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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-fourth Meeting
Montreal, 16–20 December 2019

PROGRESS REPORT OF UNDP AS AT 31 DECEMBER 2018

1. This document presents the progress report of UNDP as at 31 December 2018.¹

Scope of the document

2. This document consists of the following parts:

Part I: Projects approved under the regular contributions to the Multilateral Fund. It presents a summary of progress in implementation of projects for 2018 and cumulative since 1991 addressing all controlled substances under the Montreal Protocol, including Annex F substances (HFCs); it contains a review on the status of implementation of each ongoing² project at the country level; and it identifies projects with implementation delays and the potential impact on the phase-out of controlled substances, and projects with outstanding issues for consideration by the Executive Committee.

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

Recommendation.

3. This document also contains the following annexes:

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

¹ The progress report is attached to the present document. The data has been included in the Consolidated Progress Report database that is available upon request.

² Ongoing projects are all projects that were under implementation as at 31 December 2018. 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.

Annex II: An analysis of the progress report.

Measurements used in the progress reports

4. Prior to agreement on the Kigali Amendment, all controlled substances under the Montreal Protocol were ozone-depleting substances, measured in ODP tonnes. Controlled substances under the Kigali Amendment are not ozone-depleting substances, and their control targets are measured in mt CO₂-eq. (i.e., consumption in metric tonnes (mt) multiplied by the global warming-potential (GWP) of the substance). Notwithstanding the two different measurements for reporting controlled substances, the progress report of UNDP submitted to the 84th meeting are based on ODP tonnes for all controlled substances.³

An overview of HFC phase-down activities

5. As of 31 December 2018, the Executive Committee has approved 26 projects (including five investment project, five project preparation and 16 enabling activities) amounting to US \$9.02 million, in 20 countries. Approved investment projects will phase down 623.4 mt (791,633 mt CO₂-eq.) of HCFs. Regarding enabling activities, extension of the completion dates of 10 of these projects was approved at the 83rd meeting and requests for extension for five others have been submitted to the 84th meeting.

Progress review process by the Secretariat

6. 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 2018, the potential impact of these delays on the phase-out of controlled substances and the rate of planned disbursements. The Secretariat had several discussions with UNDP, where a number of issues on ongoing projects were raised and subsequently satisfactorily resolved.

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

Summary of progress in implementation of projects for 2018 and cumulative

7. Implementation of projects and activities by UNDP for 2018 and cumulative since 1991 up to 31 December 2018 is summarized as follows:

- (a) **Phase-out:**⁴ In 2018, 243.6 ODP tonnes of consumption of controlled substances were phased out and an additional 746.6 ODP tonnes of consumption of controlled substances were approved for phase-out. Since 1991, 67,009 ODP tonnes of consumption of controlled substances had been phased out, of an expected total of 68,281 ODP tonnes from projects approved (excluding cancelled and transferred projects);
- (b) **Disbursements/approvals:** In 2018, US \$41.43 million was disbursed and US \$24.92 million was planned for disbursement based on the 2017 progress report, representing a rate of disbursement of 166 per cent of that planned. Cumulatively, US \$745.56 million had been disbursed out of the total US \$822.21 million approved for disbursement (excluding agency support costs). This represents a rate of disbursement of

³ The issue of the two different measurements of controlled substances is discussed in the consolidated progress report (UNEP/OzL.Pro/ExCom/84/16).

⁴ The phase-out includes approvals for HFC investment projects of 142.8 mt with mt CO₂-eq. of 204,332.

91 per cent. In 2018, US \$40.27 million was approved for implementation;

- (c) **Cost-effectiveness (in ODP):**⁵ Since 1991, the average cost-effectiveness of investment projects approved leading to a permanent reduction in consumption was US \$10.58/kg. The average cost-effectiveness of investment projects per ODP tonne was US \$8.65/kg for completed projects and US \$78.65/kg for ongoing projects;⁶
- (d) **Number of projects completed:** In 2018, 58 projects were completed. Since 1991, 2,289 projects of the 2,435 projects approved (excluding closed or transferred projects) were completed. This represents a completion rate of 94 per cent;
- (e) **Speed of delivery – investment projects:** Projects that were completed in 2018 were completed on average 40 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 2018 were completed on average 33 months after their approval. Since 1991, the average time for completion of non-investment projects has been 39 months after their approval. First disbursements under these projects occurred, on average, 13 months after they had been approved;
- (g) **Project preparation:** Of the 529 project preparation activities approved by the end of 2018, 517 have been completed, leaving 12 ongoing. In 2018, 12 projects have been completed;
- (h) **Implementation delays:** There were a total of 73 ongoing investment projects under implementation at the end of 2018. These projects, on average, are experiencing a delay of 13 months. However, there are no projects classified as “projects with implementation delays” that are subject to the procedures of project cancellation (as project preparation, multi-year agreements (MYAs) and institutional strengthening (IS) are not subject to those procedures); and
- (i) **MYAs:** In 2018, UNDP was implementing 49 MYAs for HCFC phase-out management plans (HPMPs). Since 1991, 133 MYAs have been approved and 84 MYAs have been completed.

Project implementation progress in 2018

8. Further to the review process, a number of issues were resolved, except for two projects: one related to an MYA tranche for the phase-out of HCFCs, and the other for a project preparation, as shown in Annex I to the present document. For each ongoing project, 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.

⁵ Including 142.8 mt of HFC investment projects.

⁶ The higher value of the cost-effectiveness for ongoing projects is largely due to the lower ODP values of HCFCs but also due to the means of assigning phase-out by agencies.

9. Of the 107 ongoing projects, excluding IS and project preparation, 36 projects have revised planned dates of completion since the 2017 progress report.

10. Details of progress in implementation of projects associated with the HPMPs for China (stage II of the industrial and commercial refrigeration and air-conditioning (ICR) and solvent sector plans),⁷ Colombia,⁸ Costa Rica,⁹ Egypt,¹⁰ Ghana,¹¹ Iran (Islamic Republic of)¹² and Malaysia¹³, and reports on projects with specific reporting requirements¹⁴ associated with Brazil (HPMP and ODS demonstration project), China (CFC solvent), Cuba (HPMP), Egypt (low GWP-alternative demonstration project), India (HPMP), Indonesia (HPMP), Lebanon (HPMP), Trinidad and Tobago (HPMP) and Uruguay (HPMP), have been submitted to the 84th meeting. Recommendations for outstanding issues for these projects, including approval of extension requests, if any, are addressed in the relevant sections of these documents.

11. In line with decision 82/11(c)(ii), the Secretariat noted that renewal of the IS project for Brazil has not been submitted for the last two years. UNDP informed that it is planning to submit the renewal request in 2021.

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

12. As of 31 December 2018, the Executive Committee had approved 18 HFC-related projects under the additional voluntary contributions amounting to US \$6,079,610 (excluding agency support costs). A summary of the status of these projects is presented in Table 1.

Table 1. HFC-related projects approved in 2018

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	2		0	4,406,610	1,208,577	3,198,033	27
Project preparation	5	3	60	150,000	47,178	102,822	31
Technical assistance - Enabling activities	11		0	1,523,000	220,635	1,302,365	14
Total	18	3	17	6,079,610	1,476,389	4,603,221	24

* Excludes agency support costs.

** Phase out of 480.6 mt (586,551 mt CO₂-eq.) of HFCs.

13. Of the 18 projects approved by the end of 2018, three preparation activities have been completed, leaving 15 ongoing. There are two ongoing investment projects approved at the 80th and 82nd meetings, of which funds have been disbursed for one. The enabling activities are at various stages of implementation. Cumulatively, US \$1,476,389 had been disbursed out of the total US \$6,079,610 approved for disbursement (excluding support costs), representing a disbursement rate of 24 per cent.

⁷ UNEP/OzL.Pro/ExCom/84/42

⁸ UNEP/OzL.Pro/ExCom/84/43

⁹ UNEP/OzL.Pro/ExCom/84/45

¹⁰ UNEP/OzL.Pro/ExCom/84/49

¹¹ UNEP/OzL.Pro/ExCom/84/50

¹² UNEP/OzL.Pro/ExCom/84/51

¹³ UNEP/OzL.Pro/ExCom/84/54

¹⁴ UNEP/OzL.Pro/ExCom/84/22 and Add.1

Recommendation

14. The Executive Committee may wish:
- (a) To note the progress report of UNDP as at 31 December 2018 contained in document UNEP/OzL.Pro/ExCom/84/18; and
 - (b) To approve the recommendations related to ongoing projects with specific issues contained in Annex I to the present document.

Annex I

ONGOING PROJECTS WITH OUTSTANDING ISSUES IN THE PROGRESS REPORT FOR UNDP

Country/project code	Project title	Disbursement (%)	Status/Issues	Recommendation
Haiti HAI/PHA/76/INV/22	HCFC phase-out management plan (stage I, second tranche)	0	No disbursement; slow progress in implementation	To request a status report to the 85 th meeting on progress in implementation and the level of funds disbursement
Democratic Republic of the Congo (the) DRC/PHA/79/PRP/42	Preparation of a HCFC phase-out management plan (stage II)	0	No disbursement due to delays in implementation and Ebola outbreak resulting in difficulties in field activities; submission of stage II delayed	To request a status report to the 85 th meeting on the level of funds disbursement and the status of submission of stage II

Annex II

ANALYSIS OF THE PROGRESS REPORT OF UNDP AS AT 31 DECEMBER 2018

1. This Annex consists of the following two parts:

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

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

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

2. As of 31 December 2018, the Executive Committee had approved US \$932.88 million consisting of US \$822.21 million for the implementation of investment and non-investment projects and US \$110.66 million for agency support costs, as shown in Table 1. In 2018, 60 new projects and activities were approved. This level of funding is expected to result in the phase-out of 68,281 ODP tonnes of consumption of controlled substances.

Table 1: Approved funding by sector for UNDP as at 31 December 2018

Sector	Funding (US \$)
Aerosol	26,054,838
Destruction	3,606,279
Fire fighting	50,000
Foam	173,366,807
Halon	4,996,975
Fumigants	20,081,243
Phase-out plan	326,512,742
Process agent	1,286,923
Production	1,056,000
Refrigeration	139,929,636
Several	61,151,282
Solvents	63,699,996
Sterilant	417,628
Sub-total	822,210,347
Agency support costs	110,664,988
Total	932,875,335

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

Table 2: Status of project implementation by category

Type	Number of projects*			Funding (US \$)**			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Country programme	22	22	100	1,628,797	1,628,797	0	100
Demonstration	43	38	88	22,204,392	20,764,309	1,440,084	94
Institutional strengthening (IS)	238	211	89	50,971,615	45,142,687	5,828,928	89
Investment	1,265	1,192	94	677,423,733	617,060,549	60,363,183	91
Project preparation	529	517	98	22,207,434	21,547,273	660,162	97
Technical assistance	310	281	91	46,183,886	37,823,467	8,360,419	82
Training	28	28	100	1,590,489	1,590,489	0	100

Type	Number of projects*			Funding (US \$)**			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Total	2,435	2,289	94	822,210,347	745,557,571	76,652,776	91

*Excludes closed and transferred projects.

**Excludes agency support costs.

4. Table 3 presents an overview of the status of project implementation by year¹. All projects and activities approved between 1991 and 2008, have now been completed.

Table 3: Status of project implementation by year

Year	Number of projects*			Funding (US \$)**			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
1991	15	15	100	1,149,032	1,149,032	0	100
1992	67	67	100	8,619,002	8,619,002	0	100
1993	57	57	100	13,204,712	13,204,712	0	100
1994	148	148	100	49,481,580	49,481,581	-1	100
1995	117	117	100	29,599,445	29,599,446	-1	100
1996	83	83	100	27,838,805	27,838,805	0	100
1997	188	188	100	44,056,257	44,056,257	0	100
1998	172	172	100	31,305,010	31,305,010	0	100
1999	204	204	100	35,896,883	35,896,884	-1	100
2000	149	149	100	31,268,362	31,268,361	1	100
2001	179	179	100	35,292,272	35,292,271	1	100
2002	117	117	100	44,316,424	44,316,422	2	100
2003	64	64	100	36,336,530	36,336,530	0	100
2004	69	69	100	24,802,715	24,802,714	1	100
2005	53	53	100	29,125,258	29,124,834	425	100
2006	62	62	100	15,753,458	15,753,461	-3	100
2007	54	54	100	12,142,488	12,142,486	2	100
2008	84	84	100	22,873,866	22,873,865	0	100
2009	92	91	99	13,226,899	13,188,578	38,321	100
2010	43	42	98	19,567,971	19,545,191	22,779	100
2011	63	60	95	57,453,704	56,972,603	481,101	99
2012	29	26	90	33,889,851	32,376,384	1,513,466	96
2013	43	39	91	34,573,366	33,590,429	982,938	97
2014	67	64	96	22,958,186	21,963,919	994,268	96
2015	75	62	83	33,666,689	27,262,490	6,404,199	81
2016	53	17	32	42,802,250	26,924,872	15,877,378	63
2017	28	6	21	30,734,847	20,418,385	10,316,462	66
2018	60	0	0	40,274,486	253,048	40,021,438	1
Total	2,435	2,289	94	822,210,347	745,557,571	76,652,776	91

*Excludes closed and transferred projects.

**Excludes agency support costs.

5. Table 4 presents project implementation by country for 2018.

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

Table 4. Summary of project implementation by UNDP for 2018

Country	Phased out in 2018*	Percentage of planned phase-out achieved in 2018	Estimated funds disbursed in 2018 (US\$)	Funds disbursed in 2018 (US\$)	Percentage of funds disbursed over estimation in 2018	Percentage of planned projects completed in 2018
Angola	0.0		151,639	88,817	59	
Argentina	0.0		91,423	135,453	148	
Armenia	0.0		62,309	70,387	113	
Bangladesh	0.0		116,495	77,116	66	67
Barbados	0.0		44,162	55,791	126	
Belize	0.0		4,550	0	0	
Bhutan	0.0		10,754	19,528	182	
Brazil	45.2		3,068,058	4,422,753	144	
Brunei Darussalam	0.0		7,380	0	0	0
Cambodia	0.0		15,000	0	0	
Chile	6.0	100	395,812	895,921	226	100
China	88.8		8,384,723	23,003,574	274	50
Colombia	16.0	100	810,427	1,288,525	159	100
Costa Rica	0.0		185,918	175,042	94	100
Cuba	0.0		205,499	141,381	69	
Democratic Republic of the Congo (the)	0.0		24,351	23,536	97	50
Dominican Republic (the)	0.0		76,662	196,701	257	
Egypt	0.6	14	1,023,783	588,656	57	50
El Salvador	2.0		46,000	68,663	149	
Fiji	0.2		18,997	12,294	65	
Georgia	0.0		17,777	17,499	98	
Ghana	0.0		56,407	140,053	248	100
Guyana	0.0		37,671	74,358	197	
Haiti	0.0		29,136	0	0	
India	10.0		4,056,125	3,460,223	85	83
Indonesia	9.0	100	1,317,271	421,109	32	0
Iran (Islamic Republic of)	0.0		506,468	252,313	50	100
Jamaica	0.0		32,787	26,221	80	
Kuwait	0.0		107,900	0	0	
Kyrgyzstan	1.3	100	21,162	70,400	333	100
Lebanon	29.8		258,781	841,562	325	100
Malaysia	14.0	100	1,441,111	2,092,991	145	100
Maldives	0.0		88,445	130,151	147	
Mali	2.6		32,082	84,296	263	
Mauritania	0.0		31,500	0	0	
Mexico	0.0	0	716,710	597,950	83	0
Nepal	0.1		17,280	30,916	179	100
Nigeria	18.0	38	282,423	612,897	217	100
Pakistan	0.0		97,766	140,564	144	100
Panama	0.0		199,675	218,217	109	100
Paraguay	0.0		32,212	38,626	120	
Peru	0.0		166,297	75,513	45	
Republic of Moldova (the)	0.0		38,970	1,901	5	
Saint Kitts and Nevis	0.0		12,000	0	0	
Sri Lanka	0.0		65,689	199,265	303	100
Timor-Leste	0.0		35,204	55,600	158	100
Trinidad and Tobago	0.0		122,408	158,178	129	
Uruguay	0.0		162,504	289,835	178	

Country	Phased out in 2018*	Percentage of planned phase-out achieved in 2018	Estimated funds disbursed in 2018 (US\$)	Funds disbursed in 2018 (US\$)	Percentage of funds disbursed over estimation in 2018	Percentage of planned projects completed in 2018
Venezuela (Bolivarian Republic of)	0.0		192,849	139,748	72	
Total	243.6	44	24,920,548	41,434,526	166	81

* No phase-out in 2018 for HFC-related projects.

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

Table 5. HFC-related projects approved under regular contributions

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	3	0	0	2,491,791	0	2,491,791	0
Technical assistance - Enabling activities	5	0	0	444,000	4,334	439,666	1
Total	8	0	0	2,935,791	4,334	2,931,457	0.1

*Excludes agency support costs.

** 142.8 mt was approved for investment projects with mt CO₂-eq. of 204,332.

7. There are currently eight HFC-related projects (including three investment and five enabling activities) approved under regular contributions at a total value of US \$2,935,791, with US \$4,334 of the funds already disbursed. These projects are progressing at various stages of implementation and the investment projects are expected to be completed on time in 2020.

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

8. As of 31 December 2018, the Executive Committee had approved 18 HFC-related projects under the additional voluntary contributions amounting to US \$6,079,610 (excluding agency support costs). A summary of the status of these projects is presented in Table 6.

Table 6. HFC-related projects approved in 2018

Type	Number of projects			Funding (US \$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Investment**	2		0	4,406,610	1,208,577	3,198,033	27
Project preparation	5	3	60	150,000	47,178	102,822	31
Technical assistance - Enabling activities	11		0	1,523,000	220,635	1,302,365	14
Total	18	3	17	6,079,610	1,476,389	4,603,221	24

* Excludes agency support costs.

** 480.6 mt (587,301 mt CO₂-eq.) of HFCs to be phased out.

9. Of the 18 projects approved by the end of 2018, three preparation activities have been completed and two investment projects are under current implementation. The enabling activities are at various stages of implementation. Cumulatively, US \$1,476,389 had been disbursed out of the total US \$6,079,610 approved for disbursement (excluding support costs), representing a disbursement rate of 24 per cent.



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

UNDP Annual Progress and Financial Report Narrative: 1991-2018

84th Meeting, 16–20 December 2019, Montreal, Canada

I. INTRODUCTION

The following narrative is based on a database of 2,453 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2018. However, some updates of activities which took place during 2019 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\$ 747,033,961 of the US\$ 828,289,957 worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 69,434.8 ODP T/year, of which 67,644.9 (97%) were phased out as of 31 December 2018. 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 2018, UNDP was active in 51 countries, of which 24 are low volume consuming (LVCs). The vast majority of ongoing projects are implemented using the National Implementation modality, providing countries with larger country ownership.

A large portion of the current ongoing programmes consist of HCFC phase-out management plans (HPMPs). UNDP is the lead agency in 29 countries, including such key countries for the Montreal Protocol, as Brazil, China, and India. In all three countries, UNDP is providing them with technical support to meet their targets set forth under the Montreal Protocol and they are all progressing towards their targets. UNDP is supporting China with the implementation of its ICR and Solvent Sector Plans. With the experience gained in the implementation of the Stage I sector plans, and the cooperation and coordination mechanisms established during this earlier implementation, both sector plans have progressed well and all ExCom conditions have been met. In addition, UNDP also acts as the cooperating agency in 18 countries. There is a surge of workload for UNDP to meet the needs of so many HPMPs that are currently under implementation. This significant workload comes at a time that preparation of Stage II HPMPs is under way. Most countries, for which UNDP is the lead agency, have submitted their requests for Stage II HPMP full proposals in 2015/2016 and only one country (Democratic Republic of Congo) is yet to submit its request. Despite this challenging situation, UNDP, with its network of country offices, remains fully committed to meet the increased workload and ensure that countries receive the assistance needed to be in compliance with all requirements of the Montreal Protocol.

UNDP has also been at the forefront of technical assessments and demonstration projects for potentially cost-effective alternatives to HCFCs that minimize environmental impacts, particularly for those specific applications where such alternatives are not presently available and applicable. Pursuant to ExCom decision 72/40, UNDP has prepared a number of projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling. UNDP has received approval and implemented eight demonstration projects in seven countries. The factsheets on these projects are available at [the MLF website](#). In addition, UNDP is also exploring demonstration projects for cost-effective alternatives to HFCs that minimize environmental impacts. Pursuant to ExCom decision 78/3(g), UNDP is preparing investment/demonstration projects to phase down HFCs and has received approval for five HFC technology demonstration investment projects in Bangladesh, China, Dominican Republic, Mexico and Zimbabwe. UNDP is also supporting 16 countries to undertake enabling activities for ratification and early implementation of the Kigali Amendment.

Furthermore, UNDP continues to organize several activities to assist countries in meeting their Montreal Protocol obligations. For example, in May 2019, UNDP organized a workshop on HFC alternatives in New York City, which brought together participants from Article 5 countries and experts to discuss challenges, opportunities and solutions, and identify short-term priority activities and long-term strategies to effectively implement the Kigali Amendment and improve energy efficiency. The workshop brought together 60 participants from 20 countries and included experts that discussed key topics relevant to the implementation of the Kigali Amendment: including institutional arrangements, legislative and regulatory framework; baseline data collection and reporting; licensing system, customs rules and enforcement; alternative technologies; key activities in servicing sector; HFC phase down strategies; linkages with other national efforts (e.g. NDC under the Paris Agreement); and complementary actions to improve energy efficiency. The workshop materials are available [here](#).

Finally, UNDP also produced a [video](#) which highlights three award-winning projects in Chile, China, and the Kingdom of Eswatini (formerly known as Swaziland). These three countries (out of a total of five award-winning countries) were awarded as “Exemplary Projects” on the 30th Anniversary of the Montreal Protocol in 2017 and their successful stories demonstrated how the different parts of cold chain industries (food storage, super market and domestic refrigerator) could be equipped with highly efficient, economically viable and ozone-climate friendly technologies, and how UNDP, in partnership with private and public sectors, supported innovative and advanced technologies in pursuit of Sustainable Development Goals. UNDP organized a side event on the margins of the 30th Meeting of the Parties to the Montreal Protocol in which the key stakeholders from these three countries shared their experiences on technology transformation, positive social impact, economic growth/investment, and environmental well-being.

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 2018, UNDP had a total of 2,550 approved projects under the Multilateral Fund, of which 97 had been canceled or transferred. Of the 2,453 remaining projects, 2,292, or 93% have been completed. They are set to eliminate 68,751 ODP T/year, of which 67,009 ODP T (97%) have already been eliminated.

As of 31 December 2018, UNDP had received cumulative net project approvals of US\$ 828,289,957 (excluding support costs). Of these, UNDP, as of end-2018, had disbursed US\$ 747,033,961 excluding all obligations. This translates to 90% of approved funding. Furthermore, an additional US\$ 2,365,897 of obligations were outstanding as of end-December 2018, representing orders placed but final payments not yet made.

B. Interest and Adjustments

Interest income earned on MLF resources in 2018 is US\$ 1,327,039. Once the financial statements are submitted to the MLF Treasurer by the agreed deadline of 30 September, the difference between the provisional and final 2018 interest income can be adjusted against UNDP project approvals in 2018.

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, 82.21% of the budgets were dedicated to investment projects, 5.71% to technical assistance projects, 5.86% to institutional strengthening and 3.09% to project preparation activities. The remaining 3.14% was dedicated to country programmes and demonstration/training activities.

III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

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

GLO/SEV/82/TAS/346, the Core unit support (2019) programme approved at the 82nd meeting of the Executive Committee, that covers the administrative costs of UNDP’s Montreal Protocol Unit; and continuation of Core Unit support at a level that allows UNDP to provide the oversight, reporting and assistance needed to sustain the large programmer is critical.

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

IV. PERFORMANCE INDICATORS

A. **Results in 2018**

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 VIII of the report of the 80th meeting of the Executive Committee contained UNDP’s 2018 targets. One can see from the table below that UNDP fully met 4 out of 9 of its targets and that its score amounts to 95%.

Category of performance indicator	Item	Weight	UNDP’s target for 2018	Result achieved in 2018	Score
1. Approval	Number of tranches approved vs. those planned*	10	24	20 → 83% (see annex 1, 1)	8.33
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	39	34 → 87% (see annex 1, 2)	8.72
3. Implementation	Funds disbursed	15	\$31,295,677	\$ 40,670,035 → 100% (see annex 1, 3)	15.0
4. Implementation	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	747.2	716.17 → 100% (see annex 1, 4)	24.0
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	41	46 → 100% (see annex 1, 5)	20.0
6. Administrative	The extent to which projects are financially completed 12 months after project completion	10	70% of those due (out of 101, so target is 70)	66 finrevs out of 70 (see annex 1, 7)	9.4
7. Administrative	Timely submission of project completion reports vs. those agreed	5	100% of those due (out of 5)	100% achieved (3 individual PCRs submitted out of 3 planned and 8 MYA PCR submitted out of 2 planned -- see annex 1, 8)	5.0
8. Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On-time	100% achieved (see annex 1, 9)	5.0

Category of performance indicator	Item	Weight	UNDP's target for 2018	Result achieved in 2018	Score
TOTAL		100			95

*The target of an agency would be reduced if it could not submit a tranche owing to another cooperating or lead agency, if agreed by that agency.
 ** Project preparation should not be assessed if the Executive Committee has not taken a decision on its funding.

Note on performance indicator on MYA tranches: As per our 2018 Business Plan, UNDP submitted two China HPMP tranches to the 82nd meeting although these tranches weren't approved. As we submitted these tranches in 2018 as we had planned, they should be included in our performance target.

B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,192 investment projects have been completed, with a corresponding elimination of 61,567 ODP T. Of the US\$ 532,733,818 in their approved budgets in the sectors of Foam, Refrigeration, Phase-out Plan, Aerosol, Solvents, Fumigants, Halon, Process Agents, and Sterilants, 100% has already been disbursed. It took an average of 13 months from approval to first disbursement and 34 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was \$8.65 /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 580 non-investment projects excluding project preparation assistance. Of the US\$ 102,265,721 in their approved budgets, 99% has been disbursed. It took an average of 13 months from approval to first disbursement and 39 months from approval to completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

D. Cumulative ongoing investment projects (Table 6)

As can be seen in Table 6, UNDP has 75 ongoing investment projects in the sectors of Phase-out Plans, Foam, Aerosol, and Fumigants with corresponding budgets of US\$ 142,144,506. Of this amount, 56% has already been disbursed. It takes an average of 11 months from approval to first disbursement and an average of 46 months from approval to the estimated project completion. The overall cost-effectiveness of the projects to the Fund was \$63.54 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

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

Table 7 shows that UNDP has 72 ongoing non-investment projects excluding project preparation assistance. Of the US\$ 21,178,765 in approved budgets, 23% has been disbursed. It takes an average of 10 months from approval to first disbursement and 35 months from approval to the estimated project completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

V. STATUS OF AGREEMENTS AND PROJECT PREPARATION BY COUNTRY

A. Agreements To Be Signed/Executed/Finalized

Since UNDP has a standard legal agreement in place in each developing country that covers UNDP activities in that country, no additional legal agreement is required. There were no specific issues related to this in 2018.

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 14 PRP projects listed with US\$ 537,143 in associated approvals, 7% has been disbursed.

VI. DESCRIPTION OF KEY ONGOING ACTIVITIES

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

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

A. Technology demonstration projects for Stage II HCFCs

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

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

- **China:** demonstrating ammonia semi-hermetic frequency convertible screw refrigeration compression unit in the industrial and commercial refrigeration industry.

In order to produce the small discharge semi-hermetic frequency convertible screw refrigeration compression unit with ammonia as a viable replacement for HCFC-22 technology, the Executive Committee approved a demonstration project at its 76th meeting. Project demonstration activities ongoing in 2017. However, demonstration results will take longer than expected to be completed. As per ExCom Decision 80/26, project completion was extended to June 2018.

The demonstration project was eventually completed and passed national acceptance in May 2018. The small redesigned demonstration system with lower NH₃ charging amount and constructed to fit the small discharge semi-hermetic frequency convertible screw refrigeration compression unit has been built in two locations in China. The one at Xiamen Taiqu cold storage began operation in March 2017 and has been running safely for one and half year. The one at Chengdu Taiqu cold storage began operation in June 2017 and has been running safely for one year.

- **Egypt:** demonstrating low-cost options for the conversion to non-ODS technologies in polyurethane foams at very small users.

An international bidding including technical specifications of easy-to-use low-cost foam dispensing units for VSU was completed and issued. All received bids for equipment have been analyzed. The purchase order has been issued and three different dispensers purchased and placed for evaluation at the following Egyptian system houses: Tecmac Dispenser at Baalbaki, Pumer Dispenser at Dow-Middle East, Transtecnica Dispenser at Technocom. There are cost savings observed in the project which are useful in planning work with VSUs globally. Final report will be submitted to the next ExCom meeting as required in early 2019.

- **Maldives:** testing HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector are being tested.

Demonstration project for HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector was approved at the 76th ExCom. The consulting firm was engaged in 2017. Desk study was completed to find the available alternate refrigerant with low GWP. Due to concerns with flammability, the only refrigerant applicable came in selection in the first round of study was R448A (GWP 1387) and the report was submitted to 80th ExCom. The same was discussed in ExCom and UNDP was asked to continue more research on low GWP alternatives. As per ExCom Decision 80/26, another round of desk study was conducted by the consulting team on the available alternates in the market. In the condition of non-acceptance on A2L refrigerant by the industries, three refrigerants of R450A, R513A and R448A came into the final selection round. The consulting team together with the MIFCO Engineering Team (main fisheries vessels owner) reviewed the options and selected R448A for a demo alternative. By the time an interim report was submitted to the 83rd ExCom only one vessel was retrofitted. Over the summer of 2019 retrofitting of three vessels is completed and result sharing workshops were held in August 2019. The final report is planned to be submitted to 84th ExCom.

B. HFC investment projects

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

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

The first conversion project of HFC Phase down was approved in 80th ExCom meeting for Walton Hi-Tech Industries. The agreement was signed between UNDP, Government and Walton to convert three refrigerator lines and one compressor line. From the approval of the project till 31 July 2019 the following tasks have been completed:

- The three refrigerator lines conversion is ongoing, the equipment storage tanks, refrigerant unloading and delivery pump, refrigerant pipeline, gas charging units, ultrasonic welding equipment, alarm board sensor, explosion proof vacuum pumps, gas detection alarm system, explosion proof exhaust blower, helium leak detection system, helium charging and recovery unit, modifications in conveyor line with explosion proof motors, jig fixture modifications equipment have been procured. Commissioning and installation are ongoing. Servicing tools

- have been procured and training will start in the month of September 2019.
 - The compressor conversion line: retrofitting of crank case machining unit, crank shaft machining unit, piston machining unit, connecting rod machining unit, motor modification, modification of casting tools, tools and equipment for casting & foundry, lamination press, jigs and fixtures is ongoing and new equipment is procured. The proto type testing of major consumption compressor models have been tested successfully. Remaining models' testing on going.
 - First installment has been delivered to Walton. The project technical advisory committee has visited the plant to monitor that milestones have been met for the release of 2nd installment. It will be released by August 2019.
- **China:** Conversion from C5+HFC-245fa to C5+HFOs in a domestic refrigerator manufacturer (Hisense Kelon)

Project document and contract signed. Hisense started preparation activities on conversion of the manufacturing line, including signing contracts with equipment suppliers.

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

Memorandum of agreement prepared and signed between the Ministry of Environment and Natural Resources and Farco. An international expert undertook a mission to Farco for establishing work plan for the adoption of R-290 as refrigerant. Production line adaptation and products redesign are underway.

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

Contract with MABE has been signed. International expert visited MABE in March 2019. Equipment has been installed and is operational in 4 of 7 production lines. Continued work on remaining lines. Safety related aspects analyzed and validated by international expert. Three compressor manufacturing lines were sought to be converted using R-600a as refrigerant in order to achieve optimum performance of the new Refrigerators. One line of compressors was fully converted and commercial batches of R-600a compressors are already being manufactured. Adaptations and tests are currently being undertaken in the two additional lines.

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

The project document for Capri has been signed and budgets for the funding from the MLF have been put in place to commence activities planned under the project. The full start is possible after bilateral agreement between the Government of France and UNDP is endorsed and the additional funding (US\$ 100,000) has been received. This will allow announcing a tender for equipment for Capri.

C. ODS destruction demonstration projects

The UNDP Montreal Protocol & Chemicals Unit has been supporting countries to take steps to manage their stocks of ODS, which cannot be reused in a sound way. The potential for recovery, proper

management and final disposal of such unwanted ODS and ODS containing appliances/equipment banked, have been proven as being possible in developed countries if the proper legislation and price incentives, as well as business opportunities, exist. However, the applicability of banks management schemes in developed countries needs to also be demonstrated in Article 5 countries. The Executive Committee has approved preparation activities for Brazil, Colombia, Cuba, Georgia, Ghana and India, to address ODS waste management leading to ODS destruction. Five such projects (Brazil, Colombia, Cuba, Georgia, and Ghana) have been submitted and approved by the Executive Committee in prior years.

The project in **Brazil** is advancing in both directions: strengthening of the collection center network (reclaim centers) and testing of the destruction facility. Cylinders, equipment and tools were delivered to reclaim centers and the procurement process of lab equipment was prepared and launched. The laboratory equipment was delivered at Reclaim Centers in December 2018, including the Gas Chromatography System (GC). The GC installation and training has already been started and it is expected to be completed by 2020. The staff from four Reclaim Centers were trained on AHRI 700 tests and lab routines. In 2018, the company for destruction (incineration) has been identified and the contract signed. Essencis' incinerator has already completed the installation of equipment regarding to process. At this moment, it is occurring the pre-test phase that precedes the official Burn Test, expected to take place from 23rd September to 4th October 2019. The results of Burn Test are expected to be completed around late November this year. After the result, if it will be positive, CETESB has a period of 4 months (approximately) for issuing the definitive Operation License and Essencis will be able to start the incineration of ODSs wastes.

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

D. Country Highlights (January – December 2018)

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

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

Bangladesh

ExCom Decision 80/42 (a) approved the first HFC phase-down investment project in support of the Kigali Amendment for phasing out 230.63 metric tonnes of HFC-134a from. This was approved for Walton Hitech Industries Limited, Bangladesh to convert the refrigerant used by this domestic refrigerator manufacturing facility from HFC-134a to isobutane (R-600a), and support conversion of its compressor

manufacturing facility from HFC-134a-based compressors to isobutane-based (R600a) compressors. The conversion to isobutene technology in the refrigerator manufacturing sector will result in 329,801 CO2 equivalent emissions, a phase-out of 197.3 metric tonnes of HFC-134a consumption and 282,139 CO2 equivalent tons (as related to changes in refrigerant charge). Apart from the HFC phase out in manufacturing sector, Walton will phase out 33.33 metric tonnes of HFC-134a currently consumed in the refrigeration and air-conditioning (RAC) servicing sector of Walton-owned service outlets, which will correspond to 47,662 CO2-equivalent tonnes in emission reduction. The conversion of the compressor manufacturing facility from HFC-134a-based compressors to isobutane-based compressors, makes low GWP, in-house manufactured compressors available to the market. The required machinery and equipment have been procured. The installation and commissioning are on-going. The project has shown positive result in reducing direct emission and energy saving by this conversion. Final outcome will be shared in November 2019.

In addition, a complementary K-CEP funded project will be implemented by UNDP in partnership with Walton to increase the energy efficiency performance of domestic refrigerators during the process of conversion of its plant under the MLF funded project. The execution of this KCEP project will include a combination of interventions to facilitate technology transfer, training and capacity building, awareness, monitoring and management. This re-design of refrigerator and matching compressor has resulted in 10-30% energy saving with induction-based compressors. The result sharing workshop was held in July 2019 in cooperation with K-CEP, UNDP, Government and industry.

Dominican Republic

One key component of the implementation of the Montreal Protocol activities in the country is the strengthening of the technical knowledge of refrigeration and air conditioning technicians which allow them to properly manage the ODS and HFC and facilitate the introduction of their alternatives. As part of the HPMP Stage II, the Dominican Republic with support of UNDP has strengthened the refrigeration laboratories of 14 technical institutions where students from low-income areas undertake their initial training in refrigeration and air conditioning. This approach assures that the next generation of RAC technicians are aware of their key role in the protection of the Ozone layer.

Indonesia

The Stage I of the HPMP for Indonesia was approved at the 66th ExCom being a pioneer A-5 country to adopt the HFC-32 as alternative refrigerant for Refrigeration and Air Conditioning applications. However, due to commercial issues, parts and components for wide conversion – with competitive cost – of HFC-32 system could not be put in place, since Indonesia depends on the international market to source compressors and other components. For this reason, the Stage I as extended to December 2019, and in order to facilitate the market uptake, with bilateral support from the Government of New Zealand, the Government of Indonesia and UNDP partnered with global suppliers to promote a “Green Supply Chain Workshop”, held in Jakarta, October 2018. The workshop had been attended by many Small Island Developing States (SIDS) from Pacific and Caribbean, which also face difficulties to source equipment, parts and components for low-GWP based alternatives. The two-days’ workshop discussed technologies and availability of parts and components for the PU Foam and RAC sectors, and it was an opportunity to facilitate the contacts between suppliers and end-users, trying to close the gap of the supply chain scenario. Following the workshop, a scouting mission to the 2019 China Expo was held in order to access current market scenario for HFC-32 compressors and how to establish a facilitating mechanism so global suppliers could provide efficient and cost-effective compressor to other markets outside China.

Jamaica

The country has witnessed an uptake of HFC containing inverter-based room ACs during the recent years.

Although this equipment is more efficient vis-à-vis standard non-inverter equivalents, this translates into higher presence and consumption of HFCs in the country. In 2018, the Jamaica Customs Agency (JCA) adopted harmonized tariff codes for HFC control. JCA has strict controls not only on HFC gasses but also on HFC-containing equipment to improve the record keeping and to provide valuable information for the design and improvement of the HFC Licensing and Quota Systems for the adoption of the Kigali Amendment. JCA are continuously making improvements to provide a modern regulatory control for ODS and HFCs as well as to track the import of low GWP alternatives.

Kyrgyzstan

The country, due to its association with the Eurasian Economic Cooperation Commission and its Customs Union, had opted several years ago for acceleration of its HCFC phase-out to match that advanced schedule of non-Article 5 group of countries in the Europe/CIS region that receive technical assistance from the GEF. Kyrgyzstan has entered the final year of implementation of its accelerated programme, and has been able to rapidly increase the national capacity to prepare for the full HCFC phase-out in 2020, implement its related National Strategy to be on time with the international obligations, equip the servicing sector with essential tools for the sustainable HCFC re-use, bring in new knowledge on alternative technologies which come to replace HCFCs, including RAC equipment in the commercial sector working on R-290, and control better the use of HCFCs with reduced leakage rates. This is an outstanding performance for the Article 5 country following a non-Article 5 country HCFC phase-out schedule.

Lebanon

The country, as all non-LVCs, had to initially focus its HPMP activities on the phase-out of the most potent HCFC-141b, and thus specifically on the manufacturing sector. This meant that during stage 1, limited support was available for the servicing sector for HCFC-22 phase-out. Fortunately, Stage 2 opened opportunities for massively enhancing the support to training and formalization of the refrigeration servicing technicians' sector. In Lebanon, the servicing is done by technicians (1,000 – 1,250) who are a mix of skilled and unskilled ones and the total number of service workshops specialized in the refrigeration and air-conditioning subsector is around 450. It was essential to equip and strengthen a pivotal refrigeration training center in Beirut, at the Dekwaneh vocational school, which will be complemented by three other training centers in different geographical regions in the country. This was an essential focus of the work of the HPMP in 2018 and aims eventually at achieving a certification system for RAC technicians in the local market – it concluded in the opening of the Centre on International Ozone Day 2019. It must be noted that the country is also combining this effort with targets to increase energy efficiency while refrigerants are being replaced by new options and by improved servicing practices. This is the goal of integrating MLF actions with complementary and synergistic programmes such as KCEP – for example through the efforts at developing a National Cooling Plan and at integrating energy efficiency best practices in the national trainings – which is the case in Lebanon.

Trinidad and Tobago

UNDP supports the implementation of the Montreal Protocol Programme in Trinidad and Tobago (IS and HPMP). Trinidad and Tobago recently achieved the approval of a GEF funded programme to enhance the energy efficiency in the Refrigeration and AC Sector in the country. The efforts in both programmes are highly complementary and will assist the country to achieve additional Climate Benefits in the coming years in the context of the Kigali Amendment and Paris Accord. Trinidad and Tobago will through the combined effort be able to raise the level of ambition of their National Determined Contributions (NDCs) and introduce new climate friendly concepts like District Cooling to the country. This is a clear example of the synergies that exists across different programs and how ambitious governments can raise their commitments to the environment.

Zimbabwe

A new programme on the HFC phase-out in the manufacturing of domestic and light commercial equipment using hydrocarbon series of refrigerants (R600a) was approved for Capri company in Zimbabwe. This is a cooperation of the Government of France and UNDP and should result in the phase-out of 14.5 metric tons of HCFC-134a. The project is unique to the Africa region and may have a sub-regional positive effect on neighboring countries when such new equipment models on R600a are exported from Zimbabwe in the future. It is expected that the implementation of the project will start by the end of 2019 and provide initial results towards the end of 2020.

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

A. Meetings Attended by UNDP in 2018

From	To	Location	Description
14-Jan-18	21-Jan-18	France	UNEP Inter-Regional Thematic and Network Meetings for National Ozone Officers
3-Feb-18	12-Feb-17	China	Policy Support and Programme Oversight
3-Feb-18	12-Feb-17	Canada	IACM
7-Feb-18	10-Feb-18	Colombia	Policy Support and Programme Oversight
9-Feb-18	12-Feb-18	Bangladesh	Policy Support and Programme Oversight
12-Feb-18	16-Feb-18	Lebanon	Policy Support and Programme Oversight
14-Feb-18	16-Feb-18	Armenia	Policy Support and Programme Oversight
16-Feb-18	24-Feb-18	Iran	Policy Support and Programme Oversight
20-Feb-18	23-Feb-18	Moldova	Policy Support and Programme Oversight
27-Feb-18	2-Mar-18	Bangladesh	Policy Support and Programme Oversight
4-Mar-18	7-Mar-18	Chile	Policy Support and Programme Oversight
5-Mar-18	8-Mar-18	Brunei	Policy Support and Programme Oversight
7-Mar-18	10-Mar-18	Cuba	Policy Support and Programme Oversight
11-Mar-18	15-Mar-18	USA, NY	Coordination Meeting for the 2018 Kigali Amendment related programme
11-Mar-18	16-Mar-18	China	South-South Study Tour
18-Mar-18	20-Mar-18	Egypt	Policy Support and Programme Oversight
18-Mar-18	23-Mar-18	Rwanda	2nd Global Grantee Strategic Meeting of the Kigali Cooling Efficiency Program (K-CEP)
19-Mar-18	21-Mar-18	Dominican Republic	Policy Support and Programme Oversight
21-Mar-18	22-Mar-18	Ecuador	Policy Support and Programme Oversight
9-Apr-18	14-Apr-18	Nigeria	Policy Support and Programme Oversight
16-Apr-18	19-Apr-18	Peru	Policy Support and Programme Oversight
18-Apr-18	19-Apr-18	Kyrgyzstan	Policy Support and Programme Oversight
9-May-18	12-May-17	Panama	Inception workshop on the Enabling Activities (EA) of the Kigali Amendment and K-CEP projects in LAC region
14-May-18	18-May-18	Germany	GIZ Proklima Traininig
20-May-18	24-May-18	Botswana	Regional Africa Network meeting of Ozone Officers
20-May-18	25-May-18	India	Policy Support and Programme Oversight
23-May-18	26-May-18	Malaysia	Policy Support and Programme Oversight
27-May-18	2-Jun-18	Canada	MLF Meeting for HFC Phase-down RAC Servicing Sector

From	To	Location	Description
28-May-18	29-May-18	Peru	Policy Support and Programme Oversight
30-May-18	1-Jun-18	Saint Vincent and the Grenadines	Network Meeting for English speaking LAC countries
11-Jun-18	15-Jun-18	Trinidad and Tobago	Policy Support and Programme Oversight
16-Jun-18	23-Jun-18	Canada	81st meeting of the MLF Executive Committee
25-Jun-18	28-Jun-18	Guatemala	Network Meeting for Spanish speaking LAC countries
7-Jul-18	20-Jul-18	Austria	60 ImpCom, Workshop on Energy Efficiency, 40th OEWG, team coordination meeting
5-Aug-18	9-Aug-18	Nepal	Policy Support and Programme Oversight
26-Aug-18	30-Aug-18	Sri Lanka	Policy Support and Programme Oversight
27-Aug-18	31-Aug-18	Australia	South-South Study Tour
27-Aug-18	31-Aug-18	El Salvador	Policy Support and Programme Oversight
2-Sep-18	6-Sep-18	India	Policy Support and Programme Oversight
3-Sep-18	5-Sep-18	Canada	IACM
11-Sep-18	14-Sep-18	Trinidad and Tobago	Policy Support and Programme Oversight
11-Sep-18	15-Sep-18	Dominican Republic	Policy Support and Programme Oversight
16-Sep-18	19-Sep-18	China	Ozone Day celebration, HPMP stage-II agency coordination meeting, District cooling workshop in Xi'an
24-Sep-18	27-Sep-18	Malaysia	Policy Support and Programme Oversight
6-Oct-18	11-Oct-18	Indonesia	Global Workshop on Green Supply Chain
9-Oct-18	12-Oct-18	Colombia	Kigali Amendment Workshop
10-Oct-18	12-Oct-18	Turkey	Regional ECIS Network meeting of Ozone Officers
13-Oct-18	20-Oct-18	Germany	GIZ Proklima Field Trip
22-Oct-18	24-Oct-18	Bangladesh	Policy Support and Programme Oversight
22-Oct-18	26-Oct-18	USA	K-CEP Meeting
29-Oct-18	31-Oct-18	India	Policy Support and Programme Oversight
1-Nov-18	3-Nov-18	Ecuador	Network Meeting for Spanish speaking LAC countries
3-Nov-18	9-Nov-18	Ecuador	30th Meeting of the Parties to the Montreal Protocol
19-Nov-18	23-Nov-18	Jamaica	Policy Support and Programme Oversight
26-Nov-18	29-Nov-18	Trinidad and Tobago	Policy Support and Programme Oversight
1-Dec-18	9-Dec-18	Canada	82nd meeting of the MLF Executive Committee
16-Dec-18	22-Dec-18	Fiji	Policy Support and Programme Oversight

B. Other Issues.

There were no specific issues in 2018 that need to be addressed.

ANNEX 1: Tables related to the Performance Indicators

1. Performance Indicator 1: MYAs

Multi-year agreements submitted in 2018 are listed in the following table.

Correct Code
BGD/PHA/81/INV/51
BGD/PHA/81/TAS/49
BRA/PHA/82/INV/323
BRA/PHA/82/TAS/322
BRU/PHA/82/INV/23
CHI/PHA/81/INV/197
COL/PHA/81/INV/102
COL/PHA/81/TAS/104
CUB/PHA/82/INV/59
DOM/PHA/82/INV/66
EGY/PHA/82/INV/139
GEO/PHA/81/INV/39
GHA/PHA/81/INV/46
IDS/PHA/81/INV/213
IND/PHA/82/INV/473
IND/PHA/82/INV/475
IND/PHA/82/TAS/477
KYR/PHA/81/INV/40
LEB/PHA/81/INV/91
LEB/PHA/81/INV/93
LEB/PHA/81/TAS/92
NIR/PHA/81/INV/147
NIR/PHA/81/TAS/148
NIR/PHA/81/TAS/150
PAN/PHA/82/INV/48
TRI/PHA/81/INV/35
URU/PHA/82/INV/72
URU/PHA/82/TAS/71
China Stage II HPMP - 3rd tranche (Solvents)
China Stage II HPMP - 3rd tranche (ICR)

2. Performance Indicator 2: Individual Projects

The number of individual projects approved in 2018 are listed in the following table.

MLF Number
ARG/SEV/82/INS/188
BGD/SEV/81/TAS/52
BZE/PHA/82/PRP/34
COS/PHA/81/PRP/58
CPR/FOA/82/INV/06+
CPR/SEV/82/INS/596
CUB/PHA/82/PRP/61
CUB/PHA/82/TAS/60
CUB/SEV/81/TAS/57
DOM/REF/81/INV/63
ELS/PHA/82/PRP/39
ELS/SEV/81/TAS/37
FIJ/PHA/82/PRP/34
FIJ/PHA/82/TAS/35
GEO/SEV/81/INS/40
GHA/PHA/81/PRP/44
GHA/SEV/82/INS/47
GLO/SEV/82/TAS/346
IRA/SEV/82/INS/231
IRA/SEV/82/TAS/232
JAM/PHA/81/PRP/38
LEB/SEV/82/INS/94
MEX/REF/81/INV/187
NIR/SEV/82/INS/152
PAK/SEV/82/INS/98
PAN/SEV/81/TAS/46
PAR/PHA/82/PRP/37
PAR/SEV/81/TAS/01+
SRL/PHA/82/PRP/52
SRL/PHA/82/TAS/51
SRL/SEV/82/INS/53
TRI/PHA/82/PRP/36
VEN/SEV/82/INS/136
ZIM/REF/82/INV/55

3. Performance Indicator 3: Funds disbursed

2018 Disbursements	\$40,670,035
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4. Performance Indicator 4: 2018 ODS phase-out

MLF Number	Consumption ODP to be Phased Out per Proposal
ARG/SEV/82/INS/188	0.0
BGD/PHA/81/INV/51	6.8
BGD/PHA/81/TAS/49	0.0
BGD/SEV/81/TAS/52	0.0
BRA/PHA/82/INV/323	136.3
BRA/PHA/82/TAS/322	0.0
BRU/PHA/82/INV/23	0.2
BZE/PHA/82/PRP/34	0.0
CHI/PHA/81/INV/197	23.2
COL/PHA/81/INV/102	34.6
COL/PHA/81/TAS/104	0.0
COS/PHA/81/PRP/58	0.0
CPR/FOA/82/INV/06+	250.0
CPR/SEV/82/INS/596	0.0
CUB/PHA/82/INV/59	4.2
CUB/PHA/82/PRP/61	0.0
CUB/PHA/82/TAS/60	0.0
CUB/SEV/81/TAS/57	0.0
DOM/PHA/82/INV/66	0.0
DOM/REF/81/INV/63	2.3
EGY/PHA/82/INV/139	0.0
ELS/PHA/82/PRP/39	0.0
ELS/SEV/81/TAS/37	0.0
FIJ/PHA/82/PRP/34	0.0
FIJ/PHA/82/TAS/35	0.0
GEO/PHA/81/INV/39	1.1
GEO/SEV/81/INS/40	0.0
GHA/PHA/81/INV/46	0.0
GHA/PHA/81/PRP/44	0.0
GHA/SEV/82/INS/47	0.0
GLO/SEV/82/TAS/346	0.0
IDS/PHA/81/INV/213	8.6
IND/PHA/82/INV/473	9.8
IND/PHA/82/INV/475	296.6
IND/PHA/82/TAS/477	0.0
IRA/SEV/82/INS/231	0.0
IRA/SEV/82/TAS/232	0.0
JAM/PHA/81/PRP/38	0.0
KYR/PHA/81/INV/40	0.5
LEB/PHA/81/INV/91	9.8
LEB/PHA/81/INV/93	2.5
LEB/PHA/81/TAS/92	1.9
LEB/SEV/82/INS/94	0.0
MEX/REF/81/INV/187	129.4
NIR/PHA/81/INV/147	32.4
NIR/PHA/81/TAS/148	12.8

NIR/PHA/81/TAS/150	0.0
NIR/SEV/82/INS/152	0.0
PAK/SEV/82/INS/98	0.0
PAN/PHA/82/INV/48	6.6
PAN/SEV/81/TAS/46	0.0
PAR/PHA/82/PRP/37	0.0
PAR/SEV/81/TAS/01+	0.0
SRL/PHA/82/PRP/52	0.0
SRL/PHA/82/TAS/51	0.0
SRL/SEV/82/INS/53	0.0
TRI/PHA/81/INV/35	11.2
TRI/PHA/82/PRP/36	0.0
URU/PHA/82/INV/72	4.7
URU/PHA/82/TAS/71	0.0
VEN/SEV/82/INS/136	0.0
ZIM/REF/82/INV/55	11.1

5. Performance Indicator 5: Projects completed in 2018.

The following 66 projects were completed in 2018.

MLF Number	Date Completed (Actual)
BGD/PHA/75/PRP/44	Jun-2018
BGD/REF/75/PRP/43	Jun-2018
BRA/PHA/75/INV/312	Aug-2018
BRA/PHA/75/TAS/313	Dec-2018
CHI/PHA/73/INV/184	Jun-2018
CHI/PHA/76/INV/192	Mar-2018
COL/FOA/76/DEM/100	Apr-2018
COL/PHA/75/INV/96	Dec-2018
COL/PHA/75/TAS/92	Dec-2018
COL/PHA/75/TAS/94	Dec-2018
COL/REF/75/DEM/97	Apr-2018
COL/SEV/74/INS/90	Aug-2018
COS/SEV/75/INS/53	Jun-2018
CPR/PRO/80/PRP/03+	Jun-2018
CPR/REF/76/DEM/573	Mar-2018
CPR/SEV/77/INS/575	Dec-2018
CUB/PHA/73/INV/53	Dec-2018
DOM/PHA/77/INV/60	Dec-2018
DOM/REF/80/PRP/01+	Dec-2018
DRC/PHA/80/INV/45	Dec-2018
EGY/FOA/80/PRP/01+	Dec-2018
EGY/PHA/74/PRP/126	Dec-2018
ELS/PHA/77/INV/34	Dec-2018

GHA/PHA/76/INV/42	Oct-2018
GHA/SEV/76/INS/41	Dec-2018
GLO/SEV/80/TAS/343	Dec-2018
IND/FOA/72/PRP/455	Jun-2018
IND/FOA/74/PRP/460	Jun-2018
IND/PHA/72/PRP/452	Jun-2018
IND/REF/72/PRP/453	Jun-2018
IND/REF/72/PRP/459	Jun-2018
IRA/PHA/72/PRP/216	Jun-2018
IRA/PHA/74/INV/219	Jun-2018
IRA/REF/72/PRP/217	Jun-2018
IRA/SEV/74/TAS/223	Jun-2018
KYR/PHA/74/INV/34	Dec-2018
LEB/PHA/75/INV/85	Dec-2018
LEB/PHA/75/INV/86	Dec-2018
LEB/PHA/75/INV/87	Dec-2018
LEB/PHA/75/TAS/88	Dec-2018
LEB/SEV/74/TAS/35	Dec-2018
MAL/PHA/71/INV/172	Jun-2018
MAL/PHA/71/TAS/173	Jun-2018
MAL/PHA/71/TAS/174	Jun-2018
MAL/PHA/75/TAS/179	Jun-2018
MAL/PHA/77/INV/184	Jun-2018
NEP/PHA/66/INV/30	Jun-2018
NIR/FOA/72/PRP/139	May-2018
NIR/PHA/71/INV/135	Feb-2018
NIR/PHA/72/PRP/138	May-2018
NIR/PHA/73/INV/140	Jun-2018
NIR/PHA/75/INV/143	Dec-2018
NIR/SEV/76/INS/145	Nov-2018
PAK/SEV/73/INS/91	Mar-2018
PAN/SEV/75/INS/42	Mar-2018
SRL/PHA/70/INV/44	Dec-2018
SRL/SEV/76/INS/48	Dec-2018
TLS/PHA/63/INV/07	Dec-2018
TLS/PHA/80/INV/18	Dec-2018
URU/PHA/77/TAS/68	Dec-2018
URU/PHA/77/TAS/69	Dec-2018

7. Performance Indicator 7: Final Revisions

Last year's database counted 101 projects, of which 70 should have been financially completed in 2018. This year's database counts 66 projects for which a final revision was issued in 2018.

8. Performance Indicator 8: PCRs

100% achieved (2 MYA and 3 individual PCRs were due and submitted in 2018).

9. Performance Indicator 9

Progress Report produced on 23 September 2019 as required.