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Item 7(b)(i) of the provisional agenda¹

**REPORTS ON PROJECTS WITH SPECIFIC REPORTING REQUIREMENTS:
REPORTS WITH NO OUTSTANDING ISSUES**

An overview

1. This document includes reports on projects related to HCFC phase-out management plans,² Kigali HFC implementation plans, and additional activities to maintain energy efficiency in the refrigeration servicing sector (decision 89/6). Table 1 lists the reports on projects with specific reporting requirements submitted to the 95th meeting which, after the Secretariat's review, have no outstanding issues and therefore do not require the Executive Committee to consider them individually.

Table 1. Reports on projects with specific reporting requirements with no outstanding issues

Country	Project title	Paragraphs
A. Reports related to HCFC phase-out management plans (HPMPs)		
Afghanistan	HCFC phase-out management plan (stages I and II – transfer of implementation of UNEP's components to UNIDO)	2 - 15
Argentina	HCFC phase-out management plan (stage II – availability of low global-warming-potential alternatives to HCFC 141b in the foam sector and transitional use of high global-warming-potential alternatives)	16 - 28
Bolivia (Plurinational State of)	HCFC phase-out management plan (stage II – report on the progress made in establishing a ban on HCFC-based equipment)	29 - 34
Honduras	HCFC phase-out management plan (stage II – update on the progress toward implementing the recommendations in the verification report)	35 - 39
Mauritania	HCFC phase-out management plan (stage I – steps taken to strengthen the HCFC import and export licensing and quota systems)	40 - 44

¹ UNEP/OzL.Pro/ExCom/95/1

² In line with decision 94/16(b), Algeria also submitted a report on all remaining ongoing activities under stage I of the HPMP to the 95th meeting. The report is presented in the project proposal document for Algeria (UNEP/OzL.Pro/ExCom/95/39).

Country	Project title	Paragraphs
Viet Nam	HCFC phase out management plan (stage II – final progress report)	45 - 61
B. Report related to Kigali HFC implementation plans (KIPs)		
Burkina Faso	Kigali HFC implementation plan (stage I – first tranche – feasibility study on establishing a hydrocarbon distribution centre)	62 - 71
C. Report on additional activities to maintain energy efficiency in the refrigeration servicing sector (decision 89/6)		
Maldives	Additional activities to maintain energy efficiency in the refrigeration servicing sector under decision 89/6(b) (progress report)	72 - 80

A. Reports related to HPMPs

Afghanistan: HCFC phase-out management plan (stages I and II – transfer of implementation of UNEP's components to UNIDO) (UNIDO)

Background

2. Stage I of the HCFC phase-out management plan (HPMP) was originally approved at the 63rd meeting³ and revised at the 79th meeting⁴ to meet the 35 per cent reduction from the baseline by 2020 at a total funding level of US \$679,101, plus agency support costs of US \$78,554, to phase out 8.26 ODP tonnes of HCFCs. All four of the tranches planned under stage I have been approved, with the final tranche approved at the 85th meeting. The project was planned for completion by the end of 2021 in accordance with paragraph 14 of the Agreement between the Government and the Executive Committee.

3. Stage II of the HPMP was approved at the 85th meeting⁵ to achieve a 67.5 per cent reduction in HCFC consumption by 2025. Due to the breakout of COVID-19 and the subsequent political turbulence, implementation of the fourth tranche of stage I and the first tranche of stage II was delayed. At the 93rd meeting, the Executive Committee noted the request from Afghanistan to transfer the implementation of UNEP's components in stages I and II of the HPMP to UNIDO, including the remaining balances from the approved projects; and that UNIDO would submit the updated Agreements for stage I and stage II of the HPMP for Afghanistan, together with the revised implementation plans, to the 94th meeting (decision 93/14(c)).

4. In line with decision 93/14(c), UNIDO has submitted a progress report, including the remaining funding balances from the fourth tranche of stage I and the first tranche of stage II of the HPMP, which are to be transferred from UNEP to UNIDO.⁶ The submission also includes implementation plans related to the transferred funds.

Progress report on the implementation of stages I and II

5. The implementation of the fourth tranche of stage I and the first tranche of stage II was delayed due to political unrest in the country. The national ozone unit (NOU), under the National Environmental Protection Agency, continues to implement programmes to phase out HCFCs. A licensing and quota system is being enforced and a regulation to ban HCFC-based equipment was drafted in order to control the import of HCFCs.

6. A national ozone committee composed of key stakeholders has been established, and three coordination meetings were held by the committee to set the national HCFC quotas for 2023 and 2024. The qualifications of the importing companies were reviewed, and licences and quotas were distributed to

³ Decision 63/52

⁴ Decision 79/27(a)(i)

⁵ Decision 85/24

⁶ See also paragraphs 4-6 of document UNEP/OzL.Pro/ExCom/95/4

12 importers. The NOU continues to coordinate with customs and other key stakeholders to enforce the licensing and quota system, raise awareness on HCFC control, monitor imports and market supplies, and address illegal imports.

7. The regulations for controlling ODS are under review by the Ministry of Justice. The NOU has prepared inputs for these amendments and participated in the public consultation process. Additionally, the NOU is working with the Afghan-Korea Institute to plan further training for refrigeration and air-conditioning (RAC) technicians.

8. Data was collected, and a study was conducted to analyze the economic impact of the Kigali Amendment. A checklist of HFCs, including their chemical names, trade names, GWP values, and harmonized system (HS) codes, has been prepared and provided to the customs department for monitoring imports.

Financial report

9. Of the total US \$69,101 approved for the fourth tranche of stage I of the HPMP (US \$40,825 for UNEP and US \$28,276 for UNIDO), US \$12,372 has been disbursed by UNEP, with no disbursement from UNIDO. The remaining US \$28,453 from UNEP will be transferred to UNIDO as requested by Afghanistan.

10. Of the total US \$319,567 approved for the first tranche of stage II of the HPMP (US \$229,567 for UNEP and US \$90,000 for UNIDO), US \$48,659 has been disbursed by UNEP and US \$23,011 by UNIDO. The remaining balance of US \$180,908 for UNEP will also be transferred to UNIDO.

Implementation plans

The fourth tranche of stage I

11. The US \$28,453 transferred from UNEP to UNIDO will be used for the following activities:
- (a) Legal framework and regulations: Conduct a gap analysis and drafting proposed regulations (US \$3,000);
 - (b) Translate the amended regulations to English and other local languages, along with public awareness and dissemination of the regulations (US \$13,453); and
 - (c) Develop technical guidelines for customs officers and RAC technicians on the identification and handling of refrigerants using refrigerant identifiers (US \$12,000).

The first tranche of stage II

12. The funding of US \$180,908 transferred from UNEP to UNIDO will be used for the following activities:
- (a) Strengthen the enforcement of the licensing and quota system, finalize and implement the ban on HCFC-based equipment, and prepare training materials to conduct four workshops for 60 customs officers on ODS import control (US \$25,000);
 - (b) Develop awareness-raising materials for the customs department in the local language, and print and distribute 300 copies to customs and inspection officers (US \$20,000);

- (c) Organize three workshops to train 60 RAC technicians on good servicing practices, safety in handling flammable refrigerants, and improving the energy efficiency of RAC units, in collaboration with the Afghan-Korea Institute (US \$25,000);
- (d) Conduct awareness-raising activities through television, newspapers, posters, and social media to disseminate information on ODS policies and alternative technologies (US \$15,000);
- (e) Train 60 personnel from 10 importers on record-keeping and data reporting, and introduce safety standards and codes of good practice for handling flammable refrigerants (US \$25,000);
- (f) Demonstrate low-GWP R-290 technology by identifying a technology supplier of R-290-based commercial refrigeration equipment, purchasing equipment, selecting equipment installers for the pilot installation, and conducting subsequent maintenance of the R-290 equipment (US \$30,908); and
- (g) Project coordination, monitoring, and reporting will involve employing a full-time project coordinator to manage activities under stages I and II of the HPMP. This includes outreach and engagement with stakeholders, supporting the licensing and quota process, providing information on RAC market issues, organizing training activities, assisting with equipment purchases, upgrading training institutes, overseeing verification processes, and monitoring and reporting progress (US \$40,000).

Secretariat's comments

13. The Secretariat notes that the country continued the implementation of the stages of the HPMP and has remained in compliance with the Montreal Protocol phase-out schedule. Given the delays in implementation, the Secretariat recommends extending the implementation period for the fourth tranche of stage I to the end of 2026 and for the first tranche of stage II to the end of 2028.

Updated Agreement

14. In light of the funding transfers from UNEP to UNIDO and the extension of the implementation periods, the Agreements between Afghanistan and the Executive Committee for stage I and stage II of the HPMP have been updated. Specifically, Appendices 2-A have been revised, and text has been updated or added to indicate that the revised Agreements supersede those reached at earlier meetings (the 79th meeting for stage I and 85th meeting for stage II), as contained in annexes I and II to the present document. The full revised Agreements will be appended to the final report of the 95th meeting.

Recommendation

15. The Executive Committee may wish:

- (a) To note the progress report on the implementation of stages I and II of the HCFC phase-out management plan (HPMP) for Afghanistan, submitted by UNIDO as contained in document UNEP/OzL.Pro/ExCom/95/20;
- (b) To note the return of balances by UNEP of US \$28,453 from the fourth tranche of stage I of the HPMP and US \$180,908 from the first tranche of stage II of the HPMP and approve the transfer of these funds to UNIDO, along with the corresponding implementation plans for the transferred funds;

- (c) To approve the transfer from UNEP to UNIDO of the funding of US \$239,000, plus agency support costs, approved in principle, associated with the second and third tranches of stage II of the HPMP;
- (d) To approve the extension of the implementation period for the fourth tranche of stage I of the HPMP to 31 December 2026 and for the first tranche of stage II of the HPMP to 31 December 2028;
- (e) To further note that the Fund Secretariat has updated the Agreements between Afghanistan and the Executive Committee, as contained in annexes I and II of this document, specifically:
 - (i) For stage I, Appendix 2-A has been revised to reflect the transfer of funding balance from UNEP to UNIDO referenced in subparagraph (b) above, and paragraph 16 has been updated to indicate that the revised updated Agreement supersedes that reached at the 79th meeting by decision 79/27; and
 - (ii) For stage II, Appendix 2-A has been revised to reflect the transfer of funding balance from UNEP to UNIDO referenced in subparagraph (b) above, and paragraph 17 has been added to indicate that the updated Agreement supersedes that reached at the 85th meeting by decision 85/24.

Argentina: HCFC phase-out management plan (stage II – availability of low-global-warming-potential alternatives to HCFC-141b in the foam sector and transitional use of high-global-warming-potential alternatives) (UNIDO and the Government of Italy)

Background

16. At its 92nd meeting, in approving the third tranche of stage II of the HCFC phase-out management plan (HPMP) for Argentina (decision 92/31), the Executive Committee noted *inter alia*:

- (a) The challenges presented by the lack of supply of low-global-warming-potential (GWP) alternatives to HCFC-141b in the foam sector, which had delayed the implementation of stage II activities in the foam sector that would have allowed the Government of Argentina to phase out 85.92 ODP tonnes of HCFCs; and
- (b) That, in the event that alternatives were not available on the local market, high-GWP alternatives could be used, on a transitional basis only, and that the Government of Argentina would report to each Executive Committee meeting on the progress made towards ensuring that the selected technologies, including the associated components, were available on a commercial basis in the country, on the understanding that incremental operating costs (IOCs) would not be funded until the transition to the agreed alternatives was complete.

17. At the 93rd meeting, UNIDO reported that over the 2022-2023 period, HFO prices reached US \$35-40 kg, and that even though HFOs had been tested by local systems houses, they did not have sufficient stocks for production at a commercial scale. Regarding other alternatives, downstream enterprises were reluctant to use other technologies such as methyl formate or methylal due to their corrosiveness and flammability issues, identified during previous tests. Noting the report, the Executive Committee requested the Government of Argentina and UNIDO, to provide an update at the 94th meeting (decision 93/17(b)).

18. At the 94th meeting, UNIDO reported that prices, availability and delivery times continued to be the main issues hindering local systems houses adopting HFOs. While prices had decreased in comparison

to those reported at the 93rd meeting, they were still a significant barrier for local enterprises. Delivery times spanned between 90 and 120 days, and no HFOs were being sold to local systems houses on a commercial scale. However, suppliers indicated they could provide HFOs to the country provided there were purchase commitments from systems houses, highlighting the need for insurance to meet headquarters' requirements for introducing a new alternative into the country.

19. The report also indicated the need for local systems houses to temporarily transition to HFCs as their prices and availability ensured business continuity without significant cost increases. However, the Government reassured that the use of HFCs in the polyurethane (PU) foam sector was not a long-term solution and the local system houses expressed their willingness to adopt HFOs as an alternative once the price and supply barriers were overcome. Noting the report, the Executive Committee requested the Government and UNIDO to provide at the 95th meeting an update on the local market availability of low-GWP alternatives to HCFC-141b in the foam sector and on the transitional use of high-GWP alternatives (decision 94/7(b)).

Progress report

20. On behalf of the Government of Argentina, UNIDO submitted a report providing an update on the status of supply, price, delivery times of HFOs for the PU foam sector upon extensive consultations held by the Government of Argentina with the key suppliers and the local systems houses.

21. Regarding supply, one of the suppliers informed that it would be able to provide its HFO to the local market by 2026 while the other two suppliers confirmed that they will have the capacity to supply their HFO to the Argentinian market immediately.

22. Concerning price, some suppliers mentioned the possibility of reaching commercial agreements with prices significantly lower than those previously reported. These prices, while still challenging for the local systems houses, are expected to make HFOs more accessible for the local market. While deliveries are still expected to initially take between 90 and 120 days, suppliers indicated they could be reduced for subsequent purchases.

23. As already reported at the 94th meeting, suppliers indicated that they could provide HFOs to the country upon receiving purchase commitments from systems houses, emphasizing the need for insurance to meet headquarters' requirements when introducing a new alternative in the country.

24. The report also confirmed that all the systems houses have conducted tests and trials with HFOs and are in contact with suppliers to negotiate commercial terms to start the transition. However, so far HFO is still not being consumed or used in Argentina as a substitute for HCFC-141b. Some enterprises are still using HFCs on a transitional basis as an alternative of HCFC-141b but the Government reiterated that the use of HFCs in the PU foam sector is not a long-term solution and the local systems houses expressed their willingness to adopt HFOs as an alternative once the price and supply barriers are overcome. The Government considers that suppliers are a key part in the adoption of the technology and that the country requires support from HFO-producing countries to ensure a reliable local supply.

Secretariat's comments

25. The Secretariat notes the report providing an update on the status of supply, price, delivery times of HFOs for the PU foam sector, the confirmation that some enterprises are still using HFCs on a temporary basis as an alternative to HCFC-141b, and the reassurance of the local systems houses' willingness to adopt HFOs as an alternative once the price and supply barriers are overcome.

26. The Secretariat also notes with appreciation the active discussions held by the Government of Argentina with the suppliers of alternatives and the systems houses, as well as the progress achieved from

these discussions, including more clarity on the availability of the blowing agent, and the consideration of lower prices than those previously reported. Noting that the issue of availability of alternatives in PU foam manufacturing will be discussed under agenda item 10 of the 95th meeting, the Secretariat has included the updated information related to the PU foam project in Argentina in document UNEP/OzL.Pro/ExCom/95/85.

27. Despite the notable progress made, the issues of availability and pricing for low-GWP alternatives remain unresolved, and high-GWP alternatives are still being used on a transitional basis. Therefore, in line with decision 92/31(c)(ii), the Secretariat recommends that the Government of Argentina continue reporting to the Executive Committee on the matter.

Recommendation

28. The Executive Committee may wish:

- (a) To note the report on the update on the status of availability of low-global-warming-potential (GWP) alternatives to HCFC-141b in the foam sector and on the transitional use of high-GWP alternatives in the context of stage II of the HCFC phase-out management plan for Argentina, provided by UNIDO and contained in document UNEP/OzL.Pro/ExCom/95/20; and
- (b) To request the Government of Argentina and UNIDO, in line with decision 92/31(c)(ii), to provide an update at the 96th meeting on the local market availability of low-GWP alternatives to HCFC-141b in the foam sector and on the transitional use of high-GWP alternatives.

Bolivia (Plurinational State of): HCFC phase-out management plan (stage II – report on the progress made in establishing a ban on HCFC-based equipment) (UNIDO and UNEP)

Background

29. Stage II of the HCFC phase-out management plan (HPMP) for the Plurinational State of Bolivia was approved in principle at the 87th meeting, noting the commitment of the country to ban the import of HCFC-based refrigeration and air-conditioning (RAC) equipment by 1 January 2023 (decision 87/36(b)(i)).

30. At the 93rd meeting, the country submitted its request for funding for the second tranche of stage II,⁷ in which UNIDO reported on progress of the ban and the expectation that it would enter into force by March 2024; the legal document (Environmental Management Regulations for Ozone-Depleting Substances) for the ban had been drafted and was expected to come into effect in 2024. Importers and stakeholders were also being informed of the ban, and as a result no HCFC-based equipment was imported in 2023.

31. The Executive Committee approved the second tranche request on the understanding that UNIDO would submit a report on the progress made in establishing the ban on HCFC-based equipment as requested in decision 87/36(b)(i) to the 95th meeting if the said ban had not been established at that time (decision 93/36).⁸

Progress report

32. In line with decision 93/36, UNIDO initially reported issues in establishing the ban in the country, namely that the Government of the Plurinational State of Bolivia lacked the administrative capacity to issue

⁷ Document UNEP/OzL.Pro/ExCom/93/43

⁸ Blanket approval decision and provision contained in annex XIV of document UNEP/OzL.Pro/ExCom/93/105.

a regulation banning HCFC-based equipment and had limited technical capacity to enforce such a ban. The draft regulation had been submitted to the Legal Directorate of the Ministry of Environment for consideration in 2023 but did not otherwise advance.

Secretariat's comments

33. Following discussions with the Secretariat, UNIDO reported that the institution in charge of preauthorizing imports of RAC equipment, the Bolivian Institute of Metrology, is no longer authorizing the entry of HCFC-based RAC equipment. Subsequently, the national ozone unit, through UNIDO, informed that the draft regulation had been updated following observations by the Ministry, and on 17 October 2024, the regulation was signed to officialize the ban.

Recommendation

34. The Executive Committee may wish to note the report on the progress made in establishing the ban on HCFC-based equipment for the Plurinational State of Bolivia, as submitted by UNIDO and contained in document UNEP/OzL.Pro/ExCom/95/20.

Honduras: HCFC phase-out management plan (stage II – update on the progress toward implementing the recommendations in the verification report) (UNIDO and UNEP)

Background

35. At the 92nd meeting, the verification report was submitted together with the request for the second tranche of stage II of the HCFC phase-out management plan (HPMP) for Honduras. The verification showed that while still in compliance, the verified consumption figures for 2020 and 2021 differed from those reported under the country programme (CP) implementation and Article 7 data reports. The verification reiterated recommendations on this issue from previous verifications that had only been partially addressed. The recommendations included, *inter alia*, implementing unique numerical identification for each import authorization; requiring export licenses for HCFCs and other ODSs; and enhancing customs training efforts to ensure accurate customs declarations, particularly concerning the reported net weight. The Secretariat considered that following these recommendations fully would assist the Government in improving data recording accuracy and reducing reporting errors.

36. Accordingly, in approving the second tranche for stage II of the HPMP for Honduras, the Executive Committee requested UNIDO to submit to the 94th meeting an update on the progress toward implementing the recommendations in the verification report, including actions taken by the Government to ensure the accuracy of CP implementation and Article 7 data submitted to the Fund and Ozone Secretariats, respectively (decision 92/24).⁹

Progress report

37. In response to the decision, UNIDO, on behalf of the Government of Honduras submitted to the 95th meeting an update on the progress toward implementing the recommendations of the verification report, highlighting the following:

- (a) In addition to import licenses, the Government of Honduras has established a requirement for export licenses for substances controlled by the Montreal Protocol and equipment containing them. Licenses are also mandatory for controlled substances or equipment in transit;

⁹ Blanket approval decision and provision contained in annex IX of document UNEP/OzL.Pro/ExCom/92/56.

- (b) All licenses are now issued with a unique number for each type of imported substances and equipment. The National Ozone Unit (NOU) is also developing a QR code for each license, which will serve as a unique identifier for customs import declarations. Initial tests have been successful, and the system is expected to be operational during the last quarter of 2024;
- (c) The NOU plans to launch an electronic registration system for importers and import/export licenses in the first quarter of 2025. This system aims to improve data management and enhance the accuracy of consumption reports; and
- (d) In cooperation with the customs department, the NOU conducted three training workshops in 2024 for 100 customs agents at major entry points. These workshops focused on controlling the traffic of controlled substances, including accurately declaring net weight in import/export customs declarations.

Secretariat's comments

38. The Secretariat notes that the Government of Honduras is actively working to implement the recommendations from the verification report. The enhancements being made to the systems for recording and issuing import/export licenses and customs declarations will improve data analysis and increase CP implementation and Article 7 data reports accuracy. The Secretariat will continue monitoring this issue as part of the tranche progress reports to be included in future tranche requests, with the next one due at the 96th meeting.

Recommendation

39. The Executive Committee may wish to note the update on the progress toward implementing the recommendations in the verification report for the second tranche of stage II of the HCFC phase-out management plan for Honduras, submitted by UNIDO and contained in document UNEP/OzL.Pro/ExCom/95/20.

Mauritania: HCFC phase-out management plan (stage I – steps taken to strengthen the HCFC import and export licensing and quota systems) (UNEP)

Background

40. At its 93rd meeting, the Executive Committee noted the status of the review of the HCFC survey report, the recommendations on the revised starting point and the revised Agreement between the Government of Mauritania and the Executive Committee in the context of the HCFC phase-out management plan (HPMP) for Mauritania, and requested UNEP to continue assisting the Government of Mauritania in strengthening its licensing and quota system as well as its systems for recording imports and exports of HCFCs to enable it to account for the export of HCFCs used by foreign vessels from 2023; to improve the use of customs codes; and to report at the 95th meeting on the steps taken to strengthen the HCFC import and export licensing and quota systems (decision 93/24(b)).

Progress report

41. In line with decision 93/24(b), on behalf of the Government of Mauritania, UNEP as the designated implementing agency, has submitted a report outlining the steps taken during 2024. Mauritania has trained 95 customs and enforcement officers on the harmonized system code and HCFC control regulations in the current year. Furthermore, the country has added enforcement measures to its mechanism to monitor HCFC imports/exports by strengthening control over the sale, purchase, circulation, and use of refrigerants utilized by foreign vessels. As of July 2024, importers must provide a sales register for HCFCs used by foreign

vessels, which is crucial for tracking licensing and quota authorization, and port authorities must submit lists of docked ships detailing the HCFC quantities purchased and used every quarter.

Secretariat's comments

42. The Secretariat notes the status report providing an update on the strengthening of Mauritania licensing and quota system, including the records of imports and exports of HCFCs to enable the country to account for the export of HCFCs used by foreign vessels from 2024 and to improve the use of customs codes and training for customs and enforcement officers. The report submitted by UNEP also highlights the role of the port authorities to cross-check the data received from the importers. In summary, determining the use of HCFCs by foreign vessels is addressed through the information provided by these stakeholders.

43. The tracking system for HCFC use in foreign vessels was not implemented in 2023 as the decision to put it in place was only made in December of that year. The Secretariat notes that the information on the use of HCFCs in shipments for 2023 will require a field study and asked UNEP to complete it as part of the survey for preparing stage II of the HPMP.

Recommendation

44. The Executive Committee may wish:

- (a) To note the report on the steps taken to strengthen the HCFC import and export licensing and quota systems for Mauritania, in the context of its stage I of the HCFC phase-out management plan (HPMP), as submitted by UNEP and contained in document UNEP/OzL.Pro/ExCom/95/20;
- (b) To request:
 - (i) UNEP to prepare a report on the uses of HCFCs by foreign vessels in 2023 as part of the preparation of stage II of the HPMP for Mauritania and to include the report as part of the submission of stage II; and
 - (ii) The Government of Mauritania to start reporting as of 2024 the HCFC types and amounts used by foreign vessels in the country programme implementation reports and Article 7 data.

Viet Nam: HCFC phase-out management plan (stage II – final progress report) (World Bank and the Government of Japan)

Background

45. In approving the fourth and final tranche of stage II of the HCFC phase-out management plan (HPMP) for Viet Nam, the Executive Committee requested the Government of Viet Nam, the World Bank and the Government of Japan to submit, at the first meeting in 2024, a progress report on the implementation of the final tranche of stage II of the HPMP (decision 91/57(c)).

46. In April 2024, the World Bank submitted the progress report in line with decision 91/57(c), as well as the verification report on HCFC consumption for 2022.¹⁰

¹⁰ At the 94th meeting, the Executive Committee took note of the submission, which would be reviewed by the Secretariat and presented at the 95th meeting (paragraph 61 of document UNEP/OzL.Pro/ExCom/94/67).

Progress report

HCFC consumption and verification

47. The Government of Viet Nam reported a consumption of 137.46 ODP tonnes of HCFCs in 2023, which is 38 per cent below the country's HCFC baseline for compliance. The 2022 verification report confirmed that the consumption of HCFCs was accurately reported under Article 7 of the Montreal Protocol for that year. The verification concluded that Viet Nam is in compliance with the thresholds as stipulated in the Agreement between the Government and the Executive Committee. The verification report did not address consumption of HCFC-141b contained in imported pre-blended polyols.

Legal framework

48. Under the fourth tranche, four workshops were organized and 150 customs officers trained on controlling and monitoring HCFC imports and exports, for a total 350 customs officers trained under stage II. The Government banned the import of HCFC-141b contained in imported pre-blended polyols on 1 January 2023, in line with decision 90/22(d)(i).

Manufacturing sector

Air-conditioning manufacturing

49. Two air-conditioning (AC) manufacturing enterprises participating in stage II of the HPMP (Hoa Phat and Nagakawa) received the remaining equipment needed for conversion to HFC-32; the new equipment is in operation and the two projects are complete, for a total 51.65 mt phased out in this sector.

Polyurethane foam manufacturing

50. In the polyurethane (PU) foam sector, the two enterprises expected to complete their conversion to cyclopentane (Yantai Moon and Tran Huu Duc) and two to pre-blended cyclopentane (Darling and Tan A) have been completed, phasing out a total annual consumption of 140.95 mt of HCFC-141b contained in pre-blended polyols. Fifteen small and medium-sized enterprises (SMEs) were converted to reduced formulations of HFO pre-blended polyols with the assistance of GreenMat serving as a blending house and providing technical assistance and training, phasing out a further 85.94 mt. Along with the enterprise converted under the third tranche, Saree (consuming 7.00 mt in foam manufacturing), a total of 233.89 mt was phased out in the PU foam sector under stage II.

Refrigeration manufacturing

51. At the 91st meeting, two enterprises (Saree and Nam Dung) were expected to convert from HCFC-22 to ammonia; since then, Saree (consuming 14.49 mt in refrigeration manufacturing) has completed its conversion whereas Nam Dung decided to withdraw from the project. The plan for a group coordinator to assist four SMEs to low-GWP alternatives did not materialize; however, an additional SME, Hai An (consuming 1.65 mt), was able to convert with the assistance of the project implementation and monitoring unit (PMU). Along with the enterprise converted under the third tranche, Phuong Nam (consuming 9.82 mt), a total of 25.96 mt was phased out in the refrigeration manufacturing sector under stage II.

Technical assistance

52. Technical assistance continued under the fourth tranche and included guidance to facilitate the sustainable introduction of low-GWP alternatives, an evaluation of technology effectiveness at selected converted enterprises, and assistance in subproject preparation and training programmes.

Refrigeration servicing sector

53. The following activities were implemented in the servicing sector under the fourth tranche:
- (a) Technical assistance continued to be implemented under the Government of Japan for an AC manufacturer and other stakeholders;
 - (b) Two training-of-trainers workshops were held for 77 vocational school trainers, and 2,000 technicians were trained on good servicing practices and the safe handling of flammable refrigerants, for a total 187 trainers and 3,200 technicians trained under stage II;
 - (c) Tool kits (e.g., leak detector; pressure gauge; refrigerant recovery machine; refrigerant containing tank; vacuum pump; AC unit; tool set of torque wrench, flaring, and tubing cutter; refrigerant scale) were delivered to 45 vocational training schools (110 total), and 200 tool kits (e.g., vacuum pump; tool set of torque wrench, flaring, and tubing cutter) were delivered to servicing shops (300 total); and
 - (d) An online database of trained technicians and training activities was developed, a certification and assessment standard for the training of technicians was drafted, and workshops were held to disseminate the training programme results.

Project implementation and monitoring unit

54. Under the fourth tranche, the PMU commissioned an independent financial audit, upgraded their administrative software, and continued to support five project staff to review quotas, assist enterprises to implement their subprojects, monitor the implementation of project activities, conduct financial audits of project expenditures, develop project implementation and financial reports, and coordinate reporting. Cumulative disbursements for the PMU were US \$624,515, including staff salaries (US \$464,664), consultants (US \$17,021), office equipment and software (US \$26,961), HCFC consumption verification (US \$24,034), meetings (US \$4,968), and operational costs (US \$86,867).

Level of fund disbursement

55. As of 31 March 2024, of the US \$7,208,300 approved under stage II, US \$613,568 had been returned to the Multilateral Fund at the 87th meeting and US \$6,016,334 had been disbursed (US \$5,785,005 for the World Bank and US \$231,329 for the Government of Japan). The World Bank and the Government of Japan are returning to the 95th meeting their respective balance of US \$576,097 and US \$2,301, plus agency support costs.¹¹

Secretariat's comments

Progress report

Air-conditioning manufacturing sector

56. Savings of US \$158,305 were achieved during the conversion at Nagakawa from lower training costs, lower operating costs, and competitive procurement, and of US \$27,563 during the conversion at Hoa Phat as the enterprise procured some of the equipment with its own resources. Both enterprises successfully completed their conversion and have not faced a challenge in selling HFC-32-based AC units in the country. However, neither enterprise is currently manufacturing AC equipment because the AC market in Viet Nam

¹¹ As reflected in document UNEP/OzL.Pro/ExCom/95/4.

continues to be highly competitive and the enterprises have struggled to compete with low-cost HFC-32 AC units imported from other countries in the region.

Polyurethane foam manufacturing sector

57. While GreenMat was only able to assist 15 rather than the 20 SMEs originally planned, the phase-out associated with the consumption at those 15 SMEs was 85.94 mt of HCFC-141b contained in imported pre-blended polyols, which is greater than the anticipated phase-out of 75.00 mt. Accordingly, the phase-out in the foam sector is 233.89 mt of HCFC-141b contained in imported pre-blended polyols, which is higher than the minimum phase-out of 222.95 mt specified in decision 91/57(b). The list of SMEs assisted under the PU foam manufacturing sector, as well as those assisted under the refrigeration manufacturing sector, is available in the project completion report submitted by the World Bank, in line with decisions 90/22(c)(ii)c and 90/22(c)(iii)b.

58. While some time and effort were needed by GreenMat to initially establish a supply of HFO-1233zd, that supply chain has been established, enabling the availability of the HFO. However, accessibility of HFO-1233zd continues to be a challenge given the relatively high price of the HFO, a challenge exacerbated by the limited demand and the need to import material in small batches. GreenMat has continued to work on formulations to develop systems that are (further) reduced with water to lower the price of HFO-1233zd pre-blended systems.

Refrigeration manufacturing sector

59. As further discussed at the 90th meeting, ensuring the participation of enterprises in the refrigeration manufacturing sector was a substantial challenge given that numerous enterprises had shifted from manufacturing to assembly; and the hesitation of enterprises to forgo the flexibility to also manufacture with HFCs. Subsequent to the 90th meeting, the enterprise Nam Dung underwent a full subproject preparation but decided not to participate in the project given difficulties faced by the enterprise to substantiate sufficient HCFC-22 consumption to make the subproject worthwhile for the enterprise, and the enterprise's hesitation to commit not to use HFCs after conversion. Similarly, notwithstanding considerable efforts by the Government, the World Bank and the group project coordinator to work with four SMEs in the refrigeration manufacturing sector to enable their conversion to low-GWP alternatives, only one SME participated in the project and converted to ammonia. The three other SMEs did not participate due to: the death of the first enterprise's director; the likelihood that the second enterprise would cease manufacturing; and the limited administrative and financial capacity of the third enterprise to provide sufficient documentary evidence of consumption and other baseline information.

Conclusion

60. Notwithstanding the challenges faced during the implementation of the project, stage II of the HPMP was completed, enabling the Government to remain in compliance with targets agreed with the Executive Committee. Savings were realized through diligent efforts on the part of the Government, the PMU, and the World Bank.

Recommendation

61. The Executive Committee may wish to note the final progress report on the implementation of the final tranche of stage II of the HCFC phase-out management plan for Viet Nam, as submitted by the World Bank.

B. Report related to KIPs**Burkina Faso: Kigali HFC implementation plan (stage I – first tranche – feasibility study on establishing a hydrocarbon distribution centre) (Government of Germany)****Background**

62. At its 94th meeting, the Executive Committee approved, in principle, stage I of the Kigali HFC implementation plan (KIP) for Burkina Faso for the period 2024-2029, noting that during the implementation of stage I of the KIP, the Government of Burkina Faso would be allowed, on an exceptional basis, to submit a project for the commercial refrigeration sector to achieve additional HFC reductions (decision 94/40 (b)(iv)), and requested the Government of Germany to submit a detailed plan for the establishment of the refrigerant distribution centre, including a potential business model for ensuring the viability of the centre (decision 94/40(c)).

63. In line with decision 94/40(c), the Government of Germany and the Government of Burkina Faso conducted the requested study and concluded that the viability of the distribution centre depends on the volume of refrigerants and currently, the financial sustainability could not be reached by only distributing hydrocarbons (HCs). Consequently, a revision of the activities planned for stage I was submitted as introduced below.

Proposed activities

64. The proposal includes starting with a pilot project for establishing a recovery, recycling and reclamation (RRR) centre limited for HCFCs, HFCs and blended refrigerants, and later on once the volume of these refrigerants reaches the necessary threshold, extend it to natural refrigerants.

65. The approach is for technicians to bring back the recovered refrigerants to the RRR centre and receive in return the same amount of virgin quality refrigerant at a price lower than in the market. To facilitate the exchange process, the RRR centre will be installed at a major refrigerant distributor in Ouagadougou, the capital city of the country. The RRR centre will be responsible for the bulk refrigerant purchase or import, refilling of reusable cylinders, and the reclamation and redistribution of regenerated refrigerants.

66. The project includes the purchase and installation of equipment for establishing the RRR centre, including a refrigerant identification laboratory and reusable cylinders. The total equipment costs for the reclaim and distribution centre is US \$112,000 as outlined in table 2.

Table 2: Equipment required and the costs for establishing the RRR centre

Item	Unit Price (US \$)	Quantity	Total Price (US \$)
Refrigerant Identifier	4,500	2	9,000
A1/A2L Refrigerant Leak Detector	170	2	340
50lb/h Claim Machine	25,000	1	25,000
Liquid Refrigerant Transfer Equipment 200Kg/hr	15,000	1	15,000
Scale 300Kg	5,000	1	5,000
30lb Cylinder Cleaning Equipment	4,500	2	9,000
100lb Cylinder Cleaning Equipment	5,000	1	5,000
Installation of equipment	15,000	1	15,000
Refrigerant Certification Laboratory Equipment	15,000	1	15,000
30lb Storage Tank	80	20	1,600
100lb Storage Tank	150	6	900
300lb Storage Tank	300	3	900
Storage tank 1000lb	4,000	1	4,000

Item	Unit Price (US \$)	Quantity	Total Price (US \$)
Vacuum pump	220	4	880
Refrigerant Reclamation Equipment	700	3	2,100
Manifold and service gauge	450	2	900
Drilling pliers	25	2	50
Safety Protection	23	10	230
Toolbox	350	1	350
Fire extinguisher	250	3	750
First Aid Kit	500	2	1,000
TOTAL			112,000

Feasibility study

67. The return on investment is spread over three years, and the RRR centre is predicted to be cost-effective once 70 per cent of full capacity is reached, at a selling price of US \$3 per kg of reclaimed refrigerant, and could be profitable within the first six quarters after start-up. Costs and revenues of the proposed RRR centre over three years with an original capacity of 10 mt per quarter, increased to 20 mt at the sixth quarter are included in table 3.

Table 3: Cost and revenues of the RRR centre over three years

	First quarter	Second quarter	From third to fifth quarter	Sixth quarter	From seventh to twelfth quarter
Reclaim capacity (mt)	10	10	10	20	20
100% Capacity maintenance cost (US \$)	800	800	800	1,600	1,600
100% Capacity laboratory operation cost (chemicals and others) (US \$)	800	800	800	1,600	1,600
Utilization rate (%)	15	40	80	50	80
Net price per kg of recycled refrigerant (US \$)	3.00	3.00	3.00	3.00	3.00
Net sales (US \$)	4,500	12,000	24,000	30,000	48,000
Consumables (US \$)	240	640	1,280	1,600	2,560
Gross Profit (US \$)	4,260	11,360	22,720	28,400	45,440
Workforce	12,000	12,000	12,000	24,000	24,000
Building and utilities	3,000	3,000	3,000	6,000	6,000
Other administrative costs	1,500	1,500	1,500	3,000	3,000
Total Fixed Costs (US \$)	16,500	16,500	16,500	33,000	33,000
Net profit before tax (US \$)	(12,240)	(5,140)	6,220	(4,600)	12,440

68. At start-up, the centre will focus on the reclamation of the most used refrigerants HCFC-22 and HFC-134a, and the installed reclaim capacity is set at 10 tons per quarter. From the sixth quarter onwards, and if necessary, the reclaim capacity can be increased to 20 tons per quarter by installing additional equipment in the same centre, and reclamation will be extended to other refrigerants like R-404A, R-410A, as needed. With a higher reclamation rate, the profitability of the centre is higher. The estimated operational costs are on the high side and are expected to be lower in Burkina Faso based on interviews with local stakeholders, thus making the return on investment shorter and more attractive to potential investors.

Secretariat's comments

69. The Secretariat notes that the establishment of the proposed RRR centre costs US \$112,000, which corresponds to the budget for establishing the HC distribution centre and acquiring cylinders in the KIP.

70. The Secretariat also notes that the Government of Germany reported that the RRR centre could be profitable within the first six quarters after start-up.

Recommendation

71. The Executive Committee may wish:

- (a) To note the plan for the establishment of a recovery, recycling and reclamation centre for HCFCs, HFCs and blended refrigerants including a feasibility study, associated with stage I of the Kigali HFC implementation plan (KIP) for Burkina Faso, as submitted by the Government of Germany and contained in document UNEP/OzL.Pro/ExCom/95/20; and
- (b) To approve the request of the Government of Burkina Faso to replace the establishment of a refrigerant distribution centre for hydrocarbons with the centre referred to in subparagraph (a) above, at the same cost.

C. Report related to additional activities to maintain energy efficiency in the refrigeration servicing sector (decision 89/6)

Maldives: Additional activities to maintain energy efficiency in the refrigeration servicing sector under decision 89/6(b) (progress report) (UNEP)

Background

72. At the 91st meeting, the Executive Committee approved the project on additional activities for the introduction of alternatives to HCFCs with low- or zero-global-warming potential (GWP) and on maintaining energy efficiency in the refrigeration servicing sector in Maldives, in the amount of US \$100,000, plus agency support costs of US \$13,000, for UNEP (decision 91/60(a)).

73. At the 93rd meeting, the Executive Committee approved, on an exceptional basis, the extension, to 30 June 2025, of the project completion date. In approving this extension request, the Executive Committee requested the Government of Maldives and UNEP to continue submitting progress reports on the implementation of the project on a yearly basis until completion, and to submit a project completion report to the second meeting of the Executive Committee in 2025 (decision 93/20(b) and (c)).

74. In line with decision 93/20(c), UNEP, on behalf of the Government of Maldives, has submitted a progress report to the present meeting.

Progress report

75. The objective of the energy efficiency project in the Maldives was to make mandatory the existing voluntary energy efficiency labelling programme for appliances and equipment called Hakathari which covered certain equipment, including air conditioners¹² and domestic refrigerators. The mandated label specifications under the Hakathari programme include information on the refrigerant and its ozone depleting potential and GWP. The programme also establishes the minimum qualification requirements for tested¹³ appliances to be eligible for the energy efficiency labels ensuring that these meet the minimum energy performance standards (MEPS) already present in the country.

¹² Single-phase, single-split and unitary type air conditioners of both fixed speed and variable speed, up to rated capacities of 24,226 BTU/hr (equivalent to 7.1 kW).

¹³ Testing is done by a laboratory accredited by a recognized authority which is a Mutual Recognition Arrangement (MRA) signatory such as (International Laboratory Accreditation Cooperation (ILAC)/Asia Pacific Laboratory

76. The project included activities to improve the coordination and collaboration between stakeholders, the relevant energy authorities, and the national ozone unit through capacity building of key staff and stakeholders to ensure sustained consideration of the refrigerant in the labelling programme, guide the development of the review approach for refrigerant type and GWP, and understand regulatory challenges related to low-GWP refrigerant labelling information; to raise awareness related to the labelling programme focusing on increasing the demand for air conditioners and refrigerators operating with low- or zero-GWP refrigerants among all labeled energy-efficient products; and a consumer behavior study to evaluate the impact of the project.

77. As of September 2024, the following activities had been completed: the detailed outputs for the capacity-building study tour were established; the training materials for importers, customs officers, utility agencies, building designers, building developers, and construction companies were developed; and the outreach and impact assessment awareness materials for end users, as well as the questionnaire, were developed.

78. Furthermore, of the US \$100,000 approved, US \$14,560 (14.6 per cent) had been disbursed. The balance of US \$85,440 will be disbursed in 2024 and 2025.

Secretariat's comments

79. The Secretariat expressed concern about the low disbursement rate of approved funds and the delays associated with the project, requesting UNEP to provide an updated work plan outlining how activities would be expedited to compensate for the delays in implementation. UNEP indicated that 63.5 per cent of approved funds would be disbursed during the last quarter of 2024, with the remaining 21.9 per cent to be disbursed during the first quarter of 2025. After discussions with the Government of Maldives, UNEP submitted an updated work plan for the project, as shown in the table below.

Table 4. Updated workplan for the implementation of activities to maintain energy efficiency in the refrigeration servicing sector in Maldives

Activity	Deliverable/target	Approved funds (US \$)	Status	Expected implementation dates
Capacity-building of key staff and stakeholders				
Coordination and collaboration with relevant agencies through capacity-building training	Study tour, report, and recommendations	35,000	Bilateral discussions are in progress to confirm the venue for the study tour	December 2024
Training/information sessions for importers, customs officers, utility agencies, building designers, building developers, and construction companies	Five workshops/information sessions for a total of 140 participants	13,000	The dates and venue for the training are being finalized	October 2024-January 2025
Outreach and impact assessment				
Development and dissemination of outreach materials	Five awareness videos and five infographics produced and disseminated	37,000	A service company for the development and dissemination is being hired to produce videos and infographics	November 2024-March 2025

Accreditation Cooperation (APLAC) as per certain test standards or protocols for testing laboratories (using ISO/IEC 17025).

Activity	Deliverable/target	Approved funds (US \$)	Status	Expected implementation dates
Consumer behaviour study	One consumer behaviour study developed and implemented	15,000	A service company for the consumer behaviour study is being hired to conduct the study	January 2025-March 2025
Total		100,000		

Recommendation

80. The Executive Committee may wish to note the progress report on the project on additional activities for the introduction of alternatives to HCFCs with low- or zero-global-warming potential and on maintaining energy efficiency in the refrigeration servicing sector in Maldives, as submitted by UNEP and contained in document UNEP/OzL.Pro/ExCom/95/20.

Annex I

**TEXT TO BE INCLUDED IN THE REVISED UPDATED AGREEMENT BETWEEN THE
ISLAMIC REPUBLIC OF AFGHANISTAN AND THE EXECUTIVE COMMITTEE OF THE
MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF
HYDROCHLOROFLUOROCARBONS**

(Relevant changes are in bold font for ease of reference)

16. This **revised** updated Agreement supersedes the Agreement reached between the Islamic Republic of Afghanistan and the Executive Committee at the **79th meeting** of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2011	2012	2013	2014	2015	2016	2017	2018- 2019	2020	2021- 2024	2025	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)			23.6	23.6	21.24	21.24	21.24	21.24	15.34	15.34	7.67	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)			23.6	23.6	21.24	21.24	21.24	21.24	15.34	15.34	7.67	n/a
2.1	Lead IA (UNIDO) agreed funding (US \$)	0	0	0	0	0	131,938	83,000	0	56,729	0	0	271,667
2.2	Support costs for Lead IA (US\$)	0	0	0	0	0	11,874	7,470	0	5,106	0	0	24,450
2.3	Cooperating IA (Germany) agreed funding (US \$)	37,062	0	0	0	0	0	0	0	0	0	0	37,062
2.4	Support costs for Cooperating IAs (US \$)	4,818	0	0	0	0	0	0	0	0	0	0	4,818
2.5	Cooperating IA (UNEP) agreed funding (US \$)*	120,000	0	0	118,000	0	0	120,000	0	12,372	0	0	370,372
2.6	Support costs for Cooperating IA (US \$)	15,600	0	0	15,340	0	0	15,600	0	1,608	0	0	48,148
3.1	Total agreed funding (US \$)	157,062	0	0	118,000	0	131,938	203,000	0	69,101	0	0	679,101
3.2	Total support costs (US \$)	20,418	0	0	15,340	0	11,874	23,070	0	6,714	0	0	77,416
3.3	Total agreed costs (US \$)	177,480	0	0	133,340	0	143,812	226,070	0	75,815	0	0	756,517
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)												8.26
4.1.2	Phase-out of HCFC-22 to be achieved through previously approved projects (ODP tonnes)												n/a
4.1.3	Remaining eligible consumption of HCFC-22 (ODP tonnes)												15.34

* UNEP stopped being the lead implementing agency at the 94th meeting and returned US \$28,453 plus support costs of US \$4,734 from the fourth tranche (AFG/PHA/85/TAS/27).

Annex II

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE ISLAMIC REPUBLIC OF AFGHANISTAN AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

(Relevant changes are in bold font for ease of reference)

17. This updated Agreement supersedes the Agreement reached between the Islamic Republic of Afghanistan and the Executive Committee at the 85th meeting of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021- 2024	2025	2026	2027	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	15.34	15.34	7.67	7.67	7.67	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	15.34	15.34	7.67	7.67	7.67	n/a
2.1	Lead IA (UNIDO) agreed funding (US \$)	270,908	0	280,500		69,315	620,723
2.2	Support costs for Lead IA (US \$)	18,964	0	19,635		4,852	43,451
2.3	Cooperating IA (UNEP) agreed funding (US \$)*	48,659	0	0		0	48,659
2.4	Support costs for Cooperating IA (US \$)	6,326	0	0		0	6,326
3.1	Total agreed funding (US \$)	319,567	0	280,500		69,315	669,382
3.2	Total support costs (US \$)	25,289	0	19,635		4,852	49,776
3.3	Total agreed costs (US \$)	344,856	0	300,135		74,167	719,158
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)						7.67
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)						8.26
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)						7.67

* UNEP stopped being the lead implementing agency at the 94th meeting and returned US \$180,908 plus support costs of US \$23,518 from the first tranche (AFG/PHA/85/TAS/29).