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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
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Item 7(a)(iii) of the provisional agenda¹

PROGRESS REPORT OF UNDP AS AT 31 DECEMBER 2024**Introduction**

1. This document presents the progress report of UNDP as at 31 December 2024.²
2. The progress report of UNDP includes the status of implementation of projects, including 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 2024, 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 metric tonnes (mt) and CO₂-eq tonnes.³
4. This document presents a summary of progress in implementation of projects for 2024 and cumulative since 1991 addressing all controlled substances, including Annex F substances (HFCs), under the Montreal Protocol for all projects approved under regular funding and additional voluntary contributions. It also contains a review on the status of implementation of each ongoing⁴ project at the country level. It identifies projects with implementation delays and the potential impact on the phase-out

¹ UNEP/OzL.Pro/ExCom/97/1

² The progress report is attached to the present document. The data has been included in the Consolidated Progress Report database, which is provided on the 97th meeting portal on the Multilateral Fund's website, in the spreadsheet programme, Microsoft Excel.

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 97th meeting.

⁴ Ongoing projects are all projects that were under implementation as at 31 December 2024. 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.

of controlled substances, and projects with outstanding issues for consideration by the Executive Committee. As all projects approved under the additional voluntary contributions have been completed and the remaining balances will be returned to the Secretariat, the Secretariat will no longer report on these projects separately.

Progress in implementation of projects for 2024 and cumulative since 1991

5. As of 31 December 2024, the Executive Committee had approved US \$1.1 billion in projects for UNDP, consisting of US \$967.52 million for the implementation of investment and non-investment projects and US \$134.12 million for agency support costs, as shown in table 1.

Table 1. Approved funding by sector for UNDP as at 31 December 2024

Sector	Funding (US \$)
Aerosol	26,054,837
Destruction	4,436,037
Energy efficiency	2,362,019
Foam	174,543,644
Halon	4,996,973
HFC phase-down plan	16,001,127
Fumigants	20,081,241
Phase-out plan	427,990,351
Process agent	1,286,923
Production	1,060,066
Refrigeration	142,922,668
Several	81,663,722
Solvents	63,699,997
Sterilant	417,628
Sub-total	967,517,233
Agency support costs	134,117,165
Total	1,101,634,398

6. In 2024, 75 new projects and activities were approved. This level of funding is expected to result in the phase-out of 70,528 ODP tonnes of consumption of ODS and 2,605 mt (5,549,026 CO₂-eq tonnes) of consumption of HFCs. Annex I shows the status of project implementation per country in 2024.

7. Table 2 shows the status of project implementation including fund disbursement per project type as at 31 December 2024. Annex II presents analytical information per year since 1991.

Table 2. Status of project implementation by type as at 31 December 2024

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	43	42	98	21,868,769	21,718,833	149,936	99
Institutional strengthening (IS)	293	270	92	69,833,208	59,844,685	9,988,523	86
Investment	1,437	1,332	93	791,325,150	728,349,394	62,975,756	92
Project preparation	619	581	94	28,922,871	26,021,537	2,901,334	90
Technical assistance	360	345	96	52,347,949	49,529,425	2,818,524	95
Training	28	28	100	1,590,489	1,590,489	0	100
Total	2,802	2,620	94	967,517,233	888,683,160	78,834,073	92

*Excludes closed and transferred projects.

**Excludes agency support costs.

8. Implementation of projects and activities by UNDP for 2024 and cumulative since 1991 up to 31 December 2024 is summarized as follows:

- (a) **Phase-out:**⁵ In 2024, 401.5 ODP tonnes of consumption of ODS were phased out⁶ and an additional 188.1 ODP tonnes of consumption of ODS and 949.2 mt (2,571,839 CO₂-eq tonnes) of consumption of HFCs were approved for phase-out. Since 1991, 69,342 ODP tonnes had been phased out, of an expected total of 70,528 ODP tonnes of consumption of ODS and 648.4 mt (827,395 CO₂-eq tonnes) had been phased out, of an expected total of 2,605 mt (5,549,026 CO₂-eq tonnes) of consumption of HFCs from projects approved (excluding cancelled and transferred projects);
- (b) **Disbursements/approvals:** In 2024, US \$18.75 million was disbursed and US \$19.67 million was planned for disbursement based on the 2023 progress report, representing a rate of disbursement of 95 per cent of that planned. Cumulatively, US \$888.68 million had been disbursed out of the total US \$967.52 million approved for disbursement (excluding agency support costs), representing a rate of disbursement of 92 per cent. In 2024, US \$32.67 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 \$11.50/kg. The average cost-effectiveness of investment projects per ODP tonne was US \$11.01/kg for completed projects and US \$20.81/kg for ongoing projects;⁸
- (d) **Number of projects completed:** In 2024, 66 projects were completed. Since 1991, 2,620 projects of the 2,802 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 2024 were completed on average 43 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 2024 were completed on average 27 months after their approval. Since 1991, the average time for completion of non-investment projects has been 38 months after their approval. First disbursements under these projects occurred, on average, 13 months after they had been approved;
- (g) **Project preparation:** Of the 619 project preparation activities approved by the end of 2024, 581 have been completed, leaving 38 ongoing activities. In 2024, 25 projects preparation activities were completed;
- (h) **Implementation delays:** A total of 182 projects were under implementation at the end of 2024, experiencing, on average, a delay of four months. Fifteen of these projects are

⁵ Phase-out of ODS is expressed in ODP tonnes and of HFCs in mt and CO₂-eq tonnes.

⁶ No phase-out for HFC-related projects in 2024.

⁷ Including 2,605 mt of HFC-related 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.

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 2024, 44 MYAs for HCFC phase-out management plans (HPMPs) and 21 Kigali HFC implementation plans (KIPs) were under implementation. Since 1991, 186 MYAs have been approved and 121 MYAs have been completed, representing a completion rate of 65 per cent.

9. Table 3 summarizes 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
69,342	827,395	888,683,160	11.50	2,802	2,620	34	38	4	186	121

* HFC related projects.

HFC-related projects

10. As of 31 December 2024, the Executive Committee had approved 117 HFC-related projects (including one demonstration project, 44 investment projects, 50 project preparation activities and 22 technical assistance projects) amounting to US \$26,947,921 (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

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Demonstration	1	0	0	150,000	0	150,000	0
Investment**	44	5	11	19,125,234	6,937,477	12,187,757	36
Project preparation	50	33	66	4,689,011	3,024,432	1,664,579	65
Technical assistance	22	19	86	2,983,676	2,253,041	730,635	76
Total	117	57	49	26,947,921	12,214,950	14,732,971	45

* Excludes agency support costs.

** 2,605 mt (5,549,026 CO₂-eq tonnes) of HFCs was approved for phase-out.

11. As of the end of 2024, of the 117 projects, five investment projects, 33 project preparation and 19 technical assistance projects have been completed, leaving 60 ongoing. These activities are at various stages of implementation.

12. Of the total cumulative funding approved of US \$26,947,921 (excluding agency support costs), US \$12,214,950 had been disbursed, representing a disbursement rate of 45 per cent.

Issues identified in project implementation in 2024

13. Further to the review process, several issues were discussed and satisfactorily addressed, except for issues on 15 projects classified as projects with implementation delays (including 12 projects related to components of MYAs that are subject to procedures for project cancellation, in line with decision 84/45(c); two technical assistance projects and one HFC investment project). Annex III to the present document

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).

presents those projects classified with implementation delays, and the Secretariat's recommendations requesting the submission of a report to the 98th meeting.

14. In addition, an issue has been identified regarding a tranche of an MYA for the phase-out of HCFCs. 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.

15. Details of progress in implementation of projects associated with the HPMPs for Angola,¹⁰ Bangladesh,¹¹ China (overarching, industrial and commercial refrigeration and air-conditioning, solvent),¹² Cuba,¹³ Mali,¹⁴ Peru,¹⁵ and South Sudan,¹⁶ with the KIP for Mexico,¹⁷ and reports on projects with specific reporting requirements¹⁸ associated with Lebanon (HPMP), have been submitted to the 97th meeting. Recommendations for outstanding issues for these projects, including approval of extension requests, if any, are addressed in the relevant sections of those documents. Outstanding issues for the remaining ongoing projects not included in annex III to the present document, and requests for extension of dates of completion are addressed below.

16. Of the 121 ongoing projects, excluding IS and project preparation, 16 projects have revised planned dates of completion since the 2023 progress report.

17. In line with decision 95/12(b), the Secretariat noted that a renewal request of the IS project for China had not been submitted for the last three years; it is expected to be submitted in 2026.

18. At its 95th meeting, in approving the second tranche of stage II of the HPMP for Georgia, the Executive Committee noted that UNDP would submit a report on the progress of regulations to prohibit the import and installation of HCFC-based equipment as part of its 2024 financial and progress report to be submitted at the second meeting in 2025.¹⁹ UNDP has reported that a study had confirmed that no new refrigeration and air-conditioning (RAC) units using HCFCs are being imported or offered for sale in the country. Stakeholders, including importers, service companies, and vocational training institutions, further validated that the market is gradually shifting toward systems based on low-global-warming-potential refrigerants, in alignment with global manufacturing trends and supply chain realities. UNDP will provide an update on the matter at the 97th meeting.

19. In line with decision 82/11(b),²⁰ UNDP has requested the extension of the duration of nine projects, as shown in table 5.

¹⁰ UNEP/OzL.Pro/ExCom/97/35

¹¹ UNEP/OzL.Pro/ExCom/97/37

¹² UNEP/OzL.Pro/ExCom/97/44

¹³ UNEP/OzL.Pro/ExCom/97/46

¹⁴ UNEP/OzL.Pro/ExCom/97/58

¹⁵ UNEP/OzL.Pro/ExCom/97/70

¹⁶ UNEP/OzL.Pro/ExCom/97/78

¹⁷ UNEP/OzL.Pro/ExCom/97/60

¹⁸ UNEP/OzL.Pro/ExCom/97/17

¹⁹ Decision 95/34(a), annex XVII of UNEP/OzL.Pro/ExCom/95/94

²⁰ 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.

Table 5. Projects for which an extension of the completion dates has been requested

Country/ project code	Disbursement (%)	Activities requiring additional time	Original date of completion	Date of completion requested
Conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare)				
Zimbabwe ZIM/REF/82/INV/55	89	Completion of prototype of the cooling circuits, commissioning of freezer line and safety audit completion	Jun-25	Jun-26
Preparation of national inventory of banks of waste-controlled substances and development of a national plan for management of these substances (decision 91/66)				
Chile CHI/DES/94/PRP/213	0	Recruitment of consultant, completion of data collection and analysis, and report preparation	Jun-26	June-27
Cuba CUB/DES/93/PRP/69	14	Completion of data collection and analysis, and report preparation	Dec-25	Dec-26
Egypt EGY/DES/93/PRP/155	0	Recruitment of consultant, completion of data collection and analysis, and report preparation	Dec-25	Dec-26
Jamaica JAM/DES/93/PRP/46	0	Recruitment of consultant, completion of data collection and analysis, and report preparation	Dec-25	Dec-26
Panama PAN/DES/94/PRP/58	0	Completion of data collection and analysis, and report preparation	June-26	June-27
Peru PER/DES/93/PRP/64	0	Recruitment of consultant, completion of data collection and analysis, and report preparation	Dec-25	Dec-26
Trinidad and Tobago TRI/DES/93/PRP/43	0	Recruitment of consultant, completion of data collection and analysis, and report preparation	Dec-25	Dec-26
Uruguay URU/DES/93/PRP/82	0	Recruitment of consultant, completion of data collection and analysis, and report preparation	Dec-25	Dec-26

Gender mainstreaming²¹

20. All projects implemented by UNDP continue to apply its Gender Equality Strategy, the gender mainstreaming policy of the Multilateral Fund and relevant national gender policies. In general, UNDP ensures that project implementation includes consultations with relevant associations, networks, and stakeholders, and disaggregated data collection on the participation of women. UNDP's country offices monitor their performance on gender equality through the flagship Gender Seal programme, which measures progress across a range of criteria, including the impact of UNDP's interventions at the country level. Although activities to promote women's participation vary by country, the strategies deployed thus far have led to increased participation of women in training courses and meetings organized under the Montreal Protocol portfolio.

21. In China, UNDP collaborated with the China Refrigeration and Air-conditioning Industry College Student Science and Technology Competition to engage youth and empower young women in sustainable practices within the refrigeration sector. This initiative promoted visibility, mentorship, and career development for young women, helping to address professional barriers in the sector. In Colombia, a nationwide data collection exercise was conducted to identify and profile women involved in the RAC sector. Subsequently, the annual meeting of women in the RAC sector was held, which focused on the signing of an expression of interest in the formation of the RAC Women's Network in Colombia. In Mali, two sensitization workshops were held in Bamako, training 90 participants on best refrigeration practices and the importance of customs enforcement in ensuring the country's compliance to the Montreal Protocol, with 21 women participating, representing 23 per cent of the total number of participants. The RAC technicians' workshop achieved 34 per cent female participation. These outcomes reflect meaningful

²¹ 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)).

progress in inclusive capacity-building and provide a strong foundation for future gender-responsive programming in Mali.

22. Finally, data collection for KIP preparation includes the number of technicians disaggregated by gender, sector and subsector. Furthermore, while developing KIPs and new stages of HPMPs, UNDP extensively considers lessons learned from previous HPMPs regarding gender mainstreaming. The key challenges include the lack of baseline data on gender and the limited involvement of women in the RAC sector.

Recommendation

23. The Executive Committee may wish:

- (a) To note the progress report of UNDP as at 31 December 2024 contained in document UNEP/OzL.Pro/ExCom/97/13;
- (b) To approve the extension of the completion dates of the projects listed below to allow completion of the remaining ongoing activities, as reflected in table 5 of document UNEP/OzL.Pro/ExCom/97/13:
 - (i) To June 2026, for the conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare) for Zimbabwe (ZIM/REF/82/INV/55);
 - (ii) For the preparation of national inventory of banks of waste-controlled substances and development of a national plan for management of these substances (decision 91/66) for the following countries:
 - a) To December 2026, for Cuba (CUB/DES/93/PRP/69); Egypt (EGY/DES/93/PRP/155); Jamaica (JAM/DES/93/PRP/46); Peru (PER/DES/93/PRP/64); Trinidad and Tobago (TRI/DES/93/PRP/43); and Uruguay (URU/DES/93/PRP/82); and
 - b) To June 2027, for Chile (CHI/DES/94/PRP/213); and Panama (PAN/DES/94/PRP/58); and
- (c) 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 2024**

1. Table 1 of annex I presents the status of project implementation by country for 2024 in achieved phase-out, planned and achieved disbursements and project completion.

Table 1. Status of project implementation by UNDP for 2024

Country	Phased out in 2024 (ODP tonnes)*	Phased out in 2024 (CO ₂ -eq tonnes)*	Estimated funds disbursed in 2024 (US\$)	Funds disbursed in 2024 (US\$)	Percentage of funds disbursed over estimation in 2024	Percentage of planned projects completed in 2024**
Angola	0.0	0	272,286	114,499	42	
Argentina	0.0	0	185,128	92,933	50	
Bangladesh	6.8	0	507,649	1,139,761	225	0
Barbados	0.0	0	28,750	0	0	
Belize	0.0	0	21,325	0	0	100
Bhutan	0.0	0	25,000	0	0	0
Brazil	66.3	0	1,074,324	2,194,806	204	
Cambodia	0.4	0	62,902	46,169	73	100
Chile	0.0	0	373,434	199,740	53	
China	98.6	0	2,994,092	5,756,097	192	50
Colombia	0.0	0	623,325	559,150	90	
Costa Rica	0.0	0	284,866	328,618	115	
Cuba	0.0	0	304,597	283,308	93	100
Democratic Republic of the Congo (the)	0.0	0	50,140	0	0	0
Dominican Republic (the)	0.0	0	365,427	132,036	36	100
Egypt	0.0	0	629,235	444,436	71	0
El Salvador	3.8	0	119,927	85,684	71	0
Eswatini	0.0	0	38,500	9,000	23	100
Fiji	0.0	0	119,976	16,421	14	0
Georgia	0.0	0	67,856	190,822	281	100
Ghana	0.0	0	187,006	206,505	110	100
Grenada	0.0	0	36,187	0	0	100
Guyana	0.0	0	67,103	13,250	20	0
Haiti	0.0	0	49,720	59,607	120	100
India	165.2	0	2,488,148	1,294,054	52	100
Indonesia	31.4	0	1,608,721	716,069	45	100
Iran (Islamic Republic of)	6.6	0	647,942	449,008	69	50
Jamaica	0.0	0	130,309	51,750	40	
Kyrgyzstan	0.0	0	52,040	0	0	
Lao People's Democratic Republic (the)	0.0	0	49,024	35,735	73	100
Lebanon	1.1	0	436,679	376,273	86	100
Malaysia	0.0	0	832,776	460,539	55	100
Maldives	0.0	0	35,000	22,026	63	100
Mali	0.0	0	51,440	0	0	0
Mexico	0.0	0	482,008	151,580	31	100
Mozambique	0.0	0	73,650	18,509	25	0
Nepal	0.1	0	19,104	40,685	213	100
Nigeria	17.4	0	971,210	1,188,161	122	100
Pakistan	0.0	0	171,334	42,215	25	

Country	Phased out in 2024 (ODP tonnes)*	Phased out in 2024 (CO ₂ -eq tonnes)*	Estimated funds disbursed in 2024 (US\$)	Funds disbursed in 2024 (US\$)	Percentage of funds disbursed over estimation in 2024	Percentage of planned projects completed in 2024**
Panama	0.0	0	293,803	203,384	69	100
Paraguay	0.7	0	30,073	48,255	160	
Peru	2.0	0	449,263	270,583	60	
Philippines (the)	0.0	0	220,000	94,567	43	0
Republic of Moldova (the)	0.2	0	12,645	36,968	292	100
South Sudan	0.0	0	21,500	0	0	0
Sri Lanka	0.8	0	210,775	375,007	178	67
Timor-Leste	0.1	0	1,260	0	0	100
Trinidad and Tobago	0.0	0	693,670	375,125	54	100
Türkiye	0.0	0	72,242	56,837	79	100
Uruguay	0.0	0	760,736	235,971	31	100
Venezuela (Bolivarian Republic of)	0.0	0	169,760	68,018	40	
Zimbabwe	0.0	0	194,189	261,973	135	50
Global***	0.0	0	0	0		100
Grand total	401.5	0	19,668,056	18,746,134	95	72

* No phase-out in 2024 for HFC-related projects.

** For projects that were planned to be completed in 2024.

*** 2024 core unit.

Annex II

OVERVIEW OF STATUS OF PROJECT IMPLEMENTATION FOR UNDP PER YEAR AS AT 31 DECEMBER 2024

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 2017 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	49,481,581	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	15,753,458	15,753,459	-1	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	13,217,903	13,217,903	0	100
2010	43	43	100	19,567,970	19,567,970	0	100
2011	63	63	100	57,415,931	57,415,931	0	100
2012	29	29	100	33,818,922	33,818,922	0	100
2013	43	43	100	33,958,972	33,958,972	0	100
2014	67	67	100	22,560,966	22,561,030	-64	100
2015	75	75	100	30,256,568	30,274,905	-18337	100
2016	52	52	100	41,574,769	41,536,980	37,789	100
2017	43	43	100	35,237,535	35,118,103	119,432	100
2018	62	61	98	40,667,384	39,088,774	1,578,610	96
2019	41	37	90	10,322,186	9,689,496	632,690	94
2020	50	46	92	29,795,896	27,100,573	2,695,323	91
2021	66	55	83	24,642,528	20,393,289	4,249,239	83
2022	38	23	61	13,768,300	6,537,652	7,230,648	47
2023	81	9	11	34,974,872	5,151,863	29,823,009	15
2024	75	0	0	32,674,861	189,126	32,485,735	1
Total	2,802	2,620	94	967,517,233	888,683,160	78,834,073	92

* 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
Barbados BAR/PHA/91/INV/33	HCFC phase-out management plan (stage II, first tranche)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Democratic Republic of the Congo (the) DRC/PHA/88/INV/49	HCFC phase-out management plan (stage II, first tranche)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
El Salvador ELS/PHA/91/TAS/45	Verification report on the implementation of stage II of the HCFC phase-out management plan	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Fiji FIJ/PHA/88/INV/39	HCFC phase-out management plan (stage II, first tranche)	0	12 and 18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Fiji FIJ/PHA/92/TAS/44	Verification report on the implementation of the HCFC phase-out management plan	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Guyana GUY/PHA/83/INV/32	HCFC phase-out management plan (stage II, second tranche)	20	Administrative delays in procurement	To request UNDP to submit a status report to the 98 th meeting on implementation progress
Guyana GUY/PHA/92/INV/36	HCFC phase-out management plan (stage II, third tranche)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
India IND/PHA/91/INV/495	HCFC phase-out management plan (stage III, first tranche) (air-conditioning manufacturing sector)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
India IND/PHA/91/INV/498	HCFC phase-out management plan (stage III, first tranche) (servicing sector)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
India IND/PHA/91/INV/500	HCFC phase-out management plan (stage III, first tranche) (Technical assistance for MSMEs)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Indonesia IDS/PHA/92/INV/222	HCFC phase-out management plan (stage III, first tranche)	0	18 months delays	To request UNDP to report to the 98 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	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Iran (Islamic Republic of) IRA/PHA/92/INV/266	HCFC phase-out management plan (stage II, fourth tranche) (commercial refrigeration sector)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Iran (Islamic Republic of) IRA/PHA/92/INV/267	HCFC phase-out management plan (stage II, fourth tranche) (foam sector)	0	18 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays
Sri Lanka SRL/PHA/86/INV/58	HCFC phase-out management plan (stage II, first tranche)	23	12 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays

Country/project code	Project title	Disbursement (%)	Status/Issues	Recommendation
Zimbabwe ZIM/REF/82/INV/55	Conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare)	89	12 months delays	To request UNDP to report to the 98 th meeting on this project with implementation delays



Empowered lives.
Resilient nations.

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

UNDP Annual Progress and Financial Report Narrative: 1991-2024

97th meeting, 1 –5 December 2025, Montreal, Canada

I. INTRODUCTION

The following narrative is based on a database of 2,802 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2024. However, some updates of activities which took place during 2025 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\$ 888,683,160 of the US\$ 967,517,239 worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 73,382 ODP T/year, of which 71,416 (97%) were phased out as of 31 December 2024. 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 2024, UNDP was active in 51 countries, of which 35 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 with large consumption sectors, as Brazil, China, India, Indonesia, Malaysia, and Nigeria. In all countries, UNDP provides 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 also acts as the cooperating agency in 18 countries.

Moreover, with the entry into force of the Kigali Amendment for phasing down HFCs from January 1st, 2019, UNDP is also assisting countries act on climate change and implement additional energy efficiency measures, which could help the world avoid even higher temperatures. Difficulties and challenges faced by developing countries in accessing and scaling-up sustainable and efficient cooling technologies are significant at present. Technical and financial support, as well as capacity development to reduce HFCs and improve cooling efficiency are needed broadly in all developing countries. UNDP is supporting 34 countries to prepare and implement their HFC phasedown plans.

UNDP continued to organize in-person, virtual and online-based activities to assist countries in meeting their Montreal Protocol. UNDP organized side events during the Open-Ended Working Group (OEWG) and the Meeting of the Parties (MOP) to share knowledge and best practices of the projects we are involved in. In the margins of the 46th OEWG, UNDP organized a side event on [Integrated Approaches to Promote Energy-Efficient, low-GWP RAC Appliances in Africa](#). This side event provided practical strategies to promote the adoption of efficient, low-GWP RAC appliances through combining multiple measures, including market-based financing instruments, energy-efficiency promotion, circular economy practices, and enhancing partnerships among Ozone Units, Energy Commissions, and national banks. During the 36th MOP, UNDP organized a successful side event on Refrigeration Technicians Training and Mandatory Certification, which described Indonesia's promotion of responsible refrigerant management practices for Sustainable Cooling. Finally, UNDP also organized a side event on [Enhancing Energy Efficiency of the Refrigeration and Cooling Sector](#) at COP29, which highlighted potential near-zero emissions from the cooling sector by 2050 and the need for integrated policy approaches for progress on the Montreal Protocol and the Paris Agreement.

WALKING THE WALK – UNDP GREENING MOONSHOT

The UNDP Montreal Protocol Unit (MPU) contributes towards UNDP’s efforts in becoming more green, sustainable and just by reducing Greenhouse Gas (GHG) emissions from its operations across the globe. Having committed to an ambitious Moonshot Target of reducing its corporate carbon footprint from its facilities, vehicles and air travel by 50% by 2030, UNDP has minimized refrigerant emissions from cooling equipment in UNDP offices. Therefore, UNDP’s MPU, in collaboration with the UNDP Greening Moonshot Secretariat, developed a [comprehensive updated approach to monitor and manage UNDP’s carbon footprint from refrigerant use](#) in its facilities world-wide and started monitoring its cooling-related carbon footprint in more detail as of 2022.

Today, all 149 UNDP main offices report on more than 6,000 cooling assets in 200+ facilities, ranging from air-conditioned vehicles, fridges of various sizes, from small residential and commercial assets to bigger rooftop chillers. Preliminary data shows that for 2024, leakage of refrigerants contributes to over 2,000 tonnes of CO₂e emissions – about 4% of UNDP’s total operational carbon footprint. Data also revealed that a large portion of the reported refrigerants are currently classified as having a “high carbon impact” (GWP of 800+). UNDP is committed to prioritize the procurement of ‘greener’ cooling equipment and avoid equipment with high global warming impact where feasible going forward - equipment using low or no GWP refrigerants on average also use less energy, which further contributes to reducing the carbon footprint of UNDP operations while saving energy costs.

Due to its success, other UN agencies are also now adopting this methodology to reduce the climate impact of their cooling needs.

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 2024, UNDP had a total of 2,802 approved projects under the Multilateral Fund, of which 100 had been canceled or transferred. Of the 2,802 remaining projects, 2,619, or 93% have been completed. They are set to eliminate 73,382 ODP T/year, of which 70,187 ODP T (97%) have already been eliminated.

As of 31 December 2024, UNDP had received cumulative net project approvals of US\$ 967,517,239 (excluding support costs). Of these, UNDP, as of end-2024, had disbursed US\$ 888,683,160 excluding all obligations. This translates to 92% of approved funding. Furthermore, an additional US\$ of obligations were outstanding as of end-December 2024, representing orders placed but final payments not yet made.

B. Interest and Adjustments

Interest income earned on MLF resources in 2024 is US\$ 3,224,552. This amount will be reported in the 2024 final financial statement to be submitted to the MLF Treasurer by the agreed deadline of 30 September. The difference between the provisional and final 2024 interest income was adjusted against UNDP project approvals at the 94th 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, 5% to technical assistance projects, 7% to institutional strengthening and 3% to project preparation activities. The remaining 2% was dedicated to country programmes and demonstration/training activities.

III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

A. Global Projects: There is one ongoing global programme under implementation by UNDP:

GLO/SEV/95/TAS/374, the Core unit support (2025) programme approved at the 95th 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 2024

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 XII of the report

of the 93rd meeting of the Executive Committee contained UNDP's 2024 targets. One can see from the table below that UNDP fully met 2 out of 9 of its targets and that its score amounts to 89%.

Category of performance indicator	Item	Weight	2024 target	UNDP 2024 Achieved	Comments
1. Approval	Number of tranches approved vs. those planned*	10	38	30	
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	33	29	
3. Implementation	Funds disbursed	15	26,752,712	18,742,767	
4. Implementation	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	271.84	260.0	
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	45	41	
6. Administrative	The extent to which projects are financially completed 12 months after project completion	10	48 (70% of 68 projects)	48	
7. Administrative	Timely submission of project completion reports vs. those agreed	5	100% of those due (1)	100%	5 MYA PCRs and 1 individual PCR submitted
8. Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On time	On time	
TOTAL		100		89	

*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.

B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,332 investment projects have been completed, with a corresponding elimination of 64,673 ODP T. Of the US\$ 712,472,553 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 34 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was \$11.02 /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 706 non-investment projects excluding project preparation assistance. Of the US\$ 133,692,420 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 105 ongoing investment projects in the sectors of Phase-out Plans and Foam, with corresponding budgets of US\$ 72,311,554. Of this amount, 21% has been disbursed. It takes an average of 37 months from approval to the estimated project completion. 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 40 ongoing non-investment projects excluding project preparation assistance. Of the US\$ 13,104,765 in approved budgets, 12% has been disbursed. It takes an average of 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. 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 2024.

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 38 PRP projects listed with US\$ 2,706,500 in associated approvals, 17% has been disbursed.

VI. DESCRIPTION OF KEY ONGOING ACTIVITIES

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

- A. Kigali Implementation Plan (KIP) Preparation
- B. Energy Efficiency Activities
- C. Preparation for national inventories of banks of waste-controlled substances
- D. Gender Mainstreaming Results Achieved
- E. Country Highlights

A. KIP Preparation

As of the end of 2024, UNDP has received approval from the Multilateral Fund to provide support to 34 countries to prepare their Kigali Implementation Plans as the lead or cooperating agency. Of these countries, 22 countries have submitted their Stage I Kigali Implementation Plans. For more details, please see the table below.

Country	MLF Number	Project Title	KIP Status
Angola	ANG/KIP/88/PRP/24	Preparation of Kigali HFC implementation plan	In process
Bangladesh	BGD/KIP/90/PRP/58	Preparation of Kigali HFC implementation plan	In process
Bhutan	BHU/KIP/87/PRP/29	Preparation of Kigali HFC implementation plan	In process
Belize	BZE/KIP/94/PRP/49	Preparation of Kigali HFC implementation plan	In process
Brazil	BRA/KIP/93/PRP/333	Preparation of Kigali HFC implementation plan	In process
Cambodia	KAM/KIP/88/PRP/40	Preparation of Kigali HFC implementation plan	Submitted
Chile	CHI/KIP/88/PRP/207	Preparation of Kigali HFC implementation plan	Submitted

Colombia	COL/KIP/87/PRP/110	Preparation of Kigali HFC implementation plan	Submitted
Costa Rica	COS/KIP/87/PRP/63	Preparation of Kigali HFC implementation plan	Submitted
Cuba	CUB/KIP/87/PRP/65	Preparation of Kigali HFC implementation plan	Submitted
Dominican Republic	DOM/KIP/87/PRP/73	Preparation of Kigali HFC implementation plan	Submitted
Egypt	EGY/KIP/93/PRP/156	Preparation of Kigali HFC implementation plan	In process
El Salvador	ELS/KIP/88/PRP/44	Preparation of Kigali HFC implementation plan	Submitted
Eswatini	SWA/KIP/87/PRP/33	Preparation of Kigali HFC implementation plan	Submitted
Fiji	FIJ/KIP/88/PRP/41	Preparation of Kigali HFC implementation plan	In process
Ghana	GHA/KIP/87/PRP/51	Preparation of Kigali HFC implementation plan	Submitted
Grenada	GRN/KIP/88/PRP/28	Preparation of Kigali HFC implementation plan	Submitted
Kyrgyzstan	KYR/KIP/87/PRP/45	Preparation of Kigali HFC implementation plan	Submitted
Laos PDR	LAO/KIP/87/PRP/39	Preparation of Kigali HFC implementation plan	Submitted
Lebanon	LEB/KIP/87/PRP/98	Preparation of Kigali HFC implementation plan	In process
Maldives	MDV/KIP/87/PRP/36	Preparation of Kigali HFC implementation plan	In process
Mali	MLI/KIP/93/PRP/47	Preparation of Kigali HFC implementation plan	In process
Mexico	MEX/KIP/87/PRP/195	Preparation of Kigali HFC implementation plan	Submitted
Mozambique	MOZ/KIP/90/PRP/36	Preparation of Kigali HFC implementation plan	Submitted
Nigeria	NIR/KIP/87/PRP/156	Preparation of Kigali HFC implementation plan	Submitted
Panama	PAN/KIP/87/PRP/53	Preparation of Kigali HFC implementation plan	Submitted
Paraguay	PAR/KIP/87/PRP/42	Preparation of Kigali HFC implementation plan	Submitted
Peru	PER/KIP/87/PRP/59	Preparation of Kigali HFC implementation plan	Submitted
Philippines	PHI/KIP/91/PRP/109	Preparation of Kigali HFC implementation plan	In process
Sri Lanka	SRL/KIP/87/PRP/59	Preparation of Kigali HFC implementation plan	In process
Trinidad & Tobago	TRI/KIP/87/PRP/40	Preparation of Kigali HFC implementation plan	Submitted
Turkiye	TUR/KIP/90/PRP/112	Preparation of Kigali HFC implementation plan	Submitted
Uruguay	URU/KIP/87/PRP/77	Preparation of Kigali HFC implementation plan	Submitted
Zimbabwe	ZIM/KIP/91/PRP/66	Preparation of Kigali HFC implementation plan	Submitted

B. Energy Efficiency Activities

Energy efficiency has become an increasingly important co-benefit of projects supported under the MLF. As countries phase out harmful substances and transition to low-GWP alternatives, the MLF has recognized the opportunity to simultaneously improve energy performance, particularly in the RAC sector.

Below are the key ExCom decisions on energy efficiency:

- **ExCom Decision 89/6** allows countries to consider activities for inclusion in HPMPs for LVCs for the introduction of alternatives to HCFCs with low or zero GWP and for maintaining energy efficiency in the refrigeration servicing sector.
- **ExCom Decision 91/65** sets out criteria for pilot projects to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of the HFC phase-down.
- **ExCom Decision 92/37** addresses the level and modalities of funding to support HFC phase-down activities in the refrigeration servicing sector, in line with the Kigali Amendment to the Montreal

Protocol.

- **ExCom Decision 94/60** creates an operational framework and strengthens the integration of energy efficiency measures within HFC phase-down activities supported by the MLF under the Kigali Amendment.
- **ExCom Decisions 95/87 and 96/31** establishes a funding window of US \$40 million for two energy-efficiency end-user projects using a revolving fund mechanism.

Below is a list of UNDP's approvals on Energy Efficiency as of 2025.

Country	Title
Barbados	HCFC phase-out management plan (stage II): Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6)
Chile	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (decision 91/65)
Chile	Preparation of a pilot project for the use of R-744 (carbon dioxide) as an alternative refrigerant in heat pumps in industrial refrigeration (decision 91/65)
China	Preparation for a pilot project on energy efficiency (decision 91/65)
Colombia	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities) (decision 91/65)
Costa Rica	Pilot project to demonstrate a transcritical CO2 refrigeration system in a supermarket as a low-GWP energy-efficient technology in the context of HFC phase-down (non-investment activities) (decision 91/65)
Costa Rica	HCFC phase-out management plan (stage II): Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6)
Cuba	HCFC phase-out management plan (stage II) (Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6))
Cuba	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (decision 91/65)
El Salvador	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities) (decision 91/65)
Georgia	HCFC phase-out management plan (stage II): Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6)
Ghana	Preparation of a pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (decision 91/65)
Global	Preparation for a pilot project for digital monitoring and management tools to enhance energy efficiency and reduce emission of greenhouse gases in the space cooling and cold chain sectors in Colombia, Lebanon, and Trinidad and Tobago (91/65)
Global	Preparation for Energy Efficiency Revolving Fund in Colombia, Ghana, and Jordan
Guyana	Additional activities to maintain energy efficiency for the servicing sector under decision 89/6(b)
Haiti	HCFC phase-out management plan (stage II): Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6)
India	Conversion of the manufacturing of commercial refrigeration appliances at Rockwell Industries Limited from HFC-134a to propane (R-290) (technical assistance to enhance the energy efficiency of the converted equipment) (decision 91/65)
Jamaica	HCFC phase-out management plan (stage II): Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6)
Paraguay	HCFC phase-out management plan (stage II) (Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6))
Sri Lanka	HCFC phase-out management plan (stage II) (Additional activities to maintain energy efficiency in refrigeration servicing sector (decision 89/6))
Sri Lanka	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities) (91/65)
Uruguay	Pilot project to maintain and/or enhance the energy efficiency of technologies in the commercial

	refrigeration and residential AC sectors in the context of HFC phase-down (non investment activities) (decision 91/65)
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UNDP has been making efforts to support integrated interventions for the implementation of the Kigali Amendment and improving energy efficiency through collaboration with other partners. Two impactful regional initiatives were developed and implemented. One is the Cool-Up Programme¹ funded by IKI for four countries mainly in the MINA region in which UNDP provided development services collaborating with other partners. The other is the AGORA² project for Nigeria and Ghana funded by FFEM for an integrated approach for sustainable cooling. These projects will complement the implementation of the MLF projects in concerned countries particularly for energy efficiency and market transformation to natural refrigerants in end-user sectors. The accumulated knowledge and experiences from the development and implementation of these initiatives provide insights to distribute and replicate successful practices through the MLF portfolio.

C. Preparation for inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances

ExCom Decision 91/66 sets forth criteria to fund inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances. UNDP's approvals as of 2025 include:

Country	Title
Chile	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances
Cuba	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances
Egypt	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances
Indonesia	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances
Jamaica	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances
Panama	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances
Peru	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances
Trinidad & Tobago	Preparation of national inventory of banks of waste-controlled substances and development o national plan for management of these substances

D. Gender Mainstreaming Results Achieved

All projects implemented by UNDP follow [UNDP's Gender Equality Strategy](#), while also following their 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. UNDP's country offices track their performance on gender equality through the flagship Gender Seal programme, which measures progress on wide-ranging criteria, including the impact of UNDP's interventions on the ground.

Gender mainstreaming activities vary from country to country; however, the strategies deployed so far have resulted in an increase of women's participation in courses and meetings organized under the Montreal Protocol portfolio. 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.

¹ <https://www.coolupprogramme.org/>

² Agora: Abating Greenhouse Gas Emissions from Obsolete RAC equipmenttiseurs domestiques

Specific highlights include the following:



In **China**, UNDP collaborated with the China Refrigeration and Air Conditioning Industry College Student Science and Technology Competition to engage youth and empower young women in sustainable practices within the refrigeration sector. The initiative integrates climate education and gender-sensitive approaches to foster innovation, practical skills, and awareness of environmental protocols among students. The program highlights China's progress in implementing the Montreal Protocol, emphasizing the importance of youth involvement for future industry compliance and

environmental protection efforts. Despite women being underrepresented globally in refrigeration, China shows higher female participation, especially in design and research roles. But barriers still exist in relation to the professional promotion opportunities, as well as issues related to work-life balance and training access remain key hurdles, especially in technical roles. Therefore, UNDP China also collaborated with the China Refrigeration and Air Conditioning Industry College Student Science and Technology Competition to promote visibility, mentorship, and career development for young women to address professional barriers in the sector.

In **Colombia**, as part of the actions aimed at complying with the MLF Gender Operational Policy and promoting the integration of the gender perspective in funded projects, a nationwide data collection was carried out to identify and characterize women who play roles in the value chain of the RAC sector. Subsequently, the annual meeting of women in the RAC sector was held, with the central theme being the signing of the expression of interest for the formation of the RAC Women's Network in Colombia. Additionally, a virtual event was organized for women in the RAC sector as part of the celebration of International Women's Day, during which topics such as public policy on women and gender equity, prioritization of women's rights, and access to justice pathways were addressed. Finally, a proposed activity plan was prepared for the integration of the gender perspective in the Stage I KIP.

In **Mali**, two sensitization workshops were held in Bamako, training 90 participants on best refrigeration practices as well as the importance of Customs enforcement in ensuring the country's compliance to the Montreal Protocol. Notably, gender inclusion was encouraging, with 21 women participating, representing 23% overall. The RAC technicians' workshop saw 34% female participation, a promising sign in a traditionally male-dominated field. Although the Customs officers' session had lower female representation (10%), the overall results reflect growing efforts toward gender balance. These outcomes highlight positive strides in inclusive capacity building and offer a strong foundation for future gender-responsive programming in Mali.

Finally, 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 2024)

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.

Mandatory Certification System Experience in Georgia

Following the ratification of the Kigali Amendment in Georgia on 5 May 2023, a package of legislative changes was prepared and adopted on 16 June 2023 with the support of the Stage II HPMP. These changes entered into force gradually, starting at the end of 2023 and continuing until January 2024, introducing new mandatory requirements for environmental inspectors, customs officers, owners of ODS-using equipment, business sector representatives, and RAC service providers. In addition, the use of the web-based electronic reporting and permit system became mandatory.

The amendments aim to strengthen the national refrigerant management system, including the management of HFCs, and to improve service quality in the heat pump, air-conditioning, and refrigeration sectors. Key provisions include:

- Introduction of a mandatory certification system for RAC service technicians and owners of ODS-using equipment. The certification process ensures that, in addition to theoretical knowledge, certified technicians possess the necessary practical skills.
- Establishment of a web-based electronic refrigerant management system (ERMS) for monitoring refrigerants, including HFCs. Owners of stationary equipment containing 3 kg or more of a substance listed under the Montreal Protocol, as well as certified personnel, are required to maintain an electronic log.

In Georgia, the Legal Entity of Public Law “Environmental Information and Education Centre” under the Ministry of Environmental Protection and Agriculture is the authority responsible for technician certification. To date, approximately 1,100 technicians and 400 equipment owners have been certified. More than one year of implementation has demonstrated the need to diversify certification examination content by sector. This will ensure that technicians working on vehicle air conditioner repairs, domestic appliance servicing, industrial chiller maintenance, and individuals involved in the trade of ozone-depleting substances undertake sector-specific tests with appropriate levels of complexity. Work is underway to introduce differentiated testing, which is planned to come into effect next year.

Advancing Climate Action & Ozone Protection with the Transformation of the PU Foam Sector in Malaysia

Under the Stage II HPMP, Malaysia committed to phase-out HCFCs in its PU Foam Sector by 2022. The Stage II HPMP was approved in November 2016, at a total funding level of US \$ 6,138,063 and the country agreed to phase-out 146.24 ODP tons, constituting 50% of its baseline.



HPMP Stage II (2017–2024): Key Achievements

The Stage II HPMP targeted a complete phase-out of HCFCs in the foam sector covering 77 enterprises, including 67 eligible to receive funding from the MLF. It was agreed that non-eligible enterprises would convert with their own resources. The HPMP provided technical assistance and conversion activities to 67 eligible foam companies, adopting pure hydrocarbons, pre-blended hydrocarbons, methylal and HFO as alternative blowing agents. Of these, 57 were MSMEs.

Challenges for Micro and Small Enterprises

However, in progressing with the implementation of conversion activities at the MSMEs the project implementation team identified several issues that related to the supply chain of HFOs in Malaysia. During implementation, requests for a change of technology from HFOs to other low-GWP blowing agents for the SMEs were approved by the Executive Committee.

Particularly, 18 MSMEs faced great financial difficulties in the technological phase-in. On one hand, conversion to flammable blowing agents was not feasible due to “heavy” capital investment requirements in safety, but the adoption of HFOs was also not a sustainable solution given the very high operational costs and the unstable supply chain. Water-blown systems were also considered in the technology choice scenarios, however, due to insulation performance requirements, the tests carried out with available water-blown systems in Malaysia underperformed in several technical requirements, and additional high costs in molds replacement/adaptation as well as much improved operation practices and environment would be required, increasing the capital cost of the project. Therefore, 15 companies decided to adopt (high-GWP) HFCs and withdrew from the Stage II HPMP.

Sustainability of the Phase-out

A ban on the import of HCFC-141b pure and pre-blended in polyols was placed for 1 January 2023 (accounting for delays in implementation due to the COVID-19 pandemic), while the Stage III HPMP is supporting the Government of Malaysia to strengthen its institutional capabilities to identify blowing agents mixed in polyols to improve controls and sustain the phase-out.



Empowering Sri Lanka’s Cooling Efficiency Future with support from MLF

With support from the funding window providing technical support for energy efficiency in different sectors/applications of LVCs under ExCom Decision 89/6, UNDP supported a delegation of nine Sri Lankan experts from key institutions (including the Sri Lanka Sustainable Energy Authority, National Ozone Unit, and Sri Lanka Standards Institute) to undertake a transformative study tour in Japan. This mission, coordinated with the Japan’s Overseas Environmental Cooperation Center (OECC), was part of a

broader initiative to enhance energy efficiency in Sri Lanka’s RAC sector.

Why This Mission Matters?

Sri Lanka is at a pivotal moment in its energy transition. With growing demand for cooling technologies, the country faces the dual challenge of reducing greenhouse gas emissions and improving energy performance. The study tour focused on:

- Learning about the Japanese experiences in setting MEPS and energy labelling—critical tools for promoting energy-efficient appliances.
- Exposing the Sri Lankan Delegation to low-GWP and zero-ODP refrigerants solutions in use in Japan, supporting Sri Lanka’s commitment to phasing down harmful substances.
- Learning from Japan’s advanced testing laboratories, E-waste (EOL refrigerants and equipment) management systems, and the innovative “Top Runner” program.

Key Achievements

- Knowledge Transfer: Participants gained hands-on insights into international best practices in MEPS, energy labelling, refrigerant lifecycle management, and policy implementation.
- Strategic Collaboration: The mission fostered inter-agency cooperation and opened pathways for future partnerships with between Sri Lankan and Japanese institutions.
- Actionable Outcomes: Ideas emerged for enhancing data collection, look into opportunities to expand equipment testing, and raising public awareness—laying the groundwork for Sri Lanka’s energy efficiency roadmap.

The mission also provided additional insights for the delegation to further consider actions that could promote energy-efficient cooling technologies; reduce CO₂ emissions through better standards and labelling and strengthen institutional capacity for sustainable development. The Sri Lankan delegation highlighted the

project’s relevance, depth, and practical value and participants expressed strong interest in further technical demonstrations and deeper collaboration.

Energy Efficiency through the Development of Low-Carbon RAC Technologies in Trinidad and Tobago

The “Energy Efficiency through the Development of Low-Carbon RAC Technologies” project in Trinidad and Tobago has successfully reshaped the country’s sustainable cooling landscape. A key milestone has been the establishment of three pioneering District Cooling pilot sites—TOSL Engineering in Marbella, Gasparillo Mall, and the Point Lisas Business Park—the first of their kind in Trinidad and Tobago. These facilities not only contribute directly to reducing GHG emissions but also provide tangible demonstrations of how modern, centralized cooling infrastructure can support national climate targets.

The completion of these sites represents a landmark achievement for both the project and the country, offering a model of technical feasibility and commercial viability for innovative energy-efficient cooling solutions.

Equally significant has been the strong commitment of the private sector, whose active engagement has been instrumental in realizing these outcomes. Their leadership has built a compelling business case that is expected to accelerate market transformation and inspire replication of best practices across the region.

Importance of designing effective HFC Quota Systems for the implementation of the Kigali Amendment

The HFC quota system under the Kigali Amendment is crucial for controlling HFC imports in Article 5 countries to ensure compliance with the Montreal Protocol. Managing the various substances and blends, measured in CO2 equivalents, is more complex than in earlier phases. Therefore, a well-designed quota system is essential to facilitate the transition to lower GWP alternatives. Over the past few years, UNDP has developed numerous webinars and training sessions to help these countries design effective HFC quota systems and promote regional learning and collaboration for successful implementation.

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

A. Meetings Attended by UNDP in 2024

The UNDP Montreal Protocol team carried out the following missions in 2024. In addition to this, UNDP country offices also carried out field visits in countries with MLF programmes.

From	To	Country	Details
6-Feb-24	7-Feb-24	Malaysia	Policy Support and Programme Oversight
13-Feb-24	17-Feb-24	Indonesia	Policy Support and Programme Oversight
3-Mar-24	6-Mar-24	Brazil	Policy Support and Programme Oversight
11-Mar-24	14-Mar-24	Canada	MLF Inter-Agency Coordination Meeting
12-Mar-24	16-Mar-24	China	Policy Support and Programme Oversight
25-Mar-24	29-Mar-24	Indonesia	Policy Support and Programme Oversight
8-Apr-24	12-Apr-24	China	Policy Support and Programme Oversight
15-Apr-24	19-Apr-24	Fiji	Policy Support and Programme Oversight
15-Apr-24	20-Apr-24	Peru	Policy Support and Programme Oversight
24-Apr-24	27-Apr-24	Albania	ECA Network and Enforcement Meeting
20-May-24	24-May-24	China	South and South East Asia Joint Network Meeting
26-May-24	30-May-24	Canada	MLF 94th Executive Meeting
2-Jun-24	7-Jun-24	Mexico	Policy Support and Programme Oversight
7-Jun-24	15-Jun-24	Mozambique	Network Meeting of Anglophone African Ozone Officers
9-Jun-24	13-Jun-24	Bangladesh	Policy Support and Programme Oversight
6-Jul-24	13-Jul-24	Canada	46th Open Ended Working Group (OEWG) meeting of the Montreal Protocol

21-Jul-24	25-Jul-24	China	Policy Support and Programme Oversight
28-Jul-24	3-Aug-24	Chile	LAC Ozone Network meeting
2-Sep-24	5-Sep-24	Indonesia	Policy Support and Programme Oversight
9-Sep-24	13-Sep-24	Canada	MLF Inter Agency Coordination Meeting.
15-Sep-24	18-Sep-24	Columbia	Policy Support and Programme Oversight
18-Sep-24	20-Sep-24	Brazil	Policy Support and Programme Oversight
23-Sep-24	27-Sep-24	India	Joint South and West Asia Network Meeting
7-Oct-24	11-Oct-24	Bangladesh	Policy Support and Programme Oversight
24-Oct-24	8-Nov-24	Bangkok	36th Meeting of the Parties to the Montreal Protocol
4-Nov-24	8-Nov-24	India	Policy Support and Programme Oversight
13-Nov-24	16-Nov-24	Azerbaijan	COP29 - Joint Cooling Pavillion and Side Event
13-Nov-24	15-Nov-24	Philippines	SEA and PIC Joint Network Meeting
2-Dec-24	6-Dec-24	Philippines	Policy Support and Programme Oversight
3-Dec-24	9-Dec-24	Canada	MLF 95th Executive Meeting
11-Dec-24	13-Dec-24	Serbia	Europe and Central Asia (ECA) Ozone Network Meeting
17-Dec-24	20-Dec-24	Sri Lanka	Policy Support and Programme Oversight

B. Other Issues

None.