,802,714	24,802,714	0	100
2005	53	53	100	29,124,833	29,124,833	0	100
2006	62	62	100	15,753,459	15,753,461	-2	100
2007	54	54	100	12,142,486	12,142,486	0	100
2008	84	84	100	22,873,866	22,873,866	0	100
2009	92	92	100	13,222,786	13,217,903	4,883	100
2010	43	43	100	19,567,970	19,567,970	0	100
2011	63	63	100	57,415,442	57,415,931	-489	100
2012	29	29	100	33,889,850	33,711,420	178,430	99
2013	43	43	100	34,433,292	33,845,180	588,112	98
2014	67	65	97	22,566,390	22,339,555	226,835	99
2015	75	74	99	33,477,064	29,609,306	3,867,758	88
2016	52	43	83	42,115,232	38,481,186	3,634,046	91
2017	28	18	64	30,726,524	29,868,519	858,005	97
2018	60	21	35	40,274,486	12,139,791	28,134,695	30
2019	41	6	15	10,391,727	1,717,154	8,674,573	17
2020	51	0	0	30,212,903	11,383,167	18,829,736	38
Total	2,526	2,379	94	861,355,337	796,358,755	64,996,582	92

* Excludes closed and transferred projects.

** Excludes agency support costs.

5. Table 4 presents project implementation by country for 2020.

²⁹ The data is presented according to the year when a project was approved by the Executive Committee. It treats all approvals (investment and non-investment projects) equally (i.e., an investment project or a funding tranche of an MYA of US \$1 million is considered one project, same as a country programme preparation of US \$30,000). Key indicators from the annual summary are: the percentage of projects completed, ODP phased out, and percentage of funds disbursed. There are three types of disbursements: during implementation, after implementation and for retroactively-financed projects.

Table 4. Summary of project implementation by UNDP for 2020

Country	Phased out in 2020 (ODP tonnes)*	Percentage of planned phase-out achieved in 2020	Estimated funds disbursed in 2020 (US\$)	Funds disbursed in 2020 (US\$)	Percentage of funds disbursed over estimation in 2020	Percentage of planned projects completed in 2020
Angola	0.0		80,629	119,673	148	
Argentina	0.0		160,688	107,141	67	
Armenia	0.0		10,405	34,053	327	100
Bangladesh	0.0		698,777	922	0	
Barbados	0.0		1,276	0	0	
Belize	0.0		10,000	0	0	
Bhutan	0.0		449	0	0	
Brazil	20.0		3,663,123	1,900,772	52	
Brunei Darussalam	0.2	100	6,900	14,937	216	100
Cambodia	0.0		45,000	74,216	165	
Chile	4.0		290,692	391,151	135	
China	130.3	55	76,437	11,609,384	15188	40
Colombia	26.0	14	897,760	380,370	42	50
Costa Rica	3.5		222,542	164,696	74	100
Cuba	3.2		223,459	289,759	130	50
Democratic Republic of the Congo (the)	0.0		17,476	0	0	0
Dominican Republic (the)	0.0		140,195	109,120	78	
Egypt	2.0	29	1,915,623	1,211,224	63	0
El Salvador	0.0		78,643	43,427	55	0
Eswatini	0.0		10,000	0	0	
Fiji	0.0		38,391	8,565	22	50
Georgia	0.7		72,547	30,189	42	0
Ghana	5.5		143,692	170,247	118	100
Guyana	0.0		53,979	0	0	
Haiti	0.2		57,261	92,174	161	
India	103.8	100	5,964,270	5,834,391	98	67
Indonesia	0.0		1,284,496	515,582	40	50
Iran (Islamic Republic of)	17.2		1,101,245	684,040	62	
Jamaica	0.0		45,407	18,211	40	0
Kyrgyzstan	0.5	100	31,371	11,576	37	100
Lebanon	6.3		249,550	420,074	168	
Malaysia	10.0		634,368	834,646	132	
Maldives	0.0		9,887	12,593	127	
Mali	0.0		19,875	0	0	
Mauritania	0.0		31,500	0	0	
Mexico	70.1		1,352,236	631,763	47	
Mozambique	0.0		10,000	0	0	
Nepal	0.0		8,179	9,000	110	
Nigeria	5.0	11	952,954	660,512	69	25
Pakistan	0.0		84,324	166,380	197	
Panama	1.4	16	302,710	248,251	82	0
Paraguay	0.0		22,321	3,280	15	
Peru	0.0		73,975	231,576	313	
Republic of Moldova (the)	0.0		46,359	50,072	108	
Saint Kitts and Nevis	0.0		40	0	0	
Sri Lanka	0.0		63,050	94,493	150	100
Timor-Leste	0.0		18,321	0	0	
Trinidad and Tobago	7.2		135,972	141,914	104	

Country	Phased out in 2020 (ODP tonnes)*	Percentage of planned phase-out achieved in 2020	Estimated funds disbursed in 2020 (US\$)	Funds disbursed in 2020 (US\$)	Percentage of funds disbursed over estimation in 2020	Percentage of planned projects completed in 2020
Uruguay	1.0	100	308,885	319,339	103	100
Venezuela (Bolivarian Republic of)	0.0		123,480	50,404	41	
Zimbabwe	0.0		118,086	8,003	7	
Grand Total	418.1	58	21,908,805	27,698,120	126	51

* 70.1 mt (100,243 mt CO₂-eq.) phased out in 2020 for HFC-related projects.

6. Table 5 presents a summary of HFC-related projects approved under regular contributions.

Table 5. HFC-related projects approved under regular contributions

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	3	2	67	2,491,791	2,073,141	418,650	83
Technical assistance - Enabling activities	8	0	0	644,000	171,405	472,595	27
Total	11	2	18	3,135,791	2,244,546	891,245	72

* Excludes agency support costs.

** 142.8 mt (240,094 mt CO₂-eq.) was approved for investment projects.

7. There are currently 11 HFC-related projects (including three investment projects and eight enabling activities). Of the 11 projects, two investment projects have been completed, leaving nine ongoing. Extension of the completion dates of eight enabling activities was approved; these ongoing activities are at various stages of implementation.

8. Extension of completion dates for the remaining ongoing investment project was approved at the 87th meeting. This project is expected to be completed in 2022.

9. Of the total cumulative funding approved of US \$3,135,791 (excluding agency support costs), US \$2,244,546 had been disbursed, representing a disbursement rate of 72 per cent.

PART II: PROJECTS APPROVED UNDER THE ADDITIONAL VOLUNTARY CONTRIBUTIONS FOR FAST-START SUPPORT FOR HFC PHASE-DOWN

10. As of 31 December 2020, the Executive Committee had approved 18 HFC-related projects under the additional voluntary contributions amounting to US \$6,051,258 (excluding agency support costs). A summary of the status of these projects is presented in Table 6.

Table 6. Status of approved HFC-related projects as of the end of 2020

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	2	1	50	4,406,610	4,150,023	256,587	94
Project preparation	5	5	100	124,066	83,511	40,555	67
Technical assistance - Enabling activities	11	4	36	1,520,582	1,309,290	211,292	86
Total	18	10	56	6,051,258	5,542,824	508,434	92

* Excludes agency support costs.

** 330.6 mt (432,801 mt CO₂-eq.) of 480.6 mt (587,301 mt CO₂-eq.) of HFCs has been phased out.

11. As of the end of 2020, of the 18 projects approved, ten projects had been completed including one investment project, four enabling activities and five preparation activities, leaving eight ongoing.

Extension of the completion dates of the seven ongoing enabling activities was approved; these activities are at various stages of implementation.

12. The remaining ongoing investment project approved at the 82nd meeting, with 80 per cent of the approved funds disbursed, is expected to be completed in 2021.

13. Of the total cumulative funding approved of US \$6,051,258, US \$5,542,824 had been disbursed, representing a disbursement rate of 92 per cent.



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

UNDP Annual Progress and Financial Report Narrative: 1991-2020

88th Meeting, 15–19 November 2021, Montreal, Canada

I. INTRODUCTION

The following narrative is based on a database of 2,642 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2020. However, some updates of activities which took place during 2021 are also included for information purposes. The database results in 11 summary tables which can be found at the end of this report, and which are referred to throughout this narrative.

As can be seen in the following sections, UNDP has disbursed US\$ 801,901,579 of the US\$ 867,406,601 worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 70,189 ODP T/year, of which 68,839 (98%) were phased out as of 31 December 2020. This demonstrates UNDP's important role in the success of MLF's assistance towards the elimination of Ozone Depleting Substances.

As of the end of 2020, UNDP was active in 51 countries, of which 24 are low volume consuming (LVCs). The vast majority of ongoing projects are implemented using the National Implementation modality, providing countries with larger country ownership.

A large portion of the current ongoing programmes consist of HCFC phase-out management plans (HPMPs). UNDP is the lead agency in 29 countries, including such key countries for the Montreal Protocol, as Brazil, China, and India. In all countries, UNDP is providing technical support for countries to meet their targets set forth under the Montreal Protocol and these three key countries are progressing towards their targets. UNDP is continuing to support China with the implementation of its ICR and Solvent Sector Plans. With the experience gained in the implementation of the Stage I sector plans, and the cooperation and coordination mechanisms established during this earlier implementation, both sector plans have progressed further and all ExCom conditions have been met. In addition, UNDP also acts as the cooperating agency in 18 countries.

Furthermore, in 2020, the COVID-19 pandemic had imposed limitations on project implementation. Despite this challenging situation, UNDP, with its network of country offices, remains fully committed to meet the increased workload and ensure that countries receive the assistance needed to be in compliance with all requirements of the Montreal Protocol.

UNDP has been at the forefront of technical assessments and demonstration projects for potentially cost-effective alternatives to HCFCs that minimize environmental impacts, particularly for those specific applications where such alternatives are not presently available and applicable. Pursuant to ExCom decision 72/40, UNDP has prepared a number of projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling. UNDP received approval and implemented eight demonstration projects to replace HCFCs with low-GWP alternatives in seven countries. The factsheets on these projects are available at the MLF website. In addition, UNDP also implemented demonstration projects for cost-effective alternatives to HFCs that minimize environmental impacts. Pursuant to ExCom decision 78/3(g), UNDP prepared investment/demonstration projects to phase down HFCs and received approval for five HFC technology demonstration investment projects in Bangladesh, China, Dominican Republic, Mexico and Zimbabwe. The technology demonstration project in Bangladesh has been completed and submitted to the Executive Committee, making it the first HFC demonstration project to have been finalized, thereby providing invaluable information to the Executive Committee for the requirements of the upcoming HFC phasedown. In addition, the HFC technology demonstration activities in Dominican Republic and Mexico have also been completed. UNDP is also supporting 19 countries to undertake enabling

activities for ratification and early implementation of the Kigali Amendment and five countries (China, Costa Rica, Jamaica, Lebanon, and Peru) have completed these activities.

While the COVID-19 pandemic has imposed limitations on project implementation recently, Article 5 countries and UNDP have been able to adapt some of our operations in order to ensure the continuation of the implementation of activities under the Multilateral Fund in 2020. Although missions were not allowed starting in March 2020, UNDP has continued to implement the projects through our country offices, staying in communication with NOUs and providing support remotely (through online meetings) on preparation of annual work plans, review of project-related documents, procurement, clarification of policy and technical issues, submission of tranche requests, drafting of project completion reports, and financial disbursement issues.

Furthermore, UNDP continued to organize several virtual and online-based activities to assist countries in meeting their Montreal Protocol obligations. For example, since April 2020, the UNDP Montreal Protocol team has organized more than 30 webinars aimed at strengthening the capacity of NOUs from Latin America and the Caribbean and the Asia Pacific on the implementation of the Montreal Protocol and the Kigali Amendment. The webinars were organized with specific objectives (informative, exchange of experiences and lessons learned, and sharing of good practices/introduction of new technologies) both for English and Spanish speaking countries and covered such topics such as CO2 as an alternative for the RAC sector, COVID-19 in the AC equipment, and Energy Efficiency in the RAC sector (please see Annex 1 for a full list of the webinars offered in 2020). On the occasion of the World Ozone Day 2020, UNDP organized a webinar titled “Phase out of HFCs in the manufacturing of domestic refrigerators at Walton, Bangladesh” devoted to sharing the experience, results and lessons learnt from the implementation of the first MLF-funded investment project to phase out the use of HFCs. Presentations highlighted key achievements and lessons learnt from the project and also the reflections from the Walton on the sustainability of project results.

Finally, recognizing the importance and the need for capacity building for the implementation of the Kigali Amendment, the UNDP Montreal Protocol team drafted an [internal brief](#) aimed at empowering UNDP country office colleagues, among other key stakeholders, to engage with governments on cooling, and to advocate for its inclusion (as appropriate) in their revised NDCs.

II. PROJECT APPROVALS AND DISBURSEMENTS

A. Annual Summary Data (See table 1)

Table 1: “Annual Summary” shows the important summary data on the number of project approvals, corresponding budgets, ODP, and disbursement figures. The table highlights that, cumulatively, as of 31 December 2020, UNDP had a total of 2,642 approved projects under the Multilateral Fund, of which 98 had been canceled or transferred. Of the 2,544 remaining projects, 2,388, or 94% have been completed. They are set to eliminate 70,189 ODP T/year, of which 68,839 ODP T (98%) have already been eliminated.

As of 31 December 2020, UNDP had received cumulative net project approvals of US\$ 906,536,236 (excluding support costs). Of these, UNDP, as of end-2020, had disbursed US\$ 801,901,579 excluding all obligations. This translates to 92% of approved funding. Furthermore, an additional US\$ 2,876,981 of obligations were outstanding as of end-December 2020, representing orders placed but final payments not yet made.

B. Interest and Adjustments

Interest income earned on MLF resources in 2020 is US\$ 1,040,734. Once the financial statements are submitted to the MLF Treasurer by the agreed deadline of 30 September, the difference between the provisional and final 2020 interest income can be adjusted against UNDP project approvals at the 88th meeting.

C. Summary Data By Type and Chemical [CPG, DEM, INS, INV, PRP, TAS, TRA] (See table 2)

Table 2: Summary Data by Project Type presents an overview of the approvals by the type of project. It demonstrates that of the total amounts approved, 82.2% of the budgets were dedicated to investment projects, 5.8% to technical assistance projects, 6.1% to institutional strengthening and 3.0% to project preparation activities. The remaining 8.5% was dedicated to country programmes and demonstration/training activities.

III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

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

GLO/SEV/82/TAS/346, the Core unit support (2021) programme approved at the 86th meeting of the Executive Committee, that covers the administrative costs of UNDP's Montreal Protocol Unit; and continuation of Core Unit support at a level that allows UNDP to provide the oversight, reporting and assistance needed to sustain the large programmer is critical.

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

IV. PERFORMANCE INDICATORS

A. Results in 2020

Decision 41/93 of the Executive Committee approved the following indicators to allow for the evaluation of performance of implementing agencies, with the weightings indicated in the table below. Annex X of the report of the 84th meeting of the Executive Committee contained UNDP's 2020 targets. One can see from the table below that UNDP fully met 3 out of 9 of its targets and that its score amounts to 83%.

Category of performance indicator	Item	Weight	UNDP's target for 2020	Result achieved in 2020	Score
1. Approval	Number of tranches approved vs. those planned*	10	40	34 → 85%	8.5
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	15	12 → 80%	8.0
3. Implementation	Funds disbursed	15	\$ 22,320,060	\$ 27,665,584 → 100% (see annex 1, 3)	15.0
4. Implementation	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	572.8	530.4 → 92% (see annex 1, 4)	23.1
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	70	34 → 100% (see annex 1, 5)	9.7
6. Administrative	The extent to which projects are financially completed 12 months after project completion	10	70% of those due (out of 79, so target is 55)	50 finrevs	9.1
7. Administrative	Timely submission of project completion reports vs.	5	100% of	100% achieved (3	5.0

Category of performance indicator	Item	Weight	UNDP's target for 2020	Result achieved in 2020	Score
	those agreed		those due (3)	individual PCRs submitted and 5 MYA PCR submitted out of 5 planned	
8. Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On-time	100% achieved (see annex 1, 9)	5.0
TOTAL		100			83

*The target of an agency would be reduced if it could not submit a tranche owing to another cooperating or lead agency, if agreed by that agency.

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

Note on performance indicators on MYA tranches and corresponding ODP phaseout:

As per our 2020 Business Plan, UNDP prepared and submitted the Stage II HPMP for Brazil to the second meeting of 2020. UNDP complied with the 20% requirement and the tranche was approved. However, there was an agreement to reschedule the payment to the next tranche which will come in 2021. In addition, the delays in Belize Stage II are due to the lead agency. As UNDP's tranches were ready in 2020 as we had planned, the performance target should be adjusted accordingly for these two countries.

In addition, on the indicator for the individual projects, HFC PRPs were submitted throughout 2020 but were not approved due to the lack of the guidelines. These have also been removed from our target.

B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,244 investment projects have been completed, with a corresponding elimination of 62,903 ODP T. Of the US\$ 610,541,426 in their approved budgets in the sectors of Foam, Refrigeration, Phase-out Plan, Aerosol, Solvents, Fumigants, Halon, Process Agents, and Sterilants, 99% has already been disbursed. It took an average of 13 months from approval to first disbursement and 34 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was \$9.39 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

C. Cumulative completed non-investment projects (Table 5)

As Table 5 shows, UNDP has completed 617 non-investment projects excluding project preparation assistance. Of the US\$ 110,318,703 in their approved budgets, 99% has been disbursed. It took an average of 13 months from approval to first disbursement and 39 months from approval to completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

D. Cumulative ongoing investment projects (Table 6)

As can be seen in Table 6, UNDP has 69 ongoing investment projects in the sectors of Phase-out Plans, Foam, Aerosol, and Fumigants with corresponding budgets of US\$ 96,726,492. Of this amount, 55% has already been disbursed. It takes an average of 11 months from approval to first disbursement and an average of 38 months from approval to the estimated project completion. The overall cost-effectiveness of the projects to the Fund was \$65.77 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

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

Table 7 shows that UNDP has 69 ongoing non-investment projects excluding project preparation assistance. Of

the US\$ 20,272,848 in approved budgets, 28% has been disbursed. It takes an average of 9 months from approval to first disbursement and 36 months from approval to the estimated project completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

V. STATUS OF AGREEMENTS AND PROJECT PREPARATION BY COUNTRY

A. Agreements To Be Signed/Executed/Finalized

Since UNDP has a standard legal agreement in place in each developing country that covers UNDP activities in that country, no additional legal agreement is required. There were no specific issues related to this in 2019.

B. Project Preparation By Country, Approved Amount And Amount Disbursed (Table 8)

Table 8: Project Preparation by Country, Approved Amount and Amount Disbursed, indicates active project preparation accounts. Of the ongoing 18 PRP projects listed with US\$ 619,643 in associated approvals, 29% has been disbursed.

VI. DESCRIPTION OF KEY ONGOING ACTIVITIES

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

- A. Technology demonstration projects for HCFCs
- B. Technology demonstration projects for HFCs
- C. ODS destruction demonstration projects
- D. Country Highlights

A. Technology demonstration projects for Stage II HCFCs

UNDP has been at the forefront of developing and implementing demonstration projects in various regions and sectors to assess relatively new technological developments for which little or no experience or data exists on technical performance and costs since 1996. The major objectives of such types of demonstrations were to find alternative solutions and cost-saving methods to the Multilateral Fund for the Implementation of the Montreal Protocol in order to carry out HCFC-investment activities in the future years, bearing in mind the impact on the climate. The results of the demonstrations of emerging technologies in various industrial processes under local conditions in the following countries are described in greater details below.

Pursuant to ExCom decision 72/40, UNDP has prepared and received approval for eight projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling for the following seven countries. Please see brief updates on the status of these projects. More information on all the Stage II HCFC demonstration projects approved by the ExCom can be found on the [MLF website](#). The table below provides details on all the UNDP demonstration projects funded by the MLF for HCFC phaseout.

Project Title	Country	Sector/Subsector/Applications	Status
Pilot project to validate methylal as blowing agent in the manufacture of polyurethane foam	Brazil	PU Foam Non-insulation and insulation foam	Completed
Pilot project for validation of methyl formate as a blowing agent in the manufacture of polyurethane foam	Brazil	PU Foam/Flexible, integral skin, rigid insulation foam	Completed

Demonstration project for conversion from HCFC-22 technology to ammonia/CO2 technology in the manufacture of two-stage refrigeration systems for cold storage and freezing applications at Yantai Moon Group Co. Ltd.	China	Industrial and commercial refrigeration (ICR) /Cold storage and freezing applications	Completed
Demonstration project for conversion from HCFC-22 technology to HFC-32 technology in the manufacture of commercial air-source chillers/heat pumps at Tsinghua Tong Fang Artificial Environment Co. Ltd.	China	Industrial and commercial air-conditioning Unitary and multi-connected air-conditioning (AC) and heat pumps	Completed
Demonstration of the application of an ammonia/carbon dioxide refrigeration system in replacement of HCFC-22 for the medium-sized producer and retail store of Premezclas Industriales S.A.	Costa Rica	Industrial and commercial refrigeration	Completed
Assessment of the use in Colombia of the supercritical CO2 technology	Colombia	PU Foam/Spray foam	Completed
Demonstration project to validate the use of hydrofluoro-olefins for discontinuous panels in Article 5 parties through the development of cost-effective formulations	Colombia	Rigid Foam	Completed
Demonstration of low-cost options for the conversion to non-ODS technologies in polyurethane foams at very small users	Egypt	Rigid Foam	Completed
Conversion from HCFC-22/HCFC-142b technology to CO2 with methyl formate co-blowing technology in the manufacture of extruded polystyrene foam at Feininger	China	Extruded polystyrene (XPS) foam	Completed
Validation of use of HFO-1234ze as a blowing agent in the manufacture of extruded polystyrene foam board stock	Turkey	Extruded polystyrene (XPS) foam	Completed
Validation/Demonstration of low-cost options for the use of hydrocarbons as foaming agent in the manufacture of PU foam	Egypt	PU Foam Rigid and integral skin foam	Completed
Pilot project for validation of methyl formate in microcellular polyurethane applications (phase I)	Mexico	Integral skin foam	Completed
Demonstration project for conversion from HCFC-141b-based technology to isoparaffin and siloxane (KC-6) technology for cleaning in the manufacture of medical devices at Zhejiang Kindly Medical Devices Co. Ltd.	China	Solvents	Completed
Demonstration project for ammonia semi-hermetic frequency convertible screw refrigeration compression unit in the industrial and commercial refrigeration industry at Fujian Snowman Co. Ltd.	China	Industrial and Commercial Refrigeration Compressor	Completed
Demonstration project (R290) for HCFC phase-out in the manufacturing of commercial air conditioning equipment in industrials THERMOTAR LTDA.	Colombia	Commercial Air-Conditioning	Completed
Demonstration Project for Fisheries Sector in the Maldives	Maldives	Refrigeration in Fishery Sector	Completed

Punta Cana District Cooling Feasibility Study	Dominican Republic	Air conditioning sector/not-in-kind technology	Completed
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B. HFC investment projects

Pursuant to ExCom decision 78/3(g), UNDP has prepared investment/demonstration projects to phase down HFCs and, so far, has received approval for five HFC technology demonstration projects listed below.

- **Bangladesh:** Conversion from HFC-134a to isobutane as refrigerant in manufacturing household refrigerator and of reciprocating compressor of HFC-134a to energy efficient compressor (isobutane) in Walton Hi-Tech Industries Limited

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

UNDP supported the project implementation, which started in January 2018 and was operationally completed in December 2019, spanning 24 months of implementation, and meeting the original timeframe agreed under the project. The project included a final safety audit on the installation. The conversion has successfully phased-out 197.30 metric tonnes of HFC-134a at Walton, with additional reduction of 33.30 metric tonnes of HFC-134a per annum in the servicing sector as an additional early phase-down commitment from the Government of the Bangladesh. In terms of accumulated direct emissions, following the IPCC Methodology, the conversion from HFC-134a to HC-600a at Walton will avoid the direct emission of 7,978,873 tons of CO₂-equivalent of HFC-134a from 2020 to 2050.

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

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

Capital conversion was completed by December 2020 and product optimization activities continued in the first half of 2021. According to internal testing, 2% reduction of the energy consumption has been achieved. The project team of Hisense optimized the product by adding Butane as an additional blowing foaming agent which led to the reduction of foaming cost in a certain level while maintaining the performance of products. More details will be presented in the final report that is currently under preparation.

- **Dominican Republic:** Conversion of a commercial refrigerator manufacturing line at Fábrica de Refrigeradores Comerciales, SRL (FARCO) from HFC-134a and R-404A to propane (R-290) as refrigerant

The reconversion project of FARCO in the Dominican Republic was completed in 2020 and the company now has the capacity to produce all of its self-contained commercial refrigeration units with R-290. This is an important milestone not only for the Dominican Republic but also for many of the islands in the Caribbean where FARCO sells their units. The total cost of the project was USD\$ 662,986 (USD\$ 129,825 from the Multilateral Fund, USD\$ 50,000 from the government of Canada and USD\$ 483,161 from FARCO). With the conversion of FARCO, 3.95 mt of HFC-134a and R-404A will be phased out. The project was accompanied with training of technicians in the safe handling of flammable refrigerants to assure that the new products can operate safely. This is an important project for the implementation of the Kigali Amendment in the country.

- **Mexico:** Conversion of domestic refrigeration manufacturing facility from HFC-134a to isobutane as a refrigerant and conversion of compressors manufacturing facility from HFC-134a-based to isobutane-based at Mabe Mexico

Reconversion process completed at MABE Mexico. Mabe has six (6) manufacturing line producing domestic refrigerators using HFC refrigerant, R-134a. All lines have been fully reconverted and can use R600a safely. Safety audit was completed at both the compressor and refrigerator manufacturing plant . The project was approved at the 81st meeting of the ExCom, held in June 2018, for a total agreed amount of USD 2,700,000 plus support costs. The implementation started at the end of 2018 and was operationally completed in June 2020. Additional co-finance of 500,000 USD was provided by the Government of Canada and 250,000 USD by K-CEP to support the improvement in Energy Efficiency. The project phased out a total of approximately 198 MT of HFC 134a, which is equivalent to 283,140 MT of CO₂-eq. R600a was chosen as the environmentally friendly alternative that was introduced at MABE and it only contributes to 99 MT of CO₂-eq per year. MABE estimated to total cost involved with the reconversion to be more than 27 m USD in ICCs and IOCs and the MLF contribution is therefore estimated at around 15 % of the total cost.

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

One mission took place in early 2020 after which a technology introduction plan was designed and confirmed with the company. Equipment specifications and draft contractual arrangements were formulated, with a proposal to initiate works by Capri using earlier committed cofinancing. The company has been reviewing the proposal jointly with NOU and UNDP, in the context in which the country is. Capri informed it is facing challenges currently to confirm cofinance due to the economic conditions affected by COVID-19. An extension will be required to undertake the activities for realization of co-financing commitments from Capri and undertaking the actual conversion. Capri company was informed of the additional bilateral allocation of the funding to support the future technological transition at its premises. Specific procedures were put into effect. While COVID imposed restrictions have temporarily limited production, the situation gradually stabilizes. UNDP supports the company in realizing the earlier committed co-finance resources, including from the company's sources and national development funds. Once the co-finance support is firmly confirmed as in place, further steps on the conversion of the company will be implemented according to the approved plan. Additional reporting will follow.

C. **HFC Enabling Activity projects**

As highlighted earlier in the report, UNDP is providing support to 19 countries to undertake their HFC enabling activities for ratifying and early implementation of the Kigali Amendment. For more details on

the status of these activities, please see the table below.

Country	MLF Number	Project Title	Latest Status
Bangladesh	BGD/SEV/81/TAS/52	Enabling activities for HFC phase-down	Ratified Kigali on 8 June 2020. RAC servicing sector needs assessment and Alternatives assessment research work completed. Draft National Strategy prepared. Licensing system established
Belize	BZE/SEV/85/TAS/37	Enabling activities for HFC phase-down	Country has not ratified Kigali yet. International and local consultants hired. Workplan agreed and consultations with stakeholders started. Consumption survey is in progress and first draft of ratification roadmap finalized.
Chile	CHI/SEV/80/TAS/03+	Enabling activities for HFC phase-down	Ratified Kigali on 19 Sept 2017. Virtual meeting conducted with customs authorities to increase awareness on the Kigali Amendment and country's commitments by the international expert supporting the project. The country has a license system in place, where importers must register and inform the customs authority on each import (substance, quantity, etc.). A quota distribution scheme has not been established.
China	CPR/SEV/80/TAS/04+	Enabling activities for HFC phase-down	<p>The government of China announced the acceptance of the Kigali Amendment in April and ratified the amendment in June 2021. The amended Regulation on the Administration of Ozone-depleting Substances (draft) has been approved in May in principle at the ministerial executive meeting of MEE. Substantial progress has been made for the preparation of HS code with codes designated for 18 HFCs and 4 blends. HFC data collection is being conducted and methodology for data collection is being improved. Initial research on national strategy has been completed. The report is to be finalized.</p> <p>The HFCs data collection and reporting system has been established and methodology for data collection is being improved. Initial research on national strategy has been completed.</p>
Colombia	COL/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 25 Feb 2021. An evaluation was conducted to the terms of reference for the environmental licenses for HFC imports and export. Currently, the country has in place a mandatory environmental license to all importers of HFC.
Costa Rica	COS/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 23 May 2018. The final report being prepared by the NOU in Costa Rica.
Cuba	CUB/SEV/81/TAS/57	Enabling activities for HFC phase-down	Ratified Kigali on 20 June 2019. Legal framework assessment to foster control to HFC was completed and under discussion with local authorities. Awareness raising material was produced. The country has a system in place to

			registry importers and imported quantities of HFC.
El Salvador	ELS/SEV/81/TAS/37	Enabling activities for HFC phase-down	Country has not officially ratified Kigali yet, although it has been approved locally by the National Assembly (Decree No. 859 from April 26, 2021). Awareness raising material produced. Currently, the country has not a license system for the control of HFC; as part of the enabling activity project, an assessment of the needs and gaps of the current legal framework, including license system, was conducted.
Fiji	FIJ/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 16 June 2020. Stakeholders Validation Workshop was held in February 2021. EA report is under preparation. HFC licensing system established.
Haiti	HAI/SEV/84/TAS/23	Enabling activities for HFC phase-down	Country has not ratified Kigali yet. Results from the survey in process of being analyzed. Stakeholder consultations for Policy Components related to the ratification of the Kigali Amendment is in process. Awareness-raising activities scheduled to take place in September 2021.
Iran	IRA/SEV/82/TAS/232	Enabling activities for HFC phase-down	Country has not ratified Kigali yet. National strategy surveyed continued but limited due to COVID-19 spread worsening in the country. Licensing System is under development.
Jamaica	JAM/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Country has not ratified Kigali yet. Final report is being prepared. This activity has been financially completed.
Lebanon	LEB/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Kigali Amendment on 5 Feb 2020. The draft decree for the amendment of the ODS licensing system to include the controlled substances (HFCs) is completed and submitted for Cabinet approval for formal establishment. Procurement of Equipment and Tools for the Refrigeration and Air Conditioning Center at Al Amal.
Moldova	MOL/SEV/85/TAS/41	Enabling activities for HFC phase-down	Country has not ratified Kigali yet. The project documentation has been sent for clearance to the government and approved for commencement of activities. Project documentation has been signed between UNDP and the government (MEPA). Initial stakeholder meeting has taken place in April 2021. Currently, a project team is being constituted to progress more with the implementation phase. A related project's extension request has been prepared and submitted to the Secretariat and Executive Committee for approval.
Panama	PAN/SEV/81/TAS/46	Enabling activities for HFC phase-down	Ratified Kigali on 28 Sept 2018. Awareness material prepared and produced. Assessment of training institutions was completed. National Roadmap to phase down HFC is being prepared. The country has a license system in place, where

			importers must register and request clearance by the NOU for each import. A quota distribution scheme has not been established.
Paraguay	PAR/SEV/81/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 1 Nov 2018. Virtual meetings conducted with stakeholders to increase knowledge of the Kigali Amendment. COVID-19 situation in the country has prevented in-person meetings and limited travel. The country has a license system in place, where importers must request clearance by the NOU through an on-line system. A quota distribution scheme has not been established.
Peru	PER/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 7 Aug 2019. Final report prepared and this activity has been financially completed. Licensing system fully adapted to include HFCs through Ministerial decree.
Trinidad and Tobago	TRI/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 17 Nov 2017. Final report is being prepared. This activity has been financially completed. Licensing system fully adapted to include HFCs and their sectors.
Uruguay	URU/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Ratified Kigali on 12 Sept 2018. Virtual meetings conducted with stakeholders to increase knowledge of the Kigali Amendment. COVID-19 situation in the country has prevented in-person meetings and limited travel. The country has a license system in place, where importers must request clearance by the NOU through an on-line system. A quota distribution scheme has not been established.

D. ODS destruction demonstration projects

The UNDP Montreal Protocol & Chemicals Unit has been supporting countries to take steps to manage their stocks of ODS, which cannot be reused in a sound way. The potential for recovery, proper management and final disposal of such unwanted ODS and ODS containing appliances/equipment banked, have been proven as being possible in developed countries if the proper legislation and price incentives, as well as business opportunities, exist. However, the applicability of banks management schemes in developed countries needs to also be demonstrated in Article 5 countries. The Executive Committee has approved preparation activities for Brazil, Colombia, Cuba, Georgia, Ghana and India, to address ODS waste management leading to ODS destruction. Five such projects (Brazil, Colombia, Cuba, Georgia, and Ghana) have been submitted and approved by the Executive Committee in prior years.

The project in **Brazil** is advancing in both directions: strengthening of the collection center network (reclaim centers) and testing of the destruction facility. Cylinders, equipment and tools were delivered to reclaim centers and the procurement process of lab equipment was prepared and launched. The laboratory equipment was delivered at Reclaim Centers in December 2018, including the Gas Chromatography System (GC). The GC installation and training has already been started and it is expected to be completed by 2020. The staff from four Reclaim Centers were trained on AHRI 700 tests and lab routines. The company for destruction (Essencis) was identified and the contract has been signed. Essencis' incinerator has already completed the installation of equipment according to requirements. Laboratory equipment was installed in 3 reclaim centers. GC was also installed in 3 reclaim centers. The same centers trained by recognized experts. Essencis performed the process adjustments in September and the actual test burns

were conducted in October. Test burn results have come out positively and the project can advance with the subsequent phases of the implementation. Some quantities of CFCs have been disposed of.

The project in **Colombia** was completed in the beginning of 2018. A review of legal framework for the management of ODS waste was conducted and comments to proposed waste management regulations were made. Support was provided for the implementation of "Red Verde" for the collection of old refrigerators. One destruction test was conducted. The final report has been completed and was submitted to ExCom 81. It is important to note that additional tests would be needed for HFCs, as this will be a challenge for the future under the Kigali Amendment. The recollection scheme and dismantling of old refrigerators at a reasonable cost an important factor for the sustainability of the operation. The future of the recollection and disposal scheme is being financed via an Extended Producer Responsibility programme. "Red Verde" continues the collection of ODS-containing refrigerators in 6 cities nation-wide.

D. Country Highlights (January – December 2020)

UNDP has been at the forefront of innovative solutions for countries to address their Montreal Protocol compliance obligations. UNDP's work has resulted in market transformation for the introduction of environment-friendly products and corresponding policy and technological advances and has brought to countries access to emerging technologies, reduced energy bills for consumers, fostered innovation, and created a more equitable market for greener products, allowing indigenous manufacturers to maintain competitiveness.

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

Brazil

The Government of Brazil banned the use of HCFC 141b as blowing agent in the foam sector by the end of 2019 and effective as of January 1st, 2020, no additional imports of HCFC 141b for the foam sector has taken place. The government and UNDP jointly with the implementation unit of the Foam Sector plan have been working hard to make a sustainable transformation of the foam sector towards low GWP alternatives. There have been challenges, especially with the supply of HFOs in large quantities at commercially realistic costs, combined with the increased availability in the national market of HFC 365/227 at highly competitive prices and which are strongly promoted by an international chemical producer. These are all factors that have delayed the planned transformation of the sector. The pandemic has also made the transformation more difficult given the effect it has had on the economy in Brazil as well as on the ability of companies to operate. The team has provided strong and continuous technical support to all the System Houses and end-users in the foam market in Brazil. Furthermore, a new marketing strategy is also being implemented to motivate end-users to adhere to the Brazilian HPMP.

China

China completed implementation of the Solvent and ICR Sector Plans of Stage I of the HPMP. Starting in 2011, the sector plans were completed in 2017 and 2019 respectively. The Solvent and ICR Sector Plans for the Stage II of the HPMP were approved in 2016 and are under active implementation and progressing well despite late approval of the third (2018) tranche.

Under the Stage I Solvent Sector Plan, 152 production lines in 9 enterprises in the medical devices, metal and electronic industries were converted to three main zero-ODP, low-GWP alternative solvents, namely KC-6, hydrocarbon and water-based solvents. Together with two production lines converted under a demonstration project with separate MLF funding, a total of 154 production lines were converted, phased

out 638.112 MT of HCFC-141b, contributing to a direct GHG emission reduction of 442,211 tons of CO₂ equivalent.

With the completion of the Stage I of the ICR Sector Plan, 34 manufacturing lines in 18 enterprises were converted to zero-DOP, low-GWP alternative technologies. Including three demonstration projects (Yantai Moon, Qinghua Tongfang and Fujian Snowman) that were approved with separate MLF funding and phase-out by non-A5 owned enterprises with their own resources, a total of 8,721.47 MT of HCFC-22 were phased out, exceeding the Stage I of the HPMP target of 8.450 MT, contributing to China's achieving consumption freeze in 2013 and the 10% reduction in 2015. Stage II ICR Sector Plan was approved in 2016 with annual tranche for 2016-2021. While implementation has been progressing well despite of pending approval of the third (2018) tranche for more than one year. By ExCom decision 84/69, funding for the Stage II ICR Sector Plan would be extended to 2026 with the revised action plan to be submitted to the 86th ExCom meeting for review and approval.

The ICR sector in China has a wide range of products used in various applications. Under the Stage I and Stage II ICR Sector Plan, zero ODP and low GWP alternatives have been emphasized in the alternative technology selection for conversion projects, alternatives selected includes HFC-32, CO₂/NH₃, R290, HFOs and its blends, and a small part of R134a and R410 in the stage-I HPMP. Market uptake of the new technologies have progressed over time in ICR sector particularly well in the refrigeration applications using natural refrigerants but was relatively slow in the air conditioning and heat pump sub-sector using R32 technology due to various market obstacles. Low-GWP alternatives including CO₂, NH₃, HFOs and its blend and HFC-32 will continue to be vigorously promoted during the implementation of Stage II ICR Sector Plan. R&D will be conducted and testing and assessment of potential low-GWP alternative technologies will be carried out to support the sector phase-out, and the best climate friendly alternative technology will be selected for all phase-out activities.

In response to ExCom decisions, UNDP as the lead implementing agency for the HPMP, submitted, on behalf of the Government of China, a report "Review of China's Current Monitoring, Reporting, Verification and Enforcement Systems in accordance with HCFC Consumption and Production Phase-out Management Plan Agreements," and the progress report regarding actions taken with a view to strengthening of legislation on ODS and implementation.

Colombia

The National Ozone Unit in Colombia worked closely with the flower export sector to test the use of R-290 in cold rooms. The Colombian government worked together with the flower sector to identify a low environmental impact technology for the cooling systems of the flower post-harvest process. A demonstration was carried out on the use of HC-290 hydrocarbon as a refrigerant in a cooling system for a flower dispatch cold room. This demonstration allowed the establishment of safety measures for the use of the system, energy savings and the steps required to achieve a complete elimination of the refrigerant with ozone depletion potential in this sub-sector. This demonstration has provided useful experience for the future work under the Kigali Amendment.

India

India has successfully banned the imports and use of HCFC-141b as a blowing agent (in form of pure substance or mixed in polyols/fully formulated systems), on 31 December 2019, in the manufacturing of polyurethane (PU) foams. India has consciously chosen a path for environment friendly and energy efficient technologies while phasing out Ozone Depleting Substances (ODS), adopting low-GWP alternatives such as pentanes (hydrocarbons), HFOs and Methyl Formate (Ecomate®), being one among the few Article 5 countries globally to establish early bans on the use of this chemical.

The Ministry of Environment, Forest and Climate Change (MoEFCC) brought out a notification in the Gazette of India through which the issuance of import license for HCFC-141b is prohibited from 1st January 2020 under Ozone Depleting Substances (Regulation and Control) Amendment Rules, 2019 issued under the Environment (Protection) Act, 1986, and the MOEF&CC continued to coordinate the enforcement efforts to sustain this ban since then. It should be noted that the country has been severely affected by COVID-19 pandemic which resulted in great adverse impacts on the progress of the project implementation during 2020 and 2021 with temporary closure of industries to limit the spread of COVID-19. The Ozone Cell of the MoEFCC continued to deploy its best efforts to mitigate the impacts, such as, an early Technical Assistance mission to India that took place in the 1st Quarter of 2020 followed by close assistance through digital/distance means in a bid to continue delivering the highest standards of technical support to local companies, as well as limited but continued in site verification of completion of conversions.

Indonesia

Indonesia, upon the completion of PU Foam and RAC Servicing Sector Plans of the Stage I of its HPMP in 2019, has phased-out the consumption of HCFC-22 in their domestic and commercial refrigeration and air conditioning manufacturing industries by banning the new production from 2020 onwards, and the Country has been successfully enforcing this sector phase-out with a strong and coordinated multi-stakeholders approach under the oversight of the Ministry of Environment (KLHK).

The industries who received the support from the Stage I of the HPMP have completed their conversion to HFC-32 in the Room and Commercial Air Conditioning Sectors, and to HC-290 in commercial refrigeration sector, while these industries had started to market their products in 2020. Indonesia has faced great challenges as the Article 5 Party in forefront of the adoption of the HFC-32 in the Air Conditioning Sector, with the approval of its Stage I of the HPMP in 2012, when this alternative technology was still considered “novelty”, and required great efforts from the Government and other public and private sector stakeholders to establish the previously nonexistent supply chain of parts and components for HFC-32 technology and great engagement with several countries that are part of the global supply chain of HFC-32 based products to exchange experiences and internalize lessons learned.

Despite the negative impacts of COVID-19 on the national economy, the Ozone Unit has been able to deploy mitigation mechanisms to protect the Government Staff – as well as the stakeholders – which allowed operational and financial closure of the Stage I of the HPMP to be completed by December 2020, while the Final Progress Report was delivered on June 2021.

Lebanon

The country had to face a triple crisis in 2020: institutional (with continuing social unrest and demonstrations); public health related (waves of COVID-19 pandemic); and environmental with the massive explosion in the harbor of Beirut in August 2020, and its aftermath in terms of human and environmental impact. This was also compounded by the economic crisis. The National Ozone Office of Lebanon was directly impacted, with effects of the industrial accident of August immediate on the office of the Ministry of Environment, and physical damages to the office area of the NOO. In spite of this, demonstrating remarkable resilience, the NOO and the HPMP team progressed on all components of its Stage 2 HPMP implementation, ensuring that the technical solutions were found in the area of manufacturing phase-out and continuing to equip new training centres for the servicing sector. This was facilitated by the flexibility granted within the HPMP between sectors by the MFS and the ExCom, which enabled to ensure the timely identification of the technology solutions for the manufacturing sector. With this progress, the 3rd tranche of Stage 2 was presented and approved by the ExCom at the 86th ExCom

and approved end of 2020, one year ahead of its planned approval, along with an accelerated schedule for overall completion of Stage 2. In addition, Lebanon is preparing in parallel to embark on concrete work related to the HFC phase-down (with the PRP for the Kigali HFC phase-down plan) and continuing to pursue energy efficiency promotion in the RAC sector with the support of the Kigali Cooling Energy efficiency Programme.

Gender mainstreaming promoted: All countries in Africa and West Asia for which UNDP is the lead agency have taken further steps to fully include gender mainstreaming in their programming. The 86th ExCom was the occasion of 3 IS renewal submissions (Ghana, Lebanon, Nigeria) and for each of those, a specific component was added for the next phase focused on gender mainstreaming as per the latest guidance of the ExCom. This will ensure that measurable concrete indicators are used to monitor the progress in this regard in institutional strengthening activities. This included, in particular, targeted awareness raising and training towards women in the RAC sector. UNDP will keep promoting the streamlining of practical tools and ensure South-South cooperation between Article 5 Countries on this gender mainstreaming dimension. It was also noticeable that in the servicing sector of Stage 2 HPMP in Nigeria, a specific gender analysis was conducted as part of the inception activities in the sector.

Virtual training sessions in Latin America and the Caribbean

The pandemic brought an abrupt halt to the way that National Ozone Units are normally operating around the world. UNDP decided to set up a series of virtual trainings and capacity building webinars that ranged from technological to policy issues. More than 30 webinars were organized in 2020 in English and Spanish with internationally recognized experts (please see Annex 1 for a list of the webinars that were organized). There was a special focus on the new requirements that A5 countries will face under the Kigali Amendment. Webinars provided good insight into the new low GWP technologies that will have to be adopted in coming years by A5 countries to make a transition towards natural refrigerants in the RAC sector. This was accompanied by technical sessions on how the servicing sector must be upgraded to be able to safely handle all the requirements of this transition with the increased challenges from the flammability, toxicity, and high pressure of some alternative technologies.

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

A. Meetings Attended by UNDP in 2020

From	To	Location	Description
14-Jan-20	17-Jan-20	Peru	Policy Support and Programme Oversight
15-Jan-20	17-Jan-20	Cambodia	Policy Support and Programme Oversight
16-Feb-20	21-Feb-20	Malaysia	Policy Support and Programme Oversight
17-Feb-20	21-Feb-20	Mexico	Policy Support and Programme Oversight
18-Feb-20	22-Feb-20	Dominican Republic	Policy Support and Programme Oversight
23-Feb-20	28-Feb-20	India	Policy Support and Programme Oversight
25-Feb-20	27-Feb-20	Canada	IACM
8-Mar-20	13-Mar-20	Indonesia	Policy Support and Programme Oversight

B. Other Issues

As highlighted earlier in the report, the COVID-19 pandemic has imposed limitations on project implementation in 2020. For example, conducting verifications of HPMP implementation was affected due to the inability of the consultants to travel. UNDP adapted to this situation by arranging for remote

verification processes since field visits during this time was not possible. While delays in project implementation during the pandemic were difficult to avoid, UNDP, with its network of country offices, remains fully committed to adapt its operations to ensure that countries receive the assistance needed to be in compliance with all requirements of the Montreal Protocol.

Annex 1: Virtual trainings organized in 2020

Virtual trainings 2020										
No. webinars	No. sessions/virtual training	Month	Year	Region or Country	Language	Title	Content	Time	Attendees/virtual training	% participation of women
UNDP Montreal Protocol Unit										
1	1	May	2020	The Caribbean	English	National Cooling Plan	National Cooling Plans could contribute to a transition towards climate friendly refrigerants, linkages and integration of regulation and awareness policies, as well as financial support for their implementation	60 min	43	37
2	1			Latin America	Spanish			60 min	25	48
3	3	April	2020	The Caribbean	English	CO2 as an alternative for the RAC sector	CO2 transcritical is an alternative can reduce the use of the use of HCFC/HFC in refrigeration sector	180 min	No data available	No data available
4	3	May		Latin America	Spanish			180 min	156	40
5	3	April	2020	The Caribbean	English	Policies to implement the Kigali Amendment	This virtual training was designed to present the new challenges related to the control and phase-out of HFCs in the region	180 min	Data not available	Data not available
6	3	May		Latin America	Spanish			180 min	106	62
7	1	April19	2020	The Caribbean	English	COVID-19 in the AC equipment	The spread of Coronavirus that can occur in facilities that require RAC servicing is a growing concern for all personnel / technicians	60 min	No data available	No data available
8	2			Latin America	Spanish			120 min	No data available	No data available
9	3	July	2020	The Caribbean	English	Energy Efficiency in the RAC sector	Energy efficiency is a new element that needs to be considered within the actions for the successful implementation of the Kigali amendment.	180 min	46	46
10	3			Latin America	Spanish			180 min	97	55
11	2	August	2020	The Caribbean	English	Ammonia as an alternative for the industrial sector	The industry has developed different types of cooling systems, equipment and specialized facilities for specific types of products. The market offers	120 min	104	31
12	2			Latin America	Spanish			120 min	106	21

Virtual trainings 2020										
No. webinars	No. sessions/virtual training	Month	Year	Region or Country	Language	Title	Content	Time	Attendees/virtual training	% participation of women
							different refrigerant alternatives that can be used according to the needs of each user. One of the alternatives for this sector is ammonia as a refrigerant gas			
13	2	October	2020	The Caribbean	English	District Cooling	District Cooling refers to cooling that is commercially supplied through a cold/heat carrier medium against payment on the basis of a contract	120 min	63	31
14	2			Latin America	Spanish			120 min	144	30
15	2	November	2020	The Caribbean	English	ODS disposal-Colombia	This demonstration project was approved with the objective of developing technology and infrastructure for the proper final disposal of ODS that cannot be recycled or used in different cooling systems in Colombia	120 min	7	57
16				Latin America	Spanish				71	48
17	2	July	2020	Latin America	Spanish	Industrial reconversion of the Thermotar company-Colombia	This demonstration project was implemented in the Thermotar company in Colombia to replace the use of HCFC-22 with a natural refrigerant R-290 for the manufacture of AC equipment	150 min	106	32
18	2	August	2020	Latin America	Spanish	Ammonia as an alternative for the RAC sector	The industry has developed different types of cooling systems, equipment and specialized facilities for specific types of products. The market offers different refrigerant alternatives that can be used according to the needs of each user. One of the alternatives for this sector is ammonia as a refrigerant gas.	120 min	106	21

Virtual trainings 2020										
No. webinars	No. sessions/virtual training	Month	Year	Region or Country	Language	Title	Content	Time	Attendees/virtual training	% participation of women
19	1	August	2020	Latin America	Spanish	Challenges to adopt Hydrocarbons as an alternative for the RAC sector	To know and understand the challenges posed by the use of hydrocarbons as refrigerant gases in the RAC sector	60 min	44	41
20	1	September	2020	Latin America	Spanish	Recovering, Recycling and Reclamation refrigerant gases	To show the process of Recovering, Recycling and Reclamation (RRR) of HCFC/HFC refrigerants	60 min	39	36
21	1	September	2020	Latin America	Spanish	Women in the RAC sector-Peru	To share the experience in Peru to train to technician women in the RAC sector	60 min	41	63
22	1	November	2020	Latin America	Spanish	Polyurethane foams	This session addressed the current situation and perspectives on the use of HFCs for the polyurethane foam sector in LA.	60 min	35	60
23	2	June	2020	The Caribbean	English	Imports and Exports of ODS	To identify critical points for the control of HCFCs and HFCs as well as providing you some practical tools to support you on the process	120 min	129	44
24	2	June	2020	The Caribbean	English	Hydrocarbons as an alternative for the RAC sector	This virtual training addressed important points on safe handling, as well as the tools and equipment required for the use of hydrocarbons	120 min	44	30
25	1	September	2020	Asia Pacific	English	Phase out of HFCs in the manufacturing of domestic refrigerators at Walton, Bangladesh	This webinar will share the experience, results and lessons learnt from the implementation of the first HFC investment project approved by the MLF	120 min	N/A	N/A
26	1	October	2020	The Caribbean	English	Data management	To show a tool for data management on imports and of Montreal Protocol controlled	60 min	14	44

Virtual trainings 2020										
No. webinars	No. sessions/virtual training	Month	Year	Region or Country	Language	Title	Content	Time	Attendees/virtual training	% participation of women
							substances, including their equivalent in CO2			
27	10	October	2020	Costa Rica	Spanish	International Ozone Day Celebration	The National Ozone Unit-Costa Rica launched different virtual sessions to celebrate the International Ozone Day (CO2, ammonia, hydrocarbons and among others)	900 min	No data available	No data available
28	3	September	2020	Peru	Spanish	International Ozone Day Celebration	The National Ozone Unit-Peru launched different virtual sessions to celebrate the International Ozone Day (CO2, ammonia and hydrocarbons)	270 min	No data available	No data available
29	2	November				Alternative refrigerants in the RAC sector	The National Ozone Unit-Peru launched different technical virtual sessions to technicians in the RAC sector (energy efficiency and ammonia)	150 min	No data available	No data available
30	5	September	2020	Uruguay	Spanish	International Ozone Day Celebration	The National Ozone Unit-Uruguay launched different virtual sessions to celebrate the International Ozone Day (ammonia)	450 min		
31	5	November				Ammonia as an alternative for the RAC sector	The National Ozone Unit-Uruguay launched a technical virtual training to technicians in the RAC sector	450 min		
32	1	October	2020	Cuba	Spanish	CO2 as an alternative for the RAC sector	CO2 transcritical is an alternative can reduce the use of the use of HCFC/HFC in refrigeration sector. This session was requested by Ozone Office for training of its staff	60 min	4	25

Virtual trainings 2020										
No. webinars	No. sessions/virtual training	Month	Year	Region or Country	Language	Title	Content	Time	Attendees/virtual training	% participation of women
33	3	November	2020	Suriname	English	Alternative refrigerants in the RAC sector	The National Ozone Unit-Suriname launched a technical virtual training to technicians in the RAC sector (energy efficiency, ammonia and implementation of the Montreal Protocol and its Kigali Amendment)	180 min	28	30
34	1	July	2020	Maldives	English	Webinar for Maldives Refrigeration and Air conditioning technicians	Safe Installation, Service and Repair of R-290 based-air conditioners	1.5 hours	22	3 women from NOU and UNDP
35	1	July	2020	Fiji and Timor Leste	English	Sharing of experiences for replacement incentive programme by Sri Lanka and Cambodia	Designing replacement incentive programme, promotion of scheme, selection criteria, monitoring, and sharing of experiences between countries	1 hour	NOU team of Fiji and Timor Leste (12 participants), Sri Lanka NOO and Cambodia NOO	3 (25%)
36	1	August	2020	Maldives and Fiji	English	Webinar on retrofitting of fisheries vessels	Retrofitting of fishery vessels and guidelines for retrofitting, alternatives for fishery vessels and experience sharing between Fiji and Maldives	1.5 hours	23	5 women from NOU of Fiji, Maldives and UNDP
37	1	December	2020	Timor Leste	English	Good Servicing Practices on non-ODS and low-GWP technology	Online presentation and demonstration by International Consultant, followed by Q&A, and sharing session from national master trainers.	One day	26 RAC technicians from RAC servicing companies, beneficiary supermarkets, technical institutions, and TL Army Institution.	2 women in NOU team

ANNEX 2: Tables related to the Performance Indicators

1. Performance Indicator 1: MYAs

Multi-year agreements submitted in 2020 are listed in the following table.

MLF Number
BRU/PHA/85/INV/26
CUB/PHA/85/TAS/63
ELS/PHA/86/INV/39
FIJ/PHA/86/INV/35
GEO/PHA/85/INV/42
JAM/PHA/85/INV/41
NEP/PHA/86/INV/40
SRL/PHA/85/INV/54
TRI/PHA/86/INV/37
ARM/PHA/86/INV/24
BRU/PHA/86/INV/26
CHI/PHA/85/INV/201
CPR/PHA/85/INV/598
CPR/PHA/85/INV/600
CUB/PHA/86/INV/63
DOM/PHA/86/INV/68
IND/PHA/86/INV/479
IRA/PHA/86/INV/243
JAM/PHA/86/INV/42
KYR/PHA/85/INV/42
LAO/PHA/86/INV/36
LEB/PHA/86/INV/94
MOL/PHA/86/INV/41
NEP/PHA/86/INV/41
PAN/PHA/85/TAS/51
PER/PHA/85/INV/57
SRL/PHA/86/INV/55
SWA/PHA/86/INV/28
TRI/PHA/86/INV/38
URU/PHA/85/INV/75
ZIM/PHA/86/INV/60
DOM/PHA/86/INV/69
PAN/PHA/86/INV/51
URU/PHA/86/INV/75

2. Performance Indicator 2: Individual Projects

The number of individual projects approved in 2020 are listed in the following table.

MLF Number
BRA/SEV/86/INS/324
BZE/SEV/85/TAS/37
COL/PHA/85/PRP/109
GEO/SEV/85/INS/43
GHA/SEV/86/INS/41
GLO/SEV/86/TAS/354
IRA/SEV/86/INS/249
LEB/SEV/86/INS/96
MOL/PHA/86/TAS/42
MOL/SEV/85/TAS/41
NIR/SEV/86/INS/154
SRL/SEV/86/INS/57

3. Performance Indicator 3: Funds disbursed

2020 Disbursements	\$ 27,665,584
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4. Performance Indicator 4: 2020 ODS phase-out

The associated ODP for 34 tranches approved in 2020 is 530.4.

5. Performance Indicator 5: Projects completed in 2020.

The following 34 projects were completed in 2020.

Correct Code	Date Completed (Actual)
ARM/PHA/77/INV/18	Dec-20
ARM/PHA/84/TAS/23	Dec-20
BRU/PHA/82/INV/23	Dec-20
COL/PHA/81/TAS/104	Jul-20
COS/PHA/81/PRP/58	Mar-20
COS/PHA/83/INV/59	Dec-20
CPR/PHA/77/INV/580	Dec-20
CPR/PHA/80/INV/586	Dec-20
CUB/PHA/68/INV/50	Nov-20
CUB/PHA/82/INV/59	Dec-20
CUB/PHA/82/TAS/60	Dec-20
FIJ/PHA/82/TAS/35	Dec-20
GHA/PHA/81/INV/46	Dec-20

GHA/PHA/81/PRP/44	Dec-20
GHA/SEV/82/INS/47	Dec-20
GLO/SEV/84/TAS/349	Dec-20
IDS/PHA/71/TAS/200	Jun-20
IDS/PHA/76/INV/208	Jun-20
IND/PHA/77/INV/468	Dec-20
IND/PHA/77/INV/469	Dec-20
IND/PHA/82/INV/473	Dec-20
IRA/PHA/84/INV/235	Dec-20
IRA/PHA/84/INV/238	Dec-20
KYR/PHA/81/INV/40	Dec-20
LEB/PHA/81/INV/91	Dec-20
MEX/REF/81/INV/187	Nov-20
NIR/SEV/82/INS/152	Nov-20
PER/PHA/80/INV/55	Dec-20
SRL/PHA/82/PRP/52	Dec-20
SRL/PHA/82/TAS/51	Dec-20
SRL/SEV/82/INS/53	Dec-20
TRI/PHA/81/INV/35	Dec-20
URU/PHA/77/INV/67	Dec-20
ZIM/PHA/83/PRP/58	Dec-20

7. Performance Indicator 7: Final Revisions

Last year's database 79 projects, of which 55 should have been financially completed in 2020. This year's database counts 50 projects for which a final revision was issued in 2020.

8. Performance Indicator 8: PCRs

100% achieved (3 individual and 5 individual PCRs were due and submitted in 2020).

9. Performance Indicator 9

Progress Report produced on 9 August 2021 as required.