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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-fifth Meeting
Montreal, 4-8 December 2024
Item 7(a)(v) of the provisional agenda¹

PROGRESS REPORT OF UNIDO AS AT 31 DECEMBER 2023**Introduction**

1. This document presents the progress report of UNIDO as at 31 December 2023.²
2. The progress report of UNIDO includes the status of implementation of projects, including 35 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 2023, 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 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 2023 and cumulative since 1993⁴ 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/95/1

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 95th 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 95th meeting.

⁴ UNIDO became an implementing agency in 1993.

implementation of each ongoing⁵ 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.

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 2023 and cumulative since 1993

5. As of 31 December 2023, the Executive Committee had approved US \$1.05 billion in projects for UNIDO, consisting of US \$924.6 million for the implementation of investment and non-investment projects, and US \$123.19 million for agency support costs, as shown in table 1.

Table 1. Approved funding by sector for UNIDO as at 31 December 2023

Sector	Funding (US \$)
Aerosol	34,397,921
Destruction	5,005,540
Energy efficiency	2,976,620
Foam	88,536,237
Halon	1,780,369
HFC phase-down plan	14,014,915
Fumigants	78,028,741
Multiple sectors	139,440
Other	11,317,246
Phase-out plan	401,924,677
Process agent	6,337,359
Production	50,638,105
Refrigeration	182,196,588
Several	24,058,832
Solvents	23,247,443
Sub-total	924,600,031
Agency support costs	123,185,415
Total	1,047,785,446

6. In 2023, 98 new projects and activities were approved. This level of funding is expected to result in the phase-out of 84,483 ODP tonnes of consumption and production of ODS and 1,922.8 mt (3,918,853 CO₂-eq tonnes) of consumption of HFCs. Annex I shows the status of project implementation per country in 2023.

7. Table 2 shows the status of project implementation including fund disbursement per project type as at 31 December 2023. Annex II presents analytical information per year since 1993.

⁵ Ongoing projects are all projects that were under implementation as at 31 December 2023. 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.

Table 2. Status of project implementation by type as at 31 December 2023

Type	Number of projects*			Funding (US \$)**			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Country programme	11	11	100	722,669	722,669	0	100
Demonstration	51	43	84	25,504,215	23,037,829	2,466,386	90
Institutional strengthening (IS)	108	92	85	19,483,175	15,695,398	3,787,777	81
Investment	1,046	903	86	823,152,091	751,973,582	71,178,509	91
Project preparation	623	551	88	29,172,737	25,396,572	3,776,165	87
Technical assistance	225	204	91	25,368,609	22,656,035	2,712,574	89
Training	23	23	100	1,196,535	1,196,535	0	100
Total	2,087	1,827	88	924,600,031	840,678,620	83,921,412	91

* Excludes closed and transferred projects.

** Excludes agency support costs.

8. Implementation of projects and activities by UNIDO for 2023 and cumulative since 1993 up to 31 December 2023, is summarized as follows:

- (a) **Phase-out:**⁶ In 2023, 470.9 ODP tonnes of consumption of ODS were phased out⁷ and an additional 366.5 ODP tonnes of consumption of ODS and 1,762.8 mt (3,612,866 CO₂-eq tonnes) of consumption of HFCs were approved for phase-out. Since 1993, 65,146 ODP tonnes of consumption of ODS and 17,381 ODP tonnes of production of ODS had been phased out,⁸ of an expected total of 84,483 ODP tonnes of consumption and production of ODS from projects approved (excluding cancelled and transferred projects);
- (b) **Disbursements/approvals:** In 2023, US \$33.29 million was disbursed and US \$27.46 million was planned for disbursement based on the 2022 progress report, representing a rate of disbursement of 121 per cent of that planned. Cumulatively, US \$840.68 million had been disbursed out of the total US \$924.6 million approved for disbursement (excluding agency support costs), representing a rate of disbursement of 91 per cent. In 2023, US \$30.77 million was approved for implementation;
- (c) **Cost-effectiveness (in ODP):**⁹ Since 1993, the average cost-effectiveness of investment projects approved leading to a permanent reduction in consumption was US \$11.41/kg and for all production sector activities (CFC and methyl bromide (MB)) was US \$2.90/kg. The average cost-effectiveness of investment projects per ODP tonne was US \$8.87/kg for completed projects and US \$22.44/kg for ongoing projects;¹⁰
- (d) **Number of projects completed:** In 2023, 69 projects were completed. Since 1993, 1,827 projects of the 2,087 projects approved (excluding closed or transferred projects) were completed, representing a completion rate of 88 per cent;
- (e) **Speed of delivery – investment projects:** Projects that were completed in 2023 were completed on average 61 months after their approval. Since 1993, the average time for completion of investment projects has been 41 months after their approval. First

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

⁷ No phase-out for HFC-related projects in 2023.

⁸ No phase-out so far for HFC-related projects.

⁹ Including 1,923 mt of HFC-related projects. Cost-effectiveness in CO₂-eq. is not included due to the limited number of projects approved.

¹⁰ 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.

disbursements under these projects occurred, on average, nine months after they had been approved;

- (f) **Speed of delivery – non-investment projects:** Projects that were completed in 2023 were completed on average 41 months after their approval. Since 1993, the average time for completion of non-investment projects has been 36 months after their approval. First disbursements under these projects occurred, on average, nine months after they had been approved;
- (g) **Project preparation:** Of the 623 project preparation activities approved by the end of 2023, 551 have been completed, leaving 72 ongoing activities. In 2023, 17 preparation activities have been completed;
- (h) **Implementation delays:** A total of 260 projects were under implementation at the end of 2023, experiencing, on average, a delay of 11 months. Forty-two of these projects are classified as “projects with implementation delays”¹¹ 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 2023, two MYAs for the control and phase-out of HFC-23 emissions, 70 MYAs for HCFC phase-out management plans (HPMPs) and 13 Kigali HFC implementation plans (KIPs) were under implementation. Since 1993, 224 MYAs have been approved and 139 MYAs have been completed, representing a completion rate of 62 per cent.

9. Table 3 summarizes progress made by UNIDO since 1993.

Table 3: Progress made by UNIDO since 1993

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		Consumption	Production	Approved	Completed	Investment	Non-investment		Approved	Completed
82,527	0	840,678,620	11.41	2.90	2,087	1,827	41	36	11	224	139

*Consumption and production

HFC-related projects

10. As of 31 December 2023, the Executive Committee had approved 89 HFC-related projects (including seven demonstration projects, 24 investment projects, 55 preparation projects and three technical assistance projects for enabling activities) under regular contributions amounting to US \$20,908,717 (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.

¹¹ 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).

Table 4. HFC-related projects approved under regular contributions

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Demonstration	7	0	0	2,022,620	0	2,022,620	0
Investment**	24	0	0	13,501,380	3,373,712	10,127,668	25
Preparation	55	13	24	5,007,010	2,829,602	2,177,408	57
Technical assistance	3	3	100	377,708	368,074	9,634	97
Total	89	16	18	20,908,717	6,571,387	14,337,330	31

* Excludes agency support costs.

** 1,922.8 mt (3,918,853 CO₂-eq tonnes) of HFCs was approved for phase-out.

11. As of the end of 2023, of the 89 projects, 13 preparation activities and three technical assistance projects for enabling activities have been completed, leaving 73 ongoing. The 24 investment projects are at various stages of implementation and are expected to be completed in 2024, 2025 and 2026.

12. Of the total cumulative funding approved of US \$20,908,717 (excluding agency support costs), US \$6,571,387 had been disbursed, representing a disbursement rate of 31 per cent.

I.2 Issues identified in project implementation in 2023

13. Further to the review process, several issues were discussed and satisfactorily addressed, except for issues on 42 projects classified as projects with implementation delays (including 40 projects related to components of MYAs that are subject to procedures for project cancellation, in line with decision 84/45(c); one technical assistance project; and one 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 96th meeting.

14. In addition, issues have been identified regarding tranches of MYAs for the phase-out of HCFCs. These issues are also presented in annex III. For each of these projects, a brief description on the status of implementation and the outstanding issues 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 Algeria,¹² Bahrain,¹³ Burundi,¹⁴ Chile,¹⁵ China (extruded polystyrene foam sector plan),¹⁶ the Congo,¹⁷ Guinea-Bissau,¹⁸ Iraq,¹⁹ Jordan,²⁰ Kuwait,²¹ Mexico,²² Pakistan,²³ Rwanda,²⁴ Somalia,²⁵ and Uganda,²⁶ and reports on projects with specific reporting requirements²⁷ associated with the HPMPs for Bolivia (Plurinational State of) and Honduras, and an HFC investment project for Jordan, have been submitted to the 95th meeting. Recommendations for outstanding issues for these projects, including approval of

¹² UNEP/OzL.Pro/ExCom/95/39

¹³ UNEP/OzL.Pro/ExCom/95/41

¹⁴ UNEP/OzL.Pro/ExCom/95/44

¹⁵ UNEP/OzL.Pro/ExCom/95/46

¹⁶ UNEP/OzL.Pro/ExCom/95/47

¹⁷ UNEP/OzL.Pro/ExCom/95/49

¹⁸ UNEP/OzL.Pro/ExCom/95/56

¹⁹ UNEP/OzL.Pro/ExCom/95/59

²⁰ UNEP/OzL.Pro/ExCom/95/61

²¹ UNEP/OzL.Pro/ExCom/95/62

²² UNEP/OzL.Pro/ExCom/95/66

²³ UNEP/OzL.Pro/ExCom/95/72

²⁴ UNEP/OzL.Pro/ExCom/95/74

²⁵ UNEP/OzL.Pro/ExCom/95/77

²⁶ UNEP/OzL.Pro/ExCom/95/80

²⁷ UNEP/OzL.Pro/ExCom/95/20 or UNEP/OzL.Pro/ExCom/95/21

extension requests, if any, are addressed in the relevant sections of those documents. The issues relating to an HFC-23 emission control project for Argentina and the HPMPs for Afghanistan, Argentina, Botswana, Brunei Darussalam, Ethiopia, Senegal, and Syrian Arab Republic, tranches of which were due at the 95th meeting but were not submitted, are addressed in the document on tranche submission delays.²⁸ 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 172 ongoing projects, excluding IS and project preparation, 42 projects have revised planned dates of completion since the 2022 progress report.

17. In line with decision 82/11(b),²⁹ UNIDO has requested the extension of the duration of one project, as shown in table 5.

Table 5. Project for which an extension of the completion date has been requested

Country/ project code	Project title	Disburse- ment (%)	Status/issues	Original date of completion	Date of completion requested
Sudan (the) SUD/PHA/75/INV/38	HCFC phase-out management plan (stage II, first tranche) (foam sector)	31	Additional time required to complete equipment installation and commissioning at Mina Factory and Target Steel; delays experienced due to political situation	Dec-24	Dec-25

Gender mainstreaming³⁰

18. During 2023, UNIDO has implemented the Multilateral Fund's operational policy on gender mainstreaming in 72 countries as part of projects approved since the 85th meeting. UNIDO tries to include to the extent possible activities that would address gender equality and women's empowerment in HPMPs or KIPs despite budgetary constraints and competing priorities in particular those faced by low-volume consuming countries.

19. In many countries, the technical workforce in the refrigeration and air-conditioning (RAC) sector is predominantly male. UNIDO is actively engaged in identifying potential female technicians and engineers who could pursue careers in this sector, offering tailored training programmes. The success of these initiatives varies from country to country.

20. Women were actively included in multiple training programmes aimed at enhancing skills in the RAC sector. For example, Cameroon had 128 women trained across various sessions, including specific workshops focused on the use of refrigerant reclamation equipment, service technician training, and safe handling of refrigerants. In Tunisia, 11 women were among the 124 master trainers certified, and 24 women were trained in good practices for handling refrigerants. In a regional cooperation initiative, two women from Nigeria and Cameroon were included in a training programme focused on environment-friendly technologies in the RAC sector. Ecuador organized events like "Fresh Air for All: Women Leading in Refrigeration and Climate Change" to promote women's roles in the refrigeration sector and address climate change. Various countries used the World Refrigeration Day as a platform to highlight women's involvement in the RAC sector, with Ecuador organizing training events and Tunisia awarding a woman journalist for her contributions to environmental awareness. In Nigeria, 60 female engineering students

²⁸ UNEP/OzL.Pro/ExCom/95/24

²⁹ 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.

³⁰ 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)).

were awarded scholarships to encourage careers in the RAC sector, with 32 already selected and awarded in a special ceremony. Women participated in study tours to gain international exposure and learn best practices in RAC, such as the visit to South Korea by a team from Nigeria that included female technicians.

21. In some regions, sustained investments are imperative to bolster the number of female technicians and engineers. Adequate funding for gender mainstreaming activities, extending beyond mere participant tallies, holds the promise of yielding enduring results.

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

22. As of 31 December 2023, the Executive Committee had approved 35 HFC-related projects under the additional voluntary contributions amounting to US \$7,810,365 (excluding agency support costs). A summary of the status of these projects is presented in table 6.

Table 6. Status of approved HFC-related projects as of the end of 2023

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	3	3	100	3,806,326	3,562,977	243,349	94
Project preparation	4	4	100	101,270	101,269	1	100
Technical assistance - Enabling activities	28	28	100	3,902,769	3,757,244	145,525	96
Total	35	35	100	7,810,365	7,421,490	388,875	95

* Excludes agency support costs.

** 189.4 mt (370,517 CO₂-eq tonnes) of 286.0 mt (508,586 CO₂-eq tonnes) of HFCs had been phased out.

23. As of the end of 2023, all the 35 projects approved had been completed.

24. Of the total cumulative funding approved of US \$7,810,365, US \$7,421,490 had been disbursed representing a disbursement rate of 95 per cent.

III. Recommendation

25. The Executive Committee may wish:

- To note the progress report of UNIDO as at 31 December 2023 contained in document UNEP/OzL.Pro/ExCom/95/18;
- To approve the extension, to 31 December 2025, of the completion date of stage II of the HCFC phase-out management plan for the Sudan (first tranche (foam sector) (SUD/PHA/75/INV/38)) to allow completion of the remaining ongoing activities, as reflected in table 5 of document UNEP/OzL.Pro/ExCom/95/18; and
- 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 UNIDO
PER COUNTRY FOR 2023**

1. Table 1 of annex I presents the status of project implementation by country for 2023 in achieved phased out, planned and achieved disbursements and project completion.

Table 1. Status of project implementation by UNIDO for 2023

Country	Phased out in 2023 (ODP tonnes)	Phased out in 2023 (CO ₂ -eq tonnes)*	Estimated funds disbursed in 2023 (US\$)	Funds disbursed in 2023 (US\$)	Percentage of funds disbursed over estimation in 2023	Percentage of planned projects completed in 2023**
Afghanistan	0.0	0	5,003	17,415	348	
Albania	0.0	0	105,000	124,887	119	100
Algeria	0.0	0	50,001	81,725	163	
Argentina	18.0	0	830,000	1,141,077	137	17
Armenia	0.0	0	50,983	114,794	225	100
Bahamas (the)	0.0	0	70,000	29,507	42	
Bahrain	0.0	0	60,001	30,365	51	
Benin	1.6	0	42,000	42,266	101	
Bolivia (Plurinational State of)	0.2	0	103,000	108,253	105	100
Bosnia and Herzegovina	0.3	0	133,012	124,900	94	
Botswana	1.3	0	178,532	104,276	58	50
Brazil	0.0	0	290,000	270,656	93	33
Brunei Darussalam	0.0	0	8,000	0	0	
Burkina Faso	0.5	0	4,500	3,797	84	100
Burundi	0.0	0	600	2,414	402	
Cameroon	4.0	0	225,000	336,122	149	100
Chad	1.0	0	40,250	10,766	27	
Chile	1.0	0	429,000	563,024	131	100
China	362.0	0	14,010,002	14,670,065	105	100
Congo (the)	0.0	0	20,002	55,597	278	
Cote d'Ivoire	0.0	0	238,000	203,371	85	
Democratic People's Republic of Korea (the)	0.0	0	3	0	6	0
Ecuador	0.0	0	259,000	360,060	139	100
Egypt	3.3	0	1,857,000	2,623,417	141	50
Equatorial Guinea	0.0	0	1,000	0	0	100
Eritrea	0.0	0	40,000	18,759	47	
Ethiopia	0.0	0	50,000	21,315	43	
Gabon	0.0	0	68,320	34,352	50	0
Gambia (the)	0.0	0	90,002	12,276	14	0
Grenada	0.0	0	1,000	18,760	1876	
Guatemala	0.0	0	20,001	38,654	193	100
Guinea	0.0	0	25,000	40,205	161	
Guinea-Bissau	0.0	0	18,000	14,121	78	100
Honduras	0.3	0	139,000	158,170	114	100
Iran (Islamic Republic of)	0.0	0	221,000	16,183	7	
Iraq	0.0	0	21,002	210,421	1002	
Jordan	5.5	0	170,678	197,277	116	67
Kuwait	3.0	0	1,804,000	1,789,195	99	
Lebanon	0.0	0	5,000	0	0	100
Lesotho	0.0	0	15,000	3,649	24	0
Liberia	0.0	0	7,043	14,610	207	

Country	Phased out in 2023 (ODP tonnes)	Phased out in 2023 (CO ₂ -eq tonnes)*	Estimated funds disbursed in 2023 (US\$)	Funds disbursed in 2023 (US\$)	Percentage of funds disbursed over estimation in 2023	Percentage of planned projects completed in 2023**
Libya	1.2	0	267,551	232,974	87	100
Madagascar	0.0	0	30,101	204	1	
Malawi	0.2	0	63,000	88,698	141	50
Mauritania	0.0	0	60,000	27,810	46	
Mexico	19.0	0	595,200	1,904,840	320	100
Montenegro	0.2	0	190,252	189,424	100	100
Morocco	0.0	0	179,000	104,637	58	
Mozambique	1.2	0	62,000	1,716	3	100
Myanmar	0.0	0	2	0	9	0
Namibia	0.0	0	14,000	8,808	63	0
Nicaragua	0.1	0	165,000	198,721	120	100
Niger (the)	0.7	0	95,900	120,176	125	
Nigeria	33.8	0	109,501	286,073	261	100
North Macedonia	0.4	0	140,000	261,616	187	100
Oman	2.4	0	98,050	154,134	157	100
Pakistan	2.8	0	626,002	1,067,373	171	100
Philippines (the)	0.0	0	250,000	295,494	118	100
Qatar	0.0	0	50,000	42,346	85	
Rwanda	0.0	0	57,000	5,120	9	0
Saint Lucia	0.0	0	55,000	25,803	47	
Saudi Arabia	0.0	0	12,704	43,372	341	100
Senegal	0.0	0	100,000	69,832	70	
Serbia	0.5	0	94,000	51,329	55	50
Sierra Leone	0.0	0	55,000	17,759	32	
Somalia	0.0	0	67,000	57,369	86	50
South Africa	5.1	0	386,001	620,767	161	80
Sudan (the)	0.0	0	60,132	119,149	198	
Suriname	0.0	0	1,500	1,500	100	
Syria	0.0	0	210,501	273,256	130	50
Togo	0.0	0	24,501	45,353	185	
Tunisia	0.0	0	163,000	249,069	153	33
Türkiye	0.0	0	617,000	2,060,016	334	100
Turkmenistan	0.0	0	224,001	273,500	122	100
Uganda	0.0	0	58,000	51,917	90	0
United Republic of Tanzania (the)	0.0	0	55,000	23,315	42	0
Venezuela (Bolivarian Republic of)	1.0	0	118,001	290,112	246	100
Zambia	0.4	0	78,000	92,785	119	50
Global	0.0	0	320,000	302,338	94	100
Grand total	470.9	0	27,456,835	33,294,883	121	67

* No phase-out in 2023 for HFC-related projects.

** For projects that were planned to be completed in 2023.

Annex II

**OVERVIEW OF STATUS OF PROJECT IMPLEMENTATION FOR UNIDO
PER YEAR AS AT 31 DECEMBER 2023**

1. Table 1 of annex II presents an overview of the status of project implementation by year.¹ All projects and activities approved between 1993 and 2011 and 2013, 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
1993	22	22	100	11,815,540	11,815,540	0	100
1994	52	52	100	30,645,899	30,645,899	0	100
1995	59	59	100	25,662,092	25,662,092	-1	100
1996	46	46	100	19,820,493	19,820,493	0	100
1997	130	130	100	42,083,037	42,083,038	-1	100
1998	88	88	100	23,638,291	23,638,291	0	100
1999	123	123	100	34,140,324	34,140,324	0	100
2000	96	96	100	30,180,752	30,180,752	0	100
2001	119	119	100	24,700,254	24,700,255	-1	100
2002	76	76	100	35,992,041	35,992,041	0	100
2003	49	49	100	29,997,305	29,997,305	0	100
2004	44	44	100	33,105,459	33,105,460	-1	100
2005	74	74	100	52,035,808	52,035,806	2	100
2006	44	44	100	20,760,312	20,760,312	0	100
2007	42	42	100	24,186,740	24,186,740	0	100
2008	77	77	100	33,386,108	33,386,111	-3	100
2009	70	70	100	15,345,924	15,054,995	290,929	98
2010	69	69	100	45,563,485	45,558,787	4,699	100
2011	71	71	100	76,542,377	76,542,380	-2	100
2012	52	50	96	32,670,641	32,079,843	590,798	98
2013	37	37	100	31,110,859	31,086,711	24,148	100
2014	55	54	98	27,150,026	27,104,088	45,938	100
2015	83	78	94	36,863,403	34,431,334	2,432,069	93
2016	58	54	93	35,109,320	32,980,593	2,128,727	94
2017	28	25	89	16,415,109	15,491,655	923,454	94
2018	62	58	94	26,984,263	17,295,205	9,689,058	64
2019	66	46	70	19,184,804	11,847,677	7,337,127	62
2020	58	40	69	15,337,858	14,128,868	1,208,990	92
2021	73	29	40	23,085,475	10,035,376	13,050,099	43
2022	66	5	8	20,317,479	4,232,494	16,084,985	21
2023	98	0	0	30,768,554	658,155	30,110,399	2
Total	2,087	1,827	88	924,600,031	840,678,620	83,921,412	91

* 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 UNIDO

Country/project code	Project title	Disbursement (%)	Status/Issues	Recommendation
Afghanistan AFG/PHA/79/INV/22	HCFC phase-out management plan (stage I, third tranche)	14	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Afghanistan AFG/PHA/85/INV/28	HCFC phase-out management plan (stage I, fourth tranche)	0	12 and 18 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Afghanistan AFG/PHA/85/INV/30	HCFC phase-out management plan (stage II, first tranche)	23	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Algeria ALG/PHA/66/INV/76	HCFC phase-out management plan (stage I, first tranche) (conversion from HCFC-22 in the manufacture of room air conditioners at Condor)	64	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Algeria ALG/PHA/66/INV/77	HCFC phase-out management plan (stage I, first tranche) (activities in the refrigeration servicing sector including phase-out of HCFC-141b used for flushing, and project monitoring)	67	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Argentina ARG/PHA/84/INV/189	HCFC phase-out management plan (stage II, second tranche) (foam sector - management and monitoring)	93	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Argentina ARG/PHA/84/INV/192	HCFC phase-out management plan (stage II, second tranche) (foam sector)	5	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Argentina ARG/PHA/84/TAS/190	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing sector - management and monitoring)	92	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Argentina ARG/PHA/84/TAS/191	HCFC phase-out management plan (stage II, second tranche) (monitoring and reporting of HCFC-22 production)	6	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Argentina ARG/PHA/84/TAS/193	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing sector)	31	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Bosnia and Herzegovina BHE/PHA/86/TAS/38	Verification report on implementation of stage I of the HCFC phase-out management plan	0	12 and 18 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays

Country/project code	Project title	Disbursement (%)	Status/Issues	Recommendation
Botswana BOT/PHA/86/INV/27	HCFC phase-out management plan (stage II, first tranche)	0	18 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Brazil BRA/PHA/75/INV/311	HCFC phase-out management plan (stage II, first tranche) (commercial refrigeration and air-conditioning sector)	98	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Brazil BRA/PHA/75/TAS/308	HCFC phase-out management plan (stage II, first tranche) (project monitoring)	99	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Brazil BRA/PHA/82/INV/320	HCFC phase-out management plan (stage II, third tranche) (commercial refrigeration and air-conditioning sector)	59	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Cameroon CMR/PHA/82/INV/45	HCFC phase-out management plan (stage II, first tranche)	70	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
China CPR/PHA/77/INV/576	HCFC phase-out management plan (stage II, first tranche) (room air-conditioner manufacturing sector plan)	89	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
China CPR/PHA/81/INV/588	HCFC phase-out management plan (stage II, second tranche) (room air-conditioner manufacturing sector plan)	50	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
China CPR/PHA/88/INV/605	HCFC phase-out management plan (stage II, third tranche) (room air-conditioning manufacturing and heat pump water heaters sector plan)	0	12 and 18 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Egypt EGY/PHA/79/INV/133	HCFC phase-out management plan (stage II, first tranche) (polyurethane foam sector)	92	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Egypt EGY/PHA/84/INV/141	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing sector and project management unit)	91	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Egypt EGY/PHA/84/INV/147	HCFC phase-out management plan (stage II, second tranche) (residential air-conditioning manufacturing sector)	57	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Gambia (the) GAM/PHA/86/INV/41	HCFC phase-out management plan (stage II, first tranche)	2	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Iran (Islamic Republic of) IRA/PHA/77/INV/228	HCFC phase-out management plan (stage II, first tranche) (foam sector)	65	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Iran (Islamic Republic of) IRA/PHA/84/INV/239	HCFC phase-out management plan (stage II, second tranche) (foam sector)	7	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays

Country/project code	Project title	Disbursement (%)	Status/Issues	Recommendation
Iran (Islamic Republic of) IRA/PHA/84/TAS/240	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing sector)	6	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Iran (Islamic Republic of) IRA/PHA/86/INV/246	HCFC phase-out management plan (stage II, third tranche) (foam sector)	21	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Jordan JOR/REF/81/INV/103	Conversion of large commercial unitary roof top air-conditioning units of up to 400kW manufacturing facility from HFC (R-134a, R-407c, R-410a) to propane R-290 as refrigerant at Petra Engineering Industries Co.	93	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Kuwait KUW/PHA/88/INV/43	HCFC phase-out management plan (stage II, first tranche)	11	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Liberia LIR/PHA/90/INV/32	HCFC phase-out management plan (stage II, first tranche)	11	Slow progress in implementation	To request UNIDO to submit a status report to the 96 th meeting on implementation progress and funds disbursement
Madagascar MAG/PHA/90/INV/37	HCFC phase-out management plan (stage II, first tranche)	0	18 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Montenegro MOG/PHA/85/INV/16	HCFC phase-out management plan (stage II, first tranche)	73	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Pakistan PAK/PHA/76/INV/94	HCFC phase-out management plan (stage II, first tranche) (polyurethane foam sector)	89	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Pakistan PAK/PHA/83/INV/102	HCFC phase-out management plan (stage II, second tranche) (polyurethane foam sector)	67	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Pakistan PAK/PHA/83/INV/99	HCFC phase-out management plan (stage II, second tranche) (domestic air-conditioning sector)	95	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Pakistan PAK/PHA/83/TAS/100	HCFC phase-out management plan (stage II, second tranche) (project management unit)	70	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Pakistan PAK/PHA/90/INV/111	HCFC phase-out management plan (stage III, first tranche) (foam sector)	0	18 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Sudan (the) SUD/PHA/75/INV/38	HCFC phase-out management plan (stage II, first tranche) (foam sector)	36	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Suriname SUR/PHA/92/INV/32	HCFC phase-out management plan (stage I, fourth tranche)	0	Delay in project completion	To request UNIDO to submit a status report to the 96 th meeting on operational completion and funds disbursement
Tunisia TUN/PHA/84/INV/74	HCFC phase-out management plan (stage II, first tranche) (refrigeration servicing sector)	62	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays

Country/project code	Project title	Disbursement (%)	Status/Issues	Recommendation
Tunisia TUN/PHA/84/INV/75	HCFC phase-out management plan (stage II, first tranche) (foam sector)	98	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Türkiye TUR/PHA/75/INV/107	HCFC phase-out management plan (stage I, second tranche) (refrigeration servicing and monitoring)	96	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Türkiye TUR/PHA/84/INV/111	HCFC phase-out management plan (stage I, third tranche) (refrigeration servicing and monitoring)	62	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays
Serbia YUG/PHA/85/INV/54	HCFC phase-out management plan (stage II, first tranche)	39	12 months delays	To request UNIDO to report to the 96 th meeting on this project with implementation delays



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO Progress and Financial Report 2023

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I. Project Approvals and Disbursements

Annual summary data

- 1) Table 1 “Annual Summary” in the Excel file includes the most relevant annual data, such as number of approvals, corresponding ODP (wherever applicable), approved funding, adjustment and disbursement characteristics. The cumulative funds for the period 1993-2023 approved for UNIDO activities under the Multilateral Fund amount to US\$ 924,600,031, excluding agency support cost, the core unit funding and projects funded by the additional contributions for implementation of the Kigali Amendment. This amount, however, includes the adjustments made until end 2023. The details are contained in the attached database (Annex II in the Excel file). In this annex, the data are sorted by regions and within each region the completed, financially completed; ongoing and closed (cancelled) projects are listed.
- 2) From 2017 a total of US\$ 8,089,728 were approved for UNIDO activities from the additional contributions to provide fast-start support for implementation of the Kigali Amendment. The details are contained in the attached database (Annex IIa in the Excel file)
- 3) As of 31 December 2023, UNIDO’s cumulative disbursement for all projects (completed and ongoing) amounts to US\$ 840,678,620 excluding agency support cost, core unit funding and disbursements in projects funded by additional contributions. This corresponds to a delivery rate of 91 per cent. Out of this amount, US\$ 751,973,582 relate to cumulative disbursement for investment projects (Table 2, “Summary Data by Project Type” in the Excel file).

Interest

- 4) The interest earned for the period 1993 – 2023 amounts to US\$ 43,670,651 and is shown by years in the Table 1 “Annual Summary” in the Excel file. The interest earned in 2023 amounts to US\$ 1,257,278.

Summary data by type

- 5) The cumulative activities of UNIDO approved by the Multilateral Fund are listed in Annex II in the Excel file. The following table summarizes their breakdown by types.

Type	Approved Funding US\$*	Share of portfolio in per cent	Number of projects*	Share of portfolio in per cent
CPG (Country Programme Preparation)	815,000	0.09%	11	0.53%
DEM (Demonstration projects)	28,304,610	3.01%	51	2.44%
INS (Institutional strengthening)	19,562,287	2.08%	108	5.17%
INV (Investment projects)	830,675,839	88.36%	1,046	50.12%
PRP (Project preparation)	32,193,052	3.42%	623	29.85%
TAS (Technical Assistance)	27,329,300	2.91%	225	10.78%
TRA (Training)	1,249,459	0.13%	23	1.10%
Total (excluding agency support cost)	940,129,547	100%	2,087	100%

* These figures are without adjustments, which are in total US\$ -15,529,516.

** Excluding Closed and Transferred Projects.

- 6) Table 2 “Summary of Data by Project Type” in the Excel file, shows approvals, adjustments and disbursements by type of project/activity. In 2023 UNIDO’s overall disbursement rate (excluding agency support cost) was 91%. Disbursements by activity type and as percentage of activity allocations are summarized as follows:

Type	Funds Disbursed US\$	Disbursement rate in per cent
CPG (Country Programme Preparation)	722,669	100%
DEM (Demonstration projects)	23,037,829	90%
INS (Institutional strengthening)	15,695,398	81%
INV (Investment projects)	751,973,582	91%
PRP (Project preparation)	25,396,572	87%
TAS (Technical Assistance)	22,656,035	89%
TRA (Training)	1,196,535	100%
Total (excluding agency support cost)	840,678,620	91%

Multi-Year Agreements

In the reporting year, 4 new multi-year performance based projects were approved for UNIDO’s implementation, the Stage II HCFC Phase-out Management Plan in Burkina Faso, Guinea and Suriname, and the Stage III HCFC Phase-out Management Plan in the Philippines.

The agreement template for the Kigali HFC Implementation Plans (KIP) has not yet been approved by the Executive Committee. However, in 2023 thirteen KIPs and the corresponding schedules have been approved for Albania, Bolivia, Cameroon, Dominican Republic, Ecuador, Jordan, Malawi, Mexico, Nicaragua, Niger, North Macedonia, Republic of Congo and Turkmenistan.

- 7) As shown in Annex II in the Excel file, UNIDO has been implementing one hundred and eighty

seven performance-based, multi-year agreements. One hundred and thirty six of these agreements are HCFC Phase-out Management Plans as listed in the table below.

Country name	HPMP Stage I	HPMP Stage II	HPMP Stage III	KIP Stage I
Afghanistan	yes	yes		
Albania	yes	yes		yes
Algeria	yes			
Argentina	yes	yes		
Bahamas (the)	yes	yes		
Bahrain	yes	yes		
Benin	yes	yes		
Bolivia (Plurinational State of)	yes	yes		yes
Bosnia and Herzegovina	yes	yes		
Botswana	yes	yes		
Brazil		yes		
Brunei Darussalam		yes		
Burkina Faso	yes	yes		
Burundi	yes			
Cameroon	yes	yes		yes
Central African Republic (the)	yes			
Chad	yes	yes		
Chile		yes	yes	
China	yes	yes		
Congo (the)	yes			yes
Cote d'Ivoire	yes			
Croatia	yes			
Democratic People's Republic of Korea (the)	yes			
Dominican Republic				yes
Ecuador	yes	yes		yes
Egypt	yes	yes		
Equatorial Guinea	yes			
Eritrea	yes	yes		
Ethiopia	yes	yes		
Gabon	yes			
Gambia (the)	yes	yes		
Grenada	yes	yes		
Guatemala	yes	yes		
Guinea	yes	yes		
Guinea-Bissau	yes			
Honduras	yes	yes		
Indonesia	yes			
Iran (Islamic Republic of)	yes	yes		

Iraq	yes	yes		
Jordan	yes	yes		yes
Kuwait	yes	yes		
Liberia		yes		
Libya	yes	yes		
Madagascar	yes	yes		
Malawi	yes	yes		yes
Mauritania	yes			
Mexico	yes	yes		yes
Montenegro	yes	yes		
Morocco	yes	yes		
Mozambique	yes			
Myanmar	yes			
Nicaragua	yes	yes		yes
Niger (the)	yes	yes		yes
Nigeria	yes	yes	yes	
North Macedonia	yes	yes		yes
Oman	yes	yes	yes	
Pakistan	yes	yes	yes	
Philippines (the)	yes	yes	yes	
Qatar	yes	yes		
Rwanda	yes	yes		
Saint Lucia	yes	yes		
Saint Vincent and the Grenadines	yes			
Saudi Arabia	yes			
Senegal	yes	yes		
Serbia	yes	yes		
Sierra Leone	yes	yes		
Somalia	yes			
South Africa	yes	yes		
Sudan (the)	yes	yes	yes	
Suriname	yes	yes		
Syrian Arab Republic	yes			
Togo	yes	yes		
Tunisia	yes	yes		
Türkiye	yes			
Turkmenistan	yes	yes		yes
Uganda	yes	yes		
United Republic of Tanzania (the)	yes	yes		
Venezuela (Bolivarian Republic of)	yes	yes		
Yemen	yes			
Zambia	yes	yes		
Total	75	59	6	13

Sector phase out by country

- 8) Information on funded ODP phase-out by region/country for ongoing projects is given in Table 3 “ODP Phase-out by Region, Country and Sector – Ongoing Projects” in the Excel file.

Ongoing projects	
Sector	ODP tonnes
Phase-out	3,254
Refrigeration	129.1
KIP	1,793.7
Total	5,176.8

- 9) As per Table 3a “ODP Phase-out by Region, Country and Sector – Completed Projects” in the Excel file, until end of the reporting period, UNIDO eliminated 81,799 ODP tonnes. ODP phase by sector is summarized in the below table.

Completed projects	
Sector	ODP tonnes
Aerosols	4,209.7
Foams	13,302.5
Fumigants	5,611.7
Halons	2,002.8
Other (Tobacco)	1,170
Process agents	1,028.2
Phase-out	16,408.8
Production	17,381
Refrigeration	18,688.4
Several	39.3
Solvents	2,194
Total	82,054

- 10) Partial ODP phase out is reported in Table 3b “Partial ODP Phase-out by Sector, Region, Country” and in Annex II in the Excel file.
The partial phase-out achieved in 2023 is 1,325.2 ODP tonnes for phase-out sector and KIPs.

II. Project Completion since last Report

ODP phased out since last report - investment projects

- 11) As per Table 4 in the Excel file, the cumulative ODP phase out through investment projects completed in the reporting period (1 January – 31 December 2023) amounts to 224.98 ODP tonnes. In addition, 1,325.2 ODP tonnes were partially phased-out from ongoing projects. The details are shown in Table 3b and Table 4 in the Excel file. Table 4 in the Excel file lists all investment, demonstration, technical assistance, preparatory assistance and institutional strengthening projects completed in 2023.

Non-investment project completions since last report

- 12) Since the last report, 45 non-investment projects, with approved funding of US\$ 7,199,519 were completed: 11 in Africa, 7 in Asia and the Pacific, 9 in Europe, 16 in Latin America and the Caribbean and the Core Unit Funding.

III. Global and Regional Project Highlights

Global Projects

- 13) Core Unit Funding for the year 2024 was approved in December 2023. The core unit funding for the year 2023 that was approved in 2022 for UNIDO as a global project in the amount of US\$ 2,050,407 was completed in December 2023.

Regional Projects

- No regional projects were ongoing during 2023.

IV. Performance Indicators

Business Plan Performance Goals as decided by the Executive Committee

- 14) The 71st Meeting of the Executive Committee in December 2013 reviewed and modified the performance indicators established by earlier decisions. The new weightings, based on Decision 71/28, are indicated in the below table.
- 15) The targets and achievements for the year 2023 performance indicators approved during the 91st Meeting of the ExCom are indicated below.

A1. Planning – Approvals

- 16) Tranches approved: Number of tranches approved vs. those planned

In 2023, 29 tranches were approved in total against the updated target of 35. The original target was 58, however, the below projects were not approved beyond UNIDO's control:

- UNIDO was ready for submission of the following tranches from HPMPs Stage II: Bahrain, Botswana, Iran, Kuwait, Senegal, Antigua and Barbuda, Burundi, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea-Bissau, Sao Tome and Principe; HPMPs Stage III for Brazil and Iran; and KIP Stage I for Nigeria, but the lead agencies were not ready for submission;
- The tranche request for Algeria (x2) were not submitted since the NOU submitted a request to cancel the HPMP Stage I;
- The new stage for Algeria HPMP and tranche request for China HPMP Stage II RAC sector were prepared and submitted, but then they were withdrawn;
- The tranche request for Iraq could not be submitted due to Executive Committee decision related to other project in Iraq;
- The tranche request for Afghanistan could not be submitted since the lead agency withdrew from the project and the transfer of funding to UNIDO was not completed;
- The tranches requests for Egypt could not be submitted because activities under currently ongoing tranches could not progress due to strict ExCom decisions and in the absence of Kigali Amendment ratification.

In addition to the approvals from the Business Plan, additional projects that were not part of the Business Plan for 2023, were prepared, submitted and approved by the Executive Committee. These are six tranches from already approved MYA for Bahrain, Bolivia, Ecuador, Guatemala, North Macedonia and Uruguay and first tranche from 4 newly approved KIPs for Cameroon, Congo, Dominican Republic and Niger. That brings the total number of additional tranches approved to 10, leading to total of 39 tranches approved compared to the updated target of 35 tranches.

- 17) Projects/activities approved: Number of projects/activities approved vs. those planned (including project preparation activities)

During 2023, 10 individual projects were approved against the originally agreed target of 20. However the target should be updated to 11 taking into account the projects not approved for reasons beyond UNIDO's control:

- The Project preparation for HFC-related project in the manufacturing sector at Lematic Industries to convert the production of residential air-conditioning from R-

410A to R290 was completed. The data collection and analysis showed that the consumption in this sector by the company Lematic Industries is low and insufficient for preparation of a project to be funded under the MLF. Therefore the investment project could not be submitted;

- Funding for preparation of Kigali HFC implementation plans (KIPs) for Algeria and Guatemala could not be submitted due to the fact that the countries did not ratify the Kigali Amendment;
- UNIDO was ready for requesting the preparatory funding for KIP Stage I Burundi, Equatorial Guinea, Iran, Iraq and Madagascar and for HPMP Stage II for Syria, but lead agencies were not.

The approvals include 5 renewals of institutional strengthening projects (Ecuador, Bosna and Herzegovina, North Macedonia, Oman and Tunisia), one project preparation for HPMPs Stage III, 3 project preparations for Kigali HFC implementation plan and one global project for UNIDO's 2024 Core Unit Funding.

In addition to the approvals from the Business Plan, additional 32 project that were not part of the Business Plan for 2023, were prepared, submitted and approved by the Executive Committee. These are four project preparations for Kigali HFC implementation plan, one project preparation for KIP investment projects, one project preparation for HPMPs Stage III, one institutional strengthening project, one verification reports, eight pilot projects on energy efficiency (decision 91/65) and 15 projects for preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances (decision 91/66). That brings the total number of additional projects/activities approved to 32, leading to total of 42 projects/activities approved; 31 more compared to the updated target of 11. This number is quite high mainly due to the newly opened funding windows at the 91st meeting, after the submission of the Business Plan for 2023.

A2. Implementation

18) Funds disbursed: Based on estimated disbursement in Progress Report

During 2023 the funds disbursed as per IPSAS were US\$ 33,245,237 against the estimated disbursements for year 2023 established in the Progress Report for year 2022 of US\$ 27,456,835.

19) ODS phased-out: ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans

331.4 ODP tonnes can be recorded as achievements for all MYA projects approved in 2023. However, 345.76 ODP tonnes need to be deducted from the original target of 694.1 ODP as explained in section 16 due to the non-submission and/or non-approval of several tranches beyond UNIDO's control. The adjusted target should be 335.74 ODP tonnes.

As explained in paragraph 16, additional projects were approved for which the total ODS phase out is 12 ODP tonnes, bringing the total ODS tonnes to be recorded as achievement to 343.4 ODP tonnes against the updated target of 335.74 ODP tonnes. Furthermore, for the KIPs, 300.16 mt of HFC phase-out need to be recorded as achievement.

20) Project completion for activities: Project completion vs. planned in progress reports for all

activities (excluding project preparation)

During 2023, UNIDO completed 52 projects against the target of 67. It should be noted that five of the projects comprising the target were completed before 2023. Therefore target should be adjusted to 62.

21) The performance indicators with the weightings are summarized in the following table:

Performance indicators: Targets and achievements in 2023

Type of Indicator	Short title	Calculation	Weighting	Target 2023	Achievement 2023	Additional Achievements 2023
Planning-- Approval	Tranches approved	Number of tranches approved vs. those planned	10	35 ¹	29	10 ²
Planning-- Approval	Projects/ activities approved	Number of projects/activities approved vs. those planned (including project preparation activities)	10	11 ³	10	32 ⁴
	Sub-total		20			
Implementation	Funds disbursed	Based on estimated disbursement in progress report (USD)	15	27,456,835 US\$	33,245,237 US\$	

¹ The original target was 58, however, the below projects were not approved beyond UNIDO's control: (1) UNIDO was ready for submission of the following tranches from HPMPs Stage II: Bahrain, Botswana, Iran, Kuwait, Senegal, Antigua and Barbuda, Burundi, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea-Bissau, Sao Tome and Principe; HPMPs Stage III for Brazil and Iran; and KIP Stage I for Nigeria, but the lead agencies were not ready for submission; (2) The tranche request for Algeria (x2) were not submitted since the NOU submitted a request to cancel the HPMP Stage I; (3) The new stage for Algeria HPMP and tranche request for China HPMP Stage II RAC sector were prepared and submitted, but the then they were withdrawn; (4) The tranche request for Iraq could not be submitted due to Executive Committee decision related to other project in Iraq; (5) The tranche request for Afghanistan could not be submitted since the lead agency withdraw from the project and the transfer of funding to UNIDO was not completed; (6) The tranches requests for Egypt could not be submitted because activities under currently ongoing tranches could not progress due to strict ExCom decisions and in the absence of the Kigali Amendment ratification.

² Twenty additional tranches were approved. These are six tranches from already approved MYA for Bahrain, Bolivia, Ecuador, Guatemala, North Macedonia and Uruguay and first tranche from 4 newly approved KIPs for Cameroon, Congo, Dominican Republic and Niger.

³ During 2023, 10 individual projects were approved against the originally agreed target of 20. However the target should be updated to 11 taking into account the projects not approved for reasons beyond UNIDO's control: (1) the project preparation for HFC-related project in the manufacturing sector at Lematic Industries to convert the production of residential air-conditioning from R-410A to R290 was completed. The data collection and analysis showed that the consumption in this sector by the company Lematic Industries is low and insufficient for preparation of a project to be funded under the MLF. Therefore the investment project could not be submitted; (2) Funding for preparation of Kigali HFC implementation plans (KIPs) for Algeria and Guatemala could not be submitted due to the fact that the countries did not ratify the Kigali Amendment; (3) UNIDO was ready for requesting the preparatory funding for KIP Stage I Burundi, Equatorial Guinea, Iran, Iraq and Madagascar and for HPMP Stage II for Syria, but lead agencies were not.

⁴ In addition to the approvals from the Business Plan, additional 32 project that were not part of the Business Plan for 2023, were prepared, submitted and approved by the Executive Committee. These are four project preparations for Kigali HFC implementation plan, one project preparation for KIP investment projects, one project preparation for HPMPs Stage III, one institutional strengthening project, one verification reports, eight pilot projects on energy efficiency (decision 91/65) and 15 projects for preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances (decision 91/66).

Type of Indicator	Short title	Calculation	Weighting	Target 2023	Achievement 2023	Additional Achievements 2023
Implementation	ODS phase- out	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	335.74 ODP tonnes ⁵	331.4 ODP tonnes	12 ODP + 300.16 mt of HFC phase-out tonnes⁶
Implementation	Project completion for activities	Project completion vs. planned in progress reports for all activities (excl. project preparation)	20	62 ⁷	52	
	Sub-total		60			
Administrative	Speed of financial completion	The extent to which projects are financially completed 12 months after project completion	10	12 months after operational completion	12 months	
Administrative	Timely submission of project completion reports	Timely submission of project completion reports vs. those agreed	5	On time	On time	
Administrative	Timely submission of progress reports	Timely submission of progress reports and business plans and responses unless otherwise agreed	5	On time	On time or as agreed	
	Sub-total		20			

In addition to the above, UNIDO's approvals in 2023 amounted to US\$ 30,768,554 (excluding agency support costs).

Cumulative completed investment projects

- 22) Since 1993, UNIDO's cumulative number of completed investment projects has grown to 903 with a total of US\$ 700,907,790 of approved funding including adjustments. The average number of months from approval to first disbursement was 9 months. The average number of months from approval to completion was 41 months. The cost effectiveness of completed projects is US\$ 8.87/kg. Table 5 "Cumulative completed investment projects by region, sector and implementation characteristics" in the Excel file illustrates more details, presenting information both on a regional and on a sector basis.

⁵331.4 ODP tonnes can be recorded as achievements for all MYA projects approved in 2023. However, 343.4 ODP tonnes need to be deducted from the original target of 694.1 ODP as explained in section 16 due to the non-submission and/or non-approval of several tranches beyond UNIDO's control. The adjusted target should be 335.74 ODP tonnes.

⁶ As explained in paragraph 16, additional projects were approved for which the total ODS phase out is 12 ODP tonnes, bringing the total ODS tonnes to be recorded as achievement to 343.2 ODP tonnes against the updated target of 335.74 ODP tonnes. Furthermore, for the KIPs, 300.16 mt of HFC phase-out need to be recorded as achievement.

⁷ Five of the projects comprising the target for project completion for activities were completed before 2023. Therefore the target should be reduced to 62.

The vast majority of completed investment projects have been implemented with disbursements of funds during implementation; only ten retroactively funded projects were implemented by UNIDO. In addition, all investment projects funding from the additional voluntary contributions have been completed.

Cumulative completed non-investment projects

- 23) Since 1993, UNIDO's cumulative number of completed non-investment projects is 373. Out of a total of US\$ 61,988,907 approved funding, 98 per cent of funds have been disbursed. Table 6 "Cumulative completed non-investment projects by region, sector and implementation characteristics" in the Excel file provides details according to geographic region and sectors. In addition, UNIDO has completed all Technical Assistance and project preparations funded by additional contributions for the Kigali Amendment.

Cumulative ongoing investment projects

- 24) By the end of 2023, UNIDO's cumulative portfolio of ongoing investment, demonstration and recovery and recycling projects contained 140 projects. Of the US\$ 115,414,829 approved budget, 53 per cent has been disbursed. It took an average of 9 months from approval to first disbursement. The Africa region had 50 ongoing projects, Asia and the Pacific 39 ongoing projects, Europe 15 ongoing projects and Latin America and the Caribbean 36 ongoing projects. Table 7 "Cumulative ongoing investment projects by region, sector and implementation characteristics" in the Excel file illustrates the implementation characteristics among regions and sectors for UNIDO's ongoing investment projects. The ongoing projects are objective sensitive and the disbursement of funds takes place during implementation.

Cumulative ongoing non-investment projects

- 25) At the end of 2023, UNIDO's cumulative portfolio of ongoing non-investment projects (excluding preparatory funding) consisted of 45 projects. Out of a total of US\$ 10,100,309 of approved funding, 51 per cent has been disbursed. The ongoing non-investment projects include 18 Technical Assistance projects (tranches of HPMPs), 16 Institutional Strengthening projects, 2 Verification Reports, 1 Demonstration project, 8 Energy Efficiency Pilot Projects and 1 Core Unit Budget. Table 8 "Cumulative ongoing non-investment projects by region, sector and implementation characteristics" in the Excel file illustrates details, presenting the projects according to regions, sectors and types.

V. Status of Agreements and Project Preparation by Country

Agreements to be signed/executed/finalized and ready for disbursing

- 26) As soon as a project is approved by the Executive Committee and after having notified the respective authorities, UNIDO secures officially from the recipient country's Ozone and project authorities, validity/confirmation of basic project data, such as actual ODS consumption; validity of counterpart commitment, etc., since by this time, a substantial period of time might have elapsed from the time of formulation of the project, and the projects, in most cases, are adjusted as a result of the negotiations during the approval process. UNIDO prepares detailed Terms of Reference (TOR) for services to be rendered under the project. The TOR and the list of potential suppliers are approved by the counterpart. The bidding and subcontracting takes place based on the mutually agreed TOR. The first payment is due upon entry into force of the first contract. Even if the first payment is released, as per the IPSAS, disbursements are not reflected until after services have been delivered. Under UNSAS, any payment outflow was recorded as disbursement. The above-illustrated preparatory work explains, for multi-year programmes and projects, the time elapsing between project approval and first disbursement.

Project preparation by country, approved amount and amounts disbursed

- 27) As of the end of 2023, UNIDO had on-going 72 project preparation in 53 countries with approved funding amounting to US\$ 5,510,500 out of which US\$ 1,826,784 has been disbursed.

The list and details of active project preparation accounts are shown in Table 9 "Active project preparation accounts" in the Excel file.

Activities related to the phase-out of HCFCs

- 28) UNIDO is lead agency or only implementing agency for altogether 32 **Stage I HPMPs**. These MYAs/projects are listed below:

#	Mtg	Country	Main / Cooperating agency
1.	64	Albania	UNIDO lead agency with UNEP
2.	66	Algeria	UNIDO only implementing agency
3.	66	Argentina	UNIDO lead agency with World Bank
4.	74	Bolivia	UNIDO only implementing agency
5.	66	Bosnia and Herzegovina	UNIDO only implementing agency
6.	64	Cameroon	UNIDO only implementing agency
7.	64	China – RAC sector	UNIDO only implementing agency
8.	64	China – XPS sector	UNIDO lead agency with GIZ
9.	73	Democratic People's Republic of Korea	UNIDO lead agency with UNEP
10.	65	Ecuador	UNIDO lead agency with UNEP
11.	65	Egypt	UNIDO lead agency with UNDP
12.	64	Guatemala	UNIDO lead agency with UNEP
13.	63	Honduras	UNIDO lead agency with UNEP
14.	65	Jordan	UNIDO lead agency with WB
15.	75	Libya	UNIDO only implementing agency
16.	64	Mexico	UNIDO lead agency with UNDP
17.	63	Montenegro	UNIDO only implementing agency
18.	65	Morocco	UNIDO only implementing agency
19.	66	Niger	UNIDO lead agency with UNEP
20.	60	North Macedonia	UNIDO only implementing agency
21.	65	Oman	UNIDO lead agency with UNEP
22.	62	Pakistan	UNIDO lead agency with UNEP
23.	65	Qatar	UNIDO lead agency with UNEP
24.	68	Saudi Arabia	UNIDO lead agency with UNEP
25.	62	Serbia	UNIDO lead agency with UNEP
26.	67	Somalia	UNIDO only implementing agency
27.	67	South Africa	UNIDO only implementing agency
28.	66	Sudan	UNIDO only implementing agency
29.	72	Tunisia	UNIDO lead agency with UNEP and France

#	Mtg	Country	Main / Cooperating agency
30.	62	Turkmenistan	UNIDO only implementing agency
31.	68	Turkey	UNIDO lead agency with UNEP
32.	63	Venezuela	UNIDO lead agency with UNEP

Furthermore, UNIDO is co-implementing agency for the **Stage I HPMPs** for the following countries with the below agencies:

- UNEP: Afghanistan, Bahamas, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Congo (Rep. of), Cote d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Grenada, Guinea, Guinea-Bissau, Iraq, Kuwait, Madagascar, Malawi, Mauritania, Mozambique, Myanmar, Nicaragua, Philippines, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Senegal, Sierra Leone, Suriname, Syria, Tanzania, Togo, Uganda, Yemen and Zambia;
- UNDP: Indonesia, Iran and Nigeria;

Other **Stage I HPMPs**:

- Croatia, implemented by UNIDO. Croatia is no longer Article-5 country.

29) UNIDO is involved in **Stage II HPMPs** as single, lead or cooperating implementing agency in the following countries:

	Mtg	Country	Main / Cooperating agency
1.	85	Afghanistan	UNEP lead with UNIDO as cooperating implementing agency
2.	85	Albania	UNIDO lead with UNEP as cooperating implementing agency
3.	79	Argentina	UNIDO lead with Italy as cooperating bilateral agency
4.	90	Bahamas	UNEP lead with UNIDO as cooperating implementing agency
5.	88	Bahrain	UNEP lead with UNIDO as cooperating implementing agency
6.	90	Benin	UNEP lead with UNIDO as cooperating implementing agency
7.	87	Bolivia	UNEP lead with UNIDO as cooperating implementing agency
8.	87	Bosnia and Herzegovina	UNIDO single implementing agency
9.	86	Botswana	UNEP lead with UNIDO as cooperating implementing agency
10.	75	Brazil	UNDP lead with UNIDO, Germany and Italy as cooperating implementing and bilateral agencies
11.	90	Brunei Darussalam	UNEP lead with UNIDO as cooperating implementing agency
12.	92	Burkina Faso	UNEP lead with UNIDO as cooperating implementing agency
13.	82	Cameroon	UNIDO single implementing agency
14.	90	Chad	UNEP lead with UNIDO as cooperating implementing agency
15.	76	Chile	UNDP lead with UNIDO as cooperating implementing agency
16.	77	China- RAC Sector	UNIDO lead with Italy as cooperating bilateral agency
17.	77	China – XPS sector	UNIDO lead with GIZ as cooperating bilateral agency
18.	86	Ecuador	UNIDO lead with UNEP as cooperating implementing agency ⁸
19.	79	Egypt	UNIDO lead with UNDP, UNEP and Germany as

⁸ At the 87th meeting a decision was made to transfer UNEPs components to UNIDO and UNIDO became single implementing agency for this project.

			cooperating implementing and bilateral agencies
20.	91	Eritrea	UNEP lead with UNIDO as cooperating implementing agency
21.	88	Ethiopia	UNEP lead with UNIDO as cooperating implementing agency
22.	86	Gambia	UNEP lead with UNIDO as cooperating implementing agency
23.	90	Grenada	UNEP lead with UNIDO as cooperating implementing agency
24.	86	Guatemala	UNEP lead with UNIDO as cooperating implementing agency
25.	93	Guinea	UNEP lead with UNIDO as cooperating implementing agency
26.	86	Honduras	UNIDO lead with UNEP as cooperating implementing agency
27.	77	Iran	UNDP lead with UNEP, UNIDO and Germany as cooperating implementing and bilateral agencies
28.	87	Iraq	UNEP lead with UNIDO as cooperating implementing agency
29.	77	Jordan	World Bank lead with UNIDO as cooperating implementing agency
30.	88	Kuwait	UNEP lead with UNIDO as cooperating implementing agency
31.	90	Liberia	UNEP lead with UNIDO as cooperating implementing agency
32.	90	Libya	UNIDO single implementing agency
33.	90	Madagascar	UNEP lead with UNIDO as cooperating implementing agency
34.	85	Malawi	UNEP lead with UNIDO as cooperating implementing agency
35.	73	Mexico	UNIDO lead with Germany, Italy, Spain and UNEP as cooperating implementing and bilateral agencies
36.	85	Montenegro	UNIDO single implementing agency
37.	88	Morocco	UNIDO single implementing agency
38.	86	Nicaragua	UNEP lead with UNIDO as cooperating implementing agency
39.	90	Niger	UNIDO lead with UNEP as cooperating implementing agency
40.	81	Nigeria	UNDP lead with UNIDO as cooperating implementing agency
41.	88	North Macedonia	UNIDO single implementing agency
42.	75	Oman	UNIDO lead with UNEP as cooperating implementing agency
43.	76	Pakistan	UNIDO lead with UNEP as cooperating implementing agency
44.	83	Philippines	UNIDO single implementing agency
45.	88	Qatar	UNIDO lead with UNEP as cooperating implementing agency
46.	86	Rwanda	UNEP lead with UNIDO as cooperating implementing agency
47.	87	Saint Lucia	UNEP lead with UNIDO as cooperating implementing agency
48.	88	Senegal	UNEP lead with UNIDO as cooperating implementing agency
49.	85	Serbia	UNIDO lead with UNEP as cooperating implementing agency
50.	87	Sierra Leone	UNEP lead with UNIDO as cooperating implementing agency
51.	91	South Africa	UNIDO single implementing agency
52.	75	Sudan	UNIDO single implementing agency
53.	93	Suriname	UNEP lead with UNIDO as cooperating implementing agency
54.	87	Tanzania	UNEP lead with UNIDO as cooperating implementing agency
55.	91	Togo	UNEP lead with UNIDO as cooperating implementing agency
56.	84	Tunisia	UNIDO lead with UNEP as cooperating implementing agency
57.	86	Turkmenistan	UNIDO single implementing agency
58.	86	Uganda	UNEP lead with UNIDO as cooperating implementing agency
59.	76	Venezuela	UNIDO single implementing agency
60.	86	Zambia	UNEP lead with UNIDO as cooperating implementing agency

- 30) UNIDO is involved in **ongoing Stage III HPMPs** as single, lead or cooperating implementing agency in the following countries:

	Mtg	Country	Main / Cooperating agency
1.	88	Chile	UNDP lead with UNIDO and UNEP as cooperating implementing agencies
2.	91	Nigeria	UNDP lead with UNIDO as cooperating implementing agency
3.	88	Oman	UNIDO lead with UNEP as cooperating implementing agency
4.	90	Pakistan	UNIDO lead with UNEP as cooperating implementing agency
5.	93	Philippines	UNIDO single implementing agency
6.	88	Sudan	UNIDO single implementing agency

- 31) At the 91st meeting, UNIDO submitted the first ever Kigali HFC Implementation Plan (KIP) for Niger, with UNEP as cooperating implementing agency. The Executive Committee agreed to approve funding for starting with the activities, but did not approve the project as a multi-year agreement. In 2023, the KIP for Niger was resubmitted, including KIPs for 12 additional countries.

32)

	Mtg	Country	Main / Cooperating agency
1.	93	Albania	UNIDO lead with UNEP as cooperating implementing agency
2.	93	Bolivia	UNIDO lead with UNEP as cooperating implementing agency
3.	92	Cameroon	UNIDO single implementing agency
4.	93	Congo	UNIDO lead with UNEP as cooperating implementing agency
5.	93	Dominican Republic	UNDP lead with UNEP and UNIDO as cooperating implementing agencies
6.	93	Ecuador	UNIDO single implementing agency
7.	93	Jordan	UNIDO single implementing agency
8.	93	Malawi	UNEP lead with UNIDO as cooperating implementing agency
9.	93	Mexico	UNIDO lead with UNEP and UNDP as cooperating implementing agencies
10.	93	Nicaragua	UNIDO lead with UNEP as cooperating implementing agency
11.	93	Niger	UNIDO lead with UNEP as cooperating implementing agency
12.	93	North Macedonia	UNIDO single implementing agency
13.	93	Turkmenistan	UNIDO single implementing agency

Climate impact of Montreal Protocol activities

- 33) In the selection of alternative technologies to replace ODS, energy efficiency, has been taken into account since the first investment projects, from early 1990s in UNIDO. In the recent years, the introduction of low Global Warming Potential and high energy efficiency alternatives has gained high attention to achieve additional climate benefits in the ODS phase-out process. UNIDO has been looking into the assessment of climate impacts of the MP activities in order to respond to the needs of Dec XIX/6 of the Meeting of the Parties. In Decision 72/40 (May 2014) bilateral and implementing agencies have been encouraged to submit proposals for demonstration projects for low GWP alternatives to HCFCs in the refrigeration and air-conditioning subsectors and feasibility studies, including business cases for district cooling.

Activities related to HFC phase down

- 34) The first KIP approved ever was for Cameroon at the 92nd meeting in 2023, as prepared and submitted by UNIDO. KIPs for additional 12 countries were approved in 2023 with UNIDO as lead, single or cooperating implementing agency.
- 35) At end of 2023, activities for preparation of KIPs were ongoing for 37 additional countries. In 2023, preparatory funding for KIPs was approved for 9 countries, including for one KIP investment project.
- 36) The projects for conversion to isobutane and propane in Ecuador and Jordan were ongoing during 2023.
- 37) UNIDO continues with implementation of the projects for control and phase-out of HFC-23 emissions in production of HCFC-22 in Argentina and Mexico.

Activities related to Energy efficiency

- 38) In 2022, at the 89th meeting, a new funding window was established for additional activities to be included under the HPMPs for LVCs to maintain energy efficiency for the servicing sector (decision 89/6(b)). Based on this decision, UNIDO submitted requests for 10 countries.
- 39) In 2022, at the 91st meeting a new funding window was established for pilot projects on energy efficiency in the context of HFC phase-down. UNIDO submitted such projects for 8 countries. These projects were not included in the UNIDO Business Plan for 2023, as the funding window was established after the submission of the Business Plan.

Preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances

- 40) In 2022, at the 91st meeting a new funding window was established for preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances (decision 91/66). During 2023, UNIDO submitted such requests for 15 countries. These projects were not included in the UNIDO Business Plan for 2023, as the funding window was established after the submission of the Business Plan.

VI. Gender Mainstreaming

- 41) During 2023, UNIDO has been implementing the MLF Gender Policy in 72 countries as part of projects approved from the 85th meeting. When preparing and submitting the project proposals, UNIDO tries to include to the extent possible activities that would address gender equality and women's empowerment. The checklists and potential indicators included in the project guides are used for that purpose.
UNIDO, as an organization, acknowledges the substantial positive impact of gender equality and women's empowerment on sustained economic growth and the promotion of sustainable industrial development. These factors are instrumental in driving poverty reduction and fostering social integration. Consequently, the organization has instituted its own policy and strategy for gender mainstreaming with the goal of achieving tangible outcomes.

The integration of gender mainstreaming into project implementation encompasses several key facets:

- Project teams are conscientiously composed to ensure a balanced representation of both male

and female members.

- The recruitment process is closely monitored to track the proportion of applications received from men and women.
- Vacancy announcements include provisions that actively encourage women to apply.
- Recruitment panels are constituted with a gender-balanced composition.
- Participation rates of male and female beneficiaries in capacity-building and awareness-raising activities are diligently monitored.
- All documents generated under the project are tailored to be responsive to gender considerations, including policies, strategies, training materials, and knowledge products.
- Online platforms, events, trainings, workshops, discussions, roundtables, and side events at conferences are designed with gender responsiveness in mind.
- Capacity-building initiatives are structured to be sensitive to gender-related nuances.
- Public awareness campaigns are crafted to incorporate gender perspectives, aiming to increase female involvement in the ozone protection process.
- Prioritizing women-led or women-owned business to be supported under the project activities.
- Monitoring and evaluation activities include dedicated reporting on gender-related issues.

In many countries, the technical workforce in the Refrigeration and Air Conditioning (RAC) sector is predominantly male. UNIDO is actively engaged in identifying potential female technicians and engineers who could pursue careers in this sector, offering tailored training programs. The success of these initiatives varies from country to country.

Women were actively included in multiple training programs aimed at enhancing skills in the RAC sector. For example, Cameroon saw 128 women trained across various sessions, including specific workshops focused on the use of refrigerant reclamation equipment, service technician training, and safe handling of refrigerants. In Tunisia, 11 women were among the 124 master trainers certified, and 24 women were trained in good practices for handling refrigerants. In a regional cooperation initiative, two women from Nigeria and Cameroon were included in a training program focused on eco-friendly technologies in the RAC sector.

Women participated in stakeholder consultations on topics such as updated regulations, female needs assessment, and the adoption of refrigerant logbooks. In Cameroon, multiple consultations included women, with events specifically designed to address gender needs. Women were included in workshops in Türkiye and other countries, with activities focused on various aspects of the RAC sector, including best practices and environmental impact.

Ecuador organized events like "Fresh Air for All: Women Leading in Refrigeration and Climate Change" to promote women's roles in the refrigeration sector and address climate change. Various countries used the World Refrigeration Day as a platform to highlight women's involvement in the RAC sector, with Ecuador organizing training events and Tunisia awarding a woman journalist for her contributions to environmental awareness.

In Nigeria, 60 female engineering students were awarded scholarships to encourage careers in the RAC sector, with 32 already selected and awarded in a special ceremony.

Women participated in study tours to gain international exposure and learn best practices in RAC, such as the visit to South Korea by a team from Nigeria that included female technicians.

From the experiences garnered thus far, it is evident that there exists immense potential for advancing gender mainstreaming within the Montreal Protocol portfolio. Engaging girls and women in ozone and

climate protection initiatives has the potential to double human capacities in each country dedicated to these pursuits. However, in some regions, sustained investments are imperative to bolster the number of female technicians and engineers. Additionally, in the case of LVC countries, budget constraints pose a challenge, with gender mainstreaming competing with other priorities. Adequate funding for gender mainstreaming activities, extending beyond mere participant tallies, holds the promise of yielding enduring results. The TEAP report assessing the funding requirement for the replenishment 2024-2026 analysed the funding for gender mainstreaming of other global funds and recognizes that “without a requirement to earmark funding for those activities, not all countries will be able to properly respond to gender required actions and will not prioritise it”⁹. In this regard, UNIDO stands prepared to continue implementing the MLF Gender Policy, incorporating gender mainstreaming activities within existing budgetary constraints, while also being ready to develop more comprehensive programs within the stages of multi-year agreement projects, such as HCFC phase-out management plans or Kigali HFC implementation plans.

The gender mainstreaming activities across various projects can be summarized based on the type of activity as follows:

⁹ <https://ozone.unep.org/system/files/documents/TEAP-DecisionXXXIV2-replenishment-TF-report-May2023-RTF-report.pdf>

VII. Administrative Issues (Operational, Policy, Financial and Other Issues) Meetings attended

42) UNIDO attended/participated in the following meetings in 2023:

#	Meeting	Location	Dates
1.	Inter – agency coordination meeting	Montreal, Canada ¹⁰	8 - 9 March 2023
2.	Regional network meeting in Southeast Asia Regions	Halong, Vietnam	13 – 15 March 2023
3.	Network Meeting of the Latin America and Caribbean National Ozone Officers	Panama City, Panama	20 – 24 March 2023
4.	Network meeting of the South Asia National Ozone Officers	Male, Maldives	17 – 19 May 2023
5.	92 nd meeting of the Executive Committee	Montreal, Canada	29 May - 2 June 2023
6.	70 th Implementation Committee Meeting	Bangkok, Thailand	1 July 2023
7.	45 th Open-Ended Working Group Meeting	Bangkok, Thailand	3 – 7 July 2023
8.	Montreal Protocol meetings including the Europe and Central Asia (ECA)	Ohrid, North Macedonia	25 – 29 April 2023
9.	Inter – agency coordination meeting	Montreal, Canada	3 – 5 October 2023
10.	71 st Implementation Committee Meeting	Nairobi, Kenya	20 October 2023
11.	35 th Meeting of the Parties	Nairobi, Kenya	23 – 27 October 2023
12.	Network Meeting of the Southeast National Ozone Officers and Customs Officers Training	Phuket, Thailand	20 – 25 November, 2023
13.	93 rd meeting of the Executive Committee	Montreal, Canada	15 – 19 December 2023

Implementing agency and other cooperation

43) Cooperation with UNDP and the World Bank:

44) Several ongoing HPMP activities in different countries and regions are being implemented together with UNDP and/or the World Bank, among others the following Stage II HPMP in Brazil, Chile, Egypt, Iran, Jordan and Nigeria and Stage III HPMP in Chile and Nigeria. In addition to that, in 2023 two new stages of KIPs were approved for UNIDO with UNDP as lead or cooperating implementing agency.

45) Cooperation with UNEP: UNIDO has been implementing 98 HPMPs together with UNEP until 2023. In addition to that, in 2023 nine new stages of KIPs were approved for UNIDO with UNEP as lead or cooperating implementing agency. In 2023, 32 tranches of ongoing and new HPMPs and KIPs were approved with UNEP as lead or co-implementing agency in Albania (x2), Bahrain, Benin, Bolivia (x3), Burkina Faso, Congo (the), Dominican Republic, Gambia (x2), Grenada, Guatemala (x2), Guinea, Honduras (x2), Malawi (x2), Mexico (x3), Nicaragua (x3), Niger, Sierra Leone (x2), Suriname (x2), Tunisia.

46) Participation in inter-agency meetings: During 2023, UNIDO attended the two inter-agency meetings that were organized in preparation for the 92nd and for the 93rd Executive

¹⁰ UNIDO delegation attended online this meeting as the flight to Montreal on the 7th of March was cancelled due to the airport staff strike.

Committee meetings. UNIDO attended the first meeting online, due to flights cancellations, and the second meeting was attended in person, at the MLF Secretariat premises in Montreal.

- 47) Cooperation with Bilateral Agencies: During 2023, UNIDO continued implementation of the ongoing bilateral projects.
- 48) Those bilateral projects under UNIDO's implementation, which have been ongoing or have been completed in 2023 are listed in the below table. The list is sorted in alphabetical order of the bilateral agencies.

#	Bilateral Agency	Project Title	Country	Impact	Approved Funding (US\$)	Status
1.	Austria	HCFC phase-out management plan (stage II, third tranche) (room air-conditioning manufacturing and heat pump water heaters sector plan)	China	27,3	350,000	ONG
2.	Italy	HCFC phase-out management plan (Stage II, first tranche)(RAC sector)	China	10,3	891.892	ONG
3.	Italy	HCFC phase-out management plan (stage II, first tranche) (foam sector)	Iran (Islamic Republic of)	7,1	403.203	ONG
4.	Italy	HCFC phase-out management plan (stage II, second tranche) (foam sector)	Iran (Islamic Republic of)	8,9	504.004	ONG
5.	Italy	HCFC phase-out management plan (stage II, first tranche) (refrigeration servicing sector)	Argentina	2,9	250.000	ONG
6.	Spain	HCFC phase-out management plan (stage II, second tranche) (cleaning agent phase-out in refrigeration servicing sector)	Mexico	2,3	76.991	COM
7.	Spain	HCFC phase-out management plan (stage II, second tranche) (refrigeration servicing sector)	Mexico	0	280.000	COM
8.	Spain	HCFC phase-out management plan (stage II, third tranche) (refrigeration servicing sector)	Mexico	13,1	1.070.000	COM

Other issues

- 49) The status of ongoing projects is described in Annex II. The success and timely implementation of these activities are crucial in the current compliance period. In order to ensure timely project completion of projects approved so far, and to facilitate compliance of the recipient countries with their MP obligations, in 2023, UNIDO has continued to practice the following initiatives, which supported successful project implementation:
- Regular follow up of the implementation process is being done by the staff of the ozone office together with UNIDO's national and international consultants and project managers. This ensures that effective actions on critical issues such as resolving bottlenecks in site preparation, customs clearance, installation, commissioning and safety certification, monitoring of HCFC-related equipment are taken.
 - Following the approval of the cost-guidelines for preparation of HFC phase-down plans, UNIDO has intensified the work with countries related to the support and service that UNIDO can offer in implementation of the Kigali Amendment.
 - Following the approval of the additional funding windows related to energy efficiency and preparation of ODS inventories, UNIDO has followed up with national ozone officers, identified potential projects and submitted them for approval to the Executive Committee;
 - Communication and interaction between regional and country offices about the implementation process has ensured the smooth flow of project plans. As in previous years, directors of UNIDO regional and country offices are regularly briefed on ongoing and possible future activities. They are involved in the implementation process and are following up the progress of the programmes. In turn, the representatives brief headquarter staff working in a specific country on the regular activities in the field and problems faced, if any.
 - Due to security and/or political issues, UNIDO experienced delays in project implementation during 2023 in several countries. Due to the global lack of identifiers, delivery of these tools is delayed.
- 50) At the 92nd meeting of the Executive Committee, that took place in June 2023 in Montreal, Canada, the first ever KIP was approved for Cameroon, prepared and submitted by UNIDO. At the second meeting in 2023, additional 12 KIPs were approved.
- 51) UNIDO is regularly attending Regional Network Meetings and respective workshops, organized online and in-person during 2023, providing additional support to our counterpart countries.
- 52) UNIDO also provides, when requested, support such as policy assistance, putting in place relevant legislation etc.
- 53) From 14 to 16 June 2023, UNIDO organized a three day workshop on Kigali Implementation Plans, bringing together representatives from more than 50 countries, UNIDO and other implementing agencies, MLF and Ozone Secretariat and experts. The three-day workshop included technical sessions where the participants were exposed to the nuances of devising

their national plans in line with the KIP requirements. Experts shared their best practices and presented to the participants case studies and means of utilizing various tools and data resources available, in devising their plans. The workshop included dedicated sessions on energy efficiency and gender. On the last day, the participants visited the Austrian Association for Refrigeration Technologies (Österreichische Gesellschaft der Kältetechnik–OeGKT) where the workshop participants could learn firsthand on the safe handling and technical training for low GWP refrigerants.

- 54) At the 45th meeting of the Open-Ended Working Group (OEWG) of the Parties to the Montreal Protocol that took place in Bangkok, Thailand in July 2023, UNIDO organizes a side event on the Cold Chain Innovation Hub (CCI-Hub) Philippines: “Enabling sustainable food cold chain technologies in Southeast Asian Region (SEA)”. The side event presented the "Global Partnership for improving the food cold chain in the Philippines project" in its final year and shared experience on challenges and opportunities when identifying, developing and stimulating the development of low-carbon, energy efficient refrigeration innovation technologies and business practices for the use throughout the food cold chain whilst increasing food safety and security. The side event focused on: (1) MEPS for cold storage and database management tool for linking cold chain operators with customers, (2) technology transfer, capacity building, demonstration projects using CO₂ and hydrocarbons and increasing energy efficiency, spillover effect in SEA, (3) capacity building and introduction of natural refrigerants in food cold chain, and (4) global market and policy trends.
- 55) At the 35th Meeting of the Parties (MOP) to the Montreal Protocol on Substances that Deplete the Ozone Layer that took place in Nairobi, Kenya in October 2023, UNIDO organized a side event on the topic “Role of humidity control in improving central air-conditioning systems manufactured in Egypt”. The side event presented information about the role of humidity in air conditioning technologies including how to read a psychometric chart. As part of HCFC Phase-out Management Plan Stage II, UNIDO and NOU Egypt implemented a technical assistance project for the Egyptian commercial AC manufacturers, particularly focusing on indirect evaporative cooling (IEC). The integration of IEC into standard direct expansion systems could drastically improve the cooling loads in dry climate conditions and thus reduce energy consumption. The side event presented the results of the field tests of prototypes of IECs that were built by the participating companies. The tests were conducted by the Housing and Building National Research Center in consultation with Eurovent. The side event also presented some new project proposals such as a desiccant enhanced evaporative air conditioner prototype and R-290 direct/indirect evaporative hybrid cooling.
- 56) During UNIDO 20th General Conference that took place in Vienna, Austria during November 2023, UNIDO Montreal Protocol Division organizes a side-event in the form of a Solution Talk titled “Cooling: the eco-friendly way”. The Solution Talk highlighted the success story from an award-winning project using natural refrigerants in Brazil, implemented under the HCFC Phase-out Management Plan (HPMP).

VIII. Tables and Annexes*

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