



**United Nations
Environment
Programme**

Distr.
GENERAL



UNEP/OzL.Pro/ExCom/93/16
20 November 2023

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-third Meeting
Montreal, 15-19 December 2023
Item 7(a)(iii) of the provisional agenda¹

PROGRESS REPORT OF UNDP AS AT 31 DECEMBER 2022

Introduction

1. This document presents the progress report of UNDP as at 31 December 2022.²
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 2022, 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 CO₂-eq tonnes.³
4. This document consists of the following sections:
 - I. Projects approved for all controlled substances under the regular contributions to the Multilateral Fund. It presents a summary of progress in implementation of projects for 2022 and cumulative since 1991 addressing all controlled substances under the Montreal Protocol, including Annex F substances (HFCs). It also contains a review on the status of

¹ UNEP/OzL.Pro/ExCom/93/1

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 CO₂-eq tonnes is included in the progress reports submitted to the 93rd meeting.

implementation of each ongoing⁴ project at the country level. 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.

II. Projects approved for Annex F substances (HFCs) under the additional voluntary contributions for fast-start support for HFC phase-down.⁵

III. Recommendation.

I. Projects approved for all controlled substances under the regular contributions to the Multilateral Fund

I.1 Progress in implementation of projects for 2022 and cumulative since 1991

5. As of 31 December 2022, the Executive Committee had approved US \$1.02 billion in projects for UNDP, consisting of US \$895.08 million for the implementation of investment and non-investment projects and US \$124.21 million for agency support costs, as shown in table 1.

Table 1. Approved funding by sector for UNDP as at 31 December 2022

Sector	Funding (US \$)
Aerosol	26,054,838
Destruction	3,606,279
Foam	173,220,709
Halon	4,996,975
HFC phase-down plan	3,755,000
Fumigants	20,081,243
Phase-out plan	387,379,811
Process agent	1,286,923
Production	1,056,000
Refrigeration	139,623,080
Several	69,897,960
Solvents	63,699,996
Sterilant	417,628
Sub-total	895,076,443
Agency support costs	124,211,639
Total	1,019,288,082

6. In 2022, 38 new projects and activities were approved. This level of funding is expected to result in the phase-out of 69,658 ODP tonnes and 240,094 CO₂-eq tonnes of consumption of controlled substances. Annex I shows the status of project implementation per country in 2022.

7. Table 2 shows the status of project implementation including fund disbursement per project type as at 31 December 2022. Annex II presents analytical information per year since 1991.

⁴ Ongoing projects are all projects that were under implementation as at 31 December 2022. 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/93/14).

Table 2. Status of project implementation by type as at 31 December 2022

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	42	100	21,719,011	21,700,308	18,703	99.9
Institutional strengthening (IS)	273	253	93	59,530,103	54,808,570	4,721,532	92
Investment	1,346	1,279	95	734,375,646	697,564,228	36,811,420	95
Project preparation	582	541	93	26,919,029	23,042,400	3,876,632	86
Technical assistance	335	322	96	49,313,367	46,472,801	2,840,567	94
Training	28	28	100	1,590,489	1,590,489	0	100
Total	2,628	2,487	95	895,076,443	846,807,593	48,268,853	95

*Excludes closed and transferred projects.

**Excludes agency support costs.

8. Implementation of projects and activities by UNDP for 2022 and cumulative since 1991 up to 31 December 2022 is summarized as follows:

- (a) **Phase-out:**⁶ In 2022, 178.3 ODP tonnes and zero CO₂-eq tonnes of consumption of controlled substances were phased out and an additional 233.5 ODP tonnes of consumption of controlled substances were approved for phase-out. Since 1991, 68,999 ODP tonnes and 240,094 CO₂-eq tonnes of consumption of controlled substances had been phased out, of an expected total of 69,658 ODP tonnes and 240,094 CO₂-eq tonnes from projects approved (excluding cancelled and transferred projects);
- (b) **Disbursements/approvals:** In 2022, US \$25.93 million was disbursed and US \$23.11 million was planned for disbursement based on the 2021 progress report, representing a rate of disbursement of 112 per cent of that planned. Cumulatively, US \$846.81 million had been disbursed out of the total US \$895.08 million approved for disbursement (excluding agency support costs), representing a rate of disbursement of 95 per cent. In 2022, US \$13.77 million was approved for implementation;
- (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 \$11.25/kg. The average cost-effectiveness of investment projects per ODP tonne was US \$10.31/kg for completed projects and US \$54.67/kg for ongoing projects;⁸
- (d) **Number of projects completed:** In 2022, 46 projects were completed. Since 1991, 2,487 projects of the 2,628 projects approved (excluding closed or transferred projects) were completed, representing a completion rate of 95 per cent;
- (e) **Speed of delivery – investment projects:** Projects that were completed in 2022 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;

⁶ Phase-out of ODS is expressed in ODP tonnes and of HFCs in CO₂-eq tonnes.

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.

- (f) **Speed of delivery – non-investment projects:** Projects that were completed in 2022 were completed on average 42 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 582 project preparation activities approved by the end of 2022, 541 have been completed, leaving 41 ongoing activities. In 2022, five projects preparation activities have been completed;
- (h) **Implementation delays:** A total of 141 projects were under implementation at the end of 2022, experiencing, on average, a delay of six months. Twenty 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 2022, 43 MYAs for HCFC phase-out management plans (HPMPs) were under implementation. Since 1991, 158 MYAs have been approved and 115 MYAs have been completed, representing a completion rate of 73 per cent.

9. Table 3 summarized progress made by UNDP since 1991.

Table 3: Progress made by UNDP since 1991

Phase out achieved		Disbursement (US \$)	Average CE (US\$/kg)	Number of projects		Speed of delivery for completion (months)		Average project delays (months)	Number of MYAs	
ODP tonnes	CO ₂ -eq tonnes			Approved	Completed	Investment	Non-investment		Approved	Completed
68,999	240,094	846,807,593	11.25	2,628	2,487	34	39	6	158	115

HFC-related projects

10. As of 31 December 2022, the Executive Committee had approved 43 HFC-related projects (including three investment projects, 32 project preparation and eight enabling activities) under regular contributions amounting to US \$6,995,530 (excluding agency support costs). A summary of the status of these projects is presented in table 4 and the respective data has already been included in paragraphs 5 to 9.

Table 4. HFC-related projects approved under regular contributions

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	3	2	67	2,486,530	2,159,576	326,954	87
Project preparation	32	0	0	3,865,000	479,837	3,385,164	12
Technical assistance - Enabling activities	8	8	100	644,000	606,300	37,701	94
Total	43	10	23	6,995,530	3,245,713	3,749,819	46

* Excludes agency support costs.

** 167.8 mt (240,094 CO₂-eq tonnes) was approved and phased out for investment projects.

11. As of the end of 2022, of the 43 projects, two investment projects and eight enabling activities have been completed, leaving 33 ongoing. These activities are at various stages of implementation.

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).

12. The remaining ongoing investment project, for which the extension of the completion date was approved at the 87th meeting, is expected to be completed in 2023.

13. Of the total cumulative funding approved of US \$6,995,530 (excluding agency support costs), US \$3,245,713 had been disbursed, representing a disbursement rate of 46 per cent.

I.2 Issues identified in project implementation in 2022

14. Further to the review process, several issues were discussed and satisfactorily addressed, except for issues on 20 projects classified as projects with implementation delays (including 19 projects related to components of MYAs that are subject to procedures for project cancellation, in line with decision 84/45(c); and one HFC investment project). Annex III to the present document presents those projects classified with implementation delays, and the Secretariat's recommendations requesting the submission of a report to the 94th meeting.

15. In addition, an issue has been identified in one MYA project. This issue is also presented in annex III. 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.

16. Details of progress in implementation of projects associated with the HPMPs for China (industrial and commercial refrigeration and air-conditioning sector plan and solvent sector plan),¹⁰ Colombia,¹¹ Lebanon,¹² Mozambique,¹³ Nigeria,¹⁴ and Trinidad and Tobago¹⁵ and reports on projects with specific reporting requirements¹⁶ associated with the HPMPs for Brazil and Kyrgyzstan, have been submitted to the 93rd 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 the Lao People's Democratic Republic, Nepal, Sri Lanka, and Timor-Leste, tranches of which were due at the 93rd meeting but were not submitted, and for the Islamic Republic of Iran, the tranche of which was submitted but later withdrawn, are addressed in the document on tranche submission delays.¹⁷

17. Of the 80 ongoing projects, excluding IS and project preparation, 19 projects have revised planned dates of completion since the 2021 progress report. In line with decision 82/11(c)(ii), the Secretariat noted that renewal of the IS project for China had not been submitted for the last two years.

Gender mainstreaming¹⁸

18. UNDP reported that all projects implemented by UNDP follow UNDP's gender strategy. In addition, Article 5 countries also follow their own national policies on gender while implementing Multilateral Fund-supported projects. During project implementation, UNDP organizes consultations with relevant associations, networks and stakeholders, includes indicators and collects gender-disaggregated data on specific project activities, and promotes gender mainstreaming depending upon funding availability.

¹⁰ UNEP/OzL.Pro/ExCom/93/47

¹¹ UNEP/OzL.Pro/ExCom/93/48

¹² UNEP/OzL.Pro/ExCom/93/64

¹³ UNEP/OzL.Pro/ExCom/93/73

¹⁴ UNEP/OzL.Pro/ExCom/93/77

¹⁵ UNEP/OzL.Pro/ExCom/93/89

¹⁶ UNEP/OzL.Pro/ExCom/93/20

¹⁷ UNEP/OzL.Pro/ExCom/93/24

¹⁸ The Executive Committee requested bilateral and implementing agencies to provide a brief report on key gender mainstreaming results achieved as part of their annual progress reports, as of 2023, on the basis of the information available to them (decision 90/48(d)).

UNDP's country offices track their performance on gender equality and the impact of UNDP's interventions on gender aspects on the ground.

19. The collection of gender-related information and data for projects funded by the Multilateral Fund is undertaken for the projects. This has so far resulted in an increase in women's participation in training courses, meetings, and awareness activities. Most projects currently include gender mainstreaming activities, such as terms of reference with a specific clause encouraging men and women to apply and tracking of the gender composition of meeting participants. In the national ozone offices and project management units, a considerable number of personnel are women contributing to decision-making and project implementation. Additional information relating to gender mainstreaming activities is provided in section VI of UNDP's narrative attached to the present document.

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

20. As of 31 December 2022, the Executive Committee had approved 18 HFC-related projects under the additional voluntary contributions amounting to US \$5,996,295 (excluding agency support costs). A summary of the status of these projects is presented in table 5.

Table 5. Status of approved HFC-related projects as of the end of 2022

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	2	2	100	4,406,577	4,406,577	0	100
Project preparation	5	5	100	83,511	83,511	0	100
Technical assistance – Enabling activities	11	11	100	1,506,207	1,461,686	44,521	97
Total	18	18	100	5,996,295	5,951,774	44,521	99

* Excludes agency support costs.

** 480.6 mt (587,301 CO₂-eq tonnes) was approved and phased out for investment projects.

21. As of the end of 2022, all the 18 projects approved had been completed.

22. Of the total cumulative funding approved of US \$5,996,295, US \$5,951,774 had been disbursed, representing a disbursement rate of 99 per cent.

III. Recommendation

23. The Executive Committee may wish:

- (a) To note the progress report of UNDP as at 31 December 2022 contained in document UNEP/OzL.Pro/ExCom/93/16; and
- (b) To approve the recommendations related to ongoing projects with specific issues contained in annex III to the present document.

Annex I

**OVERVIEW OF STATUS OF PROJECT IMPLEMENTATION FOR UNDP
PER COUNTRY FOR 2022**

1. Table 1 of annex I presents the status of project implementation by country for 2022 in achieved phased out, planned and achieved disbursements and project completion.

Table 1. Status of project implementation by UNDP for 2022

Country	Phased out in 2022 (ODP tonnes)	Phased out in 2022 (CO ₂ -eq tonnes)*	Estimated funds disbursed in 2022 (US\$)	Funds disbursed in 2022 (US\$)	Percentage of funds disbursed over estimation in 2022	Percentage of planned projects completed in 2022**
Angola	2.0	0	252,410	57,847	23	100
Argentina	0.0	0	85,237	130,575	153	100
Armenia	0.0	0	743	0	0	
Bangladesh	5.0	0	719,459	1,524,213	212	100
Belize	0.0	0	45,021	40,373	90	100
Bhutan	0.0	0	9,250	0	0	
Brazil	0.0	0	2,198,910	1,276,279	58	100
Brunei Darussalam	0.5	0	6,457	0	0	100
Cambodia	0.0	0	26,190	0	0	
Chile	9.3	0	333,125	201,899	61	100
China	89.2	0	4,596,551	6,452,756	140	
Colombia	2.8	0	1,003,146	445,925	44	100
Costa Rica	0.0	0	220,707	251,205	114	50
Cuba	0.0	0	257,199	277,708	108	100
Democratic Republic of the Congo (the)	0.0	0	89,187	10,000	11	
Dominican Republic (the)	0.0	0	389,716	561,227	144	
Egypt	2.0	0	1,081,862	792,979	73	100
El Salvador	0.0	0	144,957	24,130	17	
Eswatini	0.0	0	35,600	5,609	16	
Fiji	0.0	0	127,000	28,548	22	100
Georgia	0.0	0	114,358	90,451	79	100
Ghana	20.9	0	279,192	151,188	54	100
Grenada	0.0	0	14,800	14,163	96	
Guyana	0.0	0	53,242	45,682	86	0
Haiti	0.0	0	14,837	19,321	130	
India	17.3	0	4,085,765	5,784,604	142	100
Indonesia	0.0	0	993,853	499,753	50	50
Iran (Islamic Republic of)	5.2	0	881,128	1,546,653	176	100
Jamaica	0.0	0	95,059	73,260	77	
Kyrgyzstan	0.0	0	33,931	36,673	108	
Lao People's Democratic Republic (the)	0.0	0	52,540	0	0	
Lebanon	0.0	0	272,524	268,870	99	
Malaysia	13.7	0	1,255,939	1,404,864	112	50
Maldives	0.0	0	12,950	0	0	
Mali	0.0	0	3,700	0	0	
Mexico	0.0	0	31,450	26,722	85	
Mozambique	0.0	0	3,700	0	0	
Nepal	0.1	0	38,018	0	0	100
Nigeria	3.0	0	1,283,062	2,563,240	200	80

Country	Phased out in 2022 (ODP tonnes)	Phased out in 2022 (CO ₂ -eq tonnes)*	Estimated funds disbursed in 2022 (US\$)	Funds disbursed in 2022 (US\$)	Percentage of funds disbursed over estimation in 2022	Percentage of planned projects completed in 2022**
Pakistan	0.0	0	105,899	26,889	25	
Panama	0.0	0	317,147	375,068	118	100
Paraguay	0.0	0	100,472	37,359	37	
Peru	2.0	0	142,781	99,003	69	
Republic of Moldova (the)	0.0	0	55,791	26,420	47	100
Sri Lanka	0.0	0	200,187	133,178	67	
Timor Leste	0.0	0	28,305	1	0	
Trinidad and Tobago	0.0	0	297,210	188,548	63	
Uruguay	5.3	0	464,640	206,209	44	50
Venezuela (Bolivarian Republic of)	0.0	0	98,492	220,878	224	
Zimbabwe	0.0	0	157,973	7,914	5	
Global	0.0	0	0	0		100
Grand total	178.3	0	23,111,673	25,928,184	112	82

* No phase-out in 2022 for HFC-related projects.

** For projects that were planned to be completed in 2022.

Annex II

**OVERVIEW OF STATUS OF PROJECT IMPLEMENTATION FOR UNDP
PER YEAR AS AT 31 DECEMBER 2022**

1. Table 1 of annex II presents an overview of the status of project implementation by year.¹ All projects and activities approved between 1991 and 2015, have now been completed.

Table 1. 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	49,481,580	49,481,581	-1	100
1995	117	117	100	29,599,445	29,599,446	-1	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	35,896,883	35,896,884	-1	100
2000	149	149	100	31,268,362	31,268,361	1	100
2001	179	179	100	35,292,272	35,292,271	1	100
2002	117	117	100	44,316,424	44,316,422	2	100
2003	64	64	100	36,336,530	36,336,530	0	100
2004	69	69	100	24,802,715	24,802,714	1	100
2005	53	53	100	29,124,834	29,124,833	1	100
2006	62	62	100	15,753,458	15,753,459	-1	100
2007	54	54	100	12,142,488	12,142,486	2	100
2008	84	84	100	22,873,866	22,873,866	0	100
2009	92	92	100	13,217,903	13,217,903	0	100
2010	43	43	100	19,567,971	19,567,970	1	100
2011	63	63	100	57,415,930	57,415,931	-1	100
2012	29	29	100	33,818,923	33,818,922	1	100
2013	43	43	100	33,958,973	33,958,972	1	100
2014	67	67	100	22,561,207	22,542,505	18,702	100
2015	75	75	100	30,276,800	30,274,905	1,895	100
2016	52	51	98	41,589,691	40,825,343	764,348	98
2017	27	25	93	30,607,053	30,322,093	284,961	99
2018	60	52	87	40,024,044	34,325,894	5,698,150	86
2019	41	32	78	10,370,972	7,702,349	2,668,622	74
2020	50	28	56	30,190,958	21,101,356	9,089,605	70
2021	66	5	8	24,646,043	8,562,794	16,083,250	35
2022	38	0	0	13,768,300	108,985	13,659,315	1
Total	2,628	2,487	95	895,076,443	846,807,593	48,268,853	95

* Excludes closed and transferred projects.

** Excludes agency support costs.

¹ 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 tonnes/CO₂-eq tonnes phased out, and percentage of funds disbursed. There are three types of disbursements: during implementation, after implementation and for retroactively financed projects.

Annex III

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)	90	12 months delays	To request UNDP to report to the 94 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)	72	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Brazil BRA/PHA/82/INV/323	HCFC phase-out management plan (stage II, third tranche) (foam sector)	60	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Brazil BRA/PHA/82/TAS/322	HCFC phase-out management plan (stage II, third tranche) (regulatory actions and project monitoring)	74	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Cambodia KAM/PHA/83/INV/36	HCFC phase-out management plan (fourth tranche)	76	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Costa Rica COS/PHA/84/INV/60	HCFC phase-out management plan (stage II, first tranche) (polyurethane foam sector)	0	12 and 18 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Egypt EGY/PHA/84/TAS/143	HCFC phase-out management plan (stage II, second tranche) (project management and monitoring)	0	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Guyana GUY/PHA/83/INV/32	HCFC phase-out management plan (stage II, second tranche)	0	12 and 18 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
India IND/PHA/86/TAS/482	HCFC phase-out management plan (stage II, third tranche) (project management and monitoring)	0	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Indonesia IDS/PHA/76/TAS/210	HCFC phase-out management plan (stage II, first tranche) (refrigeration servicing sector)	68	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Indonesia IDS/PHA/81/INV/213	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing sector)	0	12 and 18 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Iran (Islamic Republic of) IRA/PHA/86/INV/245	HCFC phase-out management plan (stage II, third tranche) (foam sector)	0	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Iran (Islamic Republic of) IRA/PHA/86/INV/247	HCFC phase-out management plan (stage II, third tranche) (refrigeration servicing sector and PMU)	0	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays

Country/project code	Project title	Disbursement (%)	Status/Issues	Recommendation
Jamaica JAM/PHA/86/INV/43	HCFC phase-out management plan (stage II, first tranche)	0	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Lao People's Democratic Republic (the) LAO/PHA/86/INV/38	HCFC phase-out management plan (stage II, first tranche)	0	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Nepal NEP/PHA/86/INV/41	HCFC phase-out management plan (stage II, first tranche)	0	(i) 12 months delays (ii) No fund disbursement	(i) To request UNDP to report to the 94 th meeting on this project with implementation delays (ii) To request UNDP to report to the 94 th meeting on the status of disbursement
Swaziland SWA/PHA/86/INV/31	HCFC phase-out management plan (stage II, first tranche)	0	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Timor-Leste TLS/PHA/80/INV/15	HCFC phase-out management plan (stage II, first tranche)	36	12 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays
Uruguay URU/PHA/82/INV/72	HCFC phase-out management plan (stage II, second tranche) (foam sector)	29	12 months delays	To request UNDP to report to the 94 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 months delays	To request UNDP to report to the 94 th meeting on this project with implementation delays



Empowered lives.
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**Executive Committee of the Multilateral Fund
for the Implementation of the Montreal Protocol**

UNDP Annual Progress and Financial Report Narrative: 1991-2022

92nd meeting, 15 -19 December 2023, Montreal, Canada

I. INTRODUCTION

The following narrative is based on a database of 2746 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2022. However, some updates of activities which took place during 2023 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\$ of the US\$ worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 70,810 ODP T/year, of which 70,187 (99%) were phased out as of 31 December 2022. 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 2022, UNDP was active in 51 countries, of which 35 are low volume consuming (LVCs). Most 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. In addition, UNDP also acts as the cooperating agency in 18 countries.

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 technologies deployed in the HCFC demonstration projects are relevant to the HFC phase-down in the Kigali Amendment. The factsheets on these projects are available at the MLF website.

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 projects in Bangladesh, China, Dominican Republic, and Mexico have been completed and submitted to the Executive Committee, providing valuable information to the Executive Committee for the requirements of the HFC phasedown. The HFC technology demonstration activities in Zimbabwe will also be completed in 2023. UNDP also supported 19 countries (Bangladesh, Belize, Chile, Cuba, Haiti, Iran, Moldova, Uruguay, Colombia, Costa Rica, China, El Salvador, Fiji, Jamaica, Lebanon, Panama, Paraguay, Peru, Trinidad & Tobago) to undertake enabling activities for ratification and early implementation of the Kigali Amendment and all these countries have completed these activities.

Furthermore, UNDP continued to organize in-person, virtual and online-based activities to assist countries in meeting their Montreal Protocol obligations. For example, UNDP organized a webinar on Gender and the Montreal Protocol aimed at building the necessary capacity for UNDP gender focal points based in the regions and the UNDP country offices to provide targeted support for Montreal Protocol projects, and to ensure that

gender equality perspectives are included in all stages of the MLF project cycle in 2022. Furthermore, in collaboration with the Ministry of Environment and Forestry of Indonesia, UNDP organized a workshop in Bali, Indonesia from 27th February to 1 March 2023 to support countries in their preparation of the Kigali Amendment Implementation Plans (KIPs). The workshop brought together more than 70 experts and stakeholders from 17 countries to discuss strategies for implementing the Kigali Amendment under the Montreal Protocol. In addition, a side event was organized in Bangkok during the OEWG on [Beating the Heat: Achieving Sustainable Cooling through National Cooling Plans](#) (NCPs) to spotlight and share the key experiences of countries in developing the NCPs and offer space for discussion of challenges and opportunities. A side event on [Rising up for Small Island Developing States: Challenges and opportunities towards sustainable cooling and efficient cold chain](#) was also organized in the margins of the 34th Meeting of the Parties to the Montreal Protocol. The event emphasized the importance of the sustainable cold chain for SIDS, as well as the experiences and technical solutions for them. The UNDP Montreal Protocol team also organized five webinars¹ aimed at strengthening the capacity of NOUs on the implementation of the Montreal Protocol and the Kigali Amendment in 2022. In July 2023, UNDP organized a side event on [Greening cold chain practices and breakthrough technology of the life cycle management of refrigerants](#) during the 45th meeting of the OEWG of the Montreal Protocol in Bangkok, Thailand.

Finally, a guidance note on [“Assessing greenhouse gas emissions from refrigerants use in UNDP operations”](#) was developed in 2022 based on the extensive research of state-of-art GHG accounting methodologies and the experiences of the UNDP Montreal Protocol team. A guidance note on sustainable procurement and use of cooling assets was also developed to complement this methodology with practical advice for UNDP’s country and regional offices. Carbon footprint reporting for 2022 showed that, for the first time, 109 UNDP offices included actual refrigerant data based on the methodology. UNDP offices reported 3,595 cooling assets so far. Preliminary results show that refrigerant emissions contribute about 6% to UNDP’s total carbon footprint with 68% attributed to facility cooling, 23% to vehicle operations and 9% to refrigeration.

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 2022, UNDP had a total of 2746 approved projects under the Multilateral Fund, of which 100 had been canceled or transferred. Of the 2646 remaining projects, 2,505, or 95% have been completed. They are set to eliminate 70,810 ODP T/year, of which 70,187 ODP T (99%) have already been eliminated.

As of 31 December 2022, UNDP had received cumulative net project approvals of US\$ 901,071,072 (excluding support costs). Of these, UNDP, as of end-2022, had disbursed US\$ 853,076,362 excluding all obligations. This translates to 95% of approved funding. Furthermore, an additional US \$2,382,909 of obligations were outstanding as of end-December 2022, representing orders placed but final payments not yet made.

B. Interest and Adjustments

Interest income earned on MLF resources in 2022 is US\$ 657,877. This amount will be reported in

¹ Please see Annex 1 for more information on the webinars that were organized in 2022.

the 2022 final financial statement to be submitted to the MLF Treasurer by the agreed deadline of 30 September. The difference between the provisional and final 2022 interest income was adjusted against UNDP project approvals at the 92nd ExCom 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% of the budgets were dedicated to investment projects, 6% to technical assistance projects, 6% to institutional strengthening and 3% to project preparation activities. The remaining 3% 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/91/TAS/263, the Core unit support (2023) programme approved at the 91st 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 programme is critical.

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

IV. PERFORMANCE INDICATORS

A. **Results in 2022**

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 88th meeting of the Executive Committee contained UNDP's 2022 targets. One can see from the table below that UNDP fully met 7 out of 9 of its targets and that its score amounts to 98%.

Category of performance indicator	Item	Weight	UNDP's target for 2022	Result achieved in 2022	Score
1. Approval	Number of tranches approved vs. those planned*	10	12	9 → 75 %	7.5
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	20	22 → 100%	10.0
3. Implementation	Funds disbursed	15	\$ 22,523,448	\$26,245,166 → 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	213.43	229.2 → % (see annex 1, 4)	25.0
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	40	41 → 100% (see annex 1, 5)	20.0
6. Administrative	The extent to which projects are financially completed 12 months after project completion	10	70% of those due (out of 76, so target is 53)	57 finrevs	10.0
7. Administrative	Timely submission of project completion reports vs. those agreed	5	100% of those due (5)	100% achieved (5 individual PCRs)	5.0
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			98

*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:

For Brazil, the MLF Secretariat was informed that UNDP did not need the funds from the last tranche. The agreement was updated (91/26) and the report was adopted. Based on this, UNDP did in principle submit the tranche request, but it did not include a funding request as we do not need the funds from the last tranche.

For Guyana, UNDP is waiting for the lead agency to finalize the implementation of tranche 2. We are ready for the request of tranche 3.

For Nigeria's Stage III, submission to the 91st ExCom was supported by UNDP but there was no sector/component included for UNDP. It was submitted/approved only with components for UNIDO implementation.

As UNDP's tranches were ready in 2022 as we had planned for these three countries, our performance target should be reduced from 15 to 12 and the performance indicator for ODS phase-out should be adjusted accordingly.

B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,281 investment projects have been completed, with a corresponding elimination of 63,811 ODP T. Of the US\$ 657,578,531 in their approved budgets in the sectors of Foam, Refrigeration, Phase-out Plan, Aerosol, Solvents, Fumigants, Halon, Process Agents, and Sterilants, 100% has already been disbursed. It took an average of 34 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was \$10.15/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 678 non-investment projects excluding project preparation assistance. Of the US\$ 125,052,084 in their approved budgets, 99% has been disbursed. It took an average of 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 67 ongoing investment projects in the sectors of Phase-out Plans and Foam, with corresponding budgets of US\$ 74,660,984. Of this amount, 53% has already been disbursed. It takes an average of 43 months from approval to the estimated project completion. The overall cost-effectiveness of the projects to the Fund was \$54.67/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 33 ongoing non-investment projects excluding project preparation assistance. Of the US\$ 9,763,854 approved budgets, 30% has been disbursed. It takes an average of 32 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. For new projects, the UNDP country office will engage with the implementation partner in the country to sign the Project Document which details the topic, objective, activities and implementation modality of the project. There were no specific issues related to this in 2022.

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 41 PRP projects listed with US\$ 4,335,000 in associated approvals, 13% has been disbursed.

VI. DESCRIPTION OF KEY ONGOING ACTIVITIES

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

- A. Standalone investment projects for HFCs
- B. HFC Enabling Activity projects
- C. Kigali Implementation Plan (KIP) Preparation
- D. Gender Mainstreaming Results Achieved
- D. Country Highlights

A. 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's 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 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)

The 82nd Executive Committee approved the project proposal for the conversion from HFC-245fa and cyclopentane to HFO-1233zd(E) and cyclopentane in the manufacture of domestic refrigerators at Hisense Kelon in the amount of US \$1,275,000 in response to the Decision 79/45, aiming to gather information related to incremental costs that could support the discussion on the cost guidelines for the HFCs Phase-down. The Project was completed in June 2021 and eliminated 250mt of HFC-245fa consumption through the conversion of a production line, by replacing the use of C5+HFC-245fa with C5+HFO1233zd as foaming co-blowing agent. In addition, in view of the high operational cost of cyclopentane + HFO-1233zd system, Hisense invested their own resources to carry out further research on low-density systems. As a result, ultra-low density three-component blowing agent composed by cyclopentane+HFO-1233zd+butane system is being developed, which can reduce the foam density the amount of raw materials by 5-8% without compromising the performance.

With the successful adoption of co-blowing cyclopentane and HFO-1233zd, 259,195 tons of CO₂-eq of HFC-245fa in the annual production were reduced. The energy consumption of the refrigerator after the conversion also decreased by 2.12%. It is estimated that 1.2 million units could avoid indirect emissions of 5,847.3 tons CO₂ per year.

The project achieved its objectives and provided detailed information on the alternative technology and related costs.

- **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 project of FARCO in the Dominican Republic was approved in 2018 and completed in 2020. The completion report was submitted to the MLF in 2021. FARCO now has the capacity to produce all of its self-contained commercial refrigeration units with R-290. The consumption of HFCs in FARCO is small, however, it is an important project for the country to meet its obligations for the Kigali Amendment and reduce the production and servicing demands of HFCs. 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, 3.95 mt of HFC-134a and R-404A were phased out. The project also supports the training of technicians for the safe handling of flammable refrigerants. This is an important achievement not only for the Dominican Republic but also for other islands in the Caribbean where FARCO sells their units.

- **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

The project was approved at the 81st meeting of the ExCom in June 2018 with USD 2,700,000 and was operationally completed in June 2020. Mabe has six manufacturing lines producing domestic refrigerators using HFC-134a. All lines have been fully converted and can use R600a safely. Safety audit was completed at both the compressor and refrigerator manufacturing plant. Additional 500,000 USD was provided by the Government of Canada and 250,000 USD by K-CEP to support the conversion and improvement of energy efficiency. The project phased out 198 MT of HFC 134a, which is equivalent to 283,140 MT of CO₂. MABE provided significant co-financing in the conversion. The completion report with all detailed information was submitted by UNDP to the MLF Secretariat in 2021.

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

The HFC demonstration project for Zimbabwe on “Conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare)” was approved by the Executive Committee at its 82nd meeting for UNDP and bilateral partner of France. Due to the small levels of consumption, Capri needs to find co-financing for the conversion in addition to the grant provided by the MLF. During 2021, UNDP supported Capri in realizing the earlier committed co-finance resources, including from the company’s sources and national development funds. US\$ 200,000 of additional support has been identified. A tender selection process has been carried out for Capri company, and one supplier has been selected to assemble and supply technology equipment. Associated contract has been signed, and equipment has been shipped to Harare in May 2023. Training on the use of equipment with a separate expert is expected who will have a mission to Harare. Supplier's engineers are in communication with Capri's management on the process of completing the technology supply. The project will initiate the financial closure process with current commitments pending its operational closure in summer 2023.

B. HFC Enabling Activity projects

As highlighted earlier in the report, UNDP is providing support to 19 countries to undertake their HFC enabling activities (EAs) for ratifying and early implementation of the Kigali Amendment. All the EA activities have been completed by the end of 2022. For more details on the status of these activities, please see the table below.

Country	MLF Number	Project Title	Ratification Status	Latest Status
Bangladesh	BGD/SEV/81/TAS/52	Enabling activities for HFC phase-down	Ratified Kigali on 8 June 2020.	Completed in 2022. RAC servicing sector needs assessment and Alternatives assessment completed. Final consultations with stakeholders were completed in 2022.
Belize	BZE/SEV/85/TAS/37	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. Activities concluded as expected. Report submitted to MLFS in 2022.
Chile	CHI/SEV/80/TAS/03+	Enabling activities for HFC phase-down	Ratified Kigali on 19 Sept 2017.	Completed in 2022.

China	CPR/SEV/80/TAS/04+	Enabling activities for HFC phase-down	Ratified Kigali Amendment in June 2021.	Financially completed in 2022.
Colombia	COL/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 25 Feb 2021.	Financially completed in 2022.
Costa Rica	COS/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 23 May 2018.	Financially completed in 2022.
Cuba	CUB/SEV/81/TAS/57	Enabling activities for HFC phase-down	Ratified Kigali on 20 June 2019.	Completed in 2022. Review of legal framework to control HFC was completed. Update of alternative survey was completed. Awareness raising material regarding the Kigali Amendment was produced and distributed. Due to COVID-19 restrictions, some activities (especially during the first semester) were conducted virtually.
El Salvador	ELS/SEV/81/TAS/37	Enabling activities for HFC phase-down	Country has ratified Kigali on 13 September 2021.	Financially completed in 2022.
Fiji	FIJ/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 16 June 2020.	Financially completed in 2022.
Haiti	HAI/SEV/84/TAS/23	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. International and national consultants have been recruited. HFC consumption figures are being updated through a survey process. Policy paper finalized and presented
Iran	IRA/SEV/82/TAS/232	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. HFCs consumption scenarios and HFCs long term strategy document prepared and under GOV endorsement process. Final consultations with stakeholders were completed in 2022. Ratification is expected in 2024.
Jamaica	JAM/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Financially completed in 2022.

Lebanon	LEB/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Ratified Kigali Amendment on 5 Feb 2020.	Financially completed in 2022.
Moldova	MOL/SEV/85/TAS/41	Enabling activities for HFC phase-down	Country has not ratified Kigali yet.	Completed in 2022. Ratification of the Kigali amendment can be expected later on in 2023.
Panama	PAN/SEV/81/TAS/46	Enabling activities for HFC phase-down	Ratified Kigali on 28 Sept 2018.	Financially completed in 2022.
Paraguay	PAR/SEV/81/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 1 Nov 2018.	Financially completed in 2022.
Peru	PER/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 7 Aug 2019.	Financially completed in 2022.
Trinidad and Tobago	TRI/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratified Kigali on 17 Nov 2017.	Financially completed in 2022.
Uruguay	URU/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Ratified Kigali on 12 Sept 2018.	Completed in 2022. Review of customs procedures and tariff codes for the import, export and transit of HFCs with support of international expert. Collection of HFC import, export and transit data. Awareness raising activities related to the Kigali Amendment and the national obligations.

C. KIP Preparation

As of the end of 2022, UNDP has received approval from the Multilateral Fund to provide support to 30 countries to prepare their Kigali Implementation Plans as the lead or cooperating agency. For more details on these countries, please see the table below.

Country	MLF Number	Project Title
Angola	ANG/KIP/88/PRP/24	Preparation of Kigali HFC implementation plan
Bangladesh	BGD/KIP/90/PRP/58	Preparation of Kigali HFC implementation plan
Bhutan	BHU/KIP/87/PRP/29	Preparation of Kigali HFC implementation plan
Chile	CHI/KIP/88/PRP/207	Preparation of Kigali HFC implementation plan
Colombia	COL/KIP/87/PRP/110	Preparation of Kigali HFC implementation plan
Costa Rica	COS/KIP/87/PRP/63	Preparation of Kigali HFC implementation plan
Cuba	CUB/KIP/87/PRP/65	Preparation of Kigali HFC implementation plan
Dominican Republic	DOM/KIP/87/PRP/73	Preparation of Kigali HFC implementation plan
El Salvador	ELS/KIP/88/PRP/44	Preparation of Kigali HFC implementation plan
Fiji	FIJ/KIP/88/PRP/41	Preparation of Kigali HFC implementation plan
Ghana	GHA/KIP/87/PRP/51	Preparation of Kigali HFC implementation plan

Grenada	GRN/KIP/88/PRP/28	Preparation of Kigali HFC implementation plan
Cambodia	KAM/KIP/88/PRP/40	Preparation of Kigali HFC implementation plan
Kyrgyzstan	KYR/KIP/87/PRP/45	Preparation of Kigali HFC implementation plan
Laos PDR	LAO/KIP/87/PRP/39	Preparation of Kigali HFC implementation plan
Lebanon	LEB/KIP/87/PRP/98	Preparation of Kigali HFC implementation plan
Maldives	MDV/KIP/87/PRP/36	Preparation of Kigali HFC implementation plan
Mexico	MEX/KIP/87/PRP/195	Preparation of Kigali HFC implementation plan
Mozambique	MOZ/KIP/90/PRP/36	Preparation of Kigali HFC implementation plan
Nigeria	NIR/KIP/87/PRP/156	Preparation of Kigali HFC implementation plan
Panama	PAN/KIP/87/PRP/53	Preparation of Kigali HFC implementation plan
Paraguay	PAR/KIP/87/PRP/42	Preparation of Kigali HFC implementation plan
Peru	PER/KIP/87/PRP/59	Preparation of Kigali HFC implementation plan
Philippines	PHI/KIP/91/PRP/109	Preparation of Kigali HFC implementation plan
Sri Lanka	SRL/KIP/87/PRP/59	Preparation of Kigali HFC implementation plan
Eswatini	SWA/KIP/87/PRP/33	Preparation of Kigali HFC implementation plan
Trinidad & Tobago	TRI/KIP/87/PRP/40	Preparation of Kigali HFC implementation plan
Turkiye	TUR/KIP/90/PRP/112	Preparation of Kigali HFC implementation plan
Uruguay	URU/KIP/87/PRP/77	Preparation of Kigali HFC implementation plan
Zimbabwe	ZIM/KIP/91/PRP/66	Preparation of Kigali HFC implementation plan

D. Gender Mainstreaming Results Achieved

All projects implemented by UNDP must follow [UNDP's Gender Equality Strategy](#). In addition, countries also follow their own national policies on gender. UNDP's projects organize consultations with relevant associations, networks, and stakeholders, and include data collection disaggregated by gender and the promotion of gender mainstreaming (subject to financial availability). UNDP's country offices track their performance on gender equality through the flagship Gender Seal programme, that measures progress on wide-ranging criteria, including the impact of UNDP's interventions on the ground.

The collection of gender-related information and data for projects funded by the Multilateral Fund began much earlier and the incorporation of the MLF's new gender policy in the planning and execution of projects has followed. It is important to note that gender mainstreaming activities vary from country to country and should be culturally adapted. However, the strategies so far have resulted in an increase of women's participation in courses, meetings, and awareness activities. Most projects now include gender mainstreaming activities, such as TORs with a specific clause encouraging men and women to apply and tracking of the gender composition of meeting participants. In Iran, women account for more than 50% of the NOU team and the project board of the HPMP. In the National Ozone Network, a considerable number of members are women who are staff of the Department of Environment in the provinces who are contributing to decision making and project implementation. In Bangladesh, gender actions were guided by the Gender Action Plan 2021-2023. Some of the actions implemented include: 1) considering women candidates with preferred status- terms of references for projects consultants will include clear messaging to promote women candidates; 2) strengthening women representation in key positions- Technical Advisory Committee and Project Steering Committee meetings had women participants; 3) raising awareness of all beneficiary companies to take appropriate measures to prevent sexual exploitation and harassment or abuse of authority of any beneficiary, especially women. In Peru, a working group for gender equality in the Ministry of Production was created, the participation of female RAC students at vocational schools were promoted, and

RAC training courses tailored for female technicians were developed. Likewise, in Trinidad & Tobago, education and skills development courses have been promoted for women, activities have been undertaken to sensitize the RAC sector on gender, and opportunities have been built for women to participate in all the activities of KIP Preparation.

UNDP's Montreal Protocol team at Headquarters organized a webinar on *Improving the Mainstreaming of Gender into UNDP Montreal Protocol projects and applying a gender responsive approach to activities under the Montreal Protocol* in May 2022. The audience for this webinar included gender focal points based in UNDP country offices, gender advisors based in regional centers and UNDP country offices working on Montreal Protocol projects. UNDP's Montreal Protocol team based in the regions provide inputs to countries during the development and implementation of Montreal Protocol projects. Meetings were held with key NOUs to build capacity within countries to ensure the implementation of gender mainstreaming activities in projects. A session on *Good practices on mainstreaming gender in Montreal Protocol Projects* was included in the Asia Pacific regional gender workshop in June 2022 to identify potential gender mainstreaming activities for MP projects. Data collection for KIP preparation has been gender-sensitive and the collected data includes the number of technicians, disaggregated by gender, sector and subsector. Furthermore, while UNDP is developing KIPs and new stages of HPMPs for countries, lessons learnt from past HPMPs on gender mainstreaming are extensively considered. The key challenges include the lack of baseline data on gender and the limited involvement of women in the RAC sector.

E. Country Highlights (January – December 2022)

UNDP has been dedicated to finding innovative solutions for countries to address their Montreal Protocol compliance obligations. Interventions have supported countries to strengthen the coordination of stakeholders, access emerging technologies, improve operational standards and skills of technicians, reduce energy bills for consumers, and allow indigenous manufacturers to maintain competitiveness.

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

China

Since 2012, the first Ozone2Climate Technology Roadshow and Industry Roundtable, jointly organized by UNDP, UNEP, FECO, and the China Refrigeration and Air-Conditioning Industry Association (CRAA), was successfully held during the China Refrigeration Expo.

This event has been held during the China Refrigeration Expo for more than 10 years. Each year, the event carries out a series of activities: 1) an exhibition of the technical road show, which displayed the progress of refrigerant replacement in the ICR sector; 2) organized an industry roundtable to invite representatives and experts from relevant international institutions, enterprises, universities and other institutions to share the latest policies, technological progress and practical experiences at home and abroad; and 3) held a thematic sub-forum to give keynote speeches which are related to policies and challenges, air conditioning and cold chain technology, and good maintenance of servicing topics. Meanwhile, Industry enterprises were invited to show the latest solutions and application results of zero ODP, low GWP and high efficiency energy saving alternative technologies such as CO₂, NH₃, HC, R-32 and HFO.

The event has become a flagship activity of the China Refrigeration Expo, which has played a positive role in protecting the ozone layer and promoting the green development of refrigeration and air conditioning industry. During the decades, through this platform, UNDP and UNEP have also invited the representatives from Japan, Iran, Thailand, Pakistan, Mongolia, Indonesia, the Philippines and other countries' ozone

institutions and industry representatives to participate in the roundtables, which give them opportunities to engage in technical and business communications.

In line with the gender mainstreaming policies approved by the ExCom Decision 84/92 and the related guidance of UNDP, FECO has been making efforts to engage gender issues into implementation activities. During the training workshops for the project enterprises under the solvent sector held by FECO and ICAC in September 2022, FECO invited a gender expert recommended by the UNDP China country office, who shared ways to promote gender mainstreaming throughout project implementation and encouraged the engagement of women in various steps, such as planning, management and decision making, and monitoring and evaluation.

The disposable medical devices sub-sector under the solvent sector has a high ratio of female workers and has paid a lot of attention to women's rights. It's worth mentioning that a project enterprise "Henan light group medical products Co., Ltd." created a number of positions with more flexible working hours for new mothers and many other enterprises in various industries have started to emulate this practice. The measures may still have room for improvement, but the important thing is that it brings the gender issue actually into the public eye and shows that they are making efforts on such issues. These kinds of actions could be used as great examples in promoting gender mainstreaming during project implementation and could also be further studied.

Georgia

In coordination between the Government of Georgia and UNDP, the HPMP Stage 2 programme was successfully launched in 2022. The programme was designed and approved by the Multilateral Fund Secretariat and its Executive Committee and included a number of key activities on the phase-out of HCFCs. Those covered gradual improvements in HCFC control legislation, capacity building for the government and technical assistance to the private sector to enhance knowledge in terms of technological developments. An important market-based mechanism was developed to incentivize a broader introduction of new non-HCFC/non-HFC/low-GWP refrigeration and air-conditioning (RAC) technologies for various economic sectors of the country. This work has been initiated with a comprehensive study of the active private sector counterparts in the cold chain/food processing and distribution business, industry, residential and commercial buildings. Once the sector will be accurately defined, the study will continue with the determination of suitable financial mechanisms, including ESCOs, to support a stronger market uptake of low GWP RAC technological solutions.

Development of HFC quota systems in the LAC Region

The Kigali Amendment on HFCs requires that A5 countries update their licensing and quota systems to include HFCs. However, HFC quota systems must have the flexibility to include many new aspects that were not relevant in the past, given that the Kigali Amendment is a phase-down, not phase-out, many more substances (pure and blends) must be controlled than in the past, and the measurement is done in CO₂eq instead of MT. UNDP therefore conducted a series of webinars and discussions about the aspects A5 countries must consider when developing their HFC quota systems. South-south collaboration was facilitated, and experts provided guidance during the process. UNDP considers this support vital given the new realities, that quota systems must have the flexibility to adjust to a very different new situation.

South-South Cooperation (Sri Lanka, Timor-Leste and India)



An exchange mission to India was organised by UNDP (with support by NOU India) from 27 to 30 March 2023 involving the delegations of Sri Lanka and Timor Leste for training/exposure to alternative technologies in the refrigeration and air-conditioning sector, especially R290 (Propane). The delegation included technicians, instructors, and master trainers along with government staff involved in the ODS control program. A total of 14 participants (7 from each country) were engaged in this programme, of which 13 were men and 1 was a woman).

The exchange began with a two day training (27-28 March) in one of the training centers (M/s Keypath India Pvt. Ltd., Delhi), whose objective was to provide hands-on exposure to good service practices and the installation of room air-conditioners with flammable refrigerants (R290).

On 29th March, the delegation met the Deputy Resident Representative, UNDP and shared their experiences from the training program and expectations from the mission. The delegation also met Additional Director and In-charge Ozone Cell, Ministry of Environment, Forest and Climate Change. The delegation also shared their views and appreciated the support of India on behalf of low-consumption countries as a participating member of the ExCom meetings from the region. The delegation also visited **one of the RAC servicing centers** in Delhi to understand the process and safety practices followed during the repair and servicing of RAC appliances.

On 30th March, the delegation visited the R290 based AC manufacturing facility of Godrej and Boyce Mfg. Company Limited in Pune. The delegation had a detailed discussion with the management of the plant and visited the AC assembly line to understand the mechanisms of safety equipment, storage yard and testing infrastructure in their manufacturing line based on R-290.

The feedback from the participants was overwhelming. The participants found this mission very useful. Some of the comments are captured below:

- Sri Lanka participants: “We got lots of experience from program specially about propane refrigerant (R 290). We would like to say that UNDP and the Govt of India has given a great opportunity for improving knowledge of handling flammable refrigerant. Thanks for organising this great workshop.”
- Timor Leste participants (and NOO): “It was very useful for our trainers as they could upgrade their knowledge in R 290 and visit to Godrej was great. We could connect to our import country and this will also help us in future.”



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

A. Meetings Attended by UNDP in 2022

The UNDP Montreal Protocol team carried out the following missions in 2022. In addition to this, UNDP country offices also carried out field visits in countries with MLF programmes.

From	To	Country	Details
20-Jun-22	23-Jun-22	Canada	Participation in the 89th and 90th meetings of the Executive Committee of the MLF
9-Jul-22	15-Jul-22	Thailand	Participation to the 44th OEWG meeting and the Fifth Extraordinary Meeting of the Parties to the Montreal Protocol

11-Sep-22	13-Sep-22	Dubai, UAE	Participation in the West Asia Network Meetings for Standards and Operational discussions related to HPMP and Kigali Amendment and join the UNEP-Eurovent Meeting for Middle East
19-Sep-22	21-Sep-22	Canada	Participation at the Inter-Agency Coordination Meeting
19-Sep-22	23-Sep-23	Czech Republic	Participation in UNEP ECA OzonAction Network meeting
3-Oct-22	5-Oct-22	Thailand	Participation in the Joint Southeast and South Asia Ozone Officers Network Meeting organized by UNEP OzonAction
30-Oct-22	3-Nov-22	Canada	Participation at the 34th Meeting of the Parties to the Montreal Protocol
4-Dec-22	8-Dec-22	Canada	Participation in the 91st meeting of the Executive Committee of the MLF
12-Dec-22	16-Dec-22	Trinidad and Tobago	Project oversight mission

B. **Other Issues**

None.

ANNEX 1

In 2022, UNDP organized a side event in Bangkok during the OEWG on [Beating the Heat: Achieving Sustainable Cooling through National Cooling Plans](#) (NCPs) to spotlight and share the key experiences of countries in developing the NCPs and offer space for discussion of challenges and opportunities. UNDP also organized a side event on [Rising up for Small Island Developing States: Challenges and opportunities towards sustainable cooling and efficient cold chain](#) in the margins of the 34th Meeting of the Parties to the Montreal Protocol.

In addition, UNDP organized 5 webinars for Latin America and the Caribbean. Approximately, 213 people benefited and participated in these webinars, of which approximately 40% were women.

Virtual trainings 2022										
No. webinars	No. sessions/virtual training	Month	Year	Region	Language	Title	Content	Time	Attendees/virtual training	% Participation of women
UNDP: Montreal Protocol Unit										
1	1	February	2022	Latin America and the Caribbean	Spanish/English	Lessons learned from the project on Persistent Organic Pollutants and Mercury in the SDGs in Colombia	To learn about Colombia's main experiences and lessons learned in the development of the project to reduce the release of unintentional POPs in Healthcare waste management, Steel processing, Waste of Electric and Electronic Equipment (WEEE) and biomass burning. The actions developed	60 min	41	44

Virtual trainings 2022										
No. webinars	No. sessions/virtual training	Month	Year	Region	Language	Title	Content	Time	Attendees/virtual training	% Participation of women
							d during the project were aligned with the Sustainable Development Goals and the National Circular Economy Strategy developed by the Colombian government			
2	1	February	2022	Trinidad and Tobago	English	Cooling as a Service	The focus was on the concept of Cooling as a Service, highlighting opportunities and benefits for both consumers (off-takers) and Service providers	80 min	105	No data available
3	2	March	2022	Latin America and the Caribbean	Spanish/English	Kigali Amendment Implementation Tools: Quota system, Report and WCO update	This virtual training is aimed at strengthening technical capacities on three core issues for the impleme	135 min	48	67

Virtual trainings 2022										
No. webinars	No. sessions/virtual training	Month	Year	Region	Language	Title	Content	Time	Attendees/virtual training	% Participation of women
							ntation of the Montreal Protocol: a quota system for the control of HFC imports, HCFC and HFC consumption reporting, and the update to the World Customs Organization (WCO) harmonized system			
4	1	September	2022	The Caribbean	English		Possible ways to address the illegal trade of controlled substances by the Montreal Protocol	60 min	15	60
5	1	November	2022	Latin America and the Caribbean	Portuguese/Spanish/English	Environmentally Sound Management and Disposal of ODS in Brazil		240 min	No data available	No data available

* Type

Informative
Exchange of experiences and lessons learned
Good practices or new technologies

ANNEX 2: Tables related to the Performance Indicators

1. Performance Indicator 1: MYAs

Multi-year agreements submitted in 2022 are listed in the following table.

Country	Title
Barbados	Stage II HPMP
Bangladesh	Stage II HPMP
Costa Rica	Stage II HPMP
China	Stage II HPMP
India	Stage II HPMP
India	Stage III HPMP
Iran	Stage II HPMP
Peru	Stage II HPMP
South Sudan	Stage I HPMP

2. Performance Indicator 2: Individual Projects

The number of individual projects approved in 2022 are listed in the following table.

MLF Number
BGD/KIP/90/PRP/58
COS/PHA/91/TAS/66
CUB/SEV/90/INS/67
ELS/PHA/91/TAS/45
GEO/PHA/91/TAS/45
GHA/SEV/91/INS/54
GLO/SEV/91/TAS/363
HAI/PHA/91/PRP/26
HAI/SEV/90/INS/25
IDS/SEV/90/INS/219
IRA/SEV/91/INS/263
JAM/PHA/91/TAS/45
KYR/PHA/90/TAS/47
MEX/FOA/90/PRP/198
MEX/REF/90/PRP/199
MOZ/KIP/90/PRP/36
NIR/SEV/91/INS/165
PAN/SEV/90/INS/54
PHI/KIP/91/PRP/109

SRL/SEV/91/INS/61
TUR/KIP/90/PRP/112
ZIM/KIP/91/PRP/66

3. Performance Indicator 3: Funds disbursed

2022 Disbursements	\$ 26,245,166
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4. Performance Indicator 4: 2022 ODS phase-out

Country	Project Title	ODP 2022
Barbados	Stage II HCFC phase-out management plan	
Bangladesh	Stage II HCFC phase-out management plan	8.7
Costa Rica	Stage II HCFC phase-out management plan	3.3
China	Stage II HCFC phase-out management plan	17.8
India	Stage II HCFC phase-out management plan	51.4
India	Stage III HCFC phase-out management plan	136.2
Iran	Stage II HCFC phase-out management plan	6.7
Peru	Stage II HCFC phase-out management plan	4.9
South Sudan	Stage I HCFC phase-out management plan	0.2
		229.2

5. Performance Indicator 5: Projects completed in 2022.

The following 41 projects were completed in 2022.

MLF Number
ANG/PHA/79/INV/19
ARG/SEV/82/INS/188
BGD/SEV/81/TAS/52
BGD/SEV/83/INS/55
BRA/DES/72/DEM/305
BRU/PHA/85/INV/26
BZE/SEV/85/TAS/37
CHI/PHA/81/INV/197
CHI/PHA/85/INV/201
COL/PHA/84/TAS/108
COL/PHA/88/INV/111
COL/SEV/83/INS/106
COS/PHA/84/INV/61
CPR/PHA/85/INV/600
CUB/SEV/83/INS/62
EGY/PHA/79/INV/135

EGY/PHA/79/TAS/132
FIJ/PHA/86/INV/38
GEO/PHA/85/INV/42
GEO/SEV/85/INS/43
GHA/SEV/86/INS/49
GLO/SEV/88/TAS/360
IDS/PHA/76/INV/211
IDS/SEV/84/INS/215
IND/PHA/82/TAS/477
IND/PHA/86/INV/479
IRA/SEV/82/TAS/232
MAL/PHA/77/TAS/183
MAL/PHA/84/TAS/187
MOL/PHA/86/TAS/42
MOL/SEV/85/TAS/41
NEP/PHA/86/INV/44
NIR/PHA/81/TAS/148
NIR/PHA/81/TAS/150
NIR/SEV/86/INS/155
PAN/SEV/84/INS/50
SRL/SEV/86/INS/57
URU/PHA/85/INV/75
URU/SEV/84/INS/74
VEN/SEV/82/INS/136
ZIM/PHA/86/INV/60

7. Performance Indicator 7: Final Revisions

Last year’s database counted 76 projects, of which 53 should have been financially completed in 2022. This year’s database counts 57 projects for which a final revision was issued in 2022.

8. Performance Indicator 8: PCRs

100% achieved (5 individual PCRs were due and submitted in 2022).

9. Performance Indicator 9

Progress Report produced on 4 September 2023 as required.