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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Seventy-ninth Meeting Bangkok, 3-7 July 2017

### PROGRESS REPORT OF THE WORLD BANK AS AT 31 DECEMBER 2016

1. This document presents the progress report of the World Bank as of 31 December  $2016^{1}$ .

2. The document presents a summary of progress in implementation of projects for 2016 and cumulative since 1991. It contains a review on the status of implementation of each  $ongoing^2$  project at the country level identifying 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. Annex I to the present document presents for each ongoing project with outstanding issues a summary status and a recommendation for consideration by the Executive Committee. The document also includes a recommendation.

### Summary of progress in implementation of projects for 2016 and cumulative

3. Implementation of projects and activities by the World Bank for 2016 and cumulative since 1991 up to 31 December 2016 is summarized as follows:

(a) **Phase-out:** In 2016, 468.4 ODP tonnes of consumption and production of ODS were phased out and an additional 255.5 ODP tonnes of consumption and production of HCFCs were approved for phase-out. Since 1991, 145,794 ODP tonnes of ODS consumption and 186,808 ODP tonnes of ODS production had been phased out at the end of 2016, of an expected total of 308,559 ODP tonnes from projects approved (excluding cancelled and transferred projects);

<sup>&</sup>lt;sup>1</sup> 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.

 $<sup>^2</sup>$  Ongoing projects are all projects that have been approved and were under implementation as of 31 December 2016. 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.

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

- (b) Disbursements/approvals: In 2016, US \$42.16 million was disbursed and US \$54.01 million was planned for disbursement based on the 2015 progress report representing a rate of disbursement of 78 per cent of that planned. Cumulatively, US \$1.09 billion had been disbursed out of the total US \$1.14 billion approved for disbursement (excluding agency fees). This represents a rate of disbursement of 96 per cent. In 2016, US \$13.62 million was approved for implementation;
- (c) **Cost-effectiveness (in ODP):** Since 1991, the average cost-effectiveness of investment projects approved leading to a permanent reduction in consumption was US \$5.45/kg. The cost-effectiveness for the production sector was US \$4.39/kg. The average cost-effectiveness of investment projects per ODP tonne was US \$2.74/kg for completed projects and US \$41.09/kg for ongoing projects<sup>3</sup>;
- (d) **Number of projects completed:** In 2016, nine projects were completed. Since 1991, 1,025 projects of the 1,075 projects approved (excluding closed or transferred projects) were completed. This represents a completion rate of 95 per cent;
- (e) Speed of delivery investment projects: No investment project has been completed in 2016. Since 1991, the average time for completion of investment projects has been 40 months after their approval. First disbursements under these projects occurred, on average, 24 months after they had been approved;
- (f) Speed of delivery non-investment projects: Projects that were completed in 2016 were completed on average 19 months after their approval. Since 1991, the average time for completion of non-investment projects has been 35 months after their approval. First disbursements under these projects occurred, on average, 19 months after they had been approved;
- (g) **Project preparation:** Of the 291 project preparation activities approved by the end of 2016, 281 have been completed, leaving 10 ongoing;
- (h) Implementation delays: There were a total of 24 ongoing investment projects under implementation at the end of 2016. These projects, on average, are experiencing a delay of 30 months. However, there are no projects classified as "projects with implementation delays" that are subject to the procedures of project cancellation (as multi-year agreements (MYAs) are not subject to those procedures); and
- (i) MYAs: In 2016, the World Bank was implementing ten MYAs for HCFC phase-out management plans (HPMPs) and one MYA for the HCFC production phase-out management plan (HPPMP) in China. Since 1991, 38 MYAs have been approved and 27 MYAs have been completed.
- 4. An analysis of the World Bank progress report is contained in Annex II to the present document.

### Project implementation progress in 2016

5. The Secretariat reviewed the status of project implementation 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 2016, the potential impact of these delays on phase-out and the rate of planned disbursements.

<sup>&</sup>lt;sup>3</sup> 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.

6. Of the 37 ongoing projects, excluding institutional strengthening (IS) and project preparation, 14 projects have extended planned dates of completion since the 2015 progress report.

7. During the review of the progress report, the Secretariat had several exchanges with the World Bank, where a number of issues on ongoing projects were satisfactorily resolved. However, issues could not be resolved for a number of projects or tranches of multi-year agreements for the phase-out of HCFCs; and preparation of ODS alternative surveys, 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.

#### Recommendation

- 8. The Executive Committee may wish:
  - (a) To note:
    - (i) The progress report of the World Bank as at 31 December 2016 contained in document UNEP/OzL.Pro/ExCom/79/13; and
    - (ii) That the World Bank would report to the 80<sup>th</sup> meeting on nine projects recommended for additional status reports, as indicated in Annex I to the present document;
  - (b) To approve the recommendations on ongoing projects with specific issues listed in the last column of the table contained in Annex I to the present document.

Annex I

# ONGOING PROJECTS WITH OUTSTANDING ISSUES IN THE PROGRESS REPORT FOR THE WORLD BANK

Country	Project title/project code	Disburse- ment rate (%)	Status/Issues	Recommendation
ODS alternative				
Jordan, the Philip	opines, Thailand and Viet Nam		A consultant was hired and the survey is underway.	To request the World Bank to submit the surveys on ODS alternatives to the $80^{\text{th}}$ meeting in accordance with decisions 74/53(h) and 78/2(c).
HCFC phase-ou	it management plans (HPMPs)/HCE	<sup>r</sup> C producti	on phase-out management plan (HPPMP)	
China	HCFC phase-out management plan (stage I): Polyurethane rigid foam sector plan: (CPR/PHA/64/INV/508) (CPR/PHA/68/INV/526) (CPR/PHA/71/INV/535) (CPR/PHA/73/INV/551) HCFC production phase-out management plan (stage I): (CPR/PRO/72/INV/540) (CPR/PRO/74/INV/561)		Ongoing with 100 per cent disbursement rate.	To urge the World Bank to complete these ongoing projects as soon as possible, and to provide status reports on the completion of these projects to the 81 <sup>st</sup> meeting.
Thailand	<u>HCFC phase-out management plan (stage I)</u> (THA/PHA/68/INV/162)			
Viet Nam	HCFC phase-out management plan (stage I) (VIE/PHA/63/INV/56) (VIE/PHA/63/TAS/58)			

#### Annex II

#### ANALYSIS THE PROGRESS REPORT OF THE WORLD BANK AS AT 31 DECEMBER 2016

1. As of that date, the Executive Committee had approved approximately US \$1.25 billion consisting of US \$1.14 billion for the implementation of investment and non-investment projects and US \$112.07 million for agency fees and administrative support costs, as shown in Table 1. In 2016, 18 new projects and activities were approved. This level of funding is expected to result in the phase-out of 308,559 ODP tonnes of ODS consumption and production.

Sector	Funding (US \$)
Aerosol	22,984,030
Destruction	400,000
Foam	136,426,743
Halon	70,221,038
Fumigants	5,837,887
Multiple sectors	2,341,168
Other	5,059,360
Phase-out plan	197,274,594
Process agent	114,342,497
Production	359,729,770
Refrigeration	181,574,107
Several	28,337,410
Solvents	10,237,394
Sterilant	661,227
Sub-total	1,135,427,225
Administrative cost	112,066,165
Total	1,247,493,391

 Table 1: Approved funding by sector for the World Bank as at 31 December 2016

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

	Nu	mber of pro	jects*	Funding (US \$)						
Туре	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed			
Country programme	29	29	100	1,627,732	1,627,732	0	100			
Demonstration	8	4	50	7,564,784	5,198,371	2,366,413	69			
Institutional strengthening (IS)	48	45	94	8,937,660	8,208,476	729,184	92			
Investment	627	603	96	1,076,839,419	1,033,987,001	42,852,418	96			
Project preparation	291	281	97	26,689,025	25,559,917	1,129,108	96			
Technical assistance	68	59	87	13,462,839	10,977,035	2,485,803	82			
Training projects	4	4	100	305,766	305,766	0	100			
Total	1,075	1,025	95	1,135,427,225	1,085,864,299	49,562,927	96			

 Table 2: Status of project implementation by category

\*Excludes closed and transferred projects.

### UNEP/OzL.Pro/ExCom/79/13 Annex II

3. Table 3 presents an overview of the status of project implementation by year<sup>4</sup>. All projects and activities approved between 1991 and the end of 2004, as well as 2006, 2007, 2008 and 2010, have now been completed.

	Nu	umber of proje	ects*		Funding	(US\$)	
Year	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
1991	42	42	100	5,429,404	5,429,404	0	100
1992	76	76	100	28,047,705	28,047,705	0	100
1993	79	79	100	42,538,405	42,538,405	0	100
1994	91	91	100	41,081,267	41,081,267	0	100
1995	112	112	100	47,224,186	47,224,186	0	100
1996	55	55	100	29,319,479	29,319,479	0	100
1997	95	95	100	56,173,103	56,173,103	0	100
1998	59	59	100	35,959,418	35,959,418	0	100
1999	73	73	100	64,173,138	64,173,138	0	100
2000	67	67	100	36,982,135	36,982,135	0	100
2001	29	29	100	55,212,853	55,212,854	0	100
2002	32	32	100	64,357,778	64,357,778	0	100
2003	24	24	100	72,734,119	72,734,119	0	100
2004	29	29	100	77,111,770	77,111,770	0	100
2005	28	27	96	69,623,896	68,428,232	1,195,664	98
2006	22	22	100	64,473,260	64,473,260	0	100
2007	25	25	100	66,005,270	66,005,270	0	100
2008	28	28	100	40,214,774	40,214,774	0	100
2009	22	21	95	25,563,461	25,541,662	21,799	100
2010	16	16	100	1,148,623	1,148,623	0	100
2011	10	5	50	44,703,997	43,987,016	716,981	98
2012	10	3	30	11,745,779	8,901,202	2,844,577	76
2013	7	4	57	44,296,067	42,671,855	1,624,212	96
2014	13	8	62	28,341,138	27,947,365	393,773	99
2015	13	3	23	69,350,804	40,004,239	29,346,565	58
2016	18	0	0	13,615,396	196,038	13,419,358	1
Total	1,075	1,025	95	1,135,427,225	1,085,864,299	49,562,927	96

Table 3: Status of project implementation by year

\*Excludes closed and transferred projects.

4. Table 4 presents project implementation by country for 2016.

Table 4. Summary of project implementation by the World Bank for 2016

Country	Phased out in 2016	Percentage of planned phase-out achieved in 2016	Estimated funds disbursed in 2016 (US\$)	Funds	Percentage of funds disbursed over estimation in 2016	Percentage of planned projects completed in 2016
Argentina	0.0	2010	167,912	164,513	98	III 2010
Chile	0.1			0		
China	449.3	100	44,379,210	35,665,132	80	0

<sup>&</sup>lt;sup>4</sup> 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.

Country	Phased out in 2016	Percentage of planned phase-out achieved in 2016	Estimated funds disbursed in 2016 (US\$)	Funds disbursed in 2016 (US\$)	Percentage of funds disbursed over estimation in 2016	Percentage of planned projects completed in 2016
Indonesia	9.5		619,774	446,840	72	100
Jordan	0.0		533,724	650,371	122	100
Mexico	0.1			0		
Philippines (the)	0.0		215,000	12,401	6	
Thailand	0.1		5,738,000	2,988,113	52	50
Turkey	0.0			2		
Viet Nam	9.1		2,161,117	1,955,881	91	50
Global	0.0		200,000	274,129	137	100
Grand Total	468.4	100	54,014,737	42,157,381	78	50



# ANNUAL PROGRESS REPORT

# BANK-IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

January - December 2016

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# I. PROJECT APPROVALS AND DISBURSEMENTS

### A. Annual Summary Data

1. Implementation of World Bank Multilateral Fund (MLF) activities has advanced in the calendar year 2016. Cumulative ODP consumption and production phaseout remains over 332,000 metric tonnes (MT). Over 100 percent of the total ODP to be phased out through World Bank conversion and closure projects has been achieved. Cumulative disbursement for the entire World Bank portfolio is nearly US\$1.1 million. Eighteen new approvals by the MLF have increased the cumulative number of project activities approved to a net 1,083 (excluding transfers and closed activities). The number of ongoing multi-year projects in the Bank's portfolio, primarily multi-year HCFC phaseout projects, increased to 11 in 2016 with the Executive Committee approval of four Stage II HCFC Phase-out Management Plans in May and December.

2. Implementing Agency performance is measured by a set of eight weighted performance indicators in accordance with Executive Committee Decision 71/28. The "funds disbursed" implementation indicator was exceeded by 36% given that the target set in the Bank's 2016 Business Plan of \$30.8 million but actual disbursement reached US\$42 million in 2016.

3. In 2016, seven annual plans were submitted out of 8 targeted in the approved table of World Bank 2016 performance targets. The target was reached by 88% percent. Regarding the ODP phaseout target which is now covered in one "implementation" indicator (with the most weighting) the World Bank had a total phase-out of 546.9 in ODP consumption and production for 2016. If comparing this phase-out to the target set by the Secretariat for the Bank's 2016 Business Plan, the phase-out target has been fully achieved. However this approach to setting the target includes counting phase-out not approved by the MLF Executive Committee and comparing it to newly approved, planned phase-out. Thus, this does not provide a meaningful indication of actual ODS phase-out achieved through project implementation. World Bank performance for the three implementation indicators is highlighted in Section IV of this annual report.

4. The World Bank met two of the three "administrative" indicators for 2016. The 2016 Progress Report was submitted on time and all 2016 project activities completed financially were done so within 12 months (with an average speed of financial completion of 5.6 months). Not all project completion reports (PCRs) were submitted in 2016 as planned.

5. According to Decision 41/93, the MLF Secretariat was requested to continue to monitor traditional indicators of performance on the basis of trend analysis. These indicators include value of projects approved, cost of project preparation, cost-effectiveness, distribution of projects among countries, speed of first disbursement, and speed of completion. 2016 outcomes in relation to these traditional indicators are also provided in Section IV.

Year Approv- ed	Number of Ap- prov-als*		Per Cent Com-pleted	on ODP to	Consumptio n ODP Phased Out*	•			Per Cent of Production ODP Phased Out	Approved Funding plus Adjustment (US\$)	Funds Disbursed (US\$)	Per Cent of Funds Dis-burs- ed	Balance (US\$)	Estimated Disbursemen t in Current Year (US\$)	Support Costs Approved (US\$)	Support Cost Adjustments (US\$)
1991	42	42		536		112%	0	0	0%	5,429,404	5,429,404	100%	0	0	820,000	-534,564
1992	76	76		18,441	18,276	99%	0	0	0%	28,047,705	28,047,705	100%	0	0	1,347,550	-396,573
1993	79	79		2,468	3,054	124%	0	0	0%	42,538,405	42,538,405	100%	0	0	1,179,000	-276,805
1994	91	91	100%	8,894	9,178	103%	1,200	1,200	100%	41,081,267	41,081,267	100%	0	0	1,418,963	113,858
1995	112	112		3,648	3,565	98%	0	0	0%	47,224,186	47,224,186	100%	0	0	5,478,734	-764,883
1996	55	55		3,610	3,312	92%	0	0	0%	29,319,479	29,319,479	100%	0	0	4,465,744	-621,460
1997	95	95		7,369	17,257	234%	0	11,739	0%	56,173,103	56,173,103	100%	0	0	8,100,603	-1,156,010
1998	59	59		8,837	8,783	99%	5,970	5,826	98%	35,959,418	35,959,418	100%	0	0	4,804,453	-501,628
1999	73	73		9,810	8,128	83%	5,970	5,970	100%	64,173,138	64,173,138	100%	0	0	6,207,035	325,318
2000	67	67	100%	2,978	3,260	109%	8,802	8,793	100%	36,982,135	36,982,135	100%	0	0	3,744,868	-182,406
2001	29	29		6,067	6,067	100%	8,393	8,384	100%	55,212,853	55,212,854	100%	0	0	4,482,838	564,673
2002	32	32		6,495	6,699	103%	7,443	7,443	100%	64,357,778	64,357,778	100%	0	0	7,174,301	-69,512
2003	24	24	100%	3,966	3,978	100%	7,421	7,421	100%	72,734,119	72,734,119	100%	0	0	7,029,910	252,991
2004	29	29		4,451	4,468	100%	16,065	16,065	100%	77,111,770	77,111,770	100%	0	0	7,369,146	84,125
2005	28	27	96%	19,359	23,049	119%	46,273	46,342	100%	69,623,896	68,428,232	98%	1,195,664	270,000	7,381,049	-519,917
2006	22	22	100%	1,260	1,260	100%	18,444	18,444	100%	64,473,260	64,473,260	100%	0	0	6,490,404	-139,971
2007	25	25	100%	2,989	2,989	100%	17,115	17,115	100%	66,005,270	66,005,270	100%	0	0	6,860,290	-442,016
2008	28	28	100%	5,952	5,952	100%	20,593	20,593	100%	40,214,774	40,214,774	100%	0	0	4,834,395	-278,146
2009	22	21	95%	14,036	14,036	100%	7,503	7,503	100%	25,563,461	25,541,662	100%	21,799	21,799	3,564,606	-520,075
2010	16	16	100%	674	674	100%	0	0	0%	1,148,623	1,148,623	100%	0	0	1,868,548	-458,586
2011	10	5	50%	81	81	100%	0	0	0%	44,703,997	43,987,016	98%	716,981	716,981	5,099,184	-24,363
2012	10	3	30%	168	168	100%	0	0	0%	11,745,779	8,901,202	76%	2,844,577	1,240,572	2,765,744	-628,373
2013	7	4	57%	377	377	100%	1,058	1,058	100%	44,296,067	42,671,855	96%	1,624,212	1,348,312	3,203,077	978,015
2014	13	8	62%	127	127	100%	0	0	0%	28,341,138	27,947,365	99%	393,773	300,000	3,387,443	-411,441
2015	13	3	23%	548	448	82%	2,912	2,912	100%	69,350,804	40,004,239	58%	29,346,565	23,542,924	5,913,456	0
2016	18	0	0%	255	9	4%	0	0	0%	13,615,396	196,038	1%	13,419,358	3,525,527	2,682,573	0
Total	1,075	1,025	95%	133,397	145,794	109%	175,162	186,808	107%	1,135,427,225	1,085,864,299	96%	49,562,927	30,966,115	117,673,914	-5,607,748

### **Table I-1: Annual Summary**

\* Excludes Closed and Transferred Projects. Includes Project Preparation.

### B. Summary of Data by Project Type (CPG, DEM, INS, INV, PRP, TAS, TRA)

6. Table I-2 summarizes the entire portfolio of World Bank project approvals, adjustments disbursements by type of project or activity. As can be seen from the table, the major proportion the Bank's approved funding to date has gone for investment projects, US\$1,107,300,681. The amounts allocated for institutional strengthening and country program development are US\$9,182,322 and US\$2,383,906 respectively.

Туре	Number of Approvals *	Number Completed	Per Cent Completed	Approved Funding (US\$)	Adjustment (US \$)	Funds Disbursed (US \$)	Per Cent of Funds Disbursed	Balance (US\$)	Estin Disburs In Cu Year (
Country Programme	29	29	100%	2,383,906	-756,174	1,627,732	100%	0	1
Preparation									
Demonstration	8	4	50%	11,439,764	-3,874,980	5,198,371	69%	2,366,413	1
Projects									
Institutional	48	45	94%	9,182,322	-244,662	8,208,476	92%	729,184	1
Strengthening Projects									
Investment Projects	627	603	96%	1,107,300,681	-30,461,262	1,033,987,001	96%	42,852,418	28,1
Project Preparation	291	281	97%	34,698,612	-8,009,587	25,559,917	96%	1,129,108	6
Technical Assistance	68	59	87%	16,557,998	-3,095,159	10,977,035	82%	2,485,803	1,0
Projects									
Training Projects	4	4	100%	686,000	-380,234	305,766	100%	0	1
GRAND TOTAL	1,075	1,025	95%	1,182,249,283	-46,822,058	1,085,864,299	96%	49,562,927	30,9

 Table I-2: Summary of Data by Project Type

\* Excludes Closed and Transferred Projects.

## C. Multi-year Agreements

7. A total of 38 multi-year projects have been approved for the World Bank as a Multilateral Fund Implementing Agency (IA) as of the end of 2016. One of these was cancelled before implementation start in 2006 and another five were completed with each having remaining balances that were subsequently transferred to other IAs (for the National CFC Phase-out Plans (NCPPs) of Ecuador, the Philippines and Tunisia, and in 2015, the CTC phase-out and accelerated CFC production sector plans in India).

8. In addition to its role in leading implementation for 29 of the 38 multi-year projects (including national and sector plans), the World Bank was, and continues to be a Cooperating Agency in Argentina, Indonesia, Jordan and Mexico for 9 multi-year projects with UNIDO or UNDP as the Lead Agency. The total value of Stage I HPMPs and sector plans in the Bank's portfolio is more than US\$206 million. US\$197 million in funds have been released by the Executive Committee to date and the remainder of the funding will be released between 2017 and 2018 (for Thailand).

9. Out of seven ongoing multi-year activities in the Bank's portfolio in 2016 (all dedicated to HCFC phaseout), three annual programs were approved worth in total US\$1.3 million. These tranches include the final funding tranches for the Stage I HCFC phase-out PU foam sector plan in Indonesia and HCFC Phase-out Management Plan (HPMP) in Vietnam, as well as the third tranche of the Thailand Stage I HPMP. As of the end of 2016, all Stage I multi-year projects under World Bank implementation had received full funding by the Executive Committee with the exception of that of Thailand (with four remaining tranches scheduled for release by 2018).

10. Although fully funded, these projects continue to be active in different ways. Decision 56/13 requires that sector plans in the foam, halon and CFC production sectors in China be tracked until the full utilization of the remaining balances. In accordance with Decision 56/13, the World Bank will continue to cooperate with China on monitoring the ongoing implementation of sector plan activities despite that the grant agreement (ODS IV) under which these sector plans fall closed on June 30, 2013. For the six fully funded ongoing HPMPs, implementation will continue into to 2017 (and possibly 2018 two cases) and most of these require annual implementation plan reporting and submission of an annual consumption verification report, per Executive Committee decision.

11. 2016 marks the year that the World Bank and its partner countries entered into the second phase of HPMP implementation with the approval of two Stage II HPMPs in Jordan and Vietnam and two Stage II foam sector plans in China and Indonesia. The Executive Committee released nearly \$10 million in project funds in 2016 to commence implementation of all four projects which aim, as a priority, to support compliance with the 2020 35% reductions in HCFC consumption. The four multi-year projects target HCFC-141b consumption and/or use in imported pre-blended polyol, and one (the Vietnam Stage II HPMP) is the first to introduce HCFC-phase-out activities in the commercial and industrial refrigeration sectors.

12. All World Bank partner countries currently implementing multi-year projects have met their annual consumption and production targets for the 2016 calendar year based on unverified data as of report writing. In addition, these countries have maintained the total phaseout from previous agreements, also according to preliminary information. Table I-3 presents a summary of multi-year agreements for projects under World Bank implementation. Additional country information is also found in Annex I of this report.

# Table I-3. Multi-Year Projects

Country	Sector Plan/National ODS Phase-Out Plan	Date Approved	Actual Date of Comple- tion	Planned Date of Completion (including revised)	Funds Committed by ExCom (US\$)	Funds Released including Present Year by ExCom (US\$)	Funds Disbursed to the Country (US\$)	Total ODP Consumption to be Phased- out for the Plan	ODP Consumption Allowed for the Reporting Year*	Actual ODP Consumpti on for Reporting Year*	Total ODP Production to be Phase- out for the Plan*	ODP Production Allowed for the Reporting Year*	Actual ODP Production for Reporting Year*
Antigua Barbuda	CFC phase-out management plan	Dec-04	Dec-11		97,300	97,300	62,987	1.80	-	-	-	-	
Argentina	CFC production closure plan	Nov-02	Dec-09		10,600,000	10,600,000	10,600,000	-	-	-	3,020.00	-	-
Argentina	National CFC phase-out plan	Nov-05	Dec-13		500,000	500,000	236,630	1.50	-	-	-	-	-
Argentina	HCFC phase-out management plan (stage I, first tranche)	Apr-12		Apr-17	914,612	914,612	914,612	18.46	-	-	-	-	-
Bahamas	Terminal CFC Phaseout Plan for The Bahamas	Dec-01	Jan-09		560,000	560,000	530,946	<mark>66.0</mark> 0	-	-	-	-	-
Chile	Phase-out of all the remaining uses of methyl bromide in soil application pest control	Apr-05		NA	2,547,156	691,703	-	136.30	-	-	-	-	-
China	Halon Sector	Nov-97	Dec-11	•	62,000,000	62,000,000	62,000,000	24,480.00	-	-	30,060.00	-	-
China	CFC Production Sector	Mar-99	Dec-10		150,000,000	150,000,000	150,000,000	-	-	-	44,931.00	-	-
China	Foam Sector	Dec-01	Dec-10		53,846,000	53,846,000	53,846,000	14,143.00	-	-	-	-	-
China	TCA Sector	Jul-04	Nov-10	•	2,100,000	2,100,000	2,100,000	-	-	-	113.00	-	-
China	CTC/PA Sector Phase I	Nov-02	Dec-11		65,000,000	65,000,000	65,000,000	11,160.20	-	-	52,162.00	-	-
China	CTC/PA Sector Phase II	Nov-05	Jul-10	••••••••••••••••••••••••••••••••••••••	46,500,000	46,500,000	46,500,000	6,945.00	-	-	-	-	
China	HCFC phase-out mgmt plan (polyurethane rigid foam sector plan) (stage I)	Jul-11		Dec-16	73,000,000	73,000,000	67,525,000	1,615.00	4,449.60	4,227.50	-	-	
China	HCFC phase-out mgmt plan (polyurethane rigid foam sector plan) (stage II)	Dec-16		Dec-26	141,471,210	7,514,867	-	4,449.60	4,449.60	n/a	-	-	*

Country	Sector Plan/National ODS Phase-Out Plan	Date Approved	Actual Date of Comple- tion	Planned Date of Completion (including revised)	Funds Committed by ExCom (US\$)		Funds Disbursed to the Country (US\$)	Total ODP Consumption to be Phased- out for the Plan	ODP Consumption Allowed for the Reporting Year*	Actual ODP Consumpti on for Reporting Year*	Total ODP Production to be Phase- out for the Plan*	ODP Production Allowed for the Reporting Year*	Actual ODP Production for Reporting Year*
China	HCFC production phase- out management plan (stage I)	Apr-13		Jul-17	95,000,000	95,000,000	78,200,000	-	-	-	3,970.00	26,210.00	21,926.00
Ecuador	National CFC phase-out plan	Dec-03	Sep-09		1,194,471	1,194,471	1,194,471	246.00	-	-	-	-	-
India	CFC production sector gradual phase-out project	Nov-99	Nov-11		82,000,000	82,000,000	82,000,000	-	-	-	22,588.00	-	-
India	Accelerated CFC Production Phase-out	4/1/2008 (in principle)	Mar-14		3,169,900	3,169,900	3,169,900	-	-	-	690.00	-	-
India	CTC phase-out plan for the consumption and production sectors	Ju1-03	Mar-14		38,100,954	38,100,954	37,629,080	11,505.00	-	-	11,553.00	-	-
Indonesia	Phase-out of residual CFCs in the foam sector	Apr-04	Jun-10		2,957,564	2,957,564	2,957,564	352.00	-	-	-	-	-
Indonesia	Refrigeration sector phase-out plan: MAC servicing sector	Nov-02	Mar-10		4,317,000	4,317,000	4,317,000	915.00	-	-	-	-	-
Indonesia	National strategy for phasing out the use of CFC in the aerosol sector: Policies and actions, technical assistance, and enterprise investment initiatives	Dec-04	Jun-10		371,910	371,910	371,910	70.00	-	-	-	-	-
Indonesia	HCFC Phase Out Plan (Stage I): Foam Sector Plan	Jul-11		Dec-17	2,714,187	2,714,187	2,081,838	34.10	n/a	n/a	-	-	-
Indonesia	HCFC Phase Out Plan (Stage II): Foam Sector Plan	May-16		May-23	4,255,163	1,985,743	-	42.70	n/a	n/a	-	-	-
Jordan	HCFC Phase Out Plan (Stage I): Air- conditioning Sector Plan	Nov-11		Nov-17	1,070,100	1,070,100	745,690	16.78	n/a	n/a	-	-	-

Country	Sector Plan/National ODS Phase-Out Plan	Date Approved	Actual Date of Comple- tion	Planned Date of Completion (including revised)		Funds Released including Present Year by ExCom (US\$)	Funds Disbursed to the Country (US\$)	Total ODP Consumption to be Phased- out for the Plan	ODP Consumption Allowed for the Reporting Year*	Actual ODP Consumpti on for Reporting Year*	Total ODP Production to be Phase- out for the Plan*	ODP Production Allowed for the Reporting Year*	Actual ODP Production for Reporting Year*
Jordan	HCFC Phase Out Plan (Stage II)	Dec-16		Dec-22	2,075,236	526,956	-	24.90	n/a	n/a	-	-	-
Mexico	National CFC phase-out plan: Chiller Subsector	Apr-05	Feb-06		500,000	500,000	500,000	-	-	-	-	-	-
Malaysia	National CFC phaseout plan	Dec-01	Dec-10		11,517,005	11,517,005	11,441,013	1,910.51	-	-	-	-	-
Philippines	National CFC phase out plan	Nov-02	Jun-11		8,381,671	8,381,671	8,381,671	2,017.60	-	-	-	-	-
Thailand	National CFC phaseout plan	Dec-01	Dec-13		14,728,626	14,728,626	12,638,243	3,107.52	-	-	-	-	-
Thailand	National methyl bromide phase-out plan	Dec-04	Dec-13		2,901,600	2,901,600	1,668,733	241.80	-	-	-	-	-
Thailand	HCFC phase-out management plan (stage I, first tranche)	Dec-12		Dec-18	22,749,072	15,142,123	9,725,114	219.54	834.84	776.50	-	-	-
Tunisia	National ODS phase-out plan	Jul-06	Jun-12		429,877	429,877	429,877	342.00	-	-	-	-	-
Turkey	CFC Phase-out plan for Turkey	Dec-01	Apr-08		9,000,000	9,000,000	8,565,903	977.00	-	-	-	-	-
Venezuela	Phased reduction and closure of the entire CFC production	Dec-04	Nov-09		16,500,000	16,500,000	16,500,000	-	-	-	4,400.00	-	-
Vietnam	National CFC and halon phase-out plan	Apr-05	Dec-10		1,260,000	1,260,000	1,259,448	258.69	-	-	-	-	-
Vietnam	National phase-out plan for methyl bromide	Nov-06	Dec-14	•	1,098,284	1,098,284	1,098,284	85.20	35.00	25.86	-	-	-
Vietnam	HCFC phase-out management plan (stage I, first tranche) (foam sector plan)	Apr-11		Dec-15	9,125,020	9,125,020	8,292,243	140.10	199.08	192.70	-	-	-
Vietnam	HCFC phase-out management plan (stage II, first tranche)	May-16		Dec-21	14,411,204	396,095	-	55.30	199.08	192.70	-	-	-

\*Reporting Year is 2016.

### **D. Sector Phaseout by Country**

13. The Bank implemented several projects that resulted in sector-wide or nation-wide ODS phaseout but which were not projects with multi-year agreements. With one-time funding by the Executive Committee, these projects aimed, nonetheless, to entirely phase out the consumption of ODS through investment activities and policy measures in a sector or country-wide.

14. Three of these projects, the National Transition Strategy to CFC-free Metered Dose Inhalers (MDIs) in Indonesia and the National Methyl Bromide Phaseout Strategy in the Philippines; as well as the Argentina metered dose inhalers (MDIs) project were successfully completed in 2010 and 2014 respectively.

15. The World Bank was also an implementing agency for one other aerosol project, the China Pharmaceutical Aerosol CFC Phaseout project. Completion of the China project had been delayed although all 485 ODP tonnes CFC consumption was eliminated since 2013. The project continued in order to complete training on new substitute specifications, technical assistance activities, market promotion and administration of enterprise conversions and to facilitate approval for the marketing of alternative-based products. In May 2015, the project was declared completed.

# **II.** PROJECT COMPLETIONS SINCE LAST REPORT

Projects completed during this reporting period (January 1, 2016 to December 31, 2016) are highlighted in Table II-1 below.

### A. ODP Phased Out Since Last Report

16. There was no ODP phased out in association with the one project completed during the reporting period, given that it is an institutional strengthening activity. Phase-out of 547 ODP tonnes was achieved in 2016 but this phase-out arose from ongoing projects or tranches. The completed project in Table II-1 is over 95 percent disbursed, leaving a balance of US\$8,000.

### **B. Non-Investment Project Completions Since Last Report**

17. <u>Country Programs</u>: There were no new completions in 2016 for country programs.

18. <u>Technical Assistance</u>: No technical assistance projects were completed in 2016.

19. <u>Training</u>: The Bank hosted the Third Annual COOL workshop in December 2016. The objective of the two-day workshop was similar to the first two: to serve as a knowledge forum for sharing tools and resources available through the Bank in order to support ODS phase-out in a manner integrated with climate mitigation and energy conservation activities across economic sectors. The workshop convened Bank practitioners in energy, economics, climate protection and others, as well as World Bank Montreal Protocol (MP) client countries and the Bank's Ozone Operations Resource Group (OORG). Several resource persons from research laboratories, academia and NGOs also attended the workshop. It was followed by a tour of second district cooling facility in Washington, DC that serves the Smithsonian museums (following the positive feedback received from the district cooling tour the year prior).

20. The World Bank also held its Tenth Annual East Asia and Pacific (EAP) / IA Coordination Unit ODS workshop in Bali from 24 to 26 February 2016. The three-day workshop had dedicated days on issues related to the implementation of ODS phase-out activities, on foam technologies, and finally on air-conditioning technologies. Representatives of national ozone units (NOUs), project management units (PMUs) and financial agents attended from the Bank's five partner countries in the Region, in addition to Bank project managers, and procurement, financial management and environmental safeguards specialists.

# Table II-1: Project Completions During Reporting Period

Project Name	Region	Code	ODP Phased Out	Date Approved		Date Compl. (Actual)	Date of Financial Completion	Approved Funding (US\$)	Adjustment (US\$)	Funds Disbursed (US\$)	% Funds Disbursed	Balance	Planned Commitment in Cur. Year (US\$)
Extension of institutional strengthening project (phase XI: 1/2015-12/2016)	ASP	JOR/SEV/73/INS/93	0	Nov-14	Dec-15	Dec-16		147,333	0	139,333	95%	8,000	8,000
Total			0					147,333	0	139,333		8,000	8,000

# III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

### **A. Global Projects**

21. The World Bank continued to have one global project ongoing in 2016, the Global Chiller Replacement Project. The project's original objective was to replace CFC chillers in China, India, Indonesia, Jordan, Malaysia, the Philippines and Tunisia. Five countries had embarked on a national chiller replacement project as of the end of 2012 – demonstrating a number of implementation modalities that meet specific needs of the countries. As of the end of 2016, only one country continued to have an active project.

22. The India Chiller Energy Efficiency Project was declared completed in 2015 and a savings of US\$481,628 from the MLF component was returned in 2016 to the 76<sup>th</sup> Executive Committee Meeting. The Jordan CFC Chiller Replacement Project was physically completed in 2012. The project provided a 30% subsidy to building owners based on a nominal value and all 20 CFC-based chillers targeted were replaced. A total of 4 MT of mixed CFCs were safely recovered after dismantling the chillers that fell directly under the project.

23. The Philippines Energy Efficiency Project received US\$1 million in MLF funding and US\$2.6 million in GEF funding. A total of 38 subgrant agreements (SGAs) were signed that covered the replacement of 72 chillers. The original target of 53 chiller replacements was surpassed by 26%. Cumulative disbursement as of the end of 2016 for the MLF component was US\$0.78 million and US\$1.78 million for the GEF component. The project was closed on 31 December 2016 but additional expenditures are expected prior to financial completion.

24. The Indonesia chiller energy efficiency project, which aimed to bring together US \$3.66 million in GEF funding with US\$1 million from the Global Chiller Replacement Project was canceled in 2013. The allocated MLF funds, along with savings from the Jordan component were returned at the 71<sup>st</sup> Meeting of the Executive Committee in December 2013.

25. The fifth country included in the Global Chiller Replacement Project is Argentina. The Argentina Chiller Replacement project is under an ODS grant agreement between the Government of Argentina and the World Bank that became effective in January 2015. This led to some delays in start-up. In 2016, the project witnessed its first chiller replacements at two separate sites: Fundación Favaloro - Hospital Universitario y de Investigación Médica and at a building consortium. Project implementation will continue into 2017 with the expectation that more SGAs will be signed.

26. At its 77<sup>th</sup> Meeting, the Executive Committee approved terms of reference for evaluation of chiller replacement projects by the Fund Secretariat's Senior Monitoring and Evaluation Officer. Three beneficiary countries of the Global Chiller Replacement Project have been selected to be evaluated in 2017, Argentina, Jordan and the Philippines.

### **B. Regional Projects**

27. The World Bank has no outstanding regional projects.

### **IV. PERFORMANCE INDICATORS**

### A. Agency Performance Goals

28. Executive Committee Decision 41/93 requests Implementing Agencies (IAs) to employ nine weighted indicators to assess their annual performance. These indicators are classified as approval, implementation and administrative indicators. The basis for setting and measuring these indicators are the annual progress reports and annual plans of multi-year projects as implied in the background document to the indicator system, UNEP/OzL.Pro/ExCom/41/80, as well as the IA business plans. In 2013, Decision 71/28 modified the performance indicators which have been used to measure 2016 progress.

29. "Approval" indicators compare projects that received Executive Committee approval against those planned to be delivered as per multi-year agreements (MYAs) and the 2016 Business Plan. For the first approval indicator, which per the Secretariat should now include both new and existing MYAs, the approval of 6 annual programs were targeted by the World Bank for approval in 2016 in the Business Plan. The Secretariat added 2 to the target representing deferred annual plans from 2015 for Vietnam and Indonesia. The actual number of tranches submitted was 7 associated with new and ongoing MYAs. One tranche for a newly proposed Stage II HPMP could not be submitted until the Lead Agency was ready, which did not occur in 2016. All 7 of these were approved by December 2016. The target was therefore met by 88% using that set by the Secretariat and reflected in Decision 75/27(b). If using the Bank's original target of 6, the achievement is more than 100% of the target.

30. The second approval indicator, the planned number of new individual projects (stand-alone investment projects, institutional strengthening, technical assistance and project preparation) for approval was set at 5 in the Business Plan. In 2016, 11 individual activities were approved: 1 survey of ODS alternatives, 5 preparation activities, 2 institutional strengthening projects, 2 demonstration projects, and the 2017 core unit budget. The World Bank consequently exceeded the target.

31. There are three "implementation" indicators. The first implementation indicator measures disbursement performance against that planned in the previous year's progress report. Based on estimates provided in the approved 2016 Progress Report, the World Bank aspired to disburse US\$54 million. The Secretariat set the target at \$30.8 million, however, which was adopted by the Committee as the Bank's performance target. Actual disbursement in 2016 was US\$42 million, confirming that the target was met at more than 36%.

32. The second implementation indicator now includes ODS phased out in multi-year agreements, as well as in individual projects. The Secretariat set the targeted ODP tonnes of phaseout in 2016 at 509.5 ODP MT which is the planned phase-out for tranches of approved *and new* MYAs. The Bank noted that the intent of Dec. 71/28 on the current set of indicators is to solely count planned phase-out of future tranches of already approved MYAs as phase-out as the approval of new MYAs is out of the control of the Implementing Agencies. This intent is clear from the title of the indicator that phase-out should be from approved MYAs: "ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans."

33. There are a number of reasons why the Secretariat's approach creates a target impossible to get close to. Preparation itself often leads to phase-out estimates different than those in the business plans. Moreover, the Secretariat has the Agencies prorate phase-out in tranches of proposed MYAs in the business plans, rather than assigning the phase-out according to the year the phase-out is expected to be achieved. In 2016, a clear example of the challenge in holding IAs performance accountable to figures that have not been approved by the Executive Committee is that of the China Stage II PU Foam Sector Plan, where first, the phase-out was prorated across four years of the expected tranches. However upon preparation, negotiation and approval by the Committee the funding was spread out across a decade, and phase-out assigned according to expected annual reductions by the country. The planned phase-out for 2016 has been consequently cut in half.

34. Therefore the World Bank did not meet this challenging, if impossible target. Planned phase-out approved in 2016 for multiyear and individual projects is 255 ODP MT. Using actual phase-out figures, i.e. phase-out achieved by completed activities in the current portfolio in 2016, the figure is 546.9 ODP MT. More than 99% of this phase-out is from tranches that were completed, as determined by a new tranche approval (where there was one scheduled) or where there was a consumption verification report indicating the phase-out achieved.

35. For the third implementation indicator, "project completion vs that planned in the progress report for all activities (excluding project preparation), the target was set at 7 based on the 2014 Progress Report. In 2016, the number of projects reaching completion was in fact two (the core unit project and one Institutional Strengthening project). Thus the target was not attained, reaching only 29% of the goal. This was largely due to one MYA for Vietnam, the Stage I HPMP – representing three activities as per the coding in the Inventory. The MYA has been delayed in completion by six months.

36. There are three "administrative" indicators. The methodology for setting the target for the first, "Speed of Financial Completion," has been changed through Decision 71/28. Instead of targeting the number of months, "the extent to which projects are financially completed 12 months after project completion" is targeted. Ninety per cent was targeted in the Bank's 2016 Business Plan. In 2016, there were 8 project activities financially completed (including 6 preparation activities). All 8 were financially completed within 12 months. Thus, the target was fully achieved.

37. The Bank committed to submit to the Executive Committee 100 percent of PCRs for the number of projects completed in the 2016 PCR reporting period in its 2016 Business Plan. In the 2016 PCR reporting period (July 2015-June 2016), no multiyear project PCR nor individual project PCRs were due. The target set with the Senior Monitoring and Evaluation Officer was the submission of 12 multiyear PCRs. In 2016, three PCRs were submitted. Consequently the target was not achieved.

38. The third and final administrative performance target of on-time submission of the 2016 Progress Report was met with submission of the report on 1 May 2017. Table IV-1 summarizes the World Bank's performance relative to indicators per Decision 75/27(b) on the Bank's 2016 Business Plan.

Category of Performance Indicator	Item	Weighting	2016 Target	2016 Actual
Approval	Number of annual programmes (tranches) of existing multi-year agreements approved vs. those planned	10	8	7
Approval	Number of projects/activities approved vs. those planned (including project preparation)	10	5	11
Implementation	Funds disbursed (based on estimated disbursement in progress report)	15	US\$30.8 million	US\$42 million
Implementation	ODS phased-out for the tranche when the next tranche is approved vs. those planned per business plans	25	509.5	255/546.9
Implementation	Project completion vs. that planned in progress reports for all activities	20	7	2
Administrative	Speed of financial completion vs. that required per progress report completion dates	10	90%	100%
Administrative	Timely submission of project completion reports vs. those agreed	5	On time	Not on time
Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On time	On time

# **Table IV-1: World Bank Performance Goals**

Table IV-2: World Bank Indicators of Implementation Progress	
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Indicator	Measure	Unit	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Overall
Delivery Speed	Signing	Mos.	48	35	30	21	15	13	15	13	11	10	8	11	14	0	9	0	0	12	0	0	28	0	0	0	0	0	18
	First Disb.	Mos.	47	43	35	27	22	22	27	20	21	24	17	18	18	19	19	21	12	14	14	0	27	11	12	6	4	18	20
	Last Disb.	Mos.	52	59	55	58	52	53	51	39	50	50	37	61	39	53	45	57	33	28	26	0	0	0	0	0	0	0	52
ODP Phaseout	Amount	Percent- age	77	100	117	103	101	92	100	100	100	102	100	101	100	100	106	100	100	99	100	100	12	0	0	39	84	84	85
	Speed	Mos.	62	56	44	50	44	42	43	36	40	43	21	24	16	26	34	34	31	25	28	28	40	29	21	7	36	36	34
Cost Effective	Average	US\$ per Kg ODP	8.61	0.92	11.54	3.03	9.69	7.25	1.82	2.13	2.26	3.01	3.34	3.61	5.46	3.17	0.64	2.57	2.45	0.86	5.26	0.77	67.85	64.60	53.74	214.00	19.84	48.54	21

39. Actual cost of project preparation in 2016 was US\$4.01 (excluding support costs), or four percent of investment project approvals in 2016. Actual average overall speed of first disbursement of investment and demonstration projects is 20 months (taking into account projects in the Bank's entire 24-year portfolio).

40. Nine investment project activities were approved in 2016, worth a total of US \$12.4 million (excluding support costs) consisting of two individual projects and the remaining first tranches of Stage II HPMPs as well as final tranches of Stage I HPMPs. The average cost-effectiveness value of the activities approved in 2016 is \$48.54, noting however that this is based on ODP tonnes (not metric tonnes), and that these projects include HCFC elimination in imported pre-blended polyol (with no phase-out), technical assistance and project management funding. As far as distribution among countries is concerned, 6 different countries received approvals in 2016 (including support for surveying ODS alternatives).

41. The Bank completed one non-investment project in the reporting period – an institutional strengthening renewal. The overall speed of first disbursement is 19 months. Overall speed of physical completion is 35 months by the end of the reporting period. Total funds disbursed for non-investment activities (excluding project preparation) in 2016 are US\$287,652.

### **B.** Cumulative Completed Investment Projects

42. Since 1991, the World Bank's cumulative total of completed investment projects is at 603, resulting in the reduction in consumption of 141,928 tonnes ODP and in production of 183,896 tonnes ODP. Out of a total of US\$893,893,593 of approved Multilateral Fund financing for completed projects, 100 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 24, the average number of months from approval to completion has been 40, at an average cost-effectiveness of US\$2.74/kg. These averages include projects both before and after initiation of the umbrella grant agreement approval process.

43. No investment projects completed in 2016. Table IV-3 which follows provides a summary of completed investment projects at both a regional and sectoral level.

# **Table IV-3: Cumulative Completed Investment Projects**

Item	Number of Projects	Approved Funds plus Adjustment (US \$)	Per Cent of Funds Disbursed	Consumption ODP Phased Out**	Production ODP Phased Out**	Average Number of Months from Approval to First Disbursement	Average Number of Months from Approval to Completion	Overall Cost- Effectiveness to the Fund (US\$/kg.)
GRAND TOTAL	603	893,893,593	100%	141,928	183,896	24	40	\$2.74
Region								
Africa	18	4,874,766	100%	777	0	25	49	
Asia & Pacific	439	784,243,312	100%	133,868	176,476	24	40	\$2.53
Europe	36	25,729,361	100%	3,498	0	12	20	\$7.36
Latin America and Caribbean	110	79,046,154	100%	3,786	7,420	30	44	\$7.05
Global	n/a	0	0%	0	0	n/a	n/a	n/a
Sector								
Aerosol	32	22,107,868	100%	20,290	0	27	48	\$1.09
Destruction	0	0	0%	0	0	n/a	n/a	n/a
Fire Fighting	0	0	0%	0	0	n/a	n/a	n/a
Foam	213	129,968,191	100%	29,594	0	25	42	\$4.39
Fumigants	11	4,208,461	100%	444	0	18	49	\$9.47
Halon	19	68,345,321	100%	38,439	41,958	19	34	\$0.85
Multiple Sectors*	4	2,287,376	100%	419	0	28	78	\$5.46
Other	2	5,059,360	100%	404	0	28	41	\$12.52
Phaseout Plan	56	81,454,231	100%	19,999	10,988	24	32	\$2.63
Process Agent	15	113,830,316	100%	18,663	52,162	8	18	\$1.61
Production	41	287,420,120	100%	0	78,788	10	13	\$3.65
Refrigeration	180	168,890,482	100%	13,075	0	27	47	\$12.92
Solvents	28	9,660,640	100%	562	0	29	27	\$17.19
Sterilant	2	661,227	100%	41	0	16	27	\$16.27
Implementation Character	istics							
Agency Implementation	0	0	0%	0	0	n/a	n/a	n/a
National Implementation	603	893,893,593	100%	141,928	183,896	24	40	
Disbursement Method								
During Implementation	563	875,560,805	100%	140,038	183,896	24	41	\$2.70
After Implementation	25	11,189,562	100%	1,039	0	32	29	\$10.76
Retroactive Funding	15	7,143,226	100%	851	0	24	1	\$8.40
Country to Final Beneficiaries	0	0	0%	0	0	n/a	n/a	n/a

Note: The sum of each section (Region, Sector, etc.) equals the Grand Total.

### C. Cumulative Completed Non-Investment Projects

44. Since 1991, the World Bank's cumulative total of completed non-investment projects has grown to 141. Out of a total of US\$22,144,982 of approved Multilateral Fund financing, 100 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 19; the average number of months from approval to completion has been 35.

ltem	Number of	Approved	Per Cent of	Average Number	Average Number
	Projects	Funds plus	Funds	of Months from	of Months from
		Adjustment	Disbursed	Approval to First	Approval to
		(US\$)		Disbursement	Completion
GRAND TOTAL	141	22,144,982	100%	19	35
Region					
Africa	17	2,865,298	100%	14	31
Asia & Pacific	56	12,569,456	100%	18	38
Europe	9	1,632,528	100%	25	43
Latin America and Caribbean	34	4,401,970	100%	23	43
Global	25	675,731	100%	11	14
Sector					
Aerosol	5	627,662	100%	14	26
Destruction	1	250,000	100%	17	22
Fire Fighting	i i	200,000	0%	n/a	nła
Foam	3	2,457,681	100%	25	46
Furnigants	5	1,294,425	100%	35	102
Halon	5	1,519,717	100%	50	106
Multiple Sectors	1	53,792	100%	56	58
Other	0	0	0%	nła	nła
Phaseout Plan	1	100,000	100%	12	11
Process Agent	0	0	0%	nła	nła
Production	1	40,000	100%	4	4
Refrigeration	14	4,847,025	100%	42	58
Several	105	10,954,680	100%	12	25
Solvents	0	0	0%	nła	nła
Sterilant	0	0	0%	nła	nła
Implementation Character	istics				
Agency Implementation	58	2,643,463	100%	5	14
National Implementation	83	19,501,519	100%	25	49
Disbursement Method					
During Implementation	139	21,143,552	100%	19	35
After Implementation	2	1,001,430	100%	19	39
Retroactive Funding	0	0	0%	nła	nła
Country to Final Beneficiaries	0	0	0%	nła	nła

**Table IV-4: Cumulative Completed Non-Investment Projects** 

Note:

(1) Per decision 22/11(a)(vi), project preparation is not included as a non-investment project.

(2) The sum of each section (Region, Sector, etc.) equals the Grand Total.

### **D.** Cumulative Ongoing Investment Projects

45. The World Bank's cumulative total of ongoing investment projects is 24 (including tranches of multi-year agreements). Out of a total of US\$179,199,260 of approved Multilateral Fund financing, 76 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 17, the average number of months from approval to the current expected completion date is 44, with an average cost-effectiveness of US\$41/kg. Table IV-5 below summarizes ongoing investment projects at regional and sectoral levels.

	Number         Approved         Per Cent         Number         Per Cent         Estimated         Per Cent         Average         Average         Overall													
	of Funds plus of F Projects Adjustment D		of Funds Dis-	Number of Projects Disburs- ing	of Projects	Estimated Disbursement plus Funds Disbursed	Per Cent Funds Expected to be Disbursed by End of 2004	Funds Expected Number of to be Months from Disbursed by Approval to		Average Length of Delay in Project Planned Comple- tion	Overall Cost- Effective- ness to the Fund (US\$/kg.)*			
									Completion					
	24	179,199,260	76%	18	75%	164,499,069	92%	17	44	30	\$41.09			
	0	0	0%	0	0%	0	0%	0	n/a	n/a	n/a			
	24	179,199,260	76%		75%	164,499,069	92%	17	44	30	\$41.09			
	0	0	0%		0%	0	0%	0	n/a	n/a	n/a			
Caribbe	0	0	0%	0	0%	0	0%	0	n/a	n/a	n/a			
	0	0	0%	0	0%	0	0%	0	n/a	n/a	n/a			
	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a			
	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a			
	0	0			0%	0	0%	n/a	n/a	n/a	n/:			
	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/:			
	0	0			0%	0	0%	n/a	n/a	n/a	n/:			
	0				0%	0	0%	n/a	n/a	n/a	n/:			
	0	0			0%	0	0%	n/a	n/a	n/a	n/:			
	0				0%	0	0%	n/a	n/a	n/a	n/:			
	21	108,199,260	76%		71%	93,499,069	86%	19	46	32	\$74.65			
	0	0	0%		0%	0	0%	n/a	n/a	n/a	n/:			
	3	71,000,000	76%	3	100%	71,000,000	100%	4	31	16	\$24.38			
	0	0			0%	0	0%	n/a	n/a	n/a	n/a			
	0	0			0%	0	0%	n/a	n/a	n/a	n/2			
	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a			
Charge	cteristics													
ation	l	1,500,000	75%	1	100%	1,500,000	100%	29	77	56	\$79.37			
tation	23	177,699,260	76%		74%	162,999,069	92%	16	43	29	\$40.92			
ration	25	177,039,200	7376	17	/+/0	202,333,009	9276	10	45	23	970.72			
ethod														
tion	24	179,199,260	76%	18	75%	164,499,069	92%	17	44	30	\$41.09			
ion	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a			
g	0	0			0%	0	0%	n/a	n/a	n/a	n/a			
eneficia	0	0	0%	0	0%	0	0%	n/a	n/a	n/a	n/a			

# E. Cumulative Ongoing Non-Investment Projects

46. The World Bank's cumulative total of ongoing non-investment projects is 16 as captured in the following Table IV-6. Out of a total of US\$9,733,799 of approved Multilateral Fund financing, 43 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 31; the average number of months from the date of approval to the current expected completion date is 49.

Item	Number of Projects	Approved Funds plus Adjustment (US\$)	Per Cent of Funds Disbursed	Number of Projects Disbursing	of Projects		Per Cent Funds Expected to be Disbursed by End of 2004	Average Number of Months from Approval to First Disbursement	Average Number of Months from Approval to Planned Completion	Average Length of Delay in Project Planned Completion
GRAND TOTAL	16	9,733,799	43%	9	56%	6,041,913	62%	31	49	27
Region										
Africa	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Asia & Pacific	12	5,607,471	37%	7	58%	3,654,649	65%	23	44	25
Europe	0	0,007,471	0%	0	0%	5,054,045	0%		n/a	n/a
Latin America and Caribbean	1	76,000	16%	1	100%	59,000	78%	55	74	61
Global	2	3,253,928	63%	1	50%	2,328,264	72%	61	79	24
Sector										
Aerosol	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Destruction	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Fire Fighting	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Foam	2	1,567,486	76%	1	50%	1,514,936	97%	8	58	39
Fumigants	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Halon	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Multiple Sectors	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Other	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Phaseout Plan	4	2,786,996	22%	4	100%	1,406,238	50%	42	73	59
Process Agent	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Production	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Refrigeration	2	4,050,328	51%	1	50%	2,568,264	63%	61	86	31
Several	8	1,328,989	23%	3	38%	792,475	60%	13	26	7
Solvents	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Sterilant	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Implementation Characteri	istics									
Agency Implementation	6	1,146,400	4%	2	33%	580,807	51%	13	22	7
National Implementation	10	8,587,399	48%	7	70%	5,701,106	66%	36	65	39
Disbursement Method										
During Implementation	16	9,733,799	43%	9	56%	6,281,913	65%	31	49	27
After Implementation	0	0	0%	0	0%	0	0%	n/a	n/a	n/a
Retroactive Funding	0	0	0%	0	0%	-	0%	n/a	n/a	n/a
Country to Final Beneficiaries	0	0	0%	0	0%	0	0%	n/a	n/a	n/a

### Table IV-6: Cumulative Ongoing Non-Investment Projects

Note:

(1) Per decision 22/11(a)(vi), project preparation is not included as a non-investment project.

(2) The sum of each section (Region, Sector, etc.) equals the Grand Total.

#### V. STATUS OF AGREEMENTS & PROJECT PREPARATION (WHERE APPLICABLE), BY COUNTRY

#### A. Agreements to be Signed/Executed/Finalized & When They Will be Ready for Disbursing

47. Projects with either new partner countries or with new operational modalities require legal agreements between the country and the World Bank. With HCFC phaseout project approvals occurring between 2011 and 2013 in Argentina, China, Indonesia, Jordan, Thailand, and Vietnam, new grant agreements were required.

48. New grant agreements have been in place for Vietnam and China since 2012 permitting disbursements to take place from the Bank to the countries throughout 2016, in advanced stages of Stage I HPMP and HPPMP implementation. Grant agreements and the related project appraisal and environmental safeguards documentation were finalized for Argentina, Indonesia, and Jordan in 2013. The Jordan grant agreement was approved and signed in May 2013, followed by that for Indonesia in July. A Thailand-Bank HCFC phaseout umbrella project became effective in late 2014. After countersignature by the Government of Argentina in December 2014, the grant agreement became effective in January 2015.

49. In 2016, Vietnam and China, countries with Stage I HPMPs extending only through the 2015 reductions of 10% their HCFC baselines, received approval of Stage II HPMPs. In both cases, new grant agreements are required, entailing preparation of concepts, project documents, project implementation manuals, environmental and social safeguards framework, procurement plans and other related documentation. The process that begins the Bank-country project cycle for both are in advanced stages with expected signing by the end of 2017. This includes a project concept note and review meeting to kick-off the World Bank project cycle.

50. Another two Stage II HPMP activities were also approved for Jordan and Indonesia. Both have Stage I HPMPs that extend to 2017 and it was decided in both cases that instead of new grant agreements, "Additional Financing" would be sought which basically entails amendment of the current agreement, with revision of most of the project documents. The completion of the amendments are expected before the end of 2017.

#### B. Project Preparation by Country, Approved Amount, and Amount Disbursed

51. A list of active World Bank project preparation activities is presented in the table below. Total funds approved for these projects are US\$1,492,150 of which US\$395,042 has been disbursed. Planned commitments for these 10 project preparation activities are US\$652,372.

Region	Project Number	Project Name	First Disburse- ment Date	Approved Funding (US\$)	Adjust- ment (US\$)	Funds Disbursed (US\$)	% of Funds Dis- bursed	Balance (US\$)	Planned Commit- ment in Cur. Year (US\$)
ASP	PHI/FOA/73/PRP/97	Preparation for HCFC phase-out investment activities (stage II) (air-conditioning sector)	Dec-15	150,000	0	2,045	1%	147,955	100,000
ASP	PHI/PHA/73/PRP/98	Preparation of a HCFC phase-out management plan (stage II)	Dec-15	90,000	0	7,845	9%	82,155	60,000
ASP	CPR/FOA/73/PRP/558	Preparation for HCFC phase-out investment activities (stage II) (polyurethane foam sector)	Dec-15	400,000	0	276,337	69%	123,663	100,000
ASP	JOR/PHA/75/PRP/95	Preparation of a HCFC phase-out management plan (stage II)	Dec-16	70,000	0	30,928	44%	39,072	39,072
ASP	CPR/PRO/75/PRP/570	Preparation of a HCFC production phase-out management plan (stage II)	Dec-16	254,650	0	77,887	31%	176,763	160,000
ASP	THA/FOA/77/PRP/173	Preparation for HCFC phase-out investment activities (stage II) (foam sector)		120,000	0	-	0%	120,000	30,000
ASP	THA/PHA/77/PRP/171	Preparation of a HCFC phase-out management plan (stage II)		90,000	0	-	0%	90,000	20,000
ASP	THA/REF/77/PRP/174	Preparation for HCFC phase-out investment activities (stage II) (commercial refrigeration sector)		90,000	0	-	0%	90,000	20,000
ASP	THA/SOL/77/PRP/170	Preparation for HCFC phase-out investment activities (stage II) (solvent sector)		90,000	0	-	0%	90,000	20,000
LAC	ARG/FOA/76/PRP/176	Preparation for HCFC phase-out investment activities (stage II) (foam sector)		137,500	0	-	0%	137,500	103,300
	Total			1,492,150	0	395,042	27%	1,097,108	652,372

#### **Table V-1: Active Project Preparation**

JANUARY- DECEMBER 2016

# VI. ADMINISTRATIVE ISSUES (OPERATIONAL, POLICY, FINANCIAL, AND OTHER ISSUES)

#### A. Meetings Attended

52. Table VI.1 indicates the meetings attended by World Bank Staff on all Montreal Protocol related work in 2016.

#### Table VI-1: MP Related Meetings Attended by World Bank Staff in 2016

2016 Dates	Location	Meetings Attended				
February 24-26	Bali, Indonesia	World Bank EAP ODS Regional Workshop				
February 29-March 1	Montreal, Canada	Interagency coordination meeting				
April 4-8	Geneva, Switzerland	37 <sup>th</sup> Meeting of the Open-Ended Working Group				
May 9-13	Montreal, Canada	76 <sup>th</sup> Executive Committee Meeting				
June 13-20	Suva, Fiji	UNEP Network Meeting				
July 11-14	West Lafayette, IN	16 <sup>th</sup> International Refrigeration and Air Conditioning Conference, Purdue				
July 18-21	Vienna, Austria	38 <sup>th</sup> Meeting of the Open-Ended Working Group				
July 22-23	Vienna, Austria	3 <sup>rd</sup> Extraordinary Meeting of the Parties to the Montreal Protocol				
July 24	Vienna, Austria	56 <sup>th</sup> Meeting of the Implementation Committee				
August 31-September 1	Montreal, Canada	Interagency coordination meeting				
September 20-22	Stockholm, Sweden	Workshop on Alternatives to Ozone Depleting Substance and Hydrofluorocarbons (HFC) – District Cooling and Not-in-Kind Options				
October 8	Kigali, Rwanda	Resumed 38 <sup>th</sup> Meeting of the Open-Ended Working Group				
October 9	Kigali, Rwanda	57 <sup>th</sup> Meeting of the Implementation Committee				
October 10-14	Kigali, Rwanda	28 <sup>th</sup> Meeting of the Parties to the Montreal Protocol				
November 28-December 2	Montreal, Canada	77 <sup>th</sup> Executive Committee Meeting				
December 5-7	Washington, DC	3 <sup>rd</sup> Annual COOL Workshop and OORG Meeting				

#### **B.** Implementing Agency and Other Cooperation

53. Cooperation and coordination by the World Bank with the three Implementing Agencies and Bilateral Agencies is ongoing through cooperation and coordination in project implementation of HCFC phase-out projects (for example in Argentina, China, Indonesia and Jordan) and in ODS meetings and workshops that take place throughout the year.

54. The World Bank also works with bilateral agencies, namely Japan. The Government of Japan is a partner in the implementation of Thailand's Stage I HCFC Phaseout Management Plan. It is delivering technical assistance to address technical and regulatory barriers to the introduction of HFC-32 technology in residential air-conditioner manufacturing. This includes guidance for the conversions to ensure safe storage and use of HFC-32 in manufacturing of HFC-32 AC, technical assistance and training on proper installation, and, training for service technicians.

55. In 2016, building on the good collaboration and achievements in Thailand, Japan, Vietnam and the World Bank agreed on similar cooperation in Vietnam's AC sector under the Stage II HPMP. In May 2016, the Executive Committee approved Vietnam's Stage II HPMP which will include a technical assistance component directed towards AC manufacturers that aim to shift HCFC-22 based production to HFC-32 based production.

56. The Bank is a Cooperating Agency in Argentina in the foam and production sectors under the Stage I HPMP and in Jordan in the air-conditioning sector where UNIDO serves as the Lead Agency. The Bank is also a Cooperating Agency in Indonesia and China where UNDP is the Lead Agency of the Stage I and Stage II HPMPs, in the foam and production sectors. In order to meet overall requirements of the respective Executive Committee agreements, the Agencies must have regular dialogue and access to relevant information to be able to execute their part, particularly in terms of annual consumption verification. This is particularly critical in the case of China whereby the HCFC production sector plays a large role in determining compliance with targets.

57. With the concentration of efforts in delivering HPMPs and HCFC phase-out sector plans for Article 5 countries around the world, cooperation and coordination continues to be a necessity among the four Implementing Agencies. In 2016, partial funding for an ODS alternative survey was approved for Jordan under the Bank, as UNIDO had already accepted funds outside the MLF on Jordan's behalf for an HFC survey, which for whatever reason was not clear to the national ozone unit. Because of such cases and because of the tight requirements on the maximum level of country consumption that may be funded under Stage I and Stage II HPMPs, this is all the more the case in countries where more than one agency is active.

#### C. Other Issues

58. There are no additional issues other than those captured in the previous pages, noting in particular the concerns expressed in Section IV on how targets are set and measured for certain implementing agency performance indicators,

Annex I

## COUNTRY DEVELOPMENTS

The World Bank

#### ARGENTINA

#### Country Developments

Two project activities are active for Argentina through the World Bank in 2016: technical assistance for monitoring and reporting on HCFC-22 production which falls under the country's HCFC Phaseout Management Plan (HPMP) and chiller replacement. The latter falls under the Bank's Global Chiller Replacement Project and has made progress in that two chillers have been replaced. The technical assistance activity has also made progress in 2016, in that UEPRO has contracted a consultant to monitor HCFC-22 production at FIASA S.A. In 2016, the consultant prepared four reports: one 2015 retroactive report and 3 quarterly 2016 reports. The Ministry of Environment and Sustainable Development (MAyDS) used the information to complement that gathered through the national import and export licensing system.

The sole investment activity under the Bank for Argentina's Stage I HPMP, a foam conversion project to eliminate HCFC-141b at Mabe, a domestic refrigerator manufacturer, completed financially in March 2016.

Two Bank missions were undertaken for Argentina in 2016 for implementation support to the country, including a mid-term review of the overall grant agreement/Bank project and for initiating project preparation of the Stage II foam sector plan.

#### CHINA

#### Country Developments

Active projects under the Bank as an Implementing Agency for China fall under the 2012 Bankapproved HCFC Phaseout Project (Stage I). These include the two sector plans, one for the foam polyurethane (PU) sector and one for HCFC production closure.

One individual project continued to be ongoing in 2016, the HCFC foam demonstration project at a system house. There has been some delay in the completion of the conversion of the last end beneficiary (that purchasing HC-based pre-blended polyol from the system house) with the development of new models of water heaters to meet the new energy standard issued by the Government. It is expected that conversion will be done, including disposed of baseline equipment by January 2017. Commissioning would follow in March.

The HPMP Foam Sector Plan continued to progress in 2016 with 54 conversion subprojects and 6 system house projects total. The 54 conversion projects, when all completed, will have eliminated HCFC-141b demand of 12,762 MT out of the targeted phase-out of 14,685 MT. The remaining phase-out will be achieved through the HCFC-141b ban in the three targeted subsectors. By the end of 2016, 28 enterprises completed their conversions. The remaining 26 were at different stages of implementation.

While the conversions in the three priority subsectors captured a phase-out of 7,760 MT, an additional amount of 5,003 MT was captured by projects in other subsectors. Following the HCFC-141b consumption ban in the three targeted subsectors now expected in 2017, remaining enterprises in these subsectors will convert on their own costs. Therefore, a combination of the conversion activities and the enforcement of the bans will result in a total phase-out of 14,685 MT.

In regards to the HPMP Production Sector Plan, initial 2016 production data indicates that production contract targets were met. The production quotas issued for 2016 amount to 23,930 ODP tonnes. Due to closure contracts, China surpassed its 2015 performance target for HCFC production of 26,210 ODP MT by 8.7%. Production quotas for 2017 were issued. With all funding tranches now received (a total of \$95 million), FECO's focus is to complete the last year of implementation in particular on TA, make final disbursements and embark on the preparation of the Stage II HPPMP. TA activities conducted in 2016 included training workshops of HCFC producers and dealers (170 persons total) and and investigation of feedstock applications of HCFCs in 2015.

Preparation of the Stage II HPPMP was launched in mid-2016 and the first draft of the proposal prepared by the end of 2016.

The World Bank conducted four implementation support and project preparation missions in 2016. In addition, several visits were made by international consultants for independent verification. Representatives from FECO attended the Bank's 2016 COOL workshop as well as an earlier East Asia and Pacific (EAP) regional workshop in Bali (also hosted by the Bank).

#### INDIA

#### Country Developments

All project activities completed, including the Accelerated CFC Production Sector Plan (ACPP), the CTC Phaseout Plan for the Production and Consumption Sectors, and the India Chiller Replacement Project. In late 2015, the remaining balances for the ACPP and the CTC Phaseout Plan were transferred from the Bank to UNDP which will disburse final funds for CFC producers and technical assistance for the ACPP and CTC Phaseout Plan respectively. Both the MLF and GEF components of the Chiller Replacement project were financially closed and the savings of the former was returned to the MLF in 2016.

#### INDONESIA

Country Developments

The HCFC foam sector plan continued implementation in 2016, receiving its final tranche funding after having been withdrawn in late 2015. By the end of 2016, out of 26 targeted foam enterprises, 9 foam manufacturers had completed their phase-out of 197 MT (2009 consumption) of HCFC-141b; three of these companies converted to hydrocarbons (HC) and six to HFC-245fa. One company will convert in 2017 (1100 kg in 2009) and two companies are still pending conversion (12,460 kg in 2009). The remaining 15 companies declined to participate for various business reasons, but must nevertheless abide by the HCFC quota and use ban.

The import quota system continues to be applied and a ban on HCFC use in the foam sector is in place while the NOU continued implementation of TA activities.

In May 2016, Indonesia received approval for its Stage II HPMP that will include another foam sector plan under the World Bank to completely eliminate HCFC-141b by 2023. The first tranche was released and the Bank expects to be able to start disbursement by early 2018, once the current grant agreement has been amended.

The Bank conducted two missions in 2016 for implementation support and Stage II foam sector plan preparation. In addition, representatives of the NOU attended the Bank's 10<sup>th</sup> Annual EAP Regional Workshop in Bali in February 2016.

#### JORDAN

#### A. Country Developments

Jordan's Air-conditioning (AC) Sector Plan was nearly completed by the end of 2016. The investment part of Jordan's AC Sector Plan comprised four subprojects to convert enterprise manufacturing to HFC-410A, with the largest (Petra) under the Lead Agency, UNIDO. The second largest beneficiary under the AC Sector Plan with the Bank experienced financial difficulties and its allocated funding of US\$1.36 million was returned to the Fund. Two subproject beneficiaries, National Refrigeration Company (NRC) and Abu Haltam completed their conversions by mid-2016 and have completely eliminated HCFC use.

Under the technical assistance component of the HPMP, activities have consisted of additional workshops, Customs training, and, drafting of new ODS regulation – a ban of HCFC-22 in AC manufacturing. The ban on both manufacturing and importing HCFC-based AC was signed by the Minister in mid-2016 and put into force at the end of 2016. No more HCFC-22 AC can be imported to or made in Jordan. Moreover, Jordan met its commitment to the Executive Committee to maintain or improve the energy efficiency of AC produced by converted enterprises, given the designs adopted by the companies that also respect the country's new minimum energy performance standards.

The servicing sector demonstration activity is under implementation with the successful completion of a training manual for service shops that focuses on air-conditioning. Technical and support staff

have provided dedicated support to AC sector plan implementation with site visits and consultations, organization of workshops, monitoring visits and arranging technology support to the enterprises.

In 2016, Jordan prepared, submitted and received approval for a Stage II HPMP which this time will focus chiefly on HCFC-141b phase-out both in controlled uses and in imported preblended polyol. The Bank, as Lead Agency will cover all foam manufacturing including in domestic and commercial refrigeration enterprises. UNIDO will focus on spray foam and the servicing sector. With the approval, Jordan has committed to reduce its HCFC consumption by 50% of the baseline by 2022.

#### B. Institutional Strengthening

In 2016, NOU facilitated issuance of instructions for controlling ODS import and export of ODS and issued more than 200 licenses for HCFC imports; liaised with UNEP and the other IAs and the bilateral agency and approved and signed various contracts; organized international ozone day celebrations as well as meetings of steering committees and National Ozone Committee; attended international / regional ozone meetings, including Montreal Protocol and Executive Committee meetings; and, sent information, and conducted field visits to HCFC-consuming industry.

Phase XII of Jordan's Institutional Strengthening Project (ISP) was renewed at the second 2016 Executive Committee meeting and is expected to begin disbursement in the first quarter of 2017.

In 2016, two World Bank supervision and preparation missions were conducted. Several additional short visits with the NOU by the Task Team Leader were also undertaken. One NOU staff attended the World Bank's 3<sup>rd</sup> Annual COOL Workshop in December 2016.

#### PHILIPPINES

#### A. Country Developments

One project was under implementation for the Philippines in 2016: the Philippines Chiller Energy Efficiency Project. However, as the country requested the Bank to serve as lead Implementing Agency for its Stage II HPMP, preparation activities continued in 2016 while preparation of an ODS alternative survey was launched. The Chiller Energy Efficiency Project completed by the end of 2016. For more details of the status of the project, please refer to Part III (A).

The Bank Task Team conducted two supervision and preparation missions in 2016 for the chiller project, ODS alternative survey and the Stage II HPMP. DENR representatives also attended the Bank's EAP Regional Workshop in Bali in February 2016 and the 3<sup>rd</sup> Annual COOL Workshop in Washington, DC in December 2016.

#### THAILAND

#### A. Country Developments

Implementation efforts under Thailand's Stage I HCFC Phaseout Management Plan (HPMP) have seen the project pick up in speed and it is now well underway. In 2016 alone, a total of 20 SGAs were signed for both the A/C and foam sectors. More than \$11.16 million or 48.5% of the total expected grant funding has been committed to HCFC phase-out activities in the two sectors.

According to the independent verification of 2015 HCFC consumption, Thailand decreased its consumption from 927 ODP tons in 2014 to 776.5 ODP tons (against the import quota of 830 ODP tons issued by DIW in January 2015), which is well within the target of the Montreal Protocol and the agreement with the ExCom (the 2015 target is 835 ODP tons).

#### B. Institutional Strengthening

Institutional strengthening (IS) funds have been used to enhance the capacity of the National Ozone Unit (NOU) and government agencies to effectively implement ODS phaseout in compliance with the country's obligations.

The quota for 2016 HCFC imports were issued in a timely manner while the NOU complied with the reporting obligations under Art. 7 for 2015 ODS consumption and production data. Public awareness activities conducted including circulation of materials and annual celebration of International Ozone Day in order to maintain priority on ozone layer protection among government agencies and relevant stakeholders. The NOU attended the OEWG meetings in Switzerland and Austria, the MOP in Rwanda, and network meetings in Fiji. Renewal of the IS project was submitted to the 77th ExCom Meeting and approved.

Two Bank implementation support missions were conducted in 2016 as were several short meetings related to the Thai AC industry. Representatives of the NOU/PMU and the Financial Agent, GSB attended two World Bank MP workshops: one in February and one in December 2016.

#### VIETNAM

#### Country Developments

Through the Stage I HPMP, Vietnam committed to phase-out 462 MT of HCFC-141b in bulk at twelve enterprises, as well as another 812 MT of HCFC-141b in imported pre-blended polyol, equally used by these enterprises. Vietnam also agreed to ban HCFC-141b imports and exports as of 1 January 2015. This final and decisive policy measure for the Stage I HPMP was put into place as agreed and in 2015 only HCFC-based pre-blended polyol could be imported to Vietnam.

A total of US\$8.88 million was allocated for investment activities for the conversion of eleven enterprises to hydrocarbon technology and one to water-blown technology (a shoe sole manufacturer). As of the end of 2016, six enterprises have completed conversions and five others

were well-advanced in implementation of subprojects. The twelfth enterprise exited the foaming business and was eliminated from the project. A substitution with another similar company and user of bulk HCFC-141b in 2009 at project baseline for conversion to the same technology, for a significantly reduced amount of funds from the Stage I project was agreed to by the MLF Executive Committee at the 76<sup>th</sup> Meeting but at a significantly reduced level of funding than eligible. In the end, the enterprise has decided not to participate in the project. Remaining funds also approved in the third and final tranche in May 2016 for remaining technical assistance activities and project management.

At the same Executive Committee Meeting, Vietnam also received approval in principle of \$14.6 million for its Stage II HPMP (including TA from Japan) which will cover the period 2017-2021 and support the country in meeting its 35% reductions of the 221.1 ODP MT baseline by 2020. Implementation is expected to start upon completion of Stage I in late 2017.

By the end of 2016, the ODS alternative survey data collection was completed and the report will be submitted to the Executive Committee in 2017.

Three World Bank implementation support and project preparation missions were conducted in 2016. In addition, Government representatives from Ministry of Environment and Natural Resources attended the Bank's regional ODS workshop in Bali in February 2016 and the 3<sup>rd</sup> Annual COOL Workshop in DC in December 2016.