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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Ninety-first Meeting  
Montreal, 5-9 December 2022  
Items 9(c) of the provisional agenda<sup>1</sup>

**PROJECT PROPOSAL: TURKMENISTAN**

This document consists of the comments and recommendation of the Secretariat on the following project proposal:

Phase-out

- HCFC phase-out management plan (stage II, second tranche)

UNIDO

<sup>1</sup> UNEP/OzL.Pro/ExCom/91/1

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

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**

**Turkmenistan**

<b>(I) PROJECT TITLE</b>	<b>AGENCY</b>	<b>MEETING APPROVED</b>	<b>CONTROL MEASURE</b>
HCFC phase-out plan (stage II)	UNIDO (lead)	86 <sup>th</sup>	67.5% phase-out by 2025

<b>(II) LATEST ARTICLE-7 DATA (Annex C Group I)</b>	Year: 2021	4.36 (ODP tonnes)
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<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)</b>								<b>Year: 2021</b>	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					4.36				4.36

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009-2010 baseline:	6.80	Starting point for sustained aggregate reductions:	6.80
<b>CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)</b>			
Already approved:	4.59	Remaining:	2.21

<b>(V) ENDORSED BUSINESS PLAN</b>		<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Total</b>
UNIDO	ODS phase-out (ODP tonnes)	0.74	0.00	0.00	0.74
	Funding (US \$)	110,745	0	0	110,745

<b>(VI) PROJECT DATA</b>			<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Montreal Protocol consumption limits (ODP tonnes)			4.42	4.42	4.42	4.42	4.42	2.21	n/a
Maximum allowable consumption (ODP tonnes)			4.42	4.42	4.42	4.42	4.42	2.21	n/a
Funding agreed in principle (US \$)	UNIDO	Project costs	165,000	0	103,500	0	0	40,000	308,500
		Support costs	11,550	0	7,245	0	0	2,800	21,595
Funds approved by ExCom (US \$)		Project costs	165,000						165,000
		Support costs	11,550						11,550
Total funds recommended for approval at this meeting (US \$)		Project costs			103,500				103,500
		Support costs			7,245				7,245

<b>Secretariat's recommendation:</b>	Blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of Turkmenistan, UNIDO as the designated implementing agency has submitted a request for funding for the second tranche of stage II of the HCFC phase-out management plan (HPMP), at the amount of US \$103,500, plus agency support costs of US \$7,245.<sup>2</sup> The submission includes a progress report on the implementation of the first tranche, the verification report on HCFC consumption for 2020 to 2021, and the tranche implementation plan for 2023 to 2025.

### Report on HCFC consumption

2. The Government of Turkmenistan reported a consumption of 4.36 ODP tonnes of HCFC in 2021, which is 36 per cent below the HCFC baseline for compliance. The 2017-2021 HCFC consumption is shown in table 1.

**Table 1. HCFC consumption in Turkmenistan (2017-2021 Article 7 data)**

HCFC-22	2017	2018	2019	2020	2021	Baseline
Metric tonnes (mt)	46.81	104.86	79.34	68.54	79.36	124.14
ODP tonnes	2.57	5.77	4.36	3.77	4.36	6.80

3. Since 2017, consumption of HCFC-22, which is used exclusively to service refrigeration and air-conditioning (RAC) equipment, has been below the control levels established by the Montreal Protocol as a result of the implementation of HPMP activities, including, *inter alia*, enforcement of the licensing and quota system; training of servicing technicians; public awareness; the ban on the import of HCFC-based equipment from 1 January 2016; and the increasing imports of RAC equipment using alternative refrigerants. The higher HCFC consumption in 2018 was in response to a change in the economic situation in the country that had caused lower consumption in previous years, while the increase in consumption in 2021 compared to 2020 was due to the resumption of imports when the borders reopened after the COVID-19 pandemic.

### *Country programme (CP) implementation report*

4. The Government of Turkmenistan reported HCFC sector consumption data under the 2021 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

### *Verification report*

5. The verification report confirmed that the Government of Turkmenistan was implementing a licensing and quota system for HCFC imports, and that the annual consumption for 2020 and 2021 was lower than the targets in the Agreement between the Government of Turkmenistan and the Executive Committee. Furthermore, HCFC consumption reported for 2020 and 2021 by the Government under Article 7 of the Montreal Protocol (as shown in table 1 above) and the CP report was correct. The verification report also noted that a clear and transparent quota allocation mechanism had made the HCFC import quota system in Turkmenistan fully functional.

6. The verification report recommended *inter alia* strengthening the capacity of customs to prevent potential illegal trade, and raising awareness of the Kigali Amendment among customs officers; accelerating the search for opportunities and resources to address the challenges related to the implementation of the Kigali Amendment; evaluating the effectiveness of the refrigerant recovery centre being created under stage II of the HPMP; and developing legislative measures as soon as possible to prohibit ODS and HFC emissions and require either their mandatory recovery for further reuse or storage

<sup>2</sup> As per the letter of 1 November 2022 from the National Ozone Unit, Ministry of Agriculture and Environmental Protection of Turkmenistan to UNIDO.

for destruction. UNIDO confirmed that the recommendations would be considered under stage II of the HPMP.

### Progress report on the implementation of the first tranche of stage II of the HPMP

#### *Legal framework*

7. The Government of Turkmenistan ratified the Kigali Amendment to the Montreal Protocol on 31 August 2020.

8. Twenty-five customs officers, including three women, received training on the prevention of illegal trade in ODS and the use of refrigerant identifiers.<sup>3</sup> Following a detailed analysis of ODS codes by departments within customs, the 2022 Harmonized System was adopted with an additional 3-digit national code.

#### *Refrigeration servicing sector*

9. The main activities implemented included:

- (a) Tendering and the contract issuance for the procurement and delivery of eight training simulators for the centre of excellence for training and certification in low- and zero-global-warming-potential (GWP) alternative technologies; and drafting an agreement of cooperation between the Ministry of Agriculture and Environment Protection (MAEP) and the RAC training centre;
- (b) A review of international and national legislation on RAC certification systems by a legal consultant; preparation of a final draft of the legislation for the mandatory certification of RAC technicians, following three in-person and online stakeholder consultations; and adoption of the European Standard on safety and environmental requirements for refrigeration systems and heat pumps;
- (c) Updates to the curricula, training materials and presentations for courses on flammable refrigerants and good refrigeration practices to minimize emissions; six training courses are scheduled for January 2023; and
- (d) A training workshop on good refrigeration practices for 18 technicians, including two women; an awareness-raising seminar/training for 22 RAC technicians, including four women, on climate-friendly and energy-efficient technologies as part of World Refrigeration Day activities; and training for 20 enforcement officers from the MAEP on the implementation of the Montreal Protocol and ozone-layer-related matters.

#### *Project implementation and monitoring*

10. The NOU, under the MAEP, is responsible for monitoring and implementing all activities under the HPMP, reporting on progress, and working with stakeholders to phase out HCFCs. Expenditures for this component for the first tranche of stage II amount to US \$5,000, which was the total amount approved, and include staff and consultants (US \$2,000), travel (US \$1,000), workshops/meetings (US \$1,000) and miscellaneous (US \$1,000).

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<sup>3</sup> The institutionalization of the Montreal Protocol into the regular customs training curriculum was achieved in stage I of the HPMP, and no funds are included in stage II for training new customs officers. However, the Secretariat requested that the country continue reporting on the numbers trained during the period 2021-2025.

Level of fund disbursement

11. As of September 2022, of the US \$165,000 approved so far, US \$135,000 (82 per cent) had been disbursed. The balance of US \$30,000 will be disbursed by May 2023.

Implementation plan for the second tranche of stage II of the HPMP

12. The following activities will be implemented between January 2023 and December 2025:
- (a) Training of at least 40 environmental inspectors from the Hydrometeorology and State Ecological Control Service on the Montreal Protocol, alternative non-ODS technologies, the ODS licensing and quota system, and ODS identification; and development of the training programme and training materials (US \$5,000 and remaining balance from previous tranche);
  - (b) Training and certification of five trainers, including women, under international standards covering HCFCs, HFCs, and flammable refrigerants (US \$15,000);
  - (c) Provision of certification courses for 50 RAC technicians, including women, on the safe use of natural refrigerants, ODS recovery and destruction, and energy efficiency (US \$15,000);
  - (d) Training of at least 50 key stakeholders, including Government authorities and private enterprises working in the RAC sector, on alternative refrigerants and low-GWP technologies; participation of women will be ensured (US \$5,500);
  - (e) Procurement and distribution of eight training simulators, and training on their use (remaining balance from previous tranche);
  - (f) Establishment of an ODS reclamation system: prohibition of the deliberate venting of ODS, establishment of mandatory leakage control for industrial refrigeration and chillers, and compulsory collection, reclamation, and disposal of ODS; allocation and preparation of reclamation site, supplying the set of equipment to collect and recycle ODS and HFCs, including a reclamation unit, refillable containers, filters, and accessories for three years; development and approval of technical documentation for the establishment of an ODS and HFC collection and reclamation system; and re-training of personnel and establishment of an ODS and HFC record-keeping system (US \$58,000); and
  - (g) Project management, coordination, monitoring, and reporting by the NOU, including monitoring-related travel (US \$5,000).

**SECRETARIAT'S COMMENTS AND RECOMMENDATION****COMMENTS**Status of implementation of stage I of the HPMP

13. In line with decision 81/29, the Secretariat inquired to UNIDO about the status of submission of the project completion report (PCR), noting that the activities under the fourth and final tranche of stage I of the HPMP, approved at the 85<sup>th</sup> meeting, have been operationally completed and that the financial completion is in progress. UNIDO indicated that it has started the process to return any balances and financially close the project and is preparing the PCR to be submitted to the Secretariat in the near future.

The Secretariat notes the implementation challenges caused by the restrictive conditions under the COVID-19 pandemic, appreciates that all activities in stage I have been operationally completed, and therefore recommends that the Executive Committee consider the request for funding for the second tranche of stage II of the HPMP on an exceptional basis, on the understanding that the funding would not be transferred to UNIDO until the PCR for stage I is submitted to the Secretariat.

#### Verification report

14. In response to a question from the Secretariat on the status of the recommendation from the previous verification report<sup>4</sup> to reduce the validity period of import licences for ODS, and eventually HFCs, UNIDO explained that any change would require an amendment to the current law, “On licensing of certain types of activities” (8 July 2008). An amendment is being considered but extensive consultations are required before a proposal can be sent to Parliament.

#### Progress report on the implementation of the first tranche of stage II of the HPMP

##### *Legal framework*

15. The Government of Turkmenistan has already issued HCFC import quotas for 2022 at 4.41 ODP tonnes, as per the Montreal Protocol control targets and the target in the Agreement with the Executive Committee.

16. Following a query from the Secretariat, UNIDO reported that mandatory reporting by enterprises of ODS consumption will operate based on an approved order of the MAEP, to be developed in 2023.

##### *Customs training*

17. In response to a question from the Secretariat on the five HCFC/HFC refrigerant identifiers procured for five customs border posts, UNIDO explained that the delivery of the equipment had been delayed initially due to the COVID-19 pandemic, and subsequently by the shortage of micro-chips and other parts to manufacture the identifiers. UNIDO expects the identifiers to be delivered in 2023, but the exact delivery date is unknown.

18. The Secretariat noted that no further customs training is planned under stage II of the HPMP. UNIDO explained that customs officers had been trained and provided with the appropriate skills for monitoring and controlling imports and exports of ODS and ODS-based equipment, as well as detecting and preventing illegal trade and the practical use of refrigerant identifiers. Furthermore, arrangements have been made with the customs department and relevant entities, including the MAEP and the State Concern Turkmenchemistry,<sup>5</sup> to ensure professional training at the customs training centre without financial support from the second tranche of stage II of the HPMP. Additionally, customs training updates would be planned within the framework of project preparation for the Kigali HFC implementation plan.

##### *Refrigeration servicing sector*

19. With regard to strengthening the RAC training centre, UNIDO confirmed that the eight refrigeration training simulators had been manufactured and were being prepared for shipment. However, the equipment could only be shipped once the country’s customs tax exemption had been issued, which was expected in January 2023. UNIDO reported that a draft agreement had been developed between the MAEP/NOU and the centre of excellence regarding commitments by the college in return for investment

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<sup>4</sup> The 2016-2019 verification report was submitted to the 85<sup>th</sup> and 86<sup>th</sup> meetings.

<sup>5</sup> The main goal of the Turkmenchemistry, which is accountable to the Cabinet of Ministers, is to meet the country’s needs in terms of chemical products.

and technical assistance. The centre will provide the necessary premises and stands for the equipment, maintain the training courses and equipment, and provide teaching staff. In addition, the training centre would report annually to MAEP/NOU. The value of co-financing is estimated at US \$30,000.

20. In response to a query by the Secretariat, UNIDO reported that the entry into force of legislation for mandatory certification of RAC technicians is planned for 2024 following the start-up of the training centre and the development of the certification scheme for technicians in 2023. Six training programmes, including the curricula, training manuals and presentations, for theoretical and practical training on flammable refrigerants and minimizing emissions, should be finalized in January 2023.

21. The Secretariat noted that the budget for the establishment of the ODS reclamation system had increased from US \$48,000, as submitted to the 86<sup>th</sup> meeting,<sup>6</sup> to US \$58,000. UNIDO explained that the increase was due to higher market prices for technical equipment. In response to a question on how the country would respond to the recommendation in the verification report regarding the effectiveness of the refrigerant recovery centre being created under stage II of the HPMP, UNIDO confirmed that the effectiveness of the centre would be evaluated, and reported that legislation is being prepared to introduce a ban on the release of refrigerants into the atmosphere and a number of other measures to promote recovery and reclamation.

#### Gender policy implementation<sup>7</sup>

22. The Government of Turkmenistan is implementing the National Action Plan for Gender Equality for the period 2021–2025 and is systematically implementing measures to promote gender equality. National legislation is constantly being improved, and programmes are being developed and implemented to involve women in activities by improving their educational level and professional training. The NOU will receive support from UNIDO in the form of gender-related training and other relevant materials and will discuss with the managers of the centre of excellence ways to ensure that women RAC technicians have equal opportunities to develop their careers. Specific indicators related to gender will be reported as part of subsequent tranche requests of stage II of the HPMP.

#### Sustainability of the HCFC phase-out and assessment of risks

23. The sustainability of the HCFC phase-out in Turkmenistan is ensured by all activities being implemented under stage II of the HPMP, by the controls on imports of HCFCs and HCFC-based equipment, including the ban on the import of HCFC-based equipment from 1 January 2016, and the process to strengthen the law, “On the protection of the ozone layer.” Professional customs training at the customs training centre will be implemented without the need for financial support from the HPMP. Turkmenistan is setting up the training centre of excellence using HPMP funds and co-financing to ensure the long-term sustainability of RAC training, and to promote the introduction of lower-GWP alternatives and the mandatory collection and reclamation of ODS. The Secretariat noted that risks such as health, economic and political factors had resulted in delays to implementation of the first tranche, but that these were outside of the control of the implementing agency. Despite the implementation challenges, UNIDO noted the high level of support for the NOU and implementation of the HPMP from the Government of Turkmenistan, and that the country is committed to its Montreal Protocol obligations and to further strengthening legislation.

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<sup>6</sup> Paragraph 21(d) of document UNEP/OzL.Pro/ExCom/86/78.

<sup>7</sup> In line with decision 84/92(d), decision 90/48(c) encouraged bilateral and implementing agencies to continue ensuring that the operational gender mainstreaming policy was applied to all projects, taking into consideration the specific activities presented in table 2 of document UNEP/OzL.Pro/ExCom/90/37.

Conclusion

24. The Government of Turkmenistan achieved compliance with its HCFC consumption targets for 2020 and 2021, as corroborated by the verification report. In 2021, consumption of HCFCs was 36 per cent below the country's Montreal Protocol target and the maximum allowable consumption specified in the Agreement. A system of certification of RAC service technicians for the maintenance of refrigeration equipment is being developed, training of several technical specialists has been conducted, and further training of RAC technicians is planned within the second and third tranches of stage II of the HPMP. Despite the challenges as a result of the COVID-19 pandemic, transport logistics and external factors, the implementing agency continues to make progress and move the project forward. A sufficient level of implementation of the first tranche of the HPMP has been achieved, and UNIDO met the 20 per cent disbursement threshold for the previous tranche.

**RECOMMENDATION**

25. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan (HPMP) for Turkmenistan; and further recommends blanket approval of the second tranche of stage II of the HPMP for Turkmenistan, and the corresponding 2023–2025 tranche implementation plan, at the funding level shown in the table below, on an exceptional basis, on the understanding that the Treasurer would transfer the funding to UNIDO only upon confirmation by the Secretariat that the project completion report for stage I of the HPMP had been received by the Secretariat.

	<b>Project title</b>	<b>Project funding (US \$)</b>	<b>Support cost (US \$)</b>	<b>Implementing agency</b>
(a)	HCFC phase-out management plan (stage II, second tranche)	103,500	7,245	UNIDO