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IMPLEMENTATION OF THE MONTREAL PROTOCOL  
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Item 7(b) of the provisional agenda<sup>1</sup>

**2023 CONSOLIDATED PROJECT COMPLETION REPORT  
(Part I)**

**Introduction**

1. Pursuant to relevant decisions on project completion reports (PCRs), most recently 91/28(b) and 90/28(b), the lists containing outstanding PCRs due for 2023, as per the 2021 progress report, were sent to bilateral and implementing agencies in January 2023 for the first consolidated report of the year to be submitted to the 92<sup>nd</sup> meeting.
2. Agencies communicated the efforts being undertaken to submit the PCRs to the extent possible. In some cases, external factors had led them to further postponement, aiming at final submissions to the 93<sup>rd</sup> meeting. In line with decision 91/28(b), requesting agencies to provide the reasons for not submitting the PCRs on time, the Senior Monitoring and Evaluation Officer (SMEO) requested and received feedback from several agencies reporting the related information.
3. The bilateral and implementing agencies reported the following reasons for delays in PCR submissions: (a) delays in final confirmation of data to be provided by governments; (b) delays in receiving the countries' agreement before submitting PCRs; (c) delays in the delivery of the equipment required to complete projects, thus delaying the preparation of PCRs; and (d) one project was suspended for security reasons due to political instability in the country.
4. Twenty-four multi-year agreement (MYA) PCRs for stage I of HCFC phase-out management plans (HPMPs) (17 of which due by decision) and three individual PCRs for verification projects were submitted by the agencies and received by the Secretariat after the cut-off date for submission, for their consideration at the 92<sup>nd</sup> meeting. They will be included in the consolidated report to be presented at the 93<sup>rd</sup> meeting.<sup>2</sup>

<sup>1</sup> UNEP/OzL.Pro/ExCom/92/1

<sup>2</sup> See Annex III for the individual PCRs; Annex IV for MYAs due by decision in 2023 and Annex V for outstanding MYAs.

## I. Summary of information from multi-year agreement project completion reports

### I.1 Overview of information from multi-year agreement project completion reports

5. Of the 254 MYA projects identified as completed in the 2021 progress report, bilateral and implementing agencies submitted 239 PCRs prior to the 92<sup>nd</sup> meeting, of which 219 were received prior to the 91<sup>st</sup> meeting and 20 after, leaving 15 outstanding PCRs, as shown in table 1.

**Table 1. Overview of MYA PCRs**

Agency	Completed	Received prior to the 91 <sup>st</sup> meeting	Received after the 91 <sup>st</sup> meeting	Outstanding
Canada	3	3	0	0
France	6	6	0	0
Germany	11	9	1	1
Japan	1	1	0	0
UNDP*	55	49	3	3
UNEP*	81	65	6	10
UNIDO*	71	63	8	0
World Bank	26	23	2	1
<b>Total</b>	<b>254</b>	<b>219</b>	<b>20</b>	<b>15</b>

\*In addition, UNDP, UNEP and UNIDO each submitted one more MYA PCR for projects completed after 2021.

6. The 23 PCRs for MYA projects submitted after the 91<sup>st</sup> meeting within the agreed cut-off date for consideration at the 92<sup>nd</sup> meeting,<sup>3</sup> as contained in Annex I, comprise 20 HPMPs, two CFC phase-out plans, and one project on methyl bromide (MB).

7. Table 2 below reports on the aggregated funds disbursed, ozone-depleting substances (ODSs) phased out, and project completion delays in the 23 MYA projects for which PCRs have been received since the 91<sup>st</sup> meeting and included in the present consolidated report for consideration at the 92<sup>nd</sup> meeting.

**Table 2. Overview of the budget, ODSs phased out and delays of MYA PCRs submitted after the 91<sup>st</sup> meeting**

Agency	MYA funds (US \$)		Phase-out (ODP tonnes)		Average delays (months)*
	Approved	Disbursed	Approved	Actual	
Germany	601,450	601,450	35.9	29.7	1.07
UNDP	3,850,081	3,364,879	28.1	25.2	-0.75
UNEP	2,857,602	2,677,463	18.0	9.8	-1.88
UNIDO	6,386,576	6,185,873	56.1	47.1	0.67
World Bank	9,734,781	9,734,781	2,083.6	2,083.6	9.68
<b>Grand Total</b>	<b>23,430,490</b>	<b>22,564,446</b>	<b>2,221.7</b>	<b>2,195.4</b>	<b>0.45</b>

\* The total average is based on the total of 23 MYA PCRs received, as presented in Annex I.

### I.2 Reasons for delays in multi-year agreement project implementation and action taken

#### HCFC phase-out management plan

##### *Reasons for delays*

8. The agencies submitted 17 MYA PCRs for stage I of HPMPs and three MYA PCRs for stage II. A variety of causes for project implementation delays were reported, including: (a) delayed signature of agreements due to changes in the government structure; (b) low rate of fund disbursement (delays in tranche

<sup>3</sup> Included in Annex I: 23 MYAs, of which 20 HPMPs, two CFC phase-out projects and one MB project are considered in the present consolidated document UNEP/OzL.Pro/ExCom/92/10. It includes three PCRs submitted for projects completed after 2021.

submissions); (c) procurement issues such as strict national or local administrative procedures for VAT exemptions on purchased equipment; (d) National Ozone Officer (NOO) turnover; (e) supplier and enterprise-related delays (e.g., challenges faced in selecting alternative technology for conversion); (f) national ozone units (NOUs) facing constraints from their national budgetary system to access Multilateral Fund funding; (g) project design (e.g., technologies either not available or not feasible anymore); (h) strong stakeholder reactions to new legislation on ODSs; and (i) changes of government and private-sector priorities due to external factors affecting implementation (e.g., natural disasters).

9. The COVID-19 pandemic caused delays through the disruption of the supply chain and the impact on the retail industry. The partial lockdown imposed by governments jeopardized the organization of in-person training and workshops with stakeholders. It affected data collection processes and capacity-building activities, including training of technicians.

*Action taken to address the implementation delays*

10. The delays in implementation were addressed by the bilateral and implementing agencies through improved communication with the governments and continuous follow-up to resolve the administrative issues. In some cases, implementing agencies conducted field visits to explain the project to new national counterparts before signing the agreement and the project documents. In other cases, implementing agencies accelerated the implementation of HPMP activities, including through direct implementation, to facilitate the submission of the next tranche request.

11. Capacity-building programmes and continuous training were delivered for newly appointed personnel, to facilitate their accelerated integration into project implementation. This was complemented by continuous training to overcome challenges associated with the replacement of NOOs. Project design issues were addressed through the revision of the initial project, aimed at replacing the planned technological options by alternatives which would be available for the project.

12. Delays related to procurement and contractual issues were also reported. Some activities which had been planned for implementation during one phase had to be postponed and were implemented during the next project tranche.

13. To address enterprise delays, implementing agencies conducted joint field missions with technical experts and assisted the National Ozone Authority (NOA) to monitor the conversion of industries in two cases, and ensure that the relevant processes were aligned with the framework of signed agreements between the NOA and the industries. Discussions were also held with suppliers to arrange the delivery of goods and rearrange the schedule and work plan to mitigate the impact of the delays. The agencies provided technical assistance for reclamation activities, and awareness-raising workshops were delivered to promote reclamation.

14. In cases of institutional and political changes (e.g., new administration), agencies provided support for the transition period to build bridges between previous and new responsible bodies and undertook dedicated missions when required for resolving the issues *in situ*. Agencies explained the projects to the new government representatives to facilitate continuity in project implementation. In one case, in order to address the stakeholders' reaction to an equipment ban, the project dates and milestones were revised to provide more time for transition and compliance. For another project, the launch of its implementation was delayed due to the national legal requirements to obtain national registration for the project. This was resolved through several interventions made by the IAs working with the local authorities.

15. In one case, delays were reported in relation to the change of lead agency to implement the project. The time required to revise the agreement and redefine the action plan led to a postponement in initiating the project. The Executive Committee was informed and approved the requested extension for project implementation.

16. To compensate for delayed implementation caused by the COVID-19 pandemic, alternative forms of meetings with stakeholders and training activities were implemented. The planned activities were redefined and, when possible, courses and workshops were redesigned to take place virtually. New communication methods were put in place, including video conferences, chats and cloud-based collaboration. In one case, the NOU requested through the implementing agency a one-year project extension, which was approved by the Executive Committee.

#### Chlorofluorocarbons

17. In one CFC project, delays were experienced from the beginning in getting the Agreement signed. This caused delays in the disbursement of tranches. Once the project was finally launched, the head and staff of the Project Management Unit (PMU) left. The ODS national management structure was reorganized, and it took more than a year to appoint a new ODS officer. The implementing agency worked closely with the government to complete verification of consumption and to ensure the continuation of the project with the new PMU team. No further delays were reported for the rest of the implementation period.

18. Some weaknesses in project design were reported, i.e., the absence of certified service providers and the lack of selection criteria for training institutions delayed the completion of project implementation. While the training-for-trainers programme was executed as initially planned, the project lacked some technical aspects in the selection criteria for the training institutions. This led to allocating equipment to institutions in areas with few service shops, all in all delaying the provision of training services to the technicians. This was settled by redistributing deployed equipment according to the expected number of trainees per training center, and defining the maximum fees and duration of the training.

19. Delays related to supplier issues were significant in one project. The voucher system drew little interest from service shops, due to associated time and monetary costs. Equipment suppliers were not supporting the launch of the project as it did not serve their short-term interests. The agency worked with the environmental authorities to increase the voucher amount and simplify the processing steps. This boosted the number of issuance of vouchers, coinciding with the arrival of the equipment at the qualified suppliers under the established voucher scheme.

#### Methyl bromide

20. The most important component causing delays on a methyl bromide project was related to external factors. Civil unrest and safety issues restricted project implementation. However, the effective coordination between the bilateral agency and the NOU, together with the commitment and engagement of local stakeholders, made it possible to achieve objectives and results. The capacity to adjust scheduled milestones and show flexibility in implementation was instrumental to ensure successful completion of the project and its results.

### **I.3 Lessons learned**

#### HCFC phase-out management plans

##### *Capacity building*

21. Programmes related to training and equipping refrigeration technicians were instrumental to supporting the implementation of HCFC phase-out. Those training programmes enhanced the skills of refrigeration service technicians and end-users for developing best practices in the refrigeration and air-conditioning (RAC) sector, covering *inter alia* the following issues: ODS containment, recovery, recycling and reclaiming of refrigerants, reduction, retrofit techniques, alternative refrigerant handling, and servicing reports for installations. The provision of additional equipment for analyzing refrigerants to customs offices would strengthen their monitoring and enforcement capacities to ensure compliance.

22. Training programmes could be enriched for the HPMP stage II activities, including updating knowledge and skills on technologies about which technicians should be aware, and for which they should be certified. The following issues could be part of the trainees' curricula: (a) technologies for reducing the emission of refrigerants into the atmosphere; (b) measures for reducing energy consumption based on well-maintained and well-serviced equipment; and (c) addressing safety issues related to the flammability and/or toxicity of refrigerants being phased out.

23. It could also prove useful to create new centres of excellence or to upgrade the existing ones, to improve the training on toxic and/or flammable refrigerants. There is a need to develop occupational standards and update the technicians' curricula with updated training modules covering the latest advances in technologies related to the required measures for implementing stage II of the HPMPs.

24. Capacity building could continue to foster awareness raising among the consumers, importers, and technicians from different sectors with limited knowledge in refrigeration sectors. Media should also be involved to facilitate the dissemination of relevant information. Training of new NOOs when the incumbents leave the NOUs is to be given priority to ensure smooth project implementation, without disruption.

25. Training could be broadened to include an increasing number of local experts, through training of trainers, so that they can replicate training at the national level. National and local institutions could facilitate the development of technician certification schemes, through the involvement of local experts to become trainers and strengthen the effectiveness of the established certification systems. This would contribute to maintaining and increasing the number of local experienced certified technicians.

#### *Role of the national ozone units*

26. The role of the NOUs was very effective in successfully achieving stage I activities for the HCFC phase-out. In close coordination with the implementing agencies and engaging in partnerships with national stakeholders, they were critical to raising awareness, building and strengthening capacities, establishing a well-developed electronic licensing system for the ODS import and quota system, and fostering smooth implementation in reaching the projects' objectives to achieve and sustain compliance under the Montreal Protocol.

27. For stage II of the HPMPs, NOUs could continue building strategic partnerships for HPMP implementation, e.g., with RAC associations and technical RAC training schools. They also could continue developing databases and data reporting systems in coordination with the servicing sector participants.

28. The NOUs play an active role in reaching out and engaging with key stakeholders for project implementation. They also ensure regular monitoring and reporting of project implementation to the IAs, keeping them informed on legislative changes, and organizing training sessions for refrigeration experts, as well as customs and enforcement officers.

29. Some projects have reported excessive pressure on the NOUs, with insufficient human resources to face all the responsibilities that require their support for successful implementation of the projects. Some verification reviews found that the current institutional capacity is at best stretched to its limit. At the enterprise level there was lack of technical capacity and this put significant pressure on the NOU. A number of activities are managed by two officials (NOO and NOU assistant). In these cases, it has been recommended that the capacity of the existing departments including the NOU be reviewed to identify any areas of resourcing, technology or procedures that would enhance current capacity and/or increase capacity for upcoming requirements, including the implications of HFC phase-down and technology developments in low-global-warming-potential substances and energy efficiency.

### *Policy and regulatory framework*

30. To achieve compliance, the most effective measure is the regulatory framework for the establishment of licensing and quota systems. To facilitate a successful ratification process, coordination among government institutions and stakeholders on the policies and action plans required has been very important. Continuous training for environmental inspectors and customs officers is recommended for them to stay up to date with the new regulations, policies and technologies.

31. In some projects, the weakness of regulations and enforcement did not facilitate compliance with Montreal Protocol targets. A country did not have a working system of mandatory reporting by legal entities and individual entrepreneurs on the consumption of ODSs and F-gases. Any data provided by market participants was sent on request on a voluntary basis. As a lesson learned, it is suggested to develop and introduce a system of mandatory reporting on the use of ODSs and F-gases in the near future, based on other regional or national experiences already in place.

### *Project design*

32. The availability of alternative technologies, in particular in import-dependent countries, is to be accounted for in the planning of project proposals, together with the availability of technicians required to implement the project. A sufficient number of practical sessions for the technicians to be skilled and equipped to perform their functions should also be anticipated at the project design level. Although on-line training may help, in-person sessions are necessary to complete the training of technicians.

### Other multi-year agreement projects

33. In relation to CFC phase-out plans, some lessons learned relate to project design. The disbursement arrangement in a project, set forth in the Grant Agreement, did not include a provision for a designated account. Hence, the recipient had to cover all the expenditures up front. Reimbursements were made after performance targets were met and expenditures audited. This led to conflicts and problems meeting timely expenditure requirements when needed funding was not available due to budget cycles. The lesson learned is that these aspects need to be anticipated when designing the project, including contingency measures to mitigate the impact on implementation.

34. On technological aspects, a very important issue is the detection of slow and long-term leakage. Ongoing difficulties reducing refrigerant leakages highlight the need for refrigeration engineers/technicians to have additional skills to maintain RAC equipment to operate at the lowest possible leakage rate. A lesson learned is that the training and certification of maintenance technicians in leak detection methods could be included in the definition of leak-detection strategies to increase performance in the sector. Certification of technicians could become mandatory to ensure increased quality in equipment installation and maintenance.

35. Support from customs is an essential dimension to ensuring that no unauthorized imports reach the country after regulation is in place and enforced. In the MB project, the involvement of non-governmental organizations appeared to be instrumental in engaging with relevant actors in project implementation in the rural and agricultural sector. Innovative approaches to involving local stakeholders helped overcome, to the extent possible, the impact of the continued instability and civil unrest of the country.

## **II. Summary of information from individual project completion reports**

### **II.1 Overview of information from individual project completion reports**

36. Of the total 1,866 investment projects completed, bilateral and implementing agencies have submitted 1,864 PCRs, with a balance of two outstanding PCRs, as shown in table 3.

**Table 3. PCRs submitted for investment projects**

Agency	Completed	Received prior to the 91 <sup>st</sup> meeting	Received after the 91 <sup>st</sup> meeting	Outstanding
Canada	2	2	0	0
France	13	13	0	0
Germany	20	20	0	0
Italy	11	11	0	0
Japan	6	6	0	0
Spain	1	1	0	0
United Kingdom of Great Britain and Northern Ireland	1	1	0	0
United States of America	2	2	0	0
UNDP	899	899	0	0
<b>UNIDO</b>	<b>453</b>	<b>451</b>	0	<b>2</b>
World Bank	458	456	2	0
<b>Total</b>	<b>1,866</b>	<b>1,862</b>	<b>2</b>	<b>2</b>

37. Of the 1,280 non-investment projects<sup>4</sup> completed, bilateral and implementing agencies have submitted 1,275 PCRs, of which 15 were received after the 91<sup>st</sup> meeting within the cut-off date for submission to the 92<sup>nd</sup> meeting, with a balance of five outstanding PCRs, as shown in table 4.

**Table 4. PCRs submitted for non-investment projects**

Agency	Completed	Received prior to the 91 <sup>st</sup> meeting	Received after the 91 <sup>st</sup> meeting	Outstanding
Canada	57	57	0	0
France	34	34	0	0
Germany	62	61	0	<b>1</b>
Japan	17	17	0	0
UNDP*	302	298	3	<b>1</b>
UNEP	510	498	9	<b>3</b>
UNIDO	161	159	2	0
World Bank	44	43	1	0
Others**	93	93	0	0
<b>Total</b>	<b>1,280</b>	<b>1,260</b>	<b>15</b>	<b>5</b>

\* In addition, UNDP submitted one PCR for a project completed after 2021.

\*\* Including PCRs completed and received from the following countries: Australia (25), Austria (1), Czech Republic (2), Denmark (1), Finland (5), Israel (2), Italy (1), Poland (1), Portugal (1), Russian Federation (1), South Africa (1), Spain (4), Sweden (5), Switzerland (3), and the United States of America (40).

38. The 18 individual PCRs received after the 91<sup>st</sup> meeting, including one PCR submitted for a project completed after 2021,<sup>5</sup> covered four project categories, as follows: two investment and 16 non-investment projects, the latter comprising one demonstration project, one technical assistance project covering four national surveys on ODS alternatives, and 14 verification projects.<sup>6</sup> Only seven individual PCRs for completed projects are outstanding, as indicated in Annex III.<sup>7</sup> The aggregated results relevant to disbursement, actual phase-out and averaged duration and delays in project implementation are shown in table 5.

<sup>4</sup> Excluding project preparation, country programmes, multi-year projects, networking, clearing-house activities, and institutional strengthening projects.

<sup>5</sup> Annex II

<sup>6</sup> The list of outstanding individual PCRs is contained in Annex III.

<sup>7</sup> Three of the seven outstanding PCRs have already been submitted to the Secretariat after the cut-off date and will be considered at the 93<sup>rd</sup> meeting.

**Table 5. Overview of the budget, ODSs phased out and delays of individual projects submitted after the 91<sup>st</sup> meeting**

Agency	Number of projects	Funds (US \$)		Phase-out (ODP tonnes)		Average duration/delays (months)*	
		Approved	Disbursed	Approved	Actual	Duration	Delays
UNDP	4	1,580,600	1,579,765	0.0	0.0	50.24	22.05
UNEP	9	270,000	90,900	0.0	0.0	24.36	0.00
UNIDO	2	60,000	56,312	0.0	0.0	13.23	-11.13
World Bank	3	833,514	796,567	885.8	885.8	26.57	10.66
<b>Total</b>	<b>18</b>	<b>2,744,114</b>	<b>2,523,544</b>	<b>885.8</b>	<b>885.8</b>	<b>28.86</b>	<b>6.19</b>

\*The total average is based on the total of 18 individual PCRs received before the cut-off date for submission.

## II.2 Reasons for delays and actions taken

### Investment projects (2)

39. The PCRs concerning the two investment projects, both implemented by the same agency, report the following causes for delays: (a) delays due to contractors and suppliers: delays in equipment delivery and in the provision of training on technology transfer; (b) delays due to agencies: coordination and administrative delays, changes in the personnel of the financial agent; (c) delays due to enterprises: requirements for safety audits and preparation of environmental management plans; and (d) delays due to external factors: impact of the COVID-19 pandemic and associated travel ban.

40. As part of the measures taken to mitigate the impact of delays, the implementing agency helped the national counterpart for one of the projects identify qualified safety consultants to comply with the audit requirements. To the extent possible, virtual follow-up on the advancement of the project was done to monitor progress in lieu of field visits which could not be done during the travel ban. The agency also assisted in the recruitment of technical staff and provided training on procurement and technical issues relevant to project implementation. The IA followed-up closely with the suppliers of equipment to ensure final delivery.

### Non-investment projects (16)

#### *Verification reports (14)*

41. All reports referred to the delay caused by the advent of the COVID-19 pandemic. It affected the travel possibilities of the consultants and auditors. In some cases, the verification of HCFC consumption was undertaken remotely, the independent international auditor being supported by a local verifier in the country. The national counterpart, through the NOU's support, facilitated data collection and communication with relevant stakeholders as well as the data verification before digitizing, scanning and transferring to the auditor. Online meetings were conducted with the consultant to verify and clear up any questions with the NOU regarding data submitted. The auditor held virtual meetings with each stakeholder as part of the verification process.

42. Other delays were reported by one implementation agency related to the undertaking of eight verification reports in the same region, for which two international consultants were hired to prepare four reports each, while coordinating methodology and formats for the reports to be consistent in data collection and reporting. Conducting multiple verification projects at once was a challenge for the agency, while the timeframe defined by the Executive Committee for submission became short given the complexity of this exercise. The agency addressed the challenges through the establishment of systematic procedures to conduct the verifications and streamline the assignment in all of the countries involved.

43. In order to avoid delays for stage II of a HPMP, the agency worked closely with the Fund Secretariat to prepare a preliminary report, which included an assessment of enforcement of the licensing and quota



system, and the data on verified consumption from the audit, to meet the requirement of submitting the regional HPMP stage II, while working on the full verification report.

44. Another project reported challenges in performing the verification due to the Ministry of Environment, where the NOU was located, being restructured and the NOU being moved to the Ministry of Culture, Tourism and Environment. This and the pandemic delayed the preparation and completion of the verification report.

*Demonstration project (1)*

45. The demonstration project for ODS waste management and disposal experienced some delays due to supply and contractor issues. The very rigorous bidding process related to the purchase of materials and equipment for the reclaim centres helped ensure the quality and delivery of the products, but it entailed a complex and lengthy process which caused some delays in implementation. National factors regarding the variation in fuel prices affected the costs of transportation for the hazardous waste in the project. The COVID-19 pandemic added to these delays as some enterprises had to stop working because of constraints on personnel availability.

46. Delays due to project design were also identified. According to the implementing agency, during implementation it became apparent that the allocated timeframe for the project was too short and would not make it possible to carry out all the planned activities. Furthermore, the resource allocation to achieve the different results was not adequate, and there was a need to reallocate funds among the different planned activities. The project also faced technological issues due to disruptions affecting one incinerator.

47. In order to address the above-mentioned issues, the agency requested a project extension with a detailed workplan. The revised proposal for allocation of resources was adjusted. The agency also introduced the use of virtual tools for communication to ensure business continuity remotely during the COVID-19 pandemic, to the extent feasible, and maintain interaction with national counterparts.

*Global project – four national surveys on alternatives to ozone-depleting substances (1)*

48. The PCR for the technical assistance project to prepare four national surveys on ODS alternatives indicates that in one country the survey was completed within the established timeframe of 18 months. However, since the project comprised three other countries in which implementation delays were faced, the PCR could not be presented until the completion of all subcomponents.

49. Delays reported in the other three countries were related to: (a) difficulties hiring a consultant with the adequate expertise, and (b) coordination issues between the foreign consultancy firm and the local support providers in reaching out to national stakeholders. The implementing agency provided additional support to the foreign enterprises that had been selected through a competitive process, by sharing with the consultants the required knowledge of the sectors and industry in the various national contexts.

## **II.3 Lessons learned<sup>8</sup>**

### Investment projects

50. From a conversion project, lessons learned related to the need to undertake fire safety audits before full operation can start. Project design is to take into account the time required to carefully define the scope of the audit and to identify qualified fire safety experts to perform it.

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<sup>8</sup> Online access to lessons learned from individual PCRs: <http://multilateralfund.org/pcrindividual/search.aspx>.

51. From the implementation of the halon project, lessons learned referred to the importance of defining enabling policies and regulatory environments that will provide the incentives for successful project implementation to achieve compliance with the Montreal Protocol.

### Non-investment projects

#### *Verification reports*

52. A key successful factor for verification projects is to establish smooth coordination among the agency(ies), the NOUs and the stakeholders involved as data providers for the verification. The NOUs play a central role in ensuring the flow of information and the quality of the data provided to the independent verifier. The cooperation of customs officers is also required, to understand what key issues have been faced regarding possible misreporting with wrong Harmonized System codes and other issues regarding the quota and licensing systems. The guidelines for verification provide the adequate framework for the independent verifier to submit objective and verified information as expected for the assignment.

53. The verification reports provided comprehensive information on elements involved in the implementation of projects, such as: (a) quota and licensing system; (b) regular data reconciliation; (c) filing system; (d) memorandum of understanding between the NOU and customs; (e) capacity building; and (f) reporting requirements. The verification reports' recommendations have proven useful to the agencies in revising action plans, designing and implementing either new projects or new stages of implementation.

#### *Other individual project completion reports (demonstration project and surveys on alternatives to ozone-depleting substances)*

54. The demonstration project brought some lessons, including on project design. The timeframe of the project was too short, and the resources should have been allocated differently to achieve the planned results. It also confirmed that continued collaboration with local authorities and enterprises is needed to consider the environmental impact of the projects and to relate that impact to national decision-making.

55. The surveys on ODS alternatives helped the governments to understand future import and usage patterns and establish a basis of HFCs consumed, to be better prepared for tracking HFC trends. The surveys were useful for sensitizing countries and NOUs on aspects relevant to future HFC phase-down, such as calculating equivalent emissions of carbon dioxide or understanding the market for each relevant sector for projecting future consumption. They also served to identify, and reintroduce to the NOUs, stakeholders across sectors that had not been in the picture since the CFC and halon phase of the Montreal Protocol, while providing an early warning signal to the industry that HFCs would be/were subject to control under the Montreal protocol and would eventually be phased down.

56. Learning from the delays in implementation, it is suggested to better assess the operational knowledge of foreign enterprises when tasking them to undertake assignments such as a national survey, which require not only general expertise on making surveys but also a degree of knowledge of the national context and relevant stakeholders to be mapped and included in the surveys.

### **III. Reporting on gender mainstreaming in project completion reports**

57. The existing formats for submitting the PCRs do not include a dedicated section to report on gender mainstreaming. However, a few agencies managed to provide information on this matter, when available, under the section for remarks.

58. Among the PCRs considered for the present consolidated report, 19 MYAs and one individual project were approved from the 85<sup>th</sup> meeting onwards,<sup>9</sup> of which two reported on gender-related issues. One MYA PCR for a project approved before the 85<sup>th</sup> meeting, on MB, also included a short reference to women in agriculture, indicating their role in the sector, making them important actors for project implementation.

59. On the more recent MYAs, one country reported on the creation of a women's association in the refrigeration sector, to help young female graduates get jobs and start a career. Training centres have contributed to the training of women technicians. The NOUs and the implementing agencies have played an instrumental role in improving the representation of women in a traditionally male-dominated servicing sector. Another project indicated that the country is aiming at increasing the number of women to be trained and enrolled in the different sectors related to HCFCs and alternatives, and equipment containing those substances.

60. The SMEO will continue to monitor references to gender mainstreaming in PCRs. To this end, it is expected that this area will be included for reporting, as a result of the forthcoming internal exercise included in the 2023 Monitoring and Evaluation work programme,<sup>10</sup> when proposing revised formats for the PCRs.

#### **IV. Other issues**

61. In preparation for the 92<sup>nd</sup> meeting, an inter-agency coordination meeting (IACM) was held on 8-9 March 2023. There was opportunity for discussion on the subject among the Secretariat, the bilateral and implementing agencies and the SMEO.<sup>11</sup> Reference was made to the forthcoming review of PCRs, including relevant formats and processes, as well as measures and expectations related to improving the preparation and use of the information.

62. Agencies shared their views on the review based on their experience, noting some of the following issues: (a) processes and formats had not evolved when compared to those of project proposals; (b) databases of lessons learned were rarely used in the preparation of new projects as monitoring was done through tranche implementation reports in tranche requests and country-specific lessons learned in new stage requests; (c) the timeline for submission of PCRs, i.e., within six months after project completion, was tight, and not consistent with the timeline for financial completion; (d) the process for identifying projects where PCRs were due could be reviewed and improved; and (e) the PCR guidelines would need to be updated if a new format were adopted.

63. In response, the SMEO noted that the review exercise would identify the users and the value of PCRs. She would work with agencies and the Secretariat to achieve an improved format of PCRs better aligned to project proposal formats. She recalled that changes in databases for lessons learned is part of the second phase in the implementation of the new knowledge management system. She highlighted that any change in the timeline for the submission of PCRs should be assessed and approved by the Executive Committee, and encouraged agencies to continue submitting PCRs when operational completion was done, without waiting for the list of due PCRs, since agencies were the first to know when the projects were completed. The SMEO will take into consideration the above-mentioned issues and organize a session on the matter at the IACM in preparation for the 93<sup>rd</sup> meeting.

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<sup>9</sup> Date after which projects should be addressing gender issues in compliance with the Multilateral Fund operational gender mainstreaming policy approved by decision 84/92. For latest updates see UNEP/OzL.Pro/ExCom/92/51.

<sup>10</sup> UNEP/OzL.Pro/ExCom/91/11/Rev.1

<sup>11</sup> MLF/IACM.2023/1/2

## **V. Recommendation**

64. The Executive Committee may wish:

- (a) To note:
  - (i) The 2023 consolidated project completion report (PCR) (part I) contained in document UNEP/OzL.Pro/ExCom/92/10;
- (b) To request:
  - (i) Bilateral and implementing agencies to submit, at the 93<sup>rd</sup> meeting, outstanding PCRs for multi-year agreements (MYAs) and individual projects or to provide reasons for failing to do so;
  - (ii) Lead and cooperating implementing agencies to continue coordinating their work closely in finalizing their respective portions of PCRs to facilitate the timely submission of the reports by the lead implementing agency;
  - (iii) Bilateral and implementing agencies, when filling in the data for PCR submissions, to ensure the inclusion of relevant and useful information about the lessons learned and reasons for any delays, beyond anecdotal evidence, with a view to enabling the formulation of actionable recommendations for improvements in future project implementation or the replicability of good practices; and
- (c) To invite all those involved in the preparation and implementation of MYAs and individual projects, in particular the Secretariat and the bilateral and implementing agencies, to take into consideration the lessons learned from PCRs, where applicable.

**Annex I**

**MULTI-YEAR AGREEMENT PROJECT COMPLETION REPORTS  
RECEIVED AFTER THE 91<sup>ST</sup> MEETING AND  
CONSIDERED IN THE 2023 CONSOLIDATED PROJECT COMPLETION REPORT (Part I)**

	<b>Country</b>	<b>Agreement title</b>	<b>Lead agency</b>	<b>Cooperating agency</b>
1.	Albania	HCFC Phase-Out Plan (Stage I)	UNIDO	UNEP
2.	Bahamas	CFC Phase-Out Plan	World Bank (IBRD)	
3.	Bolivia	HCFC Phase-Out Plan (Stage I)	UNIDO	Germany
4.	Burkina Faso	HCFC Phase-Out Plan (Stage I)	UNEP	UNIDO
5.	Cape Verde	HCFC Phase-Out Plan (Stage I)	UNEP	
6.	Dominican Republic	HCFC Phase-Out Plan (Stage II)	UNDP	UNEP
7.	Ecuador	HCFC Phase-Out Plan (Stage I)	UNIDO	UNEP
8.	Guatemala	HCFC Phase-Out Plan (Stage I)	UNIDO	UNEP
9.	El Salvador	HCFC Phase-Out Plan (Stage I)	UNDP	UNEP
10.	Honduras	HCFC Phase-Out Plan (Stage I)	UNIDO	UNEP
11.	Madagascar	HCFC Phase-Out Plan (Stage I)	UNEP	UNIDO
12.	Mongolia	HCFC Phase-Out Plan (Stage I)	UNEP	Japan
13.	Montenegro	HCFC Phase-Out Plan (Stage I)	UNIDO	
14.	Nepal	HCFC Phase-Out Plan (Stage I)	UNEP	UNDP
15.	Nicaragua	HCFC Phase-Out Plan (Stage I)	UNEP	UNIDO
16.	Oman	HCFC Phase-Out Plan (Stage II)	UNIDO	UNEP
17.	Panama	HCFC Phase-Out Plan (Stage II)	UNDP	
18.	Philippines	CFC Phase-Out Plan	World Bank (IBRD)	Sweden/UNEP
19.	Senegal	HCFC Phase-Out Plan (Stage I)	UNEP	UNIDO
20.	Serbia	HCFC Phase-Out Plan (Stage I)	UNIDO	UNEP
21.	Sri Lanka	HCFC Phase-Out Plan (Stage I)	UNDP	UNEP
22.	Turkmenistan	HCFC Phase-Out Plan (Stage I)	UNIDO	
23.	Yemen	Methyl bromide	Germany	



**Annex II**

**INDIVIDUAL PROJECT COMPLETION REPORTS RECEIVED AFTER THE 91<sup>ST</sup> MEETING  
CONSIDERED IN THE 2023 CONSOLIDATED PROJECT COMPLETION REPORT (Part I)**

	<b>Code</b>	<b>Agency</b>	<b>Project title</b>
1.	ANG/PHA/84/TAS/22	UNDP	Verification report for stage I of HCFC phase-out management plan
2.	BRA/DES/72/DEM/305	UNDP	ODS waste management and disposal
3.	CKI/PHA/84/TAS/14	UNEP	Verification report on the implementation of the HCFC phase-out management plan
4.	ELS/PHA/79/TAS/36	UNDP	Verification report on the implementation of the HCFC phase-out management plan
5.	FSM/PHA/84/TAS/14	UNEP	Verification report on the implementation of the HCFC phase-out management plan
6.	GUA/PHA/84/TAS/56	UNIDO	Verification report on the implementation of the HCFC phase-out management plan
7.	HON/PHA/84/TAS/49	UNIDO	Verification report on the implementation of the HCFC phase-out management plan
8.	IND/HAL/34/INV/315	World Bank (IBRD)	Halon production and consumption sector phase out plan
9.	KIR/PHA/84/TAS/15	UNEP	Verification report on the implementation of the HCFC phase-out management plan
10.	MAS/PHA/84/TAS/14	UNEP	Verification report on the implementation of the HCFC phase-out management plan
11.	NAU/PHA/84/TAS/12	UNEP	Verification report on the implementation of the HCFC phase-out management plan
12.	NIU/PHA/84/TAS/14	UNEP	Verification report on the implementation of the HCFC phase-out management plan
13.	ODS Surveys	World Bank (IBRD)	Survey of ODS Alternatives at the National Level
14.	SRL/PHA/82/TAS/51	UNDP	Verification report on the implementation of the HCFC phase-out management plan
15.	THA/REF/82/INV/03+	World Bank (IBRD)	Conversion from HFC to Propane (R-290) and/or Isobutane (R-600a) as refrigerant in manufacturing commercial refrigeration appliances in Pattana Intercool Co., Ltd.
16.	TLS/PHA/86/TAS/21	UNEP	Verification report on the implementation of the HCFC phase-out management plan
17.	TUV/PHA/84/TAS/15	UNEP	Verification report on the implementation of the HCFC phase-out management plan
18.	VAN/PHA/84/TAS/16	UNEP	Verification report on the implementation of the HCFC phase-out management plan





**Annex III**

**OUTSTANDING INDIVIDUAL PROJECT COMPLETION REPORTS FOR SUBMISSION TO THE 93<sup>rd</sup> MEETING \***

	<b>Code</b>	<b>Agency</b>	<b>Project Title</b>
1.	BHA/PHA/82/TAS/27	UNEP	Verification report on the implementation of the HCFC phase-out management plan
2.	IRQ/REF/57/INV/07	UNIDO	Replacement of refrigerant CFC-12 with isobutane and foam blowing agent CFC-11 with cyclopentane in the manufacture of domestic refrigerators and chest freezers at Light Industries Company
3.	JAM/PHA/84/TAS/39	UNDP	Verification report on the implementation of the HCFC phase-out management plan
4.	LIR/PHA/85/TAS/29*	Germany	Verification report for stage I of HCFC phase-out management plan
5.	MEX/REF/81/INV/04+	UNIDO	Conversion of commercial refrigeration manufacturing in two facilities from the use of HFC-134a and R-404A as the refrigerants to propane (R- 290) and isobutane (R-600a) at Imbera
6.	SIL/PHA/86/TAS/39	UNEP	Verification report on the implementation of the HCFC phase-out management plan
7.	STL/PHA/82/TAS/30	UNEP	Verification report on the implementation of the HCFC phase-out management plan

(\*) The individual project completion reports (PCRs) for the Bahamas, Liberia and Saint Lucia have been submitted to the Secretariat after the cut-off date for the 92<sup>nd</sup> meeting and they will be considered in the 2023 consolidated PCR (Part II) at the 93<sup>rd</sup> meeting. Shaded in the table.



**Annex IV**

**OUTSTANDING MULTI-YEAR AGREEMENT PROJECT COMPLETION REPORTS DUE BY DECISION IN 2023 \***

	<b>Country</b>	<b>Multi-year agreement (MYA) sector/title</b>	<b>Lead/cooperating agency</b>
1.	Afghanistan	HCFC Phase-Out Plan (Stage I)	UNEP/Germany/UNIDO
2.	Bahamas	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
3.	Belize	HCFC Phase-Out Plan (Stage I)	UNEP/UNDP
4.	Benin	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
5.	Bosnia and Herzegovina	HCFC Phase-Out Plan (Stage I)	UNIDO
6.	Botswana	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
7.	Brunei Darussalam	HCFC Phase-Out Plan (Stage I)	UNEP/UNDP
8.	Chad	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
9.	Chile	HCFC Phase-Out Plan (Stage II)	UNDP/UNEP/UNIDO
10.	Colombia	HCFC Phase-Out Plan (Stage II)	UNDP/UNEP/Germany
11.	Comoros	HCFC Phase-Out Plan (Stage I)	UNEP
12.	Cook Islands	HCFC Phase-Out Plan (Stage I)	UNEP
13.	Côte d'Ivoire	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
14.	Djibouti	HCFC Phase-Out Plan (Stage I)	UNEP
15.	Ethiopia	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
16.	Fiji	HCFC Phase-Out Plan (Stage I)	UNDP/UNEP
17.	Gabon	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
18.	Global (Argentina)	Global chiller replacement project (GLO/REF/80/DEM/344)	UNIDO
19.	Guinea	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
20.	Kiribati	HCFC Phase-Out Plan (Stage I)	UNEP
21.	Kuwait	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
22.	Lao, PDR	HCFC Phase-Out Plan (Stage I)	UNEP/France
23.	Marshall Islands	HCFC Phase-Out Plan (Stage I)	UNEP
24.	Micronesia	HCFC Phase-Out Plan (Stage I)	UNEP
25.	Mozambique	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
26.	Myanmar	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
27.	Nauru	HCFC Phase-Out Plan (Stage I)	UNEP
28.	Niger	HCFC Phase-Out Plan (Stage I)	UNIDO/UNEP
29.	Niue	HCFC Phase-Out Plan (Stage I)	UNEP
30.	Palau	HCFC Phase-Out Plan (Stage I)	UNEP
31.	Paraguay	HCFC Phase-Out Plan (Stage I)	UNEP/UNDP
32.	Region: ASP (PIC Islands)	HCFC Phase-Out Plan (Stage I)	UNEP
33.	Saint Lucia	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
34.	Samoa	HCFC Phase-Out Plan (Stage I)	UNEP
35.	Solomon Islands	HCFC Phase-Out Plan (Stage I)	UNEP
36.	Somalia	HCFC Phase-Out Plan (Stage I)	UNIDO
37.	Tanzania	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
38.	Tonga	HCFC Phase-Out Plan (Stage I)	UNEP
39.	Tuvalu	HCFC Phase-Out Plan (Stage I)	UNEP
40.	Vanuatu	HCFC Phase-Out Plan (Stage I)	UNEP
41.	Zambia	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
42.	Zimbabwe	HCFC Phase-Out Plan (Stage I)	Germany

(\*) The project completion reports (PCRs) for 17 projects due by decision have been submitted to the Secretariat after the cut-off date for the 92<sup>nd</sup> meeting and they will be considered in the 2023 consolidated PCR (Part II) at the 93<sup>rd</sup> meeting. Shaded in the table.

**Annex V**

**OTHER OUTSTANDING MULTI-YEAR AGREEMENT PROJECT COMPLETION  
REPORTS \***

	<b>Country</b>	<b>Multi-year agreement (MYA) sector/title</b>	<b>Lead/cooperating agency</b>
1.	Argentina	Production CFC	World Bank
2.	Armenia	HCFC Phase-Out Plan (Stage II)	UNDP/UNEP
3.	Cuba	HCFC Phase-Out Plan (Stage I)	UNDP
4.	Eritrea	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
5.	Eswatini	HCFC Phase-Out Plan (Stage I)	UNEP/UNDP
6.	Gambia	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
7.	Guinea-Bissau	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
8.	Iraq	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
9.	Lesotho	HCFC Phase-Out Plan (Stage I)	Germany
10.	Malawi	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
11.	Moldova, Rep	HCFC Phase-Out Plan (Stage II)	UNDP/UNEP
12.	Rwanda	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
13.	Sao Tome and Principe	HCFC Phase-Out Plan (Stage I)	UNEP
14.	Sierra Leone	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO
15.	Uganda	HCFC Phase-Out Plan (Stage I)	UNEP/UNIDO

(\*) The MYA project completion reports (PCRs) for seven projects have been submitted to the Secretariat after the cut-off date for the 92<sup>nd</sup> meeting and they will be considered in the 2023 consolidated PCR (Part II) at the 93<sup>rd</sup> meeting. Shaded in the table.