EP



# United Nations Environment Programme

Distr. GENERAL

UNEP/OzL.Pro/ExCom/84/23 15 November 2019

ORIGINAL: ENGLISH

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

## 2019 CONSOLIDATED PROJECT COMPLETION REPORT

## Background

1. The issue of outstanding projects completion reports (PCRs) has been addressed by the Executive Committee at each of its meetings. At its 83<sup>rd</sup> meeting, the Committee *inter alia* urged bilateral and implementing agencies (IAs) to submit, at the 84<sup>th</sup> meeting, PCRs for multi-year agreements (MYAs) and individual projects that were due and, if they were not going to submit them, to provide the reasons. The Committee also urged lead and cooperating IAs to coordinate their work closely in finalizing their portion of PCRs to allow the lead IA to submit the completed PCRs according to schedule (decision 83/45(b) and (c)).

2. Pursuant to decision 83/45(b) and (c), the Senior Monitoring and Evaluation Officer (SMEO) sent a list of all PCRs due to bilateral and IAs on 8 August 2019.

## **MYA PCRs received**

3. Of the 199 MYA completed, bilateral and IAs had submitted 184 PCRs, prior to the 84<sup>th</sup> meeting, with an outstanding balance of 15 as shown in Table 1. The list of the 10 PCRs submitted after the 83<sup>rd</sup> meeting is attached in Annex I to the present report.

Lead agency	Completed	Received prior to the 83 <sup>rd</sup> meeting	Received after the 83 <sup>rd</sup> meeting	Outstanding
Canada	3	2	1	0
France	6	3	2	1
Germany	10	9	0	1
Japan	1	1	0	0
UNDP	42	39	3	0
UNEP	60	56	2	2
UNIDO	52	51	1	0
World Bank	25	13	1	11
Total	199	174	10	15

#### Table 1. Overview of MYAs PCRs

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.

4. An analysis of the aggregated fund disbursed, ODS phased out and delay in the completion of the 10 MYA PCRs is summarized in Table 2.

Toodecourse	MYA funds (US\$)		ODP tonnes	Average delay	
Lead agency	Approved	Disbursed	Approved	Actual	(months)
Canada	534,848	534,848	26.9	26.9	28
France	1,358,639	1,358,639	431.0	94.3	30
UNDP	4,406,420	4,333,433	24.5	24.5	22
UNEP	6,099,473	5,207,833	15.0	15.0	43
UNIDO	14,789,339	14,728,789	1,213.8	1,296.8	0
World Bank	18,108,630	16,924,008	234.7	159.7	N/A
Total	45,297,349	43,087,550	1,945.9	1,617.2	24.6

Table 2. Overview of the budget, ODS phased out and delay of MYAs submitted after the 83<sup>rd</sup> meeting

## **Reasons for delays**

5. Project design and planning are frequent reasons for delays. These relate to administrative burdens, such as payment delays due to the change of UNEP's administrative system (UMOJA), or to delays in signing of an agreement with the government concerned due, *inter alia*, to political instability.

6. The project implementation was delayed in one case because of the complexity of the project that involved a number of interdependent stakeholders (i.e., farmers, chemical manufacturing companies, research and development institutions, service suppliers, and regulators and policy makers). Legislations-related issues also affected the project timetable, as agencies and national ozone units (NOUs) had limited control on these issues. Political instability can also affect the implementation, due to, for example, political difficulties, such as the border dialogue between Afghanistan and Pakistan, planned under stage I of the HCFC phase-out management plan (HPMP), that was organized in a third neutral country (Thailand).

7. Inadequate staffing at the Government level is a recurring reason for delay and affects directly the project activities. In one case, activities were implemented very slowly during the second tranche of the terminal phase-out management plan (TPMP) largely due to two consecutive changes of the national ozone officer (NOO). Another project faced administrative difficulties since its approval, due to the passing of the NOO and the change of the head of Environment Public Authority (EPA) twice over four years.

8. Enterprise-related delays were due, *inter alia*, to the additional time needed for adaptation by the manufacturers when converting to the new technologies; the doubts and uncertainties of small enterprises regarding market acceptability of new non-ODS foams, despite the government's effort to raise awareness on the ban of HCFC-141b early in the process (two years before the ban); and the decentralized conversion, planned by each enterprise in a given country, which slowed the overall implementation.

9. The supplier-related delays were linked to a lack of equipment, namely the access to large capacity HFC-32 compressors, in one case and to the procurement of equipment in Iran (Islamic Republic of) due to the embargo in another.

## Lessons learned<sup>1</sup>

10. Strong government commitment and dedicated staff in the institutions concerned are crucial to an effective and timely phase-out. Coordination, frequent communication and collaboration between all stakeholders (i.e., governmental agencies, IAs, industry associations and academia), from design to

<sup>&</sup>lt;sup>1</sup> Lessons learned from MYA PCRs can be found on the MYA PCR lessons learned database: <u>http://www.multilateralfund.org/myapcr/search.aspx</u>

implementation, are vital for a successful implementation of projects and are repeatedly mentioned by the IAs and their national counterparts.

11. Lessons from effective project designs and implementation methods relate, *inter alia* to: the usefulness of demonstration projects in designing projects; synergies and flexibility allowed in designing overlapping projects; and the monitoring component.

12. Demonstration projects prove useful, even when they are non-conclusive, as they serve as a preparation phase for research and design of the projects and produce lessons that alleviate the work in the implementation phase of the projects.

13. Collaboration between projects is an advantage, as the case of the coordination of the implementation of the methyl bromide (MB) production plan and of the MB phase-out plan proved fundamental to create the synergies needed, especially in vast countries (i.e., China).

14. Project design and funds allocation should include a monitoring system at the national level to monitor delivery of activities and to measure the effectiveness of implementation. This would help timely submission of the progress reports and smooth implementation of the sector plans and the HPMP and HCFC production phase-out management plans (HPPMP). The monitoring of recycling requires physical enforcement, which is not always possible, especially in larger countries.

15. Additionally, long-term technical assistance and monitoring systems are needed to ensure the sustainability of the alternative technologies implemented. The budget for implementation and monitoring is often used to contract consultants to coordinate the implementation of activities. When activities are delayed, sometimes these consultants still get paid resulting in unbalanced implementation and monitoring budgets, at the expense of the budgets for project activities. It is important to link more directly contracts and payments for local implementation and monitoring to the delivery of project outputs.

16. Lessons relating to capacity building refer, *inter alia*, to: practical, continuous and mainstreamed training; cooperation between Article 5 countries; standards and codes of good practices;

17. Training sessions for refrigeration and air-conditioning (RAC) technicians should include more practical sessions, and additional training tools. In view of the regular rotation of Customs officers, continuous training and upgrading of their expertise is required. Such cooperation needs to be institutionalized through forms of binding long-term agreement, and be mainstreamed into the Customs training curriculum. In one country a "single window" information management system was established by the Customs administration for import/export controls and integrated with the ODS quota and licensing system. It improved the process of enforcement of ODS quota and licensing system by making data management easier and faster for all parties including end-users.

18. South-South cooperation of technician training on low-global warming potential (GWP) flammable technologies has become popular and would continue to be a flagship activity. Cooperation on cross-border dialogue and information exchange with neighbouring countries is critical to prevent illegal ODS trade. The use of online licensing system has enabled real-time monitoring of ODS trade. The system has to be regularly updated to meet to changing landscape of alternatives entering into the global and local market.

19. It is essential to have the standards/code on good practices including recovery/recycling in place before the training material could be finalized. Policies related to technologies should take into consideration energy efficiency aspects within the promotion on any new technology, a strong quota system and an early ban on import or manufacture of equipment using HCFC to reduce the service need hence minimizing consumption.

20. Lessons relating to the availability of alternative technologies relate, *inter alia*, to the lack of technical knowledge and the market reluctance.

21. The stakeholders' technical knowledge on the use of flammable alternatives would benefit from the leading industry's experiences in sound and safe implementation as well as their knowledge of the international and national standards and good practices. Therefore, the lack of technical knowledge was translated into market reluctance in dealing with the alternative technologies, particularly technologies relying on flammable or toxic refrigerants (i.e., hydrocarbon and ammonia). The development and introduction of codes and standards about equipment and systems using such alternatives would create the required platform to promote them appropriately and thus expand their use.

## Individual PCRs received

22. Of the total 1,854 investment projects that have been completed, bilateral and IAs had submitted 1,848 PCRs, with a balance of six outstanding PCRs as shown in Table 3.

Agency	Completed	Received prior	Received after the	Outstanding
		83 <sup>rd</sup> meeting	83 <sup>rd</sup> meeting	
France	13	13	0	0
Germany	20	19	0	1
Italy	11	10	1	0
Japan	6	6	0	0
Spain	1	1	0	0
United Kingdom of Great				
Britain and Northern	1	1	0	0
Ireland				
United States of America	2	2	0	0
UNDP	895	894	1	0
UNIDO	448	448	0	0
World Bank	457	452	0	5
Total	1,854	1,846	2	6

 Table 3. PCRs submitted for investment projects

23. Of the 1,216 non-investment  $\text{projects}^2$  that have been completed, bilateral and IAs had submitted 1,184 PCRs, with a balance of 32 outstanding PCRs as shown in Table 4.

Agency	Completed	Received prior 83 <sup>rd</sup> meeting	Received after the 83 <sup>rd</sup> meeting	Outstanding
Canada	57	56	0	1
France	34	34	0	0
Germany	61	60	0	1
Italy	1	1	0	0
Japan	17	16	1	0
Portugal	1	0	0	1
UNDP	292	285	4	3
UNEP	471	436	22*	13
UNIDO	148	142	1	5
World Bank	44	36	0	8

 Table 4. PCRs submitted for non-investment projects

<sup>&</sup>lt;sup>2</sup> Excluding project preparation, country programmes, multi-year projects, networking, clearing-house activities, and institutional strengthening projects.

Agency	Completed	Received prior 83 <sup>rd</sup> meeting	Received after the 83 <sup>rd</sup> meeting	Outstanding
Others <sup>3</sup>	90	90	0	0
Total	1,216	1,156	28	32

\* In addition, UNEP submitted five consolidated PCRs for survey of ODS alternatives at the national level for five sub-regions (Anglophone Africa, Asia and the Pacific, Caribbean, Europe and Central Asia and West Asia).

24. The list of 35 investment and non-investment PCRs (including five consolidated PCRs for survey of ODS alternatives at the national level) received after the 83<sup>rd</sup> meeting is contained in Annex II to the present document. The aggregated results relevant to disbursement, actual phase-out and delays are shown in Table 5.

Table 5. Overview of the budget, ODS phased out and delay of individual projects submitted after the 83<sup>rd</sup> meeting

Agency	Number	Funds (US\$)		ODP tonnes phase out		Average delay (months)	
	of projects	Approved	Disbursed	Approved	Actual	Duration	Delays
Italy	1	1,940,514	1,940,514	139.7	139.7	60.87	0.00
Japan	1	205,616	205,616	1.1	1.1	28.47	14.20
UNDP	5	8,621,990	8,607,326	564.6	564.6	37.94	8.54
UNEP	27*	4,851,468	4,077,792	0.0	0.0	63.78	36.48
UNIDO	1	63,521	62,189	0.0	0.0	37.53	12.17
Total	35	15,683,109	14,893,437	705.4	705.4	57.33	29.06

\* Including 5 consolidated PCRs for survey of ODS alternatives at the national level.

#### **Reasons for delays**

25. Pilots demonstration projects on ODS waste management and disposals had delays due to, *inter alia*, the higher implementation costs of the preparatory activities; the lack of effective consolidation of unwanted ODS banks compared to the predicted amounts of waste refrigerant; the difficult synchronization of the shipments from different countries; complications of finding synergies with persistent organic pollutants destruction projects; and a lack of awareness on project benefits among stakeholders.

26. Delays for other individual projects are often caused by administrative processes such as the finalisation and signature of the financing agreement and the licensing and permit authorizations. Similarly, a lack of communication with the NOUs, due to a change of staff and obstacles in both legislation and institutional arrangements of the beneficiary countries created delays.

27. Other factors of delays were due namely to: the long process of selection for equipment suppliers and the refusal of institutions to host recycling and recovery centres; and political tensions, civil unrest and war.

#### ODS alternative surveys

28. A wide array of PCRs for ODS alternative surveys mentioned delays in conducting the survey, due to, *inter alia*: the challenge in finding local experts; the lack of, or frequent changes in, NOU staff; the lack of data, the quality of the data gathered or the discrepancies in data between customs and other stakeholders; the geographic dispersion and the wide range of stakeholders.

<sup>&</sup>lt;sup>3</sup> Including PCRs completed and received from the following countries: Australia (25), Austria (1), Czech Republic (2), Denmark (1), Finland (5), Israel (2), Poland (1), South Africa (1), Spain (4), Sweden (5), Switzerland (3), and United States of America (40).

29. The bilateral and IAs addressed these issues by enhancing the cooperation with the respective governments and the national consultants to gather the necessary data and to keep the project activities as per scheduled timelines.

## Lessons learned<sup>4</sup>

## Pilot demonstration projects

30. Lessons learned from pilot demonstration projects related, *inter alia*, to: the importance of a project's ability to generate and build upon national capacity; the need for portable refrigerant re-claiming machine and portable hand-held refrigerant identifiers to respectively restore the refrigerants to an acceptable standard for possible reuse and to prevent cross contamination; and the need for standard refrigerant cylinder heaters to accelerate the transfer of ODS from cylinders to cylinders during the collection and decanting before export. In one case, portable water heaters were improvised to accelerate the decanting procedure.

31. One country explained the discrepancies in estimated CFCs to missing compressors in recovered appliances, which led to leakages and subsequently to contamination of non-condensable gases into the mix, which can be hazardous during the decanting process prior to export.

32. These projects suggested: to take into consideration, in implementation phase, the possible improvement for new equipment, while allowing more time for its adjustment and improvement; to encourage visits to neighbouring countries that have adopted the alternative technologies, when selecting the technology, to support decision makers in their selection.

#### High-ambient-temperature (HAT) countries

33. High ambient temperature countries mentioned a need to improve the research and development capacity in the local air-conditioning industry, especially to re-design and optimize products using low-GWP alternatives to address issues such as: flammability, excess pressures, temperature glide, and excess discharge temperature. There is a lack of institutional programmes addressing alternative technologies and reducing dependence on high-GWP alternatives in HAT countries, as the market focuses on commercially available options. Consequently, due to the nature of future alternatives in these countries, a comprehensive and tailored risk assessment is needed to address manufacturing, marketing, servicing and the equipment's end-of-life.

#### Verification report

34. Verification reports contained a series of recommendations for ongoing and future projects, namely: that the NOU strictly follows quotas allocation to registered users and issues permits and licences against these quotas rather than the previously first come first serve method adopted; that the NOU cross-checks their records with importing companies' data on a regular basis to avoid the difference in consumption quantities; to diminish data discrepancies from Customs (e.g., use of wrong harmonized system codes, different measurement units for quantities of shipments and non-availability of actual shipment dates); additional capacity building should be favoured and a formal channel of communication established between the Customs agency and the NOUs; sufficient time should be allocated in project planning to allow government procedures (i.e., legislations adoption) between approval of the project and implementation.

35. Two verification reports mentioned the promising Deep Sea Cooling technology, which can be applied to cities with a shoreline (e.g., the Mediterranean and the Red Sea). One case showed that the

<sup>&</sup>lt;sup>4</sup> Lessons learned from the individual PCRs can be found in the PCR lessons learned database: <u>http://www.multilateralfund.org/pcrindividual/search.aspx</u>

not-in-kind Deep Sea Cooling System is more energy efficient than the same capacity in-kind system and shows saving of 20 per cent in user net present value. Similarly, the not-in-kind district cooling system assisted by in-kind system is more energy efficient than its equivalent in-kind system and shows saving of 35 per cent.

#### Refrigerant management plans (RMP)

36. Important lessons from previous RMP stressed, namely, the importance of: including all relevant stakeholders' inputs in project design; having a database of ODS importers, exporters and users, to help the NOU monitor ODS-related trade and enforce legislations; creating a mixed train-the-trainers organizing committee from different stakeholders (i.e., Customs and relevant ministries) to facilitate the training process; and providing all relevant material in local languages especially in projects addressing the servicing sectors.

37. Counterfeit refrigerants is a major concern to the servicing sector and contributes to increase consumption due to technical problems including systems' failure, inefficient cooling and in some cases compressors burn-outs.

#### ODS alternative surveys

38. Given the large amount of projects included in the consolidated PCRs submitted for ODS alternative surveys and following the reasons for delays listed above, a summary of the lessons learned from these projects is found below and relate, *inter alia*, to: the challenges to the adoption of ODS alternatives; technology selection; national legislation and standards; awareness raising and communication; and data-related issues.

39. There are several challenges that are hindering the adoption of ODS alternatives, such as: the lack of technology; the lack of capacity; the unavailability and/or the cost of the technology; safety and health issues and the absence of policy and regulatory measures to promote ODS alternatives; time constraints; flawed record-keeping; and low response rates among importers and RAC technicians.

40. Technology selection is driven by market availability. NOUs, in cooperation with bilateral and IAs have to consider how to address this within stage II of the HPMP and the phase-down of HFCs.

41. The development of national standards is essential in guiding stakeholders on the selection and use of low-GWP alternatives with higher energy efficiency products. Similarly, the willingness to develop legislation and incentives to promote the adoption of new and energy efficient technologies lies with the government. It is vital for all stakeholders to be updated with the latest policy measures and the best available technology and environmental practices, especially in the manufacturing sector.

42. Data-related issues are a recurrent subject that range from the quality and availability of the data to their compilation. One survey proposed the establishment of a national database management system to be operated by the NOU to compile all data obtained during this survey as well as historical information obtained in previous reports and studies with regard to ODS and ODS alternatives in the country. Despite providing the template for the ODS alternative survey report, many countries did not use them, leading to additional and unnecessary work and effort spent in reformatting and reviewing the draft reports submitted. Recruiting an international consultant is crucial to provide support in gathering and processing this data.

43. Surveys identified several solutions to address the challenges mentioned above, such as: providing additional training and capacity building; increased public education and awareness programmes; institutional strengthening and improved sectoral collaboration; the creation of a national refrigeration association and its inclusion in project design; and the creation of regional agreements on the movement and recording of ODS and its by-products.

44. In order to improve the situation with the record-keeping among some companies, it is recommended to set up an information system that could collect and forward the data from importers to the NOU automatically.

45. As communication is a key component, a detailed and updated list of all stakeholders would ensure ease of communication and dissemination of information and notices between the stakeholders and a data reporting system. Consideration should be given to expanding the regulatory framework and licensing system to cover controls over trade in ODS alternatives.

## **Outstanding MYA PCRs and PCRs**

46. The Secretariat appreciates the actions by some of the bilateral and IAs to address the backlog of outstanding PCRs.<sup>5</sup> The Secretariat stresses the issue of submission of PCRs for stage I of the HPMP to the bilateral and IAs, as these are mandatory for the approval of the second stage.<sup>6</sup>

#### RECOMMENDATION

- 47. The Executive Committee may wish:
  - (a) To note the 2019 consolidated project completion report (PCR) contained in document UNEP/OzL.Pro/ExCom/84/23;
  - (b) To urge bilateral and implementing agencies to submit, at the 85<sup>th</sup> meeting, PCRs for multi-year agreements (MYAs) and individual projects that were due and, if they were not going to submit them, to provide the reasons;
  - (c) To urge lead and cooperating agencies to coordinate their work closely in finalizing their portion of PCRs to allow the lead implementing agency to submit the completed PCRs according to the schedule;
  - (d) To urge bilateral and implementing agencies to enter clear, well written and thorough lessons when submitting their PCRs; and
  - (e) To invite all those involved in the preparation and implementation of MYAs and individual projects to take into consideration the lessons learned from PCRs, if relevant, when preparing and implementing future projects.

<sup>&</sup>lt;sup>5</sup> The SMEO stressed once again at the Inter-agency coordination meeting (Montreal, 9-11 October 2019) the importance to submit all outstanding PCRs, noting that many projects have been completed several years ago, and that progress and financial reports on completed projects have to be submitted until the PCRs are submitted, which increases the workload of the Executive Committee, the IAs and the Secretariat.

<sup>&</sup>lt;sup>6</sup> Decision 81/29.

## Annex I

## **MYA PCRs RECEIVED**

Country	MYA sector	Lead agency	Cooperating agencies
Bangladesh	HCFC phase-out plan (stage I)	UNDP	
Bolivia (Plurinational state of)	ODS phase-out plan	Canada	UNDP
China	HCFC phase-out plan (stage I) – National coordination	UNDP	
China	Methyl bromide	UNIDO	Italy
China	HCFC phase-out plan (stage I) – Servicing sector, including enabling	UNEP	Japan
Iran (Islamic Republic of)	CFC phase out plan - MAC R&R	France	
Kuwait	ODS phase-out plan	UNEP	UNIDO
Lao People's Democratic Republic	CFC phase-out plan	France	
Lebanon	HCFC phase-out plan (stage I)	UNDP	
Thailand	HCFC phase-out plan (stage I)	World Bank	Japan

## Annex II

## **INDIVIDUAL PCRs RECEIVED**

Project Number	Agency	Project Title
ASP/REF/69/DEM/56	UNEP	Promoting low-global warming potential refrigerants for air-conditioning sectors in high-ambient temperature countries in West Asia
BAR/PHA/75/TAS/25	UNEP	Verification report on the implementation of the HCFC phase-out management plan
BHA/PHA/71/TAS/19	UNEP	Verification report on the implementation of the HCFC phase-out management plan
COS/REF/76/DEM/55	UNDP	Demonstration of the application of an ammonia/carbon dioxide refrigeration system in replacement of HCFC-22 for the medium-sized producer and retail store at Premezclas Industriales S.A. (UNDP)
CPR/SOL/64/DEM/506	Japan	Demonstration project for conversion from HCFC-141b based technology to iso-paraffin and siloxane (KC-6) technology for cleaning in the manufacture of medical devices at Zhejiang Kindly Medical Devices Co. Ltd.
EGY/REF/75/TAS/128	UNEP	Feasibility study addressing district cooling
ETH/PHA/75/TAS/25	UNEP	Verification report on the implementation of the HCFC phase-out management plan
GAM/PHA/71/TAS/27	UNEP	Verification report on the implementation of the HCFC phase-out management plan
GEO/PHA/75/TAS/38	UNDP	Verification report for HPMP Stage 1 for Georgia
GHA/DES/63/DEM/33	UNDP	Pilot demonstration project on ODS waste management and disposal
HAI/PHA/73/TAS/19	UNEP	Verification report on the implementation of the HCFC phase-out management plan
IND/ARS/56/INV/423	UNDP	Plan for phase-out of CFCs in the manufacture of pharmaceutical MDIs
IND/ARS/56/INV/424	Italy	Plan for phase-out of CFCs in the manufacture of pharmaceutical MDIs
KUW/REF/37/TAS/06	UNEP	Implementation of the refrigerant management plan: monitoring
KUW/REF/37/TRA/03	UNEP	Implementation of the RMP: training of customs officers in monitoring of ODS
KUW/REF/37/TRA/04	UNEP	Implementation of the RMP: training programme on good refrigerant management practices and hydrocarbon (HC) refrigerants safe handling
KUW/REF/75/TAS/28	UNIDO	Comparative analysis of three not-in-kind technologies for use in central air-conditioning (feasibility study for district cooling)
KYR/PHA/77/TAS/38	UNDP	Verification report for HPMP Stage 1 for Kyrgyzstan
MLW/PHA/71/TAS/35	UNEP	Verification report on the implementation of the HCFC phase-out management plan
MYA/PHA/73/TAS/16	UNEP	Verification report on the implementation of the HCFC phase-out management plan
ODS Surveys	UNEP	ODS Surveys in West Asia region - 4 countries
ODS Surveys	UNEP	ODS Surveys in Caribbean Region - 10 countries
ODS Surveys	UNEP	ODS Surveys in ECA region - 3 countries

Project Number	Agency	Project Title
ODS Surveys	UNEP	ODS Surveys in anglophone Africa region - 21 countries
ODS Surveys	UNEP	ODS Surveys in Asia and Pacific region - 24 countries
RWA/PHA/75/TAS/25	UNEP	Verification report on the implementation of the HCFC phase-out management plan
SYR/REF/29/TAS/51	UNEP	Implementation of the RMP: assistance for the establishment of regulations and legislation
SYR/REF/29/TRA/47	UNEP	Implementation of the RMP: training programme for customs officials
SYR/REF/29/TRA/49	UNEP	Implementation of the RMP: training for trainers and refrigeration technician on good service practices
TRI/FUM/65/TAS/28	UNEP	Technical assistance to phase out the use of methyl bromide
UGA/PHA/71/TAS/18	UNEP	Verification report on the implementation of the HCFC phase-out management plan
YEM/REF/37/TAS/16	UNEP	Implementation of the RMP: establishment of regulations and legislation
YEM/REF/37/TAS/19	UNEP	Implementation of the RMP: monitoring the activities in the RMP
YEM/REF/37/TRA/17	UNEP	Implementation of the RMP: training programme on good practices in refrigeration
YEM/REF/37/TRA/18	UNEP	Implementation of the RMP: training programme for customs officers

## Annex III

## **OUTSTANDING INDIVIDUAL PCRs**

Project Number	Agency	Project Title	
ARG/ARS/56/INV/159	World Bank	Phase-out of CFC consumption in the manufacture of aerosol MDIs	
ARG/REF/18/INV/39	World Bank	Elimination of CFC in the manufacturing plant of domestic refrigerators of Neba, S.A.	
BDI/PHA/73/TAS/32	UNEP	Verification report on the implementation of the HCFC phase-out management plan	
BEN/PHA/77/TAS/34	UNEP	Verification report on the implementation of the HCFC phase-out management plan	
BHE/PHA/75/TAS/32	UNIDO	Verification report for stage I of HCFC phase-out management plan	
BRU/PHA/75/TAS/19	UNEP	Verification report on the implementation of the HCFC phase-out management plan	
CAF/PHA/71/TAS/24	UNEP	Verification report on the implementation of the HCFC phase-out management plan	
CBI/PHA/77/TAS/21	UNEP	Verification report on the implementation of the HCFC phase-out management plan	
CHD/PHA/77/TAS/31	UNEP	Verification report on the implementation of the HCFC phase-out management plan	
COL/FOA/76/DEM/100	UNDP	Demonstration project to validate the use of hydrofluoro-olefins for discontinuous panels in Article 5 parties through the development of cost-effective formulations	
COL/REF/75/DEM/97	UNDP	Demonstration of HC-290 (propane) as an alternative refrigerant in commercial air-conditioning manufacturing at Industrias Thermotar Itda	
CPR/ARS/51/INV/447	World Bank	Phase-out of CFC consumption in the pharmaceutical aerosol sector (2007-2008 biennial programme)	
CPR/FOA/59/DEM/491	World Bank	Conversion demonstration from HCFC-141b-based to cyclopentane-based pre-blended polyol in the manufacture of rigid polyurethane foam at Guangdong Wanhua Rongwei Polyurethane Co. Ltd	
CPR/PRO/69/TAS/531	World Bank	Verification of production of CFCs for essential use	
CPR/REF/76/DEM/573	UNDP	Demonstration project for ammonia semi-hermetic frequency convertible screw refrigeration compression unit in the industrial and commercial refrigeration industry at Fujian Snowman Co. Ltd.	
EQG/PHA/75/TAS/11	UNEP	Verification report on the implementation of the HCFC phase- out management plan	
GLO/REF/47/DEM/268	World Bank	Global chiller replacement project (China, India, Indonesia, Malaysia and Philippines)	
GLO/SEV/47/TAS/269	Portugal	Communication and cooperation support to Portuguese speaking countries (Angola, Cape Verde, East Timor, Guinea Bissau, Mozambique and Sao Tome and Principe)	
GLO/SEV/63/TAS/309	World Bank	Resource mobilization for HCFC phase-out co-benefits study	
IDS/ARS/56/TAS/184	World Bank	Technical assistance to implement national transition strategy to CFC-free MDI	
IND/ARS/56/TAS/425	UNEP	National strategy for transition to non-CFC MDIs	
IND/HAL/34/INV/315	World Bank	Halon production and consumption sector phase out plan	
JOR/FUM/29/INV/54	Germany	Complete phase-out of the use of methyl bromide in Jordan	
JOR/PHA/38/INV/77	World Bank	National ODS phase-out plan: aerosol, foam, MAC service and solvent sectors	

Project Number	Agency	Project Title
KIW/DEE/75/TAS/20	LINED	Comparative analysis of three not-in-kind technologies for use
KU W/KEF/73/1AS/29	UNEF	in central air-conditioning (feasibility study for district cooling)
I AC/SEV/51/TAS/38*	Canada	Latin American customs enforcement network: Preventing
LAC/SEV/31/1AS/38*	Callaua	illegal trade of ODS
MOZ/DHA/77/TAS/28	LINED	Verification report on the implementation of the HCFC
WOZ/THA////TAS/28	UNEI	phase-out management plan
NIR/DES/67/DEM/133	UNIDO	Demonstration project for disposal of unwanted ODS
ODS alternative surveys	UNEP	Survey of ODS alternatives at the national level
ODS alternative surveys	World Bank	Survey of ODS alternatives at the national level
OMA/DHA/80/TAS/34		Verification report on the implementation of the HCFC
OMA/FIIA/80/TAS/34	UNIDO	phase-out management plan
		Demonstration project at air-conditioning manufacturers to
SAU/REF/76/DEM/29	World Bank	develop window and packaged air-conditioners using
		low-global warming potential refrigerants
SII /PHA/77/TAS/32	UNEP	Verification report on the implementation of the HCFC
	UNLI	phase-out management plan
		Demonstration project on the technical and economic
SOA/FOA/76/DEM/09	UNIDO	advantages of the vacuum assisted injection in discontinuous
		panels plant retrofitted from HCFC-141b to pentane
SUD/PHA/80/TAS/41	UNIDO	Verification report on the implementation of the HCFC
	UNIDO	phase-out management plan
SUR/PHA/75/TAS/24	UNEP	Verification report on the implementation of the HCFC
501011110/591110/21	UIULI	phase-out management plan
		Demonstration project at foam system houses to formulate
THA/FOA/76/DEM/168	World Bank	pre-blended polyol for spray polyurethane foam applications
		using low-global warming potential blowing agent
ZIM/PHA/75/TAS/52	Germany	Verification report for stage I of HCFC phase-out management
	Comuny	plan

\* LAC/SEV/51/TAS/38 was submitted after the deadline and will be assessed at the 85<sup>th</sup> meeting.

### Annex IV

#### **OUTSTANDING PCRs BY DECISION**

Country	MYA Sector/Title	Lead agency and Cooperating agency
China	HCFC phase-out plan (stage I) - PU Foam	World Bank
China	Production HCFC (stage I)	World Bank
Democratic Republic of the Congo (the)	HCFC phase-out plan (stage I)	UNEP/UNDP
Egypt	Phase-out of CFC consumption in the manufacture of aerosol metered dose inhalers (MDIs)	UNIDO
Jordan*	HCFC phase-out plan (stage I)	UNIDO/World Bank

\*Jordan<sup>\*\*</sup> | HCFC phase-out plan (stage I) | UNIDO/ world Bank \*Jordan HCFC phase-out plan (stage I), was submitted after the deadline and will be assessed at the 85<sup>th</sup> meeting.

## Annex V

## **OUTSTANDING MYA PCRs**

Country	MYA Sector/Title	Lead agency and Cooperating agency
Argentina	Production CFC	World Bank
Bahamas	CFC phase out plan	World Bank
Bahrain	CFC phase out plan	UNEP/UNDP
China	CFCs/CTC/Halon accelerated phase-out plan	World Bank/United States
China	Halon	World Bank
China	HCFC phase out plan (stage I)	World Bank
China	Process agent (phase I)	World Bank
China	Process agent (phase II)	World Bank
India	Production CFC	World Bank
Kenya	HCFC phase out plan (stage I)	France
Philippines	CFC phase out plan	World Bank/Sweden/UNEP
Venezuela (Bolivarian Republic of)	Production CFC	World Bank
Venezuela	Production CFC	World Bank
Vietnam	Methyl bromide	World Bank
Yemen	Methyl bromide	Germany
Timor Leste	HCFC phase out plan (stage I)	UNEP/UNDP