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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Eighty-second Meeting Montreal, 3-7 December 2018

PROJECT PROPOSAL: OMAN

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 and UNEP

# PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

# Oman

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (stage II)	UNEP, UNIDO (lead)	75th	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2017	17.43 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2017
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	anufacturing Servicing				
HCFC-22					17.43				17.43

(IV) CONSUMPTION DATA (ODP tonnes)								
2009 - 2010 baseline:	31.5	Starting point for sustained aggregate reductions:	32.57					
	CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)							
Already approved:	12.11	Remaining:	20.46					

(V) BUSIN	ESS PLAN	2018	2019	2020	Total
UNIDO	ODS phase-out (ODP tonnes)	0.55	0	0.22	0.77
	Funding (US \$)	53,500	0	21,400	74,900
UNEP	ODS phase-out (ODP tonnes)	0.65	0	0.63	0.63
	Funding (US \$)	67,235	0	64,410	131,645

(VI) PROJECT DATA		2015	2016	2017	2018	2019	2020	Total	
Montreal Protocol consumption limits		28.32	28.32	28.32	28.32	28.32	20.46	n/a	
Maximum allowab	le consumption	(ODP tonnes)	28.32	28.32	28.32	28.32	20.46	20.46	n/a
Agreed funding	UNIDO	Project costs	215,000	0	0	50,000	0	20,000	285,000
(US \$)		Support costs	15,050	0	0	3,500	0	1,400	19,950
	UNEP	Project costs	83,500	0	0	59,500	0	57,000	200,000
		Support costs	10,855	0	0	7,735	0	7,410	26,000
Funds approved by	ExCom	Project costs	298,500	0	0				298,500
(US \$)		Support costs	25,905	0	0				25,905
Total funds requested for		Project costs				109,500			109,500
approval at this me	eting (US \$)	Support costs				11,235			11,235

Secretariat's recommendation:	For blanket approval
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#### PROJECT DESCRIPTION

1. On behalf of the Government of Oman, UNIDO as the lead implementing agency, has submitted a request for funding for the second tranche of stage II of the HCFC phase-out management plan (HPMP), at a total cost of US \$120,735, consisting of US \$50,000, plus agency support costs of US \$3,500 for UNIDO, and US \$59,500, plus agency support costs of US \$7,735 for UNEP.<sup>1</sup> The submission includes a progress report on the implementation of the first tranche of stage II, the verification report on HCFC consumption for 2015 to 2017 and the tranche implementation plan for 2018 to 2020.

#### Status of stage I

2. The Secretariat noted with appreciation that stage I of the HPMP has been completed and a comprehensive project completion report (PCR) was submitted on 19 October 2018, in line with decision 81/29. The financial completion of the project is expected by the end of 2018, and UNIDO indicated that any remaining balances, expected to be approximately US \$1,800, would be returned by the 83<sup>rd</sup> meeting. That return would be additional to the US \$1,229 previously returned given the financial completion of the first tranche of stage I.

#### Report on HCFC consumption

3. The Government of Oman reported a consumption of 17.43 ODP tonnes of HCFC in 2017, which is 45 per cent below the HCFC baseline for compliance. The 2013-2017 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Oman (2013-2017 Article 7 data)

HCFC	2013	2014	2015	2016	2017	Baseline
Metric tonnes						
HCFC-22	393.49	318.88	364.9	347.18	316.96	537.57
HCFC-123	6.75	2.0	0	0	0	=
HCFC-141b	23.29	18.78	20.3	9.25	0	10.15
HCFC-142b	69.67	11.16	0	0	0	12.05
Total HCFCs (mt)	493.2	350.82	385.2	356.43	316.96	559.77
HCFC-141b in imported pre-blended polyols*	44.31	39.92	41.91	43.2	0	10.00**
ODP tonnes						
HCFC-22	21.64	17.54	20.01	19.10	17.43	29.57
HCFC-123	0.14	0.04	0	0	0	-
HCFC-141b	2.56	2.07	2.23	1.02	0	1.12
HCFC-142b	4.53	0.73	0	0	0	0.78
Total HCFCs (ODP tonnes)	28.87	20.37	22.24	20.11	17.43	31.47
HCFC-141b in imported pre-blended polyols*	4.87	4.39	4.61	4.75	0	1.1**

<sup>\*</sup> Country programme data

\*\* Starting point as indicated in the Agreement between the Executive Committee and the Government of Oman for stage I

4. Consumption in the country continues to decline in light of the implementation of the HPMP, including conversions undertaken under stage I at polyurethane foam enterprises, with the complete phase-out of HCFC-141b pure and contained in pre-blended polyols, and conversion of extruded polystyrene foam manufacturing enterprises, with the complete phase-out of HCFC-142b; activities in the servicing sector (reduced consumption of HCFC-22), and implementation of regulations and technical assistance.

<sup>&</sup>lt;sup>1</sup> As per the letter of 24 September 2018 from the Ministry of Environment and Climate Affairs of Oman to UNIDO and UNEP.

### Country programme (CP) implementation report

5. The Government of Oman reported HCFC sector consumption data under the 2017 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol.

## Verification report

6. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports and that the total consumption of HCFCs for 2015 to 2017 were 22.29, 20.11 and 17.41 ODP tonnes, respectively. The verification concluded that Oman has an effective quota system in place and has met the consumption targets specified in the Montreal Protocol. Minor differences between the verified consumption and that reported under Article 7 and the CP report are due to rounding. UNEP will work closely with the national ozone unit (NOU) to ensure that in the future all data entries are made with the appropriate number of significant digits.

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

#### Legal framework

7. The Government of Oman implemented a regulation under which permits for the import of bulk HCFC-141b and HCFC-141b contained in pre-blended polyols are no longer issued since 1 January 2017. Similarly, permits for the import of HCFC-142b are no longer issued as of 2015. The e-licencing system developed under stage I has been in place since 2016, enhancing the control of ODS and contributing to ensure the country's compliance with the HCFC phase-out schedule.

#### Refrigeration servicing sector

- 8. The activities focused on good practices to reduce leakage in service operations, and recovery, recycling and reclamation, including:
  - (a) Organization of regular meetings of the National Ozone Committee (NOC) and full operation of the quota and licensing system;
  - (b) Publication and distribution of updated ODS regulations through articles and giving media interviews to improve cooperation by all stakeholders;
  - (c) Purchase of three advanced refrigerant identifiers and organization of three workshops for 28 customs and enforcements officers on shipment inspection and clearance, ODS control and the use of the refrigerant identifier;
  - (d) Inclusion of HCFCs, alternatives and latest technologies relevant to the service sector in the national vocational curricula and the codes of practice for service technicians;
  - (e) Preparation of the final draft of the certification scheme;
  - (f) Delivery to service training institutes of seven sets of servicing equipment, including refrigerants identifiers, portable recovery and charging machines, four-way manifold gauge sets, double-stage vacuum pumps, instruments to control acids, moisture and oil during recovery, recovery cylinders, handheld electronic leak detectors, electronic scales, digital vacuum gauges, digital thermometers, charging hoses, and charging and evacuation stations;

- (g) Organization of two training courses for 25 national trainers, six in partnership with the refrigeration and air-conditioning (RAC) industry, and one training workshop on installation and maintenance practices, resulting in about 160 trained technicians; and
- (h) Strengthening the recovery, recycling and reclamation network by supplying tools to refrigerant collection centres and one selected laboratory (10 refrigerant recovery units with recycling module, one compact gas chromatograph and analyzer, 20 fifty-pound refrigerant recovery cylinders, and 100 thirty-pound refrigerant recovery cylinders) and training on the use of equipment.

*Project implementation and monitoring unit (PMU)* 

9. Monitoring and coordination of the activities of the HPMP were undertaken by the NOU to ensure efficient implementation.

#### Level of fund disbursement

10. As of September 2018, of the US \$298,500 approved so far (US \$215,000 for UNIDO and US \$83,500 for UNEP), US \$229,742 (77 per cent) had been disbursed (US \$156,242 for UNIDO and US \$73,500 for UNEP). The balance of US \$68,759 will be disbursed in 2018-2020.

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

- 11. The following activities will be implemented between December 2018 and December 2020:
  - (a) Regular meetings of the NOC to monitor the implementation of the regulatory and policy-related activities, including assessment and if necessary, the revision of the certification scheme for refrigeration technicians that is expected to be enforced in 2019, the establishment of a logbook to record leaks and repairs, the ban on the use and import of refrigerants in disposable cylinders by 1 January 2020, consultations with stakeholders on developing a regulation on mandatory leak detection of all controlled substances in RAC systems with initial charge greater than 3 kg, and ratification of the Kigali Amendment expected by 2020 (UNEP) (US \$5,500);
  - (b) Continued operation of the quota and e-licensing system and development of standards to facilitate the introduction of low-GWP alternatives, complemented by energy efficiency standards. Minimum energy performance standards are applicable in Oman: regulations have been issued by the Ministry of Commerce and Industry on energy efficiency in low-voltage RAC equipment that will be implemented by the end of 2018 (UNEP) (US \$4,000);
  - (c) Organization of training workshops in order to increase capacities to identify the different kinds of refrigerants for approximately 40 customs officers (UNEP) (US \$5,000);
  - (d) On-going training of approximately 300 technicians with a focus on refrigerant management and good practices (UNEP) (US \$40,000);

- (e) On-going strengthening of the recovery, recycling and reclamation network by supplying recycling and recovery equipment to selected service workshops, organization of two workshops on the reclamation supply chain for service workshops and the reclamation centre, and completing activities from the first tranche (UNIDO) (US \$15,000);
- (f) Two workshops to assess emerging low-GWP technologies and their suitability for the use in Oman targeting different RAC sub-sectors, including large end-users and fisheries (UNIDO) (US \$25,000);
- (g) Awareness campaign building on lessons learned from the previous tranche targeting the end-users and the public (UNEP) (US \$5,000); and
- (h) Project monitoring and verification of implementation (UNIDO) (US \$10,000).

#### SECRETARIAT'S COMMENTS AND RECOMMENDATION

#### **COMMENTS**

Progress report on the implementation of the first tranche of the HPMP

Legal framework

- 12. The Government of Oman has issued HCFC import quotas for 2018 at 20.67 ODP tonnes, which is lower than the Montreal Protocol control targets.
- 13. The Secretariat noted the Government of Oman issued a regulation that specifies that permits for the import of bulk HCFC-141b and HCFC-141b contained in imported pre-blended polyols are no longer issued since 1 January 2017, thus complying with decision 75/47(a)(ii). Similarly, the import of HCFC-142b, pure or as a component of a blend, is no longer permitted.

#### Conclusion

14. Oman is in compliance with the Montreal Protocol and its Agreement with the Executive Committee. The verification report confirmed that the country's licensing and quota system is operational, and contributing to the country's HCFC phase-out schedule. The level of disbursement is 77 per cent. Implementation of activities has progressed effectively, and the country's consumption is already 45 per cent below its baseline for compliance. Stage I has been completed, the PCR submitted, and remaining balances have been returned. The phase-out of HCFC-141b (both pure and contained in pre-blended polyols) and HCFC-142b has been completed and regulations are in place to ensure the sustainability of that phase-out. The effectiveness of implementation has benefited from the development of and enforcement of ODS regulations and policies that are regularly updated complemented by awareness-raising and capacity-building. The progress achieved so far and the activities planned under the second tranche will ensure the long-term sustainability of stage II of the HPMP.

### RECOMMENDATION

15. 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 Oman; and further recommends blanket approval of the second tranche of stage II of the HPMP for Oman, and the corresponding 2018-2020 tranche implementation plan, at the funding levels shown in the table below:

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stag second tranche)	e II, 50,000	3,500	UNIDO
(b)	HCFC phase-out management plan (stag second tranche)	e II, 59,500	7,735	UNEP