

United Nations Environment Programme

Distr. GENERAL

UNEP/OzL.Pro/ExCom/91/17 9 November 2022

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Ninety-first Meeting Montreal, 5-9 December 2022 Item 7(a)(vi) of the provisional agenda¹

PROGRESS REPORT OF THE WORLD BANK AS AT 31 DECEMBER 2021

Introduction

- 1. This document presents the progress report of the World Bank as at 31 December 2021.²
- The progress report of the World Bank includes the status of implementation of projects, including 2. five HFC-related projects that have been funded under the additional voluntary contributions by 17 non-Article 5 Parties to provide fast-start support for implementation of the Kigali Amendment.
- 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 2021, the potential impact of these delays on the phase-out of controlled substances and the rate of planned disbursements. The analysis contained in the present document is based on ODP tonnes for all controlled substances except for HFCs which are measured in CO₂-eq tonnes.³
- 4. This document consists of the following sections:
 - I. Projects approved for all controlled substances under the regular contributions to the Multilateral Fund. It presents a summary of progress in implementation of projects for 2021 and cumulative since 1991 addressing all controlled substances under the Montreal Protocol, including Annex F substances (HFCs). It also contains a review on the status of implementation of each ongoing4 project at the country level. It identifies projects with

² The progress report is attached to the present document. The data has been included in the Consolidated Progress

¹ UNEP/OzL.Pro/ExCom/91/1

Report database that is available upon request.

³ In line with decision 84/12(a)(iv), the measurement for HFCs in CO₂-eq tonnes is included in the progress reports submitted to the 91st meeting.

⁴ Ongoing projects are all projects that were under implementation as at 31 December 2021. Key indicators of progress include percentage of funds disbursed and percentage of projects that have begun disbursing funds; funding expected

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.

- implementation delays and the potential impact on the phase-out of controlled substances, and projects with outstanding issues for consideration by the Executive Committee.
- II. Projects approved for Annex F substances (HFCs) under the additional voluntary contributions for fast-start support for HFC phase-down.⁵
- III. Recommendation.

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

I.1 Progress in implementation of projects for 2021 and cumulative since 1991

5. As of 31 December 2021, the Executive Committee had approved US \$1.29 billion in projects for the World Bank, consisting of US \$1.17 billion for the implementation of investment and non-investment projects and US \$122.15 million for agency support costs, as shown in table 1.

Table 1. Approved funding by sector for the World Bank as at 31 December 2021

| Sector | Funding (US \$) |
|----------------------|-----------------|
| Aerosol | 22,984,030 |
| Destruction | 400,000 |
| Foam | 136,059,064 |
| Halon | 70,221,038 |
| HFC phase-down plan | 405,000 |
| Fumigants | 5,837,887 |
| Multiple sectors | 2,341,168 |
| Other | 5,059,360 |
| Phase-out plan | 210,870,717 |
| Process agent | 114,342,497 |
| Production | 378,896,283 |
| Refrigeration | 180,259,970 |
| Several | 29,413,466 |
| Solvents | 10,237,394 |
| Sterilant | 661,227 |
| Sub-total Sub-total | 1,167,989,100 |
| Agency support costs | 122,146,142 |
| Total | 1,290,135,242 |

- 6. In 2021, nine new projects and activities were approved. This level of funding is expected to result in the phase-out of 307,336 ODP tonnes of consumption and production of controlled substances. Annex I shows the status of project implementation per country in 2021.
- 7. Table 2 shows the status of project implementation including fund disbursement per project type as at 31 December 2021. Annex II presents analytical information per year since 1991.

to be disbursed by the end of the year as a percentage of the approved funding; the average length of projected delay in implementation; and information provided in the remarks column in the progress report database.

⁵ In line with decision 84/12(b), a detailed progress report providing an overview of the objectives, status of implementation, key findings and lessons learned, the amounts of HFC phased out where applicable, the level of funds approved and disbursed and potential challenges in completing the projects and activities, is presented in the consolidated progress report (UNEP/OzL.Pro/ExCom/91/12).

| Type | Nun | nber of proje | cts* | | Funding (U | S \$)** | |
|----------------------|----------|---------------|---------------|---------------|---------------|------------|-----------|
| | Approved | Completed | Completed % A | | Disbursed | Balance | % |
| | | | completed | | | | disbursed |
| Country programme | 29 | 29 | 100 | 1,627,732 | 1,627,732 | 0 | 100 |
| Demonstration | 8 | 8 | 100 | 6,172,901 | 6,172,901 | 0 | 100 |
| Institutional | 51 | 48 | 94 | 10,013,716 | 9,258,476 | 755,240 | 92 |
| strengthening (IS) | | | | | | | |
| Investment | 637 | 626 | 98 | 1,109,118,323 | 1,093,970,559 | 15,147,764 | 99 |
| Project preparation | 295 | 291 | 99 | 27,093,320 | 26,623,320 | 470,000 | 98 |
| Technical assistance | 75 | 73 | 97 | 13,657,342 | 12,862,814 | 794,528 | 94 |
| Training | 4 | 4 | 100 | 305,766 | 305,766 | 0 | 100 |
| Total | 1 000 | 1 070 | 90 | 1 167 080 100 | 1 150 921 569 | 17 167 532 | 00 |

Table 2. Status of project implementation by type as at 31 December 2021

- Implementation of projects and activities by the World Bank for 2021 and cumulative since 1991 up to 31 December 2021, is summarized as follows:
 - Phase-out: In 2021, 814.2 ODP tonnes of consumption of controlled substances were (a) phased out and an additional 1,929.6 ODP tonnes of consumption of controlled substances were approved for phase-out. Since 1991, 148,230 ODP tonnes of consumption of controlled substances and 187,996 ODP tonnes of production of controlled substances had been phased out, of an expected total of 307,336 ODP tonnes from projects approved (excluding cancelled and transferred projects);
 - **Disbursements/approvals:** In 2021, US \$3.31 million was (b) disbursed and US \$5.06 million was planned for disbursement based on the 2020 progress report, representing a rate of disbursement of 65 per cent of that planned. Cumulatively, US \$1.15 billion had been disbursed out of the total US \$1.17 billion approved for disbursement (excluding agency support costs), representing a rate of disbursement of 99 per cent. In 2021, US \$9.69 million was approved for implementation;
 - Cost-effectiveness (in ODP): Since 1991, the average cost-effectiveness of investment (c) projects approved leading to a permanent reduction in consumption was US \$5.45/kg and for the production sector was US \$4.86/kg. The average cost-effectiveness of investment projects per ODP tonne was US \$3.20/kg for completed projects and US \$15.43/kg for ongoing projects;8
 - (d) Number of projects completed: In 2021, two projects were completed. Since 1991, 1,079 projects of the 1,099 projects approved (excluding closed or transferred projects) were completed, representing a completion rate of 98 per cent;
 - (e) Speed of delivery – investment projects: In 2021, one investment project was completed with a duration of 68 months after its approval. 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:** In 2021, one non-investment project was completed with a duration of 12 months after its approval. Since 1991, the average time

^{*}Excludes closed and transferred projects.

^{**}Excludes agency support costs.

⁶ All the controlled substances under these projects were ozone-depleting substances.

⁷ All the controlled substances under these projects were ozone-depleting substances.

⁸ The higher value of the cost-effectiveness for ongoing projects is largely due to the lower ODP values of HCFCs but also due to the means of assigning phase-out by agencies.

for completion of non-investment projects has been 36 months after their approval. First disbursements under these projects occurred, on average, 22 months after they had been approved;

- (g) **Project preparation:** Of the 295 project preparation activities approved by the end of 2021, 291 have been completed, leaving four ongoing activities. The World bank did not complete any preparation activities in 2021;
- (h) **Implementation delays:** A total of 20 projects were under implementation at the end of 2021, experiencing, on average, a delay of 12 months. Three of these projects are classified as "projects with implementation delays" that are subject to the procedures of project cancellation (as demonstration projects, project preparation, and IS are not subject to those procedures); and
- (i) **Multi-year agreements (MYAs):** In 2021, five MYAs for HCFC phase-out management plans (HPMPs) and one HCFC production phase-out management plan (HPPMP) were under implementation. Since 1991, 40 MYAs have been approved and 34 MYAs have been completed, representing a completion rate of 85 per cent.
- 9. Table 3 summarized progress made by the World Bank since 1991.

Table 3. Progress made by the World Bank since 1991

| Pha | Phase out Disbursement | | Average | | Number | | Speed of de | elivery for | livery for Average | | of MYAs |
|---------|------------------------|---------------|----------|---------|-------------|-----------|---------------------|-------------|--------------------|----------|-----------|
| ach | ieved | (US \$) | CE (US | \$/kg) | of projects | | completion (months) | | project | | |
| ODP | CO ₂ -eq | | Consump- | Produc- | Approved | Completed | Investment | Non- | delays | Approved | Completed |
| tonnes* | tonnes | | tion | tion | | | | investment | (months) | | |
| 336,226 | 0 | 1,150,821,568 | 5.45 | 4.86 | 1,099 | 1,079 | 40 | 36 | 12 | 40 | 34 |

^{*}Consumption and production

HFC-related projects

10. As of 31 December 2021, the Executive Committee had approved two HFC preparation projects under regular contributions amounting to US \$405,000 (excluding agency support costs). A summary of the status of these projects is presented in table 4 and the respective data has already been included in paragraphs 5 to 9.

Table 4. HFC-related projects approved under regular contributions

| Type | Nui | mber of proj | jects | Funding (US \$)* | | | | | |
|---------------------|----------|--------------|-------------|------------------|-----------|---------|-------------|--|--|
| | Approved | Completed | % completed | Approved | Disbursed | Balance | % disbursed | | |
| Project preparation | 2 | 0 | 0 | 405,000 | 0 | 405,000 | 0 | | |

^{*} Excludes agency support costs.

11. The two ongoing preparation activities were approved at the 87th and 88th meetings and are expected to be completed in 2023.

I.2 Issues identified in project implementation in 2021

12. Further to the review process in 2021, several issues were discussed and satisfactorily addressed, except for issues on three projects related to components of MYAs, classified as projects with implementation delays that are subject to procedures for project cancellation, in line with decision 84/45(c).

⁹ Projects approved over 18 months with disbursement less than 1 per cent, or projects that had not been completed 12 months after the proposed completion date in the progress report (decision 22/61).

Annex III to the present document presents those projects classified with implementation delays, and the Secretariat's recommendations requesting the submission of a report to the 92nd meeting.

- 13. Details of progress in implementation of projects associated with the HPPMP for China¹⁰ and the HPMPs for Jordan¹¹ and Viet Nam¹² have been submitted to the 91st meeting. Recommendations for outstanding issues for these projects, including approval of extension requests, if any, are addressed in the relevant sections of those documents. The issues relating to the HPMP for Thailand, the tranche of which was due at the 91st meeting but was not submitted, are addressed in the document on tranche submission delays.¹³
- 14. Of the 13 ongoing projects, excluding IS and project preparation, five projects have revised planned dates of completion since the 2020 progress report.

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

15. As of 31 December 2021, the Executive Committee had approved five HFC-related projects under the additional voluntary contributions amounting to US \$960,180 (excluding agency support costs). A summary of the status of these projects is presented in table 5.

Table 5. Status of approved HFC-related projects as of the end of 2021

| Type | Nu | mber of proj | ects* | Funding (US \$)** | | | | |
|---------------------|----------|--------------|-------------|-------------------|-----------|---------|-------------|--|
| | Approved | Completed | % completed | Approved | Disbursed | Balance | % disbursed | |
| Investment*** | 1 | 1 | 100 | 183,514 | 146,811 | 36,703 | 80 | |
| Project preparation | 1 | 1 | 100 | 30,000 | 30,000 | 0 | 100 | |
| Enabling activities | 3 | 3 | 100 | 746,666 | 683,538 | 63,128 | 92 | |
| Total | 5 | 5 | 100 | 960,180 | 860,349 | 99,831 | 90 | |

^{*} Excludes transferred projects.

16. As of the end of 2021, all activities had been completed. Of the total cumulative funding approved of US \$960,180, US \$860,349 had been disbursed, representing a disbursement rate of 90 per cent.

III. Recommendation

- 17. The Executive Committee may wish:
 - (a) To note the progress report of the World Bank as at 31 December 2021 contained in document UNEP/OzL.Pro/ExCom/91/17; and
 - (b) To approve the recommendations related to ongoing projects with specific issues contained in Annex III to the present document.

^{**} Excludes agency support costs.

^{*** 8.8} mt (12,555 CO₂-eq tonnes) of HFCs was approved and phased out.

¹⁰ UNEP/OzL.Pro/ExCom/91/SGP/3

¹¹ UNEP/OzL.Pro/ExCom/91/43

¹² UNEP/OzL.Pro/ExCom/91/57

¹³ UNEP/OzL.Pro/ExCom/91/21

Annex I

OVERVIEW OF STATUS OF PROJECT IMPLEMENTATION FOR THE WORLD BANK PER COUNTRY FOR 2021

Table 1 of Annex I presents the status of project implementation by country for 2021 in achieved 1. phased out, planned and achieved disbursements and project completion.

Table 1. Status of project implementation by the World Bank for 2021

| Country | Phased out in 2021* (ODP tonnes) | Phased out in 2021 (CO ₂ -eq tonnes)* | n 2021 funds CO ₂ -eq disbursed in | | Percentage of funds disbursed over estimation in 2021 | Percentage of planned projects completed in 2021** |
|-----------|-------------------------------------------|-----------------------------------------------------------|--------------------------------------------------|-----------|----------------------------------------------------------------|----------------------------------------------------|
| China | 808.8 | | 1,833,506 | 1,833,506 | 100 | 0 |
| Indonesia | 0 | | 452,032 | 174,403 | 39 | 0 |
| Jordan | 0 | | 706,771 | 143,218 | 20 | 0 |
| Thailand | 0 | | 662,800 | 215,030 | 32 | 0 |
| Viet Nam | 5.4 | | 1,405,079 | 946,220 | 67 | 100 |
| Total | 814.2 | 0 | 5,060,188 | 3,312,377 | 65 | 29 |

^{*} No phase-out in 2021 for HFC-related projects.

** For projects that were planned to be completed in 2021.

Annex II

OVERVIEW OF STATUS OF PROJECT IMPLEMENTATION FOR THE WORLD BANK PER YEAR AS AT 31 DECEMBER 2021

1. Table 1 of Annex II presents an overview of the status of project implementation by year. All projects and activities approved between 1991 and 2015, and 2017, have now been completed.

Table 1. Status of project implementation by year

| Year | N | umber of pro | jects* | | Funding (U | J S \$)** | |
|-------|----------|--------------|-------------|---------------|---------------|------------------|-------------|
| r ear | 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 | 56,173,102 | 56,173,103 | -1 | 100 |
| 1998 | 59 | 59 | 100 | 35,959,418 | 35,959,417 | 1 | 100 |
| 1999 | 73 | 73 | 100 | 64,173,138 | 64,173,138 | 0 | 100 |
| 2000 | 67 | 67 | 100 | 36,982,134 | 36,982,133 | 1 | 100 |
| 2001 | 29 | 29 | 100 | 55,212,853 | 55,212,854 | -1 | 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 | 28 | 100 | 68,592,865 | 68,592,865 | 0 | 100 |
| 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 | 39,934,666 | 39,934,666 | 0 | 100 |
| 2009 | 22 | 22 | 100 | 25,529,554 | 25,529,554 | 0 | 100 |
| 2010 | 16 | 16 | 100 | 1,148,623 | 1,148,623 | 0 | 100 |
| 2011 | 10 | 10 | 100 | 44,201,956 | 44,335,997 | -134,041 | 100 |
| 2012 | 10 | 10 | 100 | 11,698,145 | 11,698,145 | 0 | 100 |
| 2013 | 7 | 7 | 100 | 43,736,999 | 43,602,958 | 134,041 | 100 |
| 2014 | 13 | 13 | 100 | 28,336,509 | 28,336,509 | 0 | 100 |
| 2015 | 13 | 13 | 100 | 62,990,648 | 62,990,648 | 0 | 100 |
| 2016 | 18 | 16 | 89 | 12,601,632 | 12,363,568 | 238,064 | 98 |
| 2017 | 3 | 3 | 100 | 1,651,291 | 1,651,291 | 0 | 100 |
| 2018 | 7 | 1 | 14 | 26,408,870 | 20,539,678 | 5,869,192 | 78 |
| 2019 | 3 | 1 | 33 | 2,579,179 | 1,206,766 | 1,372,413 | 47 |
| 2020 | 2 | 1 | 50 | 2,067,012 | 2,067,012 | 0 | 100 |
| 2021 | 9 | 0 | 0 | 9,687,863 | 0 | 9,687,863 | 0 |
| Total | 1,099 | 1,079 | 98 | 1,167,989,100 | 1,150,821,568 | 17,167,532 | 99 |

^{*}Excludes closed and transferred projects.

_

^{**}Excludes agency support costs.

¹ The data is presented according to the year when a project was approved by the Executive Committee. It treats all approvals (investment and non-investment projects) equally (i.e., an investment project or a funding tranche of an MYA of US \$1 million is considered one project, same as a country programme preparation of US \$30,000). Key indicators from the annual summary are: the percentage of projects completed, ODP tonnes/CO₂-eq tonnes phased out, and percentage of funds disbursed. There are three types of disbursements: during implementation, after implementation and for retroactively financed projects.

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

| Country/project code | Project title | Disbursement | Status/Issues | Recommendation |
|----------------------|-------------------------------------------------|--------------|------------------|--------------------------------------------------------------|
| | | (%) | | |
| Indonesia | HCFC phase-out management plan (stage II, | 78 | 12 months delays | To request the World Bank to report to the |
| IDS/PHA/81/INV/214 | second tranche) (foam sector) | | | 92 nd meeting on this project with implementation |
| | | | | delays. |
| Thailand | HCFC phase-out management plan (stage II, first | 0 | 12 and 18 months | To request the World Bank to report to the |
| THA/PHA/82/INV/179 | tranche) (spray foam sector) | | delays | 92 nd meeting on this project with implementation |
| | | | | delays. |
| Thailand | HCFC phase-out management plan (stage II, first | 2 | 12 months delays | To request the World Bank to report to the |
| THA/PHA/82/TAS/177 | tranche) (refrigeration servicing sector and | | | 92 nd meeting on this project with implementation |
| | project management unit) | | | delays. |

1



ANNUAL PROGRESS REPORT

BANK-IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

January - December 2021

TABLE OF CONTENTS

| I. | PROJECT APPROVALS AND DISBURSEMENTS | 1 |
|------|-----------------------------------------------------------------------------|-------|
| | A. Annual Summary Data | 1 |
| | B. Summary of Data by Project Type (CPG, DEM, INS, INV, PRP, TAS, TRA) | 3 |
| | C. Multi-year Agreements | |
| | D. Sector Phaseout by Country | 10 |
| II. | PROJECT COMPLETIONS SINCE LAST REPORT | 11 |
| | A. ODP Phased Out Since Last Report | 11 |
| | B. Non-Investment Project Completions Since Last Report | |
| III. | GLOBAL AND REGIONAL PROJECT HIGHLIGHTS | 13 |
| | A. Global Projects | 13 |
| | B. Regional Projects | |
| IV. | PERFORMANCE INDICATORS | 14 |
| | A. Agency Performance Goals | 14 |
| | B. Cumulative Completed Investment Projects | |
| | C. Cumulative Completed Non-Investment Projects | |
| | D. Cumulative Ongoing Investment Projects | |
| | E. Cumulative Ongoing Non-Investment Projects | 23 |
| V. | STATUS OF AGREEMENTS & PROJECT PREPARATION (WHERE APPLICA | BLE), |
| | BY COUNTRY | 25 |
| | A. Agreements to be Signed/Executed/Finalized & When They Will be Ready for | |
| | Disbursing | 25 |
| | B. Project Preparation by Country, Approved Amount, and Amount Disbursed | |
| VI. | ADMINISTRATIVE ISSUES (OPERATIONAL, POLICY, FINANCIAL, AND O | ГНЕК |
| | ISSUES) | 27 |
| | A. Meetings Attended | 27 |
| | B. Implementing Agency and Other Cooperation | |
| | C. Other Issues | 28 |

LIST OF TABLES

| TABLE I-1: ANNU | al Summary | 2 |
|-------------------|---------------------------------------------------------------|----|
| TABLE I-2: SUMM | ARY OF DATA BY PROJECT TYPE | 3 |
| TABLE I-3. MULT | I-YEAR PROJECTS | 6 |
| TABLE II-1: PROJE | ECT COMPLETIONS DURING REPORTING PERIOD | 12 |
| TABLE IV-1: WOR | RLD BANK PERFORMANCE GOALS | 16 |
| TABLE IV-2: WOR | RLD BANK INDICATORS OF IMPLEMENTATION PROGRESS | 17 |
| TABLE IV-3: CUM | ULATIVE COMPLETED INVESTMENT PROJECTS | 19 |
| TABLE IV-4: CUM | ULATIVE COMPLETED NON-INVESTMENT PROJECTS | 20 |
| TABLE IV-5: CUM | ULATIVE ONGOING INVESTMENT PROJECTS | 22 |
| TABLE IV-6: CUM | ULATIVE ONGOING NON-INVESTMENT PROJECTS | 24 |
| TABLE VI-I: MP | RELATED EVENTS ATTENDED BY WORLD BANK STAFF IN 2020 | 27 |
| | | |
| | List of Annexes and Attachments | |
| Annex I: | Country Developments | 29 |
| Annex II: | Progress & Financial Reporting Database (attached separately) | |

I. PROJECT APPROVALS AND DISBURSEMENTS

A. Annual Summary Data

- 1. Implementation of World Bank Multilateral Fund (MLF) activities continue to advance in the calendar year 2021. Cumulative ODP consumption and production phaseout is approximately 337,075 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 over US\$1.15 billion. Nine new approvals by the MLF have increased the cumulative number of project activities approved to a net 1,099 (excluding transfers and closed activities). The number of ongoing multi-year projects in the Bank's portfolio, all HCFC phaseout projects, is at six total by end 2021.
- 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 met by 61% given that the target set in the Bank's 2020 Progress Report was US\$5.06 million but actual disbursement only reached US\$3.07 million.
- 3. In 2021, three annual plans were submitted out of six targeted in the approved table of 2021 performance targets set for the World Bank. The target was reached by 50 percent. Regarding the ODP phaseout target which is now covered in one "implementation" indicator (with the most weighting) the World Bank phase-out per the Multilateral Fund (MLF) Secretariat's methodology was 709.22 ODP MT as compared to 1,930 ODP MT set. Actual total phase-out of 843 MT in ODP consumption and production was reached in 2021. Although the target set by the Secretariat for the Bank's 2021 Business Plan is delinked from approved projects and actual phase-out performance, the phase-out target was therefore achieved. 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, it does not provide a meaningful indication of actual ODS phase-out achieved through project implementation and in fact makes it almost impossible for phase-out targets to ever be met. World Bank performance for the three implementation indicators is highlighted in Section IV of this annual report.
- 4. The World Bank met all three "administrative" indicators for 2021. The 2021 Progress Report was submitted on time and 100% of 2021 project activities that completed financially were done so within 12 months. More project completion reports (PCRs) were submitted in 2021 than required per project completions in the project completion reporting period.
- 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. The 2021 outcomes in relation to these traditional indicators are also provided in Section IV.

Table I-1: Annual Summary

| Year Ap- prove d | Numb er of Ap- prov- als* | Number Com- pleted | Percent Com- pleted | Consumptio n to be Phased Out* | Consump tion Phased Out* | Per Cent of Consumptio n Phased Out | Productio n to be Phased Out* | Productio n Phased Out* | Percent of Product ion Phased Out | Approved Funding plus Adjustment (US\$) | Funds Disbursed (US\$) | Per Cent of Funds Dis-burs- ed | Balance (US\$) | Estimated Disbursem ent in Current Year (US\$) | Support Costs Approved (US\$) | Suppor t Cost Adjust ments (US\$) |
|---------------------------|---------------------------------------|--------------------------|---------------------------|--------------------------------------|-----------------------------------|----------------------------------------------|----------------------------------------|-------------------------------|--------------------------------------------------|--------------------------------------------------|------------------------------|-----------------------------------------|-------------------|------------------------------------------------------------|-------------------------------------|--------------------------------------------------|
| | 1 | 1 | | 1 | | | | | | | | 1 | | | | |
| 1991 | 42 | 42 | 100% | 537 | 600 | 112% | 0 | 0 | 0% | 5,429,404 | 5,429,404 | 100% | 0 | 0 | 820,000 | -534,564 |
| 1992 | 76 | 76 | 100% | 18,442 | 18,276 | 99% | 0 | 0 | 0% | 28,047,705 | 28,047,705 | 100% | 0 | 0 | 1,347,550 | -396,573 |
| 1993 | 79 | 79 | 100% | 2,470 | 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 | 100% | 3,648 | 3,565 | 98% | 0 | 0 | 0% | 47,224,186 | 47,224,186 | 100% | 0 | 0 | 5,478,735 | -764,882 |
| 1996 | 55 | 55 | 100% | 3,610 | 3,312 | 92% | 0 | 0 | 0% | 29,319,479 | 29,319,479 | 100% | 0 | 0 | 4,465,748 | -621,458 |
| 1997 | 95 | 95 | 100% | 7,343 | 17,257 | 235% | 0 | 11,739 | 0% | 56,173,102 | 56,173,103 | 100% | -1 | 0 | 8,100,603 | -1,156,010 |
| 1998 | 59 | 59 | 100% | 8,837 | 8,783 | 99% | 5,970 | 5,826 | 98% | 35,959,418 | 35,959,417 | 100% | 1 | 0 | 4,804,456 | -501,628 |
| 1999 | 73 | 73 | 100% | 9,858 | 8,128 | 82% | 5,970 | 5,970 | 100% | 64,173,138 | 64,173,138 | 100% | 0 | 0 | 6,207,035 | 325,317 |
| 2000 | 67 | 67 | 100% | 2,978 | 3,260 | 109% | 8,802 | 8,793 | 100% | 36,982,134 | 36,982,133 | 100% | 1 | 0 | 3,744,867 | -182,406 |
| 2001 | 29 | 29 | 100% | 6,067 | 6,067 | 100% | 8,393 | 8,384 | 100% | 55,212,853 | 55,212,854 | 100% | -1 | 0 | 4,482,836 | 564,673 |
| 2002 | 32 | 32 | 100% | 6,529 | 6,699 | 103% | 7,443 | 7,443 | 100% | 64,357,778 | 64,357,778 | 100% | 0 | 0 | 7,174,302 | -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 | 100% | 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 | 28 | 100% | 19,359 | 23,049 | 119% | 46,273 | 46,342 | 100% | 68,592,865 | 68,592,865 | 100% | 0 | 0 | 7,381,049 | -597,245 |
| 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% | 39,934,666 | 39.934,666 | 100% | 0 | 0 | 4,834,395 | -278,146 |
| 2009 | 22 | 22 | 100% | 14,036 | 14,036 | 100% | 7,503 | 7,503 | 100% | 25,529,554 | 25,529,554 | 100% | 0 | 0 | 3,564,606 | -520,075 |
| 2010 | 16 | 16 | 100% | 502 | 674 | 134% | 0 | 0 | 0% | 1,148,623 | 1,148,623 | 100% | 0 | 0 | 1,868,548 | -458,586 |
| 2011 | 10 | 10 | 100% | 81 | 812 | 998% | 0 | 0 | 0% | 44,201,956 | 44,335,997 | 100% | -134,041 | 0 | 5,099,184 | -61,841 |
| 2012 | 10 | 10 | 100% | 168 | 168 | 100% | 0 | 0 | 0% | 11,698,145 | 11,698,145 | 100% | 0 | 0 | 2,765,746 | -629,040 |
| 2013 | 7 | 7 | 100% | 377 | 377 | 100% | 0 | 1,058 | 0% | 43,736,999 | 43,602,958 | 100% | 134,041 | 0 | 3,203,077 | 936,084 |
| 2014 | 13 | 13 | 100% | 127 | 127 | 100% | 0 | 0 | 0% | 28,336,509 | 28,336,509 | 100% | 0 | 0 | 3,387,443 | -412,129 |
| 2015 | 13 | 13 | 100% | 548 | 548 | 100% | 0 | 2,912 | 0% | 62,990,648 | 62,990,648 | 100% | 0 | 0 | 5,913,456 | -455,275 |
| 2016 | 18 | 16 | 89% | 255 | 735 | 288% | 0 | 0 | 0% | 12,601,632 | 12,363,568 | 98% | 238,064 | 117,600 | 2,682,573 | -133,222 |
| 2017 | 3 | 3 | 100% | 71 | 71 | 100% | 0 | 0 | 0% | 1,651,291 | 1,651,291 | 100% | 0 | 0 | 2,055,676 | -212,026 |
| 2018 | 7 | 1 | 14% | 33 | 0 | 0% | 0 | 1,188 | 0% | 26,408,870 | 20,527,504 | 78% | 5,881,366 | 4,480,804 | 3,261,620 | -43,894 |
| 2019 | 3 | 1 | 33% | 19 | 0 | 0% | 0 | 0 | 0% | 2,579,179 | 1,206,766 | 47% | 1,372,413 | 653,359 | 1,958,493 | -486,154 |
| 2020 | 2 | 1 | 50% | 809 | 809 | 100% | 0 | 0 | 0% | 2,067,012 | 2,067,012 | 100% | 0 | 0 | 1,879,691 | 0 |
| 2021 | 9 | 0 | 0% | 1,930 | 0 | 0% | 0 | 0 | 0% | 9,687,863 | 0 | 0% | 9,687,863 | 3,449,871 | 2,413,150 | 0 |
| Total | 1,099 | 1,079 | 98% | 136,144 | 148,230 | 109% | 171,192 | 187,996 | 110% | 1,167,989,100 | 1,150,809,394 | 99% | 17,179,706 | 8,701,634 | 129,242,552 | -7,096,411 |
| *Exclud | les Closed | and Transf | erred Project | ts / Includes Pro | ject Preparat | tion | · | | | | · | | · | | | |

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, and disbursements by type of project or activity. As can be seen from the table, the major proportion of the Bank's approved funding to date has gone for investment projects, US\$1,151,085,776. The amounts that have been allocated for demonstration projects and institutional strengthening are US\$11,439,764 and US\$10,258,378, respectively. In addition, through the separate fast start funds for HFC phase-down provided by the Executive Committee, another US\$183,514 and US\$750,000 were approved for a demonstration project and three HFC enabling activities, respectively.

Table I-2: Summary of Data by Project Type

| Туре | Number of Approvals* | Number Completed | Per Cent Completed | Approved Funding (US\$) | Adjustment (US \$) | Funds Disbursed (US \$) | Per Cent of Funds Disbursed | Balance (US\$) | Estimated Disbursement In Current Year (US \$) |
|--------------------------------------------|-------------------------|---------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------------------|-------------------|------------------------------------------------|
| Country Programme Preparation | 29 | 29 | 100% | 2,383,906 | -756,174 | 1,627,732 | 100% | 0 | 0 |
| Demonstration Projects | 8 | 8 | 100% | 11,439,764 | -5,266,863 | 6,172,901 | 100% | 0 | 0 |
| Institutional Strengthening Projects | 51 | 48 | 94% | 10,258,378 | -244,662 | 9,246,302 | 92% | 767,414 | 313,647 |
| Investment Projects | 637 | 626 | 98% | 1,151,085,776 | -41,967,453 | 1,091,865,881 | 98% | 17,252,442 | 7,365,959 |
| Project Preparation | 295 | 291 | 99% | 35,095,595 | -8,002,275 | 26,623,320 | 98% | 470,000 | 227,500 |
| Technical Assistance Projects | 75 | 73 | 97% | 17,147,529 | -3,490,187 | 14,967,492 | 110% | -1,310,150 | 794,528 |
| Training Projects | 4 | 4 | 100% | 1,193,246 | -887,480 | 305,766 | 100% | 0 | 0 |
| GRAND TOTAL | 1,099 | 1,079 | 98% | 1,228,604,194 | -60,615,094 | 1,150,809,394 | 99% | 17,179,706 | 8,701,634 |

 $^{{\}bf *Excludes\ Closed\ and\ Transferred\ Projects}.$

C. Multi-year Agreements

- 7. A total of 42 multi-year projects have been approved for the World Bank as a Multilateral Fund Implementing Agency (IA) as of the end of 2021 including one (the China Stage II HCFC Production Phaseout Management Plan) whose agreement was approved at the 87th Meeting of the Executive Committee. Three of the 42 multi-year projects were cancelled before implementation start in 2006, 2017 and 2019 respectively, 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 the CTC phase-out and accelerated CFC production sector plans in India).
- 8. In addition to its role in leading implementation for 31 of the 42 multi-year projects (including national and sector plans), the World Bank was, and continues to be a Cooperating Agency in China and Indonesia, for two ongoing multi-year projects with UNDP as the Lead Agency. The total value of Stage I HCFC Phase-out Management Plans (HPMPs) and sector plans in the Bank's portfolio was more than US\$206 million, excluding returns and transfers. By the end of 2021, all Stage I HPMPs were physically and financially completed.
- 9. Although fully funded, some projects continued to be active in terms of reporting requirements. 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 continued to cooperate with China on monitoring the ongoing implementation of sector plan activities through 2019 despite that the grant agreement (ODS IV) under which these sector plans fall closed on June 30, 2013. In 2020, China submitted through the Bank a financial audit report confirming that all sector plans were physically and financially completed. Associated savings of \$8.7 million for the last remaining sector plan (halon) that completed end-2019 were to be returned by China through Decision 87/24.
- 10. The Bank and its partner countries are well 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 in 2016, the Stage II HPMP in Thailand in 2018, as well as the newly approved China Stage II HCFC Production Phase-out Management Plan (HPPMP) at the 86th Executive Committee meeting. Three multi-year projects target HCFC-141b consumption and/or use in imported pre-blended polyol, one (the Vietnam Stage II HPMP) is the first to introduce HCFC-phase-out activities in the commercial and industrial refrigeration sectors, and also addresses air-conditioning manufacturing. The Thailand HPMP is addressing remaining HCFC-141b consumption in spray foam as well as tackle the servicing sector.

- 11. There are six ongoing multi-year activities in the World Bank's active HCFC phase-out portfolio worth a total US\$143 million as of the end of the 88th Meeting of the Executive Committee. At the 84th Meeting of the Executive Committee, Decision 84/69 introduced a significant cut to China's overall Stage II HPMP, reducing in value the US\$141 million polyurethane foam sector plan by more than half. At the 86th Meeting, the Committee agreed to the revised Stage II HPMP for China which resulted in a reduction by \$113 million for the PU foam sector. The revised sector plan figure now totals to \$28.3 million as per Decision 86/39. In 2021, the Committee also agreed through a multi-year agreement to a reduced amount of funding for China's Stage II HPPMP at a total \$67 million including \$23 million already released in 2018 as bridging funds.
- 12. In 2021, three tranche implementation progress reports were approved for the third tranches of the Stage II HPMP PU foam sector plans in China and Indonesia, and for the third tranche of the Stage II HPMP for Vietnam worth a total US\$8.77 million. Hence, the total funds released by the Executive Committee to date to maintain compliance with the 2020 35% reductions in HCFC consumption, or in several cases go beyond Protocol-required reductions, amount to US\$24 million (excluding China's production sector and nearly \$700,000 in returns for the Vietnam Stage II HPMP). The approval of China's Stage II HPPMP as indicated above introduced one more multiyear agreement (MYA) project to the Bank's portfolio.
- 13. All World Bank partner countries currently implementing multi-year projects appear to have met their annual consumption and production targets for the 2021 calendar year based on verified and 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 Completion | Funds Committed by ExCom (US\$) | Funds Released including Present Year by ExCom (US\$) | Funds Disbursed (US\$) | Total ODP Consumption to be Phased- out for the Plan | ODP Consumption Allowed for the Reporting Year* | Actual ODP Consumption 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 | - | - |
| 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 | Jun-18 | 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 | 66 | - | - | - | - | - |
| Chile | Phase-out of all the remaining uses of methyl bromide in soil application pest control | Apr-05 | | 2,547,156 | 691,703 | - | 136.3 | - | - | - | - | - |
| China | Halon Sector | Nov-97 | Dec-11 | 62,000,000 | 62,000,000 | 62,000,000 | 24,480 | - | - | 30,060 | 1 | - |
| China | CFC Production Sector | Mar-99 | Dec-10 | 150,000,000 | 150,000,000 | 150,000,000 | - | - | - | 44,931 | - | - |
| China | Foam Sector | Dec-01 | Dec-10 | 53,846,000 | 53,846,000 | 53,846,000 | 14,143 | - | - | - | - | - |
| China | TCA Sector | Jul-04 | Nov-10 | 2,100,000 | 2,100,000 | 2,100,000 | - | - | - | 113 | i | - |
| China | CTC/PA Sector Phase I | Nov-02 | Dec-11 | 65,000,000 | 65,000,000 | 65,000,000 | 11,160 | - | - | 52,162 | - | - |
| China | CTC/PA Sector Phase II | Nov-05 | Jul-10 | 46,500,000 | 46,500,000 | 46,500,000 | 6,945 | - | - | - | | - |
| China | HCFC phase-out management plan (PU rigid foam sector plan) (Stage I) | Jul-11 | Jun-19 | 73,000,000 | 73,000,000 | 73,000,000 | 1,615 | - | - | - | - | - |

| Country | Sector Plan/National ODS Phase-Out Plan | Date Approved | Actual Date of Completion | Funds Committed by ExCom (US\$) | Funds Released including Present Year by ExCom (US\$) | Funds Disbursed (US\$) | Total ODP Consumption to be Phased- out for the Plan | ODP Consumption Allowed for the Reporting Year* | Actual ODP Consumption 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 phase-out management plan (PU rigid foam sector plan) (stage II) | Dec-16 Dec-20 (revised) | | 28,312,039 | 9,112,039 | 9,112,039 | 4,449.6 | 2,965.7 | | - | - | - |
| China | HCFC production phase-out mgmt plan (stage I) | Apr-13 | Dec-18 | 95,000,000 | 95,000,000 | 91,256,301 | - | - | - | 3,970 | 26,210 | |
| China | HCFC production phase-out management plan (stage II,) | Dec-20 | ł | 67,000,000 | 23,000,000 | 19,200,000 | | | | 14,450 | 18,929 | |
| 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 | - | - |
| India | Accelerated CFC Production Phaseout | 4/1/2008 (in principle) | Mar-14 | 3,169,900 | 3,169,900 | 3,169,900 | - | - | - | 690 | - | - |
| India | CTC phase-out plan for the consumption and production sectors | Jul-03 | Mar-14 | 38,100,954 | 38,100,954 | 37,629,080 | 11,505.00 | - | - | 11,553 | - | - |
| 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 use of CFC in 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-19 | 2,714,187 | 2,714,187 | 2,134,725 | 34.10 | n/a | n/a | - | - | - |
| Indonesia | HCFC Phase Out Plan (Stage II): Foam Sector Plan | May-16 | | 4,255,163 | 4,255,163 | 2,984,663 | 42.70 | n/a | n/a | - | - | - |

| Country | Sector Plan/National ODS Phase-Out Plan | Date Approved | Actual Date of Completion | Funds Committed by ExCom (US\$) | Funds Released including Present Year by ExCom (US\$) | Funds Disbursed (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 I): Air- conditioning Sector Plan | Nov-11 | Dec-19 | 1,070,100 | 1,070,100 | 959,300 | 16.78 | n/a | n/a | - | - | - |
| Jordan | HCFC Phase Out Plan (Stage II) | Dec-16 | | 2,075,236 | 1,540,510 | 388,891.6 | 29.2 | 53.95 | | - | - | - |
| 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 | - | - | - | - | - |
| Philippines | HCFC Phase Out Plan (Stage II) | Nov-17 | May-19 | 2,750,057 | 1,010,023 | - | 24.59 | - | - | - | - | - |
| 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 | 17,805,665 | 16,623,996 | 219.54 | 788.46 | - | - | - | - |
| Thailand | HCFC phase-out management plan (stage II, first tranche) | Dec-18 | | 3,791,077 | 1,500,000 | 19,942 | 20.4 | 400 | 281 | | | |
| 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 | - | - | - | - | - |

| Country | Sector Plan/National ODS Phase-Out Plan | Date Approved | Actual Date of Completion | Funds Committed by ExCom (US\$) | Funds Released including Present Year by ExCom (US\$) | Funds Disbursed (US\$) | Total ODP Consumption to be Phased- out for the Plan | ODP Consumption Allowed for the Reporting Year* | Actual ODP Consumption 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* |
|-----------|------------------------------------------------------------------------------|------------------|---------------------------------|------------------------------------------|----------------------------------------------------------------------|------------------------------|------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------|----------------------------------------------------|
| 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 | - | - |
| 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 | - | - | - | - | - |
| Vietnam | HCFC phaseout mgmt plan (stage I, first tranche) (foam sector plan) | Apr-11 | Jun-17 | 9,125,020 | 9,125,020 | 8,205,602 | 140.10 | - | - | - | - | - |
| Vietnam | HCFC phase-out management plan (stage II, first tranche) | May-16 | | 14,411,204 | 5,649,619 | 1,409,503 | 37.7 | 143.78 | 141.79 | - | - | - |

*2021

D. Sector Phaseout by Country

- 14. 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.
- 15. 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.
- 16. 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

17. There were four projects completed during this reporting period (January 1, 2021 to December 31, 2021), in addition to the 2021 core unit budget, which are highlighted in Table II-1 below.

A. ODP Phased Out Since Last Report

18. There were two investment project completions in 2021, the Conversion from HFC to propane (R-290) and isobutene (R-600a) in Thailand and the HCFC phase-out management plan (stage II, first tranche) for polyurethane rigid foam sector in Vietnam. The HCFC phase-out management plan in Vietnam is part of the HCFC Phaseout Management Plan (HPMP) and therefore while activities under the tranche have been completed, the project is not financially completed. China received approval of its third tranche of the Stage II PU foam sector plan, the phase-out achieved through the first tranche can be claimed at 808.9 ODP MT

B. Non-Investment Project Completions Since Last Report

- 19. Country Programs: There were no new completions in 2021 for country programs.
- 20. <u>Technical Assistance</u>: Two stand-alone technical assistance (TA) projects were completed in 2021 the Indonesia and Thailand HFC enabling activities cited in Table II-1.
- 21. <u>Training</u>: The World Bank held its annual East Asia regional workshop virtually in 2021 due to COVID-19 travel restrictions. The Bank is planning to organize the 15th East Asia regional workshop in Spring 2023, for technical and procedural guidance to partner countries from the World Bank and external experts, exchange of views, and cross-fertilization on efficient and effective HCFC phase-out implementation.
- 22. The World Bank did not hold its annual Climate Ozone & Operational Linkages (CO₃OL) workshop in 2021 given travel restrictions arising from the COVID-19 pandemic, but plans are in place to hold this workshop in the fall of 2022.

Table II-1: Project Completions During Reporting Period

| Project Title | Country | Region | Consumption ODP Phased Out | Date Approved | First Disbursement Date | Date Completed (Actual) | Date of Financial Completion | Approved Funding (US\$) | Adjustment (US\$) | Funds Disbursed (US\$) | Per Cent of Funds Disbursed | Balance (US\$) | Funds Committed (US\$) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|----------------------------------|------------------|-------------------------------|-------------------------------|------------------------------------|-------------------------------|----------------------|------------------------------|-----------------------------------|-------------------|------------------------------|
| Enabling activities for HFC phase-down | Indonesia | ASP | 0.0 | Jun-18 | Sep-19 | Jun-21 | Jun-21 | 250,000 | -3,334 | 246,666 | 100% | 0 | 0 |
| Conversion from HFC to propane (R-290) and isobutene (R-600a) as a refrigerant in manufacturing commercial refrigeration appliances in Pattana Intercool Co. Ltd. | Thailand | ASP | 8.8 | Dec-18 | Jul-21 | Dec-21 | | 183,514 | 0 | 146,811 | 80% | 36,703 | 36,703 |
| Enabling activities for HFC phase-down | Thailand | ASP | 0.0 | Nov-17 | Dec-17 | Dec-21 | | 250,000 | 0 | 186,872 | 75% | 63,128 | 63,128 |
| HCFC phase-out management plan (stage II, first tranche) (polyurethane rigid foam sector) | Vietnam | ASP | 5.4 | May-16 | Aug-19 | Dec-21 | | 396,095 | -93,358 | 302,737 | 100% | 0 | 0 |

III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

A. Global Projects

- 23. The World Bank sole active global project, the Global Chiller Replacement Project, was declared physically and financially completed in 2017. 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.
- 24. 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 76th 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.
- 25. 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 and financial completion took place by 30 April 2017. US\$222,593 in savings were returned at the 80th Executive Committee Meeting.
- 26. 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 71st Meeting of the Executive Committee in December 2013.
- 27. The fifth country included in the Global Chiller Replacement Project was Argentina. In 2016, the project witnessed its first chiller replacements at two separate sites. However, in 2017, the Government of Argentina decided to transfer its ongoing component of the Global Chiller Replacement Project to another Implementing Agency. The transfer of the balance of funds, US\$808,438 was made at the 80th Meeting of the Executive Committee.
- 28. At its 77th 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, Argentina, Jordan, and the Philippines, were visited and evaluated. The findings of the evaluation were presented to the Executive Committee in November 2017.

B. Regional Projects

29. The World Bank has no outstanding regional projects.

IV. PERFORMANCE INDICATORS

A. Agency Performance Goals

- 30. 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 2020 progress.
- 31. "Approval" indicators compare projects that received Executive Committee approval against those planned to be delivered as per multi-year agreements (MYAs) and the 2021 Business Plan. For the first approval indicator, which per the Secretariat should include both new (not approved) and existing MYAs, six (6) annual programs were targeted for approval in the 2021 Business Plan. Actual number of tranches submitted was 3 associated with existing MYAs (China Stage II HPMP PU Foam, Indonesia Stage II Foam sector, and Vietnam refrigeration servicing & technical assistance), which was approved at the 87th and 88th Meetings. The approval target was therefore met by 50% using the original target set by the Secretariat as reflected in Decision86/30. 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 eight per Decision 86/30. In 2021, five individual activities were submitted to the Executive Committee and approved. These include Malaysia and Vietnam's Preparation of Kigali HFC implementation plan, the Extension of institutional strengthening project in Thailand, and Jordan's HCFC phase-out management plan Stage III (overarching & commercial refrigeration manufacturing), approved at the 87th and 88th Meetings.
- 32. 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 2020 Progress Report, the World Bank aspired to disburse US\$5.06 million in 2020. Actual disbursement in 2021 was US\$3.07 million, meaning that the target was met by 61%. 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 2021 at 709.22 ODP MT which is the planned phase-out for tranches of approved and not yet approved MYAs.
- 33. The Bank noted that the intent of Dec. 71/28 on the current indicators is to solely count planned phase-out of future tranches of *already approved* MYAs as the approval and scope of approval of new MYAs is somewhat out of implementing agency control. Intent is clear from the indicator's title where phase-out should be from approved MYAs: "ODS phase-out for the tranche when the next tranche <u>is approved</u> vs. those planned per business plans." In addition, it should be from already approved tranches: "the tranche" in the indicator description, not the "next tranche."

- 34. The Secretariat's approach creates a target nearly impossible to reach. Preparation and approval always lead to phase-out estimates different than those in the business plans. In addition, 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. Moreover, phase-out, regardless of the value assigned is only claimed when the tranche or activities are completed.
- 35. For 2021, the World Bank, was able to meet the target set for this implementation indicator which is interpreted by the Secretariat as an *approval* indicator because of the approvals for China, Indonesia, and Vietnam. Phase-out associated with these three MYA projects was 709.22 ODP MT per the 2021-23 Business Plan submitted by the Bank to the 86th Executive Committee Meeting, meaning for the first time, the Bank exceeded the target set by the Secretariat, per its methodology. Using actual figures, i.e., phase-out achieved by completed activities in the current portfolio in 2021, the figure achieved is843 ODP MT.
- 36. 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 5 based on the 2020 Progress Report. In 2021, five activities reached completion (the Vietnam HCFC phase-out management plan and the 2021 core unit budget, in addition to three HFC projects: Thailand's and Indonesia's Enabling activities for HFC phase-down & Thailand's Conversion from HFC to propane (R-290) and isobutene (R-600a)). Three other activities projected to reach completion in 2021 were delayed due to COVID-19 and are set to be completed in 2022. Thus, the Bank fully attained the target.
- 37. 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 2020 Business Plan. In 2021, 1 project activity was financially completed within 12 months. The remaining 3 completed projects concluded implementation in December 2021. Thus, the target was achieved.
- 38. The Bank committed to submit 100 percent of PCRs for projects completed in the 2021 PCR reporting period. In the 2021 PCR reporting period (July 2020-June 2021), there were no project completions. Additional guidance received by the Executive Committee is that the implementing agencies submit outstanding PCRs for MYAs and individual projects which is why the Bank made efforts to submit additional PCRs than those due per projects that completed. In 2021, the World Bank submitted a total of five PCRs, including two MYA PCRs and three PCRs for individual projects. The Bank's PCR submission goal for 2021 was consequently met.
- 39. The third and final administrative performance target of on-time submission of the 2021 Progress Report was met with submission by August 22nd, 2022. Table IV-1 summarizes the World Bank's performance relative to indicators per Decision 86/30on the Bank's 2021 Business Plan.

Table IV-1: World Bank Performance Goals

| Category of Performance Indicator | Item | Weighting | 2021 Target* | 2021 Actual |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------|----------------------|----------------------|
| Planning/Approval | Number of tranches approved vs. those planned | 10 | 6 | 3 |
| Planning/Approval | Number of projects/activities approved vs. those planned (including project preparation activities) | 10 | 8 | 5 |
| Implementation | Funds disbursed (based on estimated disbursement in progress report) | 15 | US\$ 18.16 million** | US\$3.917 million |
| Implementation | ODS phased-out for the tranche when the next tranche is approved vs. those planned per business plans | 25 | 709.22 ODP tonnes*** | 843 ODP tonnes*** |
| Implementation | Project completion vs. that planned in progress reports for all activities | 20 | 5 | 5 |
| 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 | On time |
| Administrative | Timely submission of progress reports and responses unless otherwise agreed | 5 | On time | On time |

^{*} Set by the Fund Secretariat and including tranches of existing MYAs and of newly approved and planned MYAs

^{**} The Secretariat set the target using the 2019 Progress Report – meaning the estimated disbursement for 2019, i.e. \$18.16 million, however the final submitted 2020 Progress Report estimated disbursement for 2020 – the year of this progress report to be \$5.05 million.

^{***} Target set by the Secretariat excluded phase-out for stage II of the HCFC phase-out management plan for China in the polyurethane foam sector, as the revised Agreement was to be submitted to the 86th meeting and target to be adjusted at the time of the evaluation in 2021. The actual "phase-out" achieved per the Secretariat's methodology above includes the planned phase-out of the China PU foam sector tranche for 2021 per the World Bank's 2021-23 Business Plan.

Table IV-2: World Bank Indicators of Implementation Progress

| Indicator | Measure | Unit | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|-------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Delivery | First Disb. | Mos. | 27 | 20 | 21 | 24 | 17 | 18 | 18 | 19 | 19 | 21 | 12 | 14 | 14 |
| Speed | Last Disb. | Mos. | 51 | 39 | 50 | 50 | 37 | 61 | 39 | 53 | 45 | 57 | 33 | 28 | 26 |
| Cost Effective | Average | US\$ per Kg ODP | 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 |

| Indicator | Measure | Unit | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Overall |
|----------------|-------------|-----------------|------|-------|-------|-------|--------|-------|-------|-------|-------|-------|------|------|---------|
| Delivery | First Disb. | Mos. | 0 | 27 | 11 | 12 | 6 | 4 | 18 | 9 | 24 | 0 | 12 | 5 | 19 |
| Speed | Last Disb. | Mos. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 21 | 34 |
| Cost Effective | Average | US\$ per Kg ODP | 0.77 | 67.85 | 64.60 | 53.74 | 214.00 | 19.84 | 48.54 | 48.41 | 20.57 | 52.04 | 2.56 | 4.55 | 22 |

- 40. There are four (4) ongoing project preparations with US\$470,000 approved funding. No funding was used in 2021 for project preparation, however US\$227,500 are projected to be disbursed in 2022. Hence the cost of project preparation is not applicable in 2021. Actual average overall speed of first disbursement of investment and demonstration projects is 19 months (taking into account projects in the Bank's entire 30-year portfolio).
- 41. Three investment project activities (tranches) were approved in 2021, worth US \$8.77 million (excluding support costs) consisting of the third tranche of a Stage II HCFC phase-out management plan in China for the polyurethane foam sector plan, the third tranche of a Stage II HCFC phase-out management plan in Indonesia for the foam sector, and the third tranche of a Stage II HCFC phase-out management plan in Vietnam for refrigeration servicing, technical assistance and project implementation and monitoring. The average cost-effectiveness value of the activities approved in 2021 is US\$4.55, noting that this is based on ODP tonnes (not metric tonnes) and not accurately capturing cost-effectiveness for HCFC projects (2012 and beyond), and that these projects may 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, three countries received approvals in 2021 (release of three tranches).

The Bank completed two non-investment projects in the reporting period – both enabling activities for HFC phase down, in June and December 2021, which was fully disbursed. The overall speed of first disbursement is 26 months. Overall speed of physical completion is 34 months by the end of the reporting period. Total funds disbursed for non-investment activities (excluding project preparation) in 2021 are US\$318,086 including HFC-related activities.

B. Cumulative Completed Investment Projects

- 42. Since 1991, the World Bank's cumulative total of completed investment projects is at 626, resulting in the reduction in consumption of 143,965 tonnes ODP and in production of 186,808 tonnes ODP. Out of a total of US\$1,059,417,376 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\$3.20/kg. These averages include projects both before and after initiation of the umbrella grant agreement approval process.
- 43. One investment project activity was completed in 2021. 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 | Approved | Per | Consumption | Production | Average | Average | Overall |
|--------------------------------|--------------|---------------|---------|-------------|------------|--------------------------|---------------------|---------------------|
| | of | Funds plus | Cent of | Phased | Phased | Number of Months from | Number of Months | Cost- Effectiven |
| | Projects | Adjustment | Funds | Out** | Out** | Approval to | from | ess to the |
| | | (US \$) | Disbur | | | First | Approval to | Fund |
| | | | -sed | | | Disbursement | Completion | (US\$/kg.) |
| GRAND TOTAL | 626 | 1,059,417,376 | 100% | 143,965 | 186,808 | 24 | 40 | \$3.20 |
| Region | | | | | | | | |
| Africa | 18 | 4,874,765 | 100% | 777 | 0 | 25 | 49 | \$6.27 |
| Asia & Pacific | 462 | 949,767,095 | 100% | 135,904 | 179,388 | 23 | 41 | \$3.01 |
| Europe | 36 | 25,729,361 | 100% | 3,498 | 0 | 12 | 20 | \$7.36 |
| Latin America and | | | 20070 | 2,122 | | | | 7.100 |
| Caribbean | 110 | 79,046,154 | 100% | 3,787 | 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 | 129,688,082 | 100% | 29,594 | 0 | 25 | 42 | \$4.38 |
| 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 |
| HFC plan | 0 | 0 | 0% | 0 | 0 | n/a | n/a | n/a |
| 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 | 76 | 180,035,730 | 99% | 22,035 | 10,988 | 22 | 38 | \$5.45 |
| Process Agent | 15 | 113,830,316 | 100% | 18,663 | 52,162 | 8 | 18 | \$1.61 |
| Production | 44 | 354,642,514 | 100% | 0 | 81,700 | 10 | 15 | \$4.34 |
| Refrigeration | 180 | 168,890,481 | 100% | 13,075 | 01,700 | 27 | 47 | \$12.92 |
| Solvents | 28 | 9,660,640 | 100% | 562 | 0 | 29 | 27 | \$17.18 |
| Sterilant | 20 | 661,227 | 100% | 41 | 0 | 16 | 27 | \$16.29 |
| Sternant | 2 | 001,227 | 100% | 41 | 0 | 10 | 21 | \$10.29 |
| Implementation Cha | racteristics | | | T | | | | |
| Agency | | | | | _ | | | |
| Implementation | 1 | 997,959 | 113% | 19 | 0 | 29 | 101 | \$52.80 |
| National Implementation | 625 | 1,058,419,417 | 100% | 143,946 | 186,808 | 24 | 40 | \$3.20 |
| | | | | · | · | | | |
| Disbursement Method | | | | | | | | |
| During | | | | | | | | |
| Implementation | 577 | 879,388,863 | 100% | 140,459 | 182,838 | 24 | 41 | \$2.72 |
| After | | | | | | _ | | |
| Implementation | 25 | 11,189,562 | 100% | 1,040 | 0 | 32 | 29 | \$10.76 |
| Retroactive | 1.5 | 7 1 12 22 5 | 1000/ | 0.51 | _ | 22 | 4 | do 40 |
| Funding Country to Final | 15 | 7,143,226 | 100% | 851 | 0 | 23 | 1 | \$8.40 |
| Country to Final Beneficiaries | 9 | 161,695,725 | 100% | 1,615 | 3,970 | 11 | 56 | \$28.95 |
| Denominates | | 101,073,143 | 100/0 | 1,013 | 3,710 | 1 11 | 50 | ΨΔ0.73 |

^{*} No funds are listed for the multiple sector investment project but are recorded in appropriate sector.

^{**} Total phased out for the Fund is 330,773 and includes consumption and production phase-out.

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 162. Out of a total of US\$29,866,931 of approved Multilateral Fund financing, 107 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 22; the average number of months from approval to completion has been 36.

Table IV-4: Cumulative Completed Non-Investment Projects

| Number of Projects | Approved Funds plus Adjustment (US \$) | Per Cent of Funds Disbursed | Average Number of Months from Approval to First Disbursement | Average Number of Months from Approva to Completion |
|-----------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 162 | 29,866,931 | 107% | 22 | 36 |
| | | | | |
| 17 | 2,865,298 | 100% | 24 | 31 |
| 70 | 17,992,508 | 112% | 18 | 39 |
| 9 | | 100% | 29 | 43 |
| 35 | | 100% | | 44 |
| 31 | 2,898,628 | 100% | 19 | 18 |
| | | | | |
| 5 | 627 662 | 100% | 17 | 26 |
| 1 | | | | 22 |
| | , | | | n/a |
| | | | | 53 |
| - | | | | 102 |
| | | | | 105 |
| - | | | | n/a |
| | | | | 58 |
| + | 0 | | | n/a |
| - | 2.267.029 | 0,0 | | 53 |
| | | | | n/a |
| 1 | | | | 4 |
| 16 | - , | | <u>-</u> | 62 |
| 1 | | | | 25 |
| - | | | | n/a |
| 0 | 0 | 0% | n/a | n/a |
| | | | | |
| 68 | 3,506,757 | 100% | 10 | 15 |
| 94 | 26,360,175 | 108% | 25 | 50 |
| | | | | |
| 160 | 28,865,501 | 107% | 22 | 35 |
| 2 | 1,001,430 | 100% | 19 | 39 |
| 0 | 0 | 0% | n/a | n/a |
| | | | | |
| | 162 | Projects Funds plus Adjustment (US \$) 162 29,866,931 17 2,865,298 70 17,992,508 9 1,632,528 35 4,477,970 31 2,898,628 5 627,662 1 250,000 0 0 5 3,947,421 5 1,294,425 5 1,519,717 0 0 1 53,792 0 0 2,267,029 0 0 0 1 40,000 16 7,583,216 117 12,283,669 0 0 0 0 0 0 0 0 0 0 16 7,583,216 117 12,283,669 0 0 0 0 0 0 0 0 0 | Projects Funds plus Adjustment (US \$) of Funds Disbursed 162 29,866,931 107% 17 2,865,298 100% 70 17,992,508 112% 9 1,632,528 100% 35 4,477,970 100% 31 2,898,628 100% 1 250,000 100% 0 0 0% 5 3,947,421 100% 5 1,294,425 100% 5 1,519,717 100% 0 0 0% 1 53,792 100% 0 0 0% 6 2,267,029 193% 0 0 0% 16 7,583,216 100% 117 12,283,669 100% 0 0 0 0 0 0% 0 0 0% 0 0 0% 0 0 0% | Projects Funds plus Adjustment (US \$) of Funds Disbursed Disbursed Disbursed Disbursement Months from Approval to First Disbursement 162 29,866,931 107% 22 17 2,865,298 100% 24 70 17,992,508 112% 18 9 1,632,528 100% 29 35 4,477,970 100% 27 31 2,898,628 100% 19 5 627,662 100% 17 0 0 0% n/a 5 3,947,421 100% 20 5 1,294,425 100% 35 5 1,519,717 100% 50 0 0 0% n/a 1 53,792 100% 56 0 0 0% n/a 6 2,267,029 193% 27 0 0 0% n/a 11 40,000 100% 42 117 < |

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 11 (including tranches of multi-year agreements). Out of a total of US\$45,954,381 of approved Multilateral Fund financing, 67 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 16, the average number of months from approval to the current expected completion date is 55, with an average cost-effectiveness of US\$15.43/kg. The cost-effectiveness value is not representative as it includes approvals for tranches that have no phase-out assigned and calculates ODP, rather than MT of HCFCs. Table IV-5 below summarizes ongoing investment projects at regional and sectoral levels.
- 46. Excluded from the table are HFC-related activities. The Bank had one approved, stand-alone investment activity worth US\$183,514 to convert HFC to propane and isobutene as a refrigerant in manufacturing commercial refrigeration appliances. Disbursement of US\$146,811 of project funds took place in 2021.

Table IV-5: Cumulative Ongoing Investment Projects

| Item | Number of Projects | Approved Funds plus Adjustment (US\$) | Per Cent of Funds Dis- bursed | Number of Projects Disbursing | Per Cent of Projects Disburs- ing | Estimated Disbursement plus Funds Disbursed | Per Cent Funds Expected to be Disbursed by End of 2004 | Average Number of Months from Approval to First Disburse- ment | Average Number of Months from Approval to Planned Completion | Average Length of Delay in Project Planned Comple- tion | Overall Cost- Effective- ness to the Fund (US\$/kg.)* |
|-----------------------------------|--------------------------|------------------------------------------------|-------------------------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------|
| GRAND TOTAL | 11 | 45,954,381 | 67% | 7 | 64% | 38,172,576 | 83% | 16 | 55 | 28 | \$15.43 |
| Region | | | | , | | | | | <u>, </u> | | |
| Africa | 0 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | n/a | n/a | n/a |
| Asia & Pacific | 11 | 45,954,381 | 67% | 7 | 64% | 38,172,576 | 83% | 16 | 55 | 28 | \$15.43 |
| Europe | 0 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | n/a | n/a | n/a |
| Latin America and Caribbean | 0 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | n/a | n/a | n/a |
| Global | 0 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | n/a | n/a | n/a |
| Sector | | U | 070 | 0 | 070 | 0 | 070 | 0 | 11/4 | II/ U | 11/ 0 |
| Aerosol | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Destruction | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Fire Fighting | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Foam | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Fumigants | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Halon | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| HFC plan | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Multiple Sectors | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Other | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Phaseout Plan | 10 | 22,954,381 | 51% | 6 | 60% | 15,972,576 | 70% | 16 | 56 | 26 | \$7.71 |
| Process Agent | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Production | 1 | 23,000,000 | 83% | 1 | 100% | 22,200,000 | 97% | 16 | 54 | 36 | n/a |
| Refrigeration | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Solvents | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Sterilant | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Implementation Character | ristics | | | | | | | | | | |
| Agency Implementation | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| National Implementation | 11 | 45,954,381 | 67% | 7 | 64% | 38,172,576 | 83% | 16 | 55 | 28 | \$15.43 |
| Disbursement Method | | | | | | | | | | | |
| During Implementation | 6 | 8,849,471 | 28% | 4 | 67% | 4,538,166 | 51% | 17 | 62 | 30 | \$101.95 |
| After Implementation | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Retroactive Funding | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a | n/a |
| Country to Final Beneficiaries | 5 | 37,104,910 | 76% | 3 | 60% | 33,634,410 | 91% | 15 | 48 | 26 | \$12.83 |

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

*Based on the ODS to be phased out according to the proposal.

E. Cumulative Ongoing Non-Investment Projects

47. The World Bank's cumulative total of ongoing non-investment projects is 5 as captured in the following Table IV-6. Out of a total of US\$1,890,526 of approved Multilateral Fund financing, 17 percent of funds has been disbursed. The average number of months from approval to first disbursement has been 21; the average number of months from the date of approval to the current expected completion date is 51. This excludes HFC enabling activities. Two HFC enabling activities were completed in 2021, valued at \$250,000 each. About 64 percent of approved enabling funds were disbursed in the reporting year.

Table IV-6: Cumulative Ongoing Non-Investment Projects

| Item | Number of Projects | Approved Funds plus Adjustment (US\$) | Per Cent of Funds Disbur sed | Number of Projects Disbursing | Per Cent of Projects Disbursing | Estimated Disburseme nts plus Funds Disbursed | 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 | 5 | 1,890,526 | 17% | 3 | 60% | 1,436,759 | 76% | 21 | 51 | 14 |
| | | | | | | | | | | |
| Region | 1 - | _ | | | T - | | | | | |
| Africa | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |
| Asia & Pacific | 4 | 1,890,526 | 17% | 3 | 75% | 1,436,759 | 76% | 21 | 51 | 18 |
| Europe | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |
| Latin America and | | 0 | 00/ | | 00/ | | 00/ | , | , | , |
| Caribbean | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |
| Global | 1 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |
| 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 | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |
| 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 |
| HFC plan | 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 | 1 | 814,470 | 2% | 1 | 100% | 814,470 | 100% | 26 | 60 | 24 |
| 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 | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |
| Several | 4 | 1,076,056 | 29% | 2 | 50% | 622,289 | 58% | 19 | 47 | 12 |
| 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 |
| Stermant | Ü | Ü | 070 | | 070 | <u> </u> | 070 | 11/4 | 11/4 | 11/4 |
| Implementation Characte | eristics | | | | | | | | | |
| Agency Implementation | 1 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |
| National Implementation | 4 | 1,890,526 | 17% | 3 | 75% | 1,436,759 | 76% | 21 | 51 | 18 |
| Dishaman (34 d) 3 | | | | | | | | | | |
| Disbursement Method During Implementation | 5 | 1,890,526 | 17% | 3 | 60% | 1,436,759 | 76% | 21 | 51 | 14 |
| | 0 | 1,890,526 | 0% | 0 | 0% | 1,430,739 | 0% | n/a | | |
| After Implementation Retroactive Funding | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a n/a | n/a n/a | n/a n/a |
| Country to Final | 0 | U | U% | U | 0% | 0 | 0% | n/a | n/a | П/а |
| Beneficiaries | 0 | 0 | 0% | 0 | 0% | 0 | 0% | n/a | n/a | n/a |

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

- 48. Projects with either new partner countries or with new operational modalities require legal agreements between the country and the World Bank. With Stage II HCFC phaseout project approvals occurring between 2016 and 2018, new grant agreements or amendment of existing agreements were required.
- 49. New grant agreements for HCFC Phase-out Projects were under processing for Vietnam and China since 2016 in order to permit disbursements from initial tranches to start from the Bank to the countries for the respective Stage II HPMP and PU Foam Sector Plan. This entailed preparation of concepts, project documents, project implementation manuals (PIMs), environmental and social safeguards framework, procurement plans and other related documentation. Each country has in turn their own processing and approval steps. Because of changes in these steps for certain development assistance projects in each country, approval, negotiation and signing of the grant agreements were delayed.
- 50. In 2018, the overarching ODS VI Project for the Stage II PU Foam Sector Plan in China and eventually, the HPPMP was appraised followed by a period of preparation and approvals of related documents, such as the project implementation manual. The new Grant Agreement (GA) between China and the WB was subsequently approved by Bank management and signed in December 2018. Effectiveness was by mid-2019 and start of disbursement was pushed to the fall of 2019.
- 51. The finalization of the China-World Bank Stage II GA preceded the Executive Committee's approval of the US\$23 million bridging funds for the HCFC production sector (in June 2018). The GA had to be amended in order to raise the project funding level for the Bank-project component related to production. The amendment was signed by China and the Bank in September 2019, allowing disbursement to start by the last quarter of the year. Now with Decision 86/39 on the revised Stage II HPMP PU Foam and Decision 86/99 on the new Stage II HPPMP, the GA for China will have to be restructured once again to reflect an overall reduced grant level. This process will be initiated in 2021 and expected to be completed by the end of year or early 2022.
- 52. For Vietnam, the GA negotiations between the State Bank of Vietnam and the World Bank completed at the end of 2018 and the Bank approved the new project and GA in January 2019. The GA was signed and countersigned on March 7, 2019.
- 53. A new grant agreement was likewise required for the 2018-approved, Thailand Stage II HPMP. World Bank preparation of the new project documents and the Grant Agreement took place in 2019 and the Grant Agreement was subsequently approved by the Bank in January 2020. Grant Agreement signing took place in August 2020, followed by effectiveness in October 2020. Similar to the agreements for China and Vietnam, the GA provides for retroactive funding of activities implemented between Bank appraisal and GA effectiveness.

54. The World Bank Preparation of Kigali HFC Implementation Plan (KIP) in Malaysia was newly approved in July 2021. The funding was made available to the World Bank in late 2021.

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

55. In 2021, there were no active World Bank project preparation activities.

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

A. Meetings Attended

56. Table VI.1 indicates the meetings attended by World Bank Staff on all Montreal Protocol related work in 2021.

Table VI-I: MP Related Events Attended by World Bank Staff in 2021

| 2021 Dates | Location | Meetings Attended |
|----------------------------------|----------|--------------------------------------------------------------------------------------|
| March 8 – 12, 2021 | Virtual | 86 th Executive Committee Meeting |
| May 22 and 24, 2021 | Virtual | 43rd meeting of the Open-ended Working Group (OEWG) (Replenishment) |
| June 25 and 28, and July 2, 2021 | Virtual | 87 th ExCom Meeting |
| July 14 – 17, 2021 | Virtual | 43rd meeting of the Open-ended Working Group (OEWG) (CFC-11) |
| October 20 - 21, 2021 | Virtual | 67 th Implementation Committee Meeting |
| October 23-29, 2021 | Virtual | 12 th COP – 33rd MOP |
| November 22 and 26, 2021 | Virtual | 88 th Executive Committee Meeting |
| November 30 – December 2, 2021 | Virtual | World Bank 14 th East Asia Montreal Protocol Online Workshop (Bangkok) |

B. Implementing Agency and Other Cooperation

- 57. Cooperation and coordination by the World Bank with the three Implementing Agencies and Bilateral Agencies are ongoing through cooperation and coordination in project implementation of HCFC phase-out projects (for example in China, Indonesia and Jordan) and in ODS meetings and workshops that take place throughout the year.
- 58. The World Bank also works with bilateral agencies, namely Japan. The Government of Japan was a partner in the implementation of Thailand's Stage I HCFC Phaseout Management Plan that completed in December 2018. It successfully delivered technical assistance to address technical and regulatory barriers to the introduction of HFC-32 technology in residential air-conditioner manufacturing. It included 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. Eleven enterprises in total benefitted from this support and have been employing HFC-32 in AC manufacturing without problems since 2017.
- 59. 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. Vietnam's Stage II HPMP includes a TA component directed towards AC manufacturers that aim to shift HCFC-22 based production to HFC-32 based production. Japan continued to work closely with the Bank in 2019 to finalize arrangements for delivery of the TA. Given delays in effectiveness of the GA between Vietnam and the World Bank, the work commenced in 2020.
- 60. The Bank was a Cooperating Agency in Jordan in the air-conditioning sector where UNIDO served as the Lead Agency. That project completed in 2019. The Bank is the Lead Agency for Jordan's Stage II HPMP covering most of the foam sector. UNIDO is the Cooperating Agency for a foam subsector and the servicing sector. The Bank is also a Cooperating Agency in Indonesia and China where UNDP is the Lead Agency of the Stage II HPMPs, in the foam and production sectors. In order to meet overall requirements of the respective Executive Committee-country 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 and preparation of the implementation progress reports. This is particularly critical in the case of China whereby the HCFC production sector plays a large role in determining compliance with targets.
- 61. 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 Implementing Agencies.

C. Other Issues

62. There are no additional issues other than those captured in the previous pages.

Annex I

COUNTRY DEVELOPMENTS

CHINA

- 1. Active projects under the Bank as an Implementing Agency for China in 2020 comprised of the HCFC Phaseout Project (Stage II) that became effective in March 2019 following Grant Agreement signing. This project includes the Stage II foam polyurethane (PU) sector plan as well as HCFC production closure bridging fund of \$23 million.
- 2. The overall Grant Agreement of the China-World Bank HCFC Phase-out Project (Stage II) that houses the Stage II sector plans for China on foam and eventually, HCFC production was signed in December 2018 and became effective in March 2019 (following successful receipt of a necessary legal opinion).
- 3. Under this Stage II Project, a total of 11 subprojects were under implementation at the start of 2020 by project beneficiaries. As of the end of 2021, the cumulative phase-out from the subprojects is 830.34 MT of HCFC-141b, in addition to US\$7.42 million, or more than 90% of the total contract value of US\$8.18 million has been disbursed for 11 foam subgrant agreements (SGAs), three of which are pending completion and acceptance. The three subprojects converted to hydrocarbon and have been delayed by another three months due to COVID restrictions which prevented the accounting firm from conducting onsite final performance verification procedures and the onsite project acceptance procedure. Preparation of safety documents at one company is also pending. The targeted acceptance date has been revised to June 2022 after which final disbursement will be made. Accordingly, the ISA contract was also delayed to the date when all SGAs contracts are completed.
- 4. The third funding tranche was approved in November 2021 at the 88th ExCom and will support subprojects at 12 enterprises. Subproject proposals have been prepared and appraised. Most of foam TA contracts are to be supported by future funding tranches although FECO is currently implementing a number of cross-cutting TA activities outside of the project's direct scope, that will support the foam and other sectors. FECO continues to put efforts into planning and consulting on how to design the implementation approach for the system houses projects that are expected to partially make-up for phase-out normally achieved through individual subprojects. For the third funding tranche, FECO has agreed to assess cash flow demands so that as much resources as possible from this and the next funding tranche can be allocated to the SH/SME modality and to TA.
- 5. China is requesting an extension of the first tranche by one year to December 2022.

- 6. During the first half of 2022, a mid-term, virtual review mission was held between FECO and the WB in January 2022. The final performance verification and project acceptance for Tianjin Junrui, one of the three delayed hydrocarbon conversion subprojects, was completed the first half of 2022. The other two subprojects are expected to be completed the 2nd half of 2022 as soon as the COVID restrictions are eased. The contract for ISA of second batch of individual subprojects under Stage II has been signed. US \$2 million has been released to FECO from the third tranche in Apr 2022. As of June 2022, second batch of 12 individual sub-projects have been signed. The total amount of SGAs is US\$4,905,206 and the expected phased out amount is 1,179.91 MT. Concept note for the system house implementation approach is expected by FECO by the end of June 2022.
- 7. In terms of HCFC production phase-out bridging fund, the COVID-19 pandemic did not impact overall level of HCFC production for controlled uses during first half 2020 which may be due to the increased need for refrigeration in the cold chain offsetting reductions in other sectors. The independent verification conducted by the World Bank confirmed China's compliance with the Montreal Protocol and MLF maximum allowable production schedule during the 2019-2020 period. The production of HCFCs in 2020 was 16,123 ODP MT which is below 18,929 ODP MT production limit (65% of baseline).
- 8. The 2022 and 2024 funding tranches stated in the HPPMP, which were approved by the ExCom in 2021, will assist China to meet the MLF maximum allowable production schedule during 2022-2026 period and complete phaseout of HCFC-141b by the end of 2025. The 2020 reduction was achieved primarily through China's control of the production quota for controlled uses. As of the end of 2021, FECO completed disbursement to 23 production quota reduction contracts and one production line closure contract with total value of US\$17.63 million. Under the TA part, a contract was signed in April 2021 with a research center to conduct the "Investigation on 2019-2022 consumption of Feedstock Applications of HCFCs." The report for 2019-2020 was completed by October 2021 with the Executive Summary. Two seminars, one on HCFC phase-out policy and supervision management with HCFC producers and another for HPPMP Stage II with HCFCs ODS and feedstock producers were held in 2021.
- 9. Between January and June 2022, the focus of work has been TA activities, with the following activities undertaken: (1) Investigation of HCFC Dealers in 2020-2021 and (2) Investigation on 2021 consumption of Feedstock Applications of HCFCs. Preliminary unverified data indicates that the 2021 actual production for each producer is within respective quota allocations. The verification of the 2021 HCFC production and consumption involves a seven-month process divided into two phases, with an ongoing virtual exercise that will be followed by site visits. The situation is being monitored closely to adjust the timing and approach accordingly.
- 10. For the phase-out activities to be implemented in 2023 with the 2022 funding tranche, FECO plans to prioritize production closure, in particular HCFC-141b producers that are subjected to complete phase-out in 2026 and discuss and review the plan and compensation rates with the Bank team in mid-2022. The TA activities' implementation plan of 2023 with the 2022 funding tranche was discussed and confirmed with the Bank team in June 2022.

INDONESIA

- 11. The Stage I HCFC foam sector plan completed implementation in December 2019.
- 12. The Stage II HCFC foam sector plan is well into implementation. One company, PT Wijaya Karya (WIKA) completed its technology conversion on May 20th, 2021, after delays due to company staff exposure to COVID-19. Payment for the final milestone was made in June 2021. Two mid-size company subprojects are still under implementation. PT Koronka signed a subproject agreement (Foam Technology Replacement Agreement, FTRA) in March 2021, and was initially expected to complete conversion by February 28th, 2022. PT Mitra Lestari Bumi Abadi (MILBA) signed a FTRA on December 17th, 2021. This would have been the last company to be converted under the midsize category. The company was expected to complete its technology conversion by September 2022.
- 13. CV Koronka continues to experience difficulties in equipment installation (failure with the polyol pump). Although the pump was replaced in March 2022, the internal computer (programmable logic controller) can only be programmed by on-site visit by the equipment manufacturer. After delays due to the pandemic, a visa to allow the technician to visit is expected rapidly, allowing installation, start-up, commissioning and start production using cyclopentane (CP) to complete by August 31, 2022. PT MILBA is having a dispute with the local community regarding building permit. The company finds that under these conditions, they are unlikely to complete the technology conversion in due time. PT MILBA will write a letter to KLHK requesting to withdraw from the project and return the 20% grant fund they received under the subproject.
- 14. Guidelines for the voucher scheme have been developed to operationalize the scheme, legalized under the Decree of Minister of Environment and Forestry Number SK.485/MENLHK/SETJEN/KUM.1/8/2021 on "Guidelines for Voucher Distribution Mechanism to the System House under HCFC Phase- out in the Polyurethane Foam Sector Project" and the Decree of Director General of Climate Change Number SK.30/PPI/MPI/KUM.1/8/2021 on "Technical Guidelines for Voucher Distribution Mechanism to the System House under HCFC Phase out in the Polyurethan Foam Sector Plan Project".
- 15. The scheme was developed based on electronic application and has been trial successfully involving 56 SMEs under 2 System Houses (PT Intimas and PT Sutindo) in the period of November to December 2021.
- 16. The review of implementation of the voucher scheme was concluded April 18th, 2022. The trial was considered successful involving 56 SMEs. The scheme now is in full operation with no modification. The allocation of the voucher for 2022 for SMEs was determined through a coordination meeting between KLHK and World Bank on June 3rd, 2022, and valid until December 31st, 2022

- 17. For the Enabling activities for HFC phase-down, the ASHRAE team, in consultation with the NOU, organized several meetings/workshops for each sector user of HFC during the first half of 2021. The objective of these workshops was to get input for improvement of the survey report, and seek preliminary stakeholder support for, and input to, the outline of an approach to HFC phase-down in Indonesia. ASHRAE-Indonesia concluded its work under the HFC Enabling Activities analytical work and a final report was submitted to the World Bank in June 2021. In August 2021, the NOU organised a stakeholder workshop, with own resources, on "Indonesia Readiness Towards the National HFC Consumption Control" involving various stakeholders, including government institutions and industry/private sector and associations, with the objective to disseminate the results of the survey and elicit further the views from stakeholders.
- 18. The project was closed June 30th, 2021. In 2022, the NOU continued to provide technical input to the relevant government departments on the impact of the Kigali Amendment based on the work accomplished under this project, including determination of the Kigali baseline.

JORDAN

- 19. The Stage I HPMP was completed and reported on by the end of 2019. The Stage II HPMP, with the World Bank, as Lead Agency, covers all foam manufacturing (except spray foam) and is supporting Jordan to fulfill its commitment to reduce HCFC consumption by 50% of the baseline by 2022.
- 20. Jordan's Article 7 data indicated that its consumption in 2020 was within the agreed limit of ExCom Jordan multiyear agreement (at about 54 ODP tons). The Government of Jordan published in the Official Gazette (March 2021) the ban on the import of HCFC-141b substance and pre-blended polyol containing HCFC-141b for insulation foam applications that would enter into force on 1 January 2022.
- 21. Out of the six enterprises with signed SGAs and commitment of \$0.9 million, four foam enterprises had completed installation of the equipment with the aim to start commercial production in 2022 after complying with Civil Defense Directorate's safety requirements to use cyclopentane while a domestic refrigerator manufacturer is expected to receive their foam equipment in 2022. One foam enterprise informed Government of Jordan (GoJ) that due to severe business disruption from COVID-19 pandemic, it was not able to complete the conversion to cyclopentane technology but would convert to its original technology choice of using HFO foam materials.
- 22. During 2021, GoJ conducted workshops with small- and medium foam enterprises with participation by foam suppliers to demonstrate alternative foam materials. Five shutter manufacturers received ExCom's approval (Decision 87/12) to water-based foam materials. The Government invited foam suppliers to provide water- and HFO-based foam materials to SMEs and expected to finalize the selection of foam supplier in 2022.

- 23. The Government of Jordan is seeking extension of the tranche until Dec 2022 in line with the planned approach to complete installation of foam equipment and assistance to SMEs.
- 24. Between January and June 2022, one foam enterprise received clearance from CDD to start commercial production while the remaining four enterprises with signed SGA are expected to fulfil CDD's safety requirements and start commercial production within 2022. GoJ had signed contract with foam supplier to provide initial batch of water- and HFO-based foam materials to 30 SMEs and will expand the contract to cover all eligible consumption. Additional support to SMEs will be financed from the next funding tranche. Total disbursement in CY2021 covered \$143,218 and it is expected that \$320,000 will be disbursed by the end of CY2022.
- 25. Stage III of the Preparation of HCFC phase-out management plan was newly approved in December 2021. The Bank discussed preliminary workplan with the Government to prepare stage III HPMP and commercial refrigeration sector plan including identification of local/regional consulting firm with MP experiences, stakeholder consultation workshops, scope of data survey, development of draft and final HPMP for submission. It is expected the consulting firm will start work in Q3 2022 with the aim to submit the proposal for consideration by the 92nd ExCom.

B. Institutional Strengthening

- 26. The NOU continued to coordinate missions of the Implementing Agencies as well as convene the National Ozone Committee to agree on 2022 import quotas and facilitate issuance of instructions for controlling imports and exports of ODS and alternatives. The NOU was able to organize some public meetings and workshops for the national stakeholders after relaxation of Government's restrictions starting in second half of 2021. The NOU experienced turnovers at key administrative positions (financial management officer and procurement officer) which resulted in lower disbursement than expected.
- 27. Between January and June 2022, the NOU has continued to coordinate virtual missions of the World Bank (mission in February and monthly follow up meetings) as well as convene the National Ozone Committee on key MP implementation issues. In person attendance at the 44th OEWG Meeting in Bangkok is expected. The NOU was able to organize regular public meetings and workshops for the national stakeholders after continued improvement in COVID-19 pandemic situation and lifting of Government's restrictions. Ozone Day celebrations planning is underway. The NOU was able to appoint one key administrative position (financial management) in April and expect to have another appointment (procurement officer) confirmed in July.

A. Country Developments

- 28. The World Bank Preparation of Kigali HFC Implementation Plan (KIP) in Malaysia was newly approved in July 2021. The funding was made available to the World Bank in late 2021. Additional HFC phasedown scenarios have been developed to inform Government of Malaysia consultations with industry. The KIP preparation TOR has been developed and agreed upon. Virtual coordination meetings were held with the government of Malaysia.
- 29. Between January and June 2022, the data collection and analyses consultant TOR was prepared, consulting firm selected, and contract signed in early March 2022. A Hybrid launch workshop was held on March 30th, 2022. Data collection forms agreed upon and survey underway, to be followed by data compilation. Preliminary data review and analysis expected by Jun/Jul 22. As of early June 2022, \$17,700 has been disbursed.

THAILAND

- 30. Thailand's Stage II HCFC Phaseout Management Plan (HPMP) was approved in late 2018 and a new Grant Agreement (GA) was approved by the World Bank in January 2020 with a clause to allow retroactive finance of expenditures from January 20 onwards. The Department of Industrial Works (DIW) and Government Saving Bank (GSB), which is the financial intermediary of the Stage II HPMP, jointly prepared the Project Implementation Manual (PIM) for the project and finalized it in February 2020. The GA was countersigned in August 2020 and became effective in October 2020.
- 31. The 2021 consumption verification has been completed. Import data indicate that Thailand is within agreed limits of ExCom-Thailand multiyear agreement (at about 280 ODP tons). First PU spray foam subproject will now be prepared in 2022 subsequent to consultations with the PU foam industry association on the path forward. A late start of the spray foam subprojects which will go to reduced HFO formulation is in line with original Stage II HPMP plans given expected high cost of the alternative at the start of the project. On developing training capacity in the servicing sector, DIW with Dept of Skill Development (DSD) and the Office of Vocational Education Committee (OVEC) agreed in principle to the list of training items for distribution to training centers. Bidding documents could not be finalized in 2021 and will be done in 2022, followed by toolset procurement for the training centers and tools for service shops. DSD launched an app to promote certified technicians but decided not to continue work on it as EGAT has developed a similar app with complementary functions. All GSB-PMU staff are on board. A WB mission (partially virtual) was conducted in March 2021 and another, conducted in October 2021. The Government of Thailand is seeking an extension of the tranche until Dec 2023 in line with the planned approach to address the spray foam sector in the latter part of the HPMP.

- 32. DIW has already confirmed with all major spray foam enterprises of their interest to participate in the project. Their eligibility has also been confirmed. At least, six subproject proposals will be prepared in 2022 with a total funding requirement of \$1 million. At present, one subproject proposal with the funding level of \$103,370 is being appraised. Another subproject proposal is being reviewed by DIW before proceeding with the appraisal process. It is expected that at least \$100,000 will be disbursed by the end of FY2022. In the meantime, DIW is also working with polyol suppliers to provide support to smaller spray foam companies. Activities related to small spray foam companies will be financed from the next funding tranche. Total disbursement in CY2021 covered only consulting services. Delivery of all training equipment in the servicing sector will be completed at end of June 2022. It is expected that \$244,489 will be disbursed in July. In addition, the training costs of \$401,883 have been agreed to with OVEC and DSD. This amount will be disbursed in 2022 to support 104 training sessions. Due to the delay caused by COVID-19, DIW, OVEC and DSD agreed to procurement of additional training equipment to allow more sessions to be hosted before the completion of the project.
- 33. In regard to Thailand's HFC enabling activity, terms of reference for conducting enabling activities for Kigali ratification were prepared in 2019 and a consultant was selected in October 2019 to collect 2016, 2017 and 2018 HFC consumption data; validate, supplement and reconcile import data of major HFCs from Customs; review the relevant regulatory framework; and, determine future HFC alternatives' availability and costs. Work was begun by the end of the year. Decision. 83/40 extended the completion date to June 2020. Due to COVID-19, the enabling activity work has been delayed, with the consulting firm and the WB team not able to travel to Thailand to lead consultations. In August 2020, a stakeholder workshop was held (in person in Thailand and virtual for the consultant and WB). Consultant draft report with HFC data updates submitted in October 2020.
- 34. Data analysis, modeling of various scenarios and technological pathways along with the economic costs of ratification or non-ratification was completed by end June 2021. Consultations and strategy options paper with scenarios/technology roadmap has been prepared by the second half of 2021 and shared with the Government of Thailand.
- 35. HFC phasedown strategy work was completed and with the Government of Thailand. Government has put into place policies on HFC licensing in early 2022. Enabling activity completed financially by June 2022. The final HFC phasedown proposal and recommendation is being posted for public comments until end of July 2022. DIW plans to submit the recommendation for ratification to the Cabinet by last quarter of 2022.

36. The Conversion from HFC to propane (R-290) and isobutene (R-600a) as a refrigerant in manufacturing commercial refrigeration appliances in Pattana Intercool Co. Ltd. Project has been fully physically completed as of Dec 2021 to include date of disposal of baseline equipment and cessation of HFC-134a use on the line (although conversion itself completed in Mar). Financial completion expected by mid-2022 after the project completion report is finalized. Project completion report was prepared in draft and submitted for review by early 2022. Review and comments provided in March 2022 and clarifications and additions in terms of costs and lessons learned, received in June 2022. The PCR and expected financial completion expected by mid-2022.

B. Institutional Strengthening

- 37. Institutional strengthening (IS) funds have been used to enhance the capacity of the National Ozone Unit (NOU) in the DIW and government agencies to effectively implement ODS phaseout in compliance with the country's obligations.
- 38. The Grant Agreement (GA) between Thailand and the World Bank was approved by the World Bank in January 2020, countersigned in August 2020, and became effective in October 2020. Retroactive and late 2020 payments could not be processed until early 2021 but IS implementation continued as possible in light of the COVID-19 pandemic.
- 39. A 2-year extension to the institutional strengthening project was approved in December 2021. The NOU continued to provide inputs to WB in regard to the HFC enabling activity consultant data and analysis. Due to COVID-19, travel in 2021 was also constrained. The NOU however held a successful (based on responses) an online World Ozone Day event. Other activities included 2020 CP data and Article 7 data reporting. Quota for 2021 HCFC imports issued in a timely manner and within the maximum allowable consumption level agreed between Thailand and ExCom. Activities completed in 2021, included attendance at the online 43rd OEWG and 33rd MOP Meetings. NOU provided support to Customs for identifying various refrigerants and blends, and HCFC consumption monitoring continued as permitted with COVID restrictions. The NOU is in the process of filling another two positions: one for a technical and data officer and another for a public outreach officer. Two hybrid WB missions were hosted by DIW in 2021.
- 40. Activities completed between January and June 2022, included putting into place policy/ regulation on the HFC licensing and quota system since early January 2022 and completing the 2021 country program reporting by the May 2022 deadline. In person attendance at the 44th OEWG Meeting in Bangkok is expected, and Ozone Day celebrations planning are underway. HCFC consumption monitoring continued as permitted with COVID restrictions which have been loosened by the 2nd quarter of 2022. On the admin side, the NOU still is in the process of filling two positions for a technical and data officer and public outreach officer. NOU hosted a World Bank mid-term mission in May 2022.

- 41. The Preparation of Kigali HFC Implementation Plan for Vietnam was newly approved in December 2021. Between January and June 2022, the overall terms of reference were prepared, coordination meetings were held with Government of Vietnam and UNEP. Additionally, the TOR for a consulting firm for the data collection, analysis, policy and technology review were completed and selection is expected by July 2022. Data to be collected and compiled by early fourth quarter of 2022.
- 42. The overall HCFC Phase-out Project (Stage II) was approved by the World Bank in January 2019 after internal approval by the Government of Vietnam. The Grant Agreement (GA) was signed and countersigned on March 7, 2019.
- 43. HCFC consumption verification for 2020 by independent consultant was completed by end of April 2021 confirming that MP and MLF targets were met. Subproject proposal submissions for target manufacturing sectors (AC, PU foam and refrigeration) continued to experience delays despite efforts to facilitate procedures to attract enterprises and other measures. By end of 2021, 5 subgrant agreements (SGAs) were signed across sectors with two in the AC sector signed in August and November 2021. The XPS foam subproject was cancelled, and approved funding returned at the 87th ExCom due to verified ineligibility of enterprise.
- 44. A list of beneficiary vocational schools and servicing shops was prepared, and procurement of toolkits for vocational training schools/service shops was completed and are expected to be delivered in 2022 due to some COVID-related delays. One hundred toolkits for servicing shops and sixty-five toolkits for flammable refrigerant for selected vocational training schools were contracted by the PMU in February and March 2021 respectively with equipment suppliers. Toolkits were delivered to vocational and training schools and servicing shops by November 2021. The training of technicians started in October 2021.

- 45. National standard for foam production using flammable blowing agent was announced by MOST on June 8th, 2021. TA on refrigeration end-users to evaluate leakage management practices and gaps was completed in 2021, and leak detectors will be provided in 2022. Contract for auditing the project's financials was signed in January 2021 and audit report was submitted in June 2021. Decree amending ozone protection rules prepared, submitted for public consultation and finalized by end of 2021, including proposed 2022 bans of HCFC in imported and manufactured AC, and of HCFC contained in imported preblended polyol. Third tranche request and 2020-21 implementation progress report and 2021-22 plan submitted to the 87th ExCom and approved. An in-depth project progress review undertaken in November 2021 by Government of Vietnam, PMU and the WB and it was agreed that funding for manufacturing in foam, the AC and refrigeration sectors would be cancelled given market shifts since the project was approved in 2016 and impacts from the COVID pandemic. The review also recommended use of intermediaries (as originally planned in the HPMP document) to reach SMEs in foam and refrigeration sectors and to reallocate \$1.33 million to the servicing sector. As reallocation across sectors and fund cancellation are major changes, they will be considered at the 90th ExCom Meeting.
- 46. As of April 2022, the PMU has disbursed US\$2,147,122 for subprojects, project management and TA. A third-party consumption verification confirmed that Vietnam met its 2021 HCFC consumption obligation to both the MP and MLF (at 141.79. ODP MT). The 6th subgrant agreement (SGA) was signed for a foam enterprise in January 2022. Enterprises are in various stages of implementation as reported in the 2022 progress report and implementation plan submitted to the 90th ExCom in April 2022. One refrigeration enterprise completed its technology conversion to NH3 in June 2022. Two of four AC enterprises will not participate in subprojects. Four additional subprojects are under preparation for the foam and refrigeration sectors and SGAs expected to be signed after mid-2022. Given a lack of capacity and willingness of SMEs to prepare individual subprojects, blending houses and a group coordinator will be employed in the foam and refrigeration sectors respectively. As of end March 2022, technicians trained increased to 1,112. Twenty leak detectors were delivered to refrigeration end-users for leakage control and management in June 2022.
- 47. Project's financial audit report was submitted in June 2022. A training for customs officers on HCFCs control was conducted in April 2022. Vietnam's reallocation request of funding from the refrigeration sector to servicing was approved, albeit in return for additional HCFC deductions from its starting point. The reallocation will allow Vietnam to address a shift of R-22 consumption in the servicing sector which is keeping its consumption at the maximum allowable limit.

48. On the policy side, Vietnam with the PMU's support successfully promulgated the bans in HCFC imports in the AC and foam sectors for application since/on January 2022 and January 2023 respectively. The PMU continued implementation support with all procurement except under the subgrants with enterprises, awarding 21 out of 24 packages. It procured US\$0.8 million in equipment and tools for the servicing sector. It also selected and oversaw all the consultants under the PMU, TA and servicing sectors (Japan's association/TA provider as well), entailing TOR development (5 in 2022), competitive selection, contract management and review of deliverables. The PMU also conducted the technical and financial appraisal of the 6th subproject and finalized the SGA for signing, as done for all individual enterprise projects. At its 90th Meeting, the ExCom agreed to cancellation of US\$5.2 m from three manufacturing sectors as well as reallocation of \$1.3 m to the servicing sector. The ExCom, as represented by the Secretariat did not agree to providing Vietnam with the PMU and TA originally approved, much less a proposed increase of \$180,000. The MYA agreement will be revised for the 91st Meeting.

49. In 2021, the World Bank held online the 14th East Asia and Pacific Regional Workshop from November 29 – December 1st. The Workshop was originally planned to take place in Vietnam in February-March 2022. The workshop was postponed due to the COVID-19 pandemic and held online the following year. In addition, a number of technical meetings were held with the project management unit and the World Bank operational team through WebEx. The World Bank team conducted two virtual missions with the Vietnam PMU in April and November 2021, the latter which entailed a mid-term review of project implementation.